Group Shift Lesson Plan

Creator: Melanie Hill

Title of Lesson: The Power of Numbers

Intended Grade Level(s): 6-7

Main Objective(s): Understand how interacting with groups of people who share the same beliefs about a controversial issue can lead an individual’s attitude to become more extreme

Suggested Supplemental Teacher Resources – References/ Websites:
http://www.theinvisiblegorilla.com/videos.html (Gorilla)

https://www.youtube.com/watch?v=b62jYeg6J-g (Hillary Clinton)

https://www.youtube.com/watch?v=zBUg7pl28fo (Donald Trump)

https://www.youtube.com/watch?v=UGxGdQnC1Y (social influences video – has a bit about group polarization at 7:25)

Lesson Plan Description:

This lesson introduces psychology methods and concepts through a classic social psychology experiment: Group Shift (also known as the Group Polarization phenomenon). Students will watch a short video to show them how we don’t always recognize the way we perceive our thoughts and actions (gorilla video). The discussion will then examine how scientists can study these thoughts, actions, and feelings to better understand how human societies work. In particular, many social psychologists are interested in group behavior – and the ways in which groups of people together act differently than each individual member of the group would act alone. (This final point about group behavior should not be addressed until after the Explore activity, to maintain unbiased student opinion in the experiment).

Arizona State Science Standards Addressed:

<table>
<thead>
<tr>
<th>Concept 3: Analysis and Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze and interpret data to explain correlations and results; formulate new questions.</td>
</tr>
<tr>
<td>Analyze data obtained in a scientific investigation to identify trends.</td>
</tr>
<tr>
<td>M06-S2C1-03</td>
</tr>
<tr>
<td>Form a logical argument about a correlation between variables or sequence of events (e.g., construct a cause-and-effect chain that explains a sequence of events).</td>
</tr>
<tr>
<td>Evaluate the observations and data reported by others.</td>
</tr>
<tr>
<td>Interpret simple tables and graphs produced by others.</td>
</tr>
<tr>
<td>Analyze the results from previous and/or similar investigations to verify the results of the current investigation.</td>
</tr>
<tr>
<td>Formulate new questions based on the results of a completed investigation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concept 4: Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate results of investigations.</td>
</tr>
</tbody>
</table>
Choose an appropriate graphic representation for collected data:
- line graph
- double bar graph
- stem and leaf plot
- histogram

Display data collected from a controlled investigation.

Communicate the results of an investigation with appropriate use of qualitative and quantitative information.

Create a list of instructions that others can follow in carrying out a procedure (without the use of personal pronouns).

Communicate the results and conclusion of the investigation.

---

**Engage**

The week prior to this lesson, pass out a brief survey to students to assess opinions on a few “controversial” topics. Such topics might include propositions to have school year around, whether or not the school should have a dress code, etc. Pick the topic that yields the most polarizing opinions and use it as the “controversial issue” for this lesson plan.

**Purpose:**
The intended function of the Engage component of this lesson is to introduce students to psychology concepts and get them thinking about how they can apply the scientific method to study human behavior. The “controversial issue” for the explore section should be introduced at the very beginning of class so that they write down unbiased opinions before learning about social psychology.

**Materials:**
Computer and projector, link to bouncing ball/gorilla video on Youtube, whiteboard and markers

**Instructional Sequence:**
1. Begin class by introducing the “controversial topic” for the explore section. State the topic and both sides neutrally and have the students record their individual opinions about the issue on scraps of paper, without talking about the issue with peers – students will rate how in favor they are of a certain position on the issue, from 1 (completely against) to 10 (completely in favor).
2. While dividing student responses into groups, one on each side of the issue, show the gorilla video. Tell students to silently count the number of times the people in the video pass the basketball and don’t speak aloud during the video.
3. After the clip, ask if anyone noticed anything unusual during the video. Some kids will have noticed the gorilla, but many will not have (you can replay the video to show them). Talk about selective attention – you can also talk about examples such as how when they are watching TV and their parents tell them to do something, they might not even hear them. Introduce psychology as a branch of science that applies the scientific method to help us understand
phenomena such as selective attention. Then explain how scientists can use these methods to study a variety of human thoughts, feelings, and behaviors.

Potential Questions to ask students:
What are some topics that might fall under the umbrella of psychology?
How do we gather information about these topics in our daily lives?
How do we use information about these topics to make decisions?
How do we apply the scientific method to these topics?
How can studying these topics scientifically inform our decision-making?
(Talk about some issues specific to psychology: how do we measure thoughts, feelings, and behaviors? What are some problems with asking people directly about their thoughts, feelings, and behaviors?)

<table>
<thead>
<tr>
<th>Exploration</th>
<th>Purpose: To introduce students to the concept of group polarization through active participation and observation of their own shifting opinions.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Materials:</strong> Paper scraps, pencils, whiteboard</td>
</tr>
<tr>
<td></td>
<td><strong>Instructional Sequence:</strong></td>
</tr>
<tr>
<td></td>
<td>1. Reintroduce students to the controversial issue from the beginning of class and tell them we are going to have two smaller groups discuss the issue so they can all get a chance to share their opinions on it.</td>
</tr>
<tr>
<td></td>
<td>2. Organize students into two groups – one composed of individuals leaning toward the “against” position and one composed of individuals leaning toward the “in favor” position. Mean scores of each group (which should be divergent) are recorded by the instructor but not shared with the students.</td>
</tr>
<tr>
<td></td>
<td>3. The student with the most extreme opinion in each group is appointed to lead the group discussion of the issue. The instructor assigns the leader without telling students why – make it seem random.</td>
</tr>
<tr>
<td></td>
<td>4. Each group engages in a 15 minute discussion of the issue in opposite corners of the room.</td>
</tr>
<tr>
<td></td>
<td>5. Everyone returns to their desks and the question on the controversial issue is presented again. Each individual records his or her position (1-10 for against to in favor) on scrap paper.</td>
</tr>
<tr>
<td></td>
<td>6. The instructor calculates the mean for each group post-discussion and writes the pre- and post-discussion means of each group on the board. Each group mean should have become more extreme (against group post-discussion mean closer to 1 than pre-discussion mean and in favor group post-discussion mean closer to 10 than pre-discussion mean). While one instructor calculates the means, the other instructor can begin the “explain” discussion below.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Purpose: To help students apply their observations of the “Explore” activity to their understanding of how groups think and act. To help students think about moderators of group polarization – factors that make the effect more or less likely to occur.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Materials:</strong></td>
</tr>
</tbody>
</table>
Powerpoint presentation or video about social scientists’ understanding of group polarization.

**Instructional Sequence:**
1. Instructor leads class discussion of the observed shift in each group mean. Some questions to pose to students might be:
   - Why do you think your opinion was more extreme after the group discussion?
   - What did your group talk about?
   - What role did your group leader play?
   - Had you thought much about this topic before this class activity?
   - Did you feel like an expert on this topic?
   - Did you come away from the discussion with new information about the topic?
   - Did the new information about the topic support your original opinion?
   - Did members of your group try to present a different perspective on the issue?
   - How close did you feel to your group members before and after the discussion?

   If the group means did not become more extreme, discuss how experiments usually show group polarization and then talk about some reasons why that may not have happened in this case. The questions above will still be relevant, and the answers might help explain why the effect was not observed (for example, if the leader of the group changed his/her mind about the topic). If the effect is not observed, this can be a good segue into the next discussion: moderators of main effects, and the importance of replication in psychology.

2. After class discussion, give presentation about how situational circumstances can make psychological phenomena such as group polarization more or less likely to occur (moderators of main effects). For example, group polarization has been found to be more likely to occur when groups are tight-knit, and when the issue for discussion is novel (group members haven’t spent a lot of time thinking about it before). There are many more moderators of group polarization, but the focus here should be getting students to think of how situational circumstances can change psychological effects in general. The next section presents an opportunity to consider specific moderators of group polarization. Here, discuss the importance of replication (repeating the same experiment in different samples to see if the effect holds), and the role of moderators in non-replication (this may be particularly important if the group polarization effect is not observed in the explore section). Discuss how we can think of experiments to test whether certain situational circumstances influence whether the anticipated effect occurs or not.

<table>
<thead>
<tr>
<th>Extend/Elaboration</th>
<th>Discussion about the consequences of Group Polarization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose:</strong></td>
<td>To help students apply their understanding of group polarization to real-world problems.</td>
</tr>
<tr>
<td><strong>Materials:</strong></td>
<td>Video clips from campaign rallies for two presidential candidates from competing parties.</td>
</tr>
<tr>
<td><strong>Warning:</strong></td>
<td></td>
</tr>
</tbody>
</table>

Warning:
Be aware of the possibility of derailment when discussing political topics. Have students focus on the role of group polarization in campaign rallies – how opinions are more extreme – rather than on political issues raised by the candidates.

**Instructional Sequence:**
1. Present students with a video of a real-world situation that fosters group polarization (presidential campaigns might be a relevant, timely focus).
2. Have them discuss in pairs what aspects of the situation in the video may make group polarization more or less likely to occur, and how they would design an experiment to test those hypotheses.
3. In their pairs, they should also discuss ways to combat group polarization, based on their proposed moderators – how would they change aspects of the situation that promote polarization to attenuate the effect?

**Evaluation**
**Purpose:**
To allow students to communicate their new understanding of group polarization, using social psychology terms to discuss moderators and consequences of the effect.

**Materials:**
Computers for pairs of students to create Powerpoint presentations.

**Instructional Sequence:**
1. Each pair creates a powerpoint to present their ideas about consequences, moderators, and intervention methods from the extend/elaborate phase.
   - These powerpoints should include hypotheses about moderators of group polarization effects for campaign rallies and methods for experiments to test these hypotheses.
   - Pairs should also present ideas about interventions to attenuate group polarization effects for campaign rallies.
2. Class discussion of consequences of polarization and effectiveness of methods to attenuate the effect, based on students’ presentations.

**Appendix**
**Vocab:**
- **Social psychology:** The scientific study of how people’s thoughts, feelings, and behaviors are influenced by the actual, imagined, or implied presence of others.
- **Self-Report Measure:** A type of survey, questionnaire, or poll which involves asking a participant about their feelings, attitudes, beliefs and so on.
- **Behavioral Observation:** A broad term referring to a wide range of techniques used by researchers to document the behaviors of their subjects.
- **Main effect:** The effect of an independent variable on a dependent variable averaging across the levels of any other independent variables.
- **Moderator:** A moderator variable is a third variable that affects the strength of the relationship between a dependent and independent variable
- **Generalizability:** The extent to which an experiment’s findings apply to participants outside of the experimental sample.
- **Replication:** The repetition of a research study with different subjects to determine if the basic findings of the original study can be generalized.
- **Group Polarization/Group Shift:** The tendency for groups to make decisions that are more extreme than the initial inclination of its members.
- **Attenuate:** To reduce the observed effect (make it closer to zero).