Group Decision-Making

Added elements: Social Relations, Fear of embarrassment or exclusion, Culture, Norms, Reciprocity, Liking, Conflict, Group Decision rules…

Why use groups at all?

Subarctic Survival
Group Decision-Making

What to do:

1. Individual rankings—fill out in booklet, fill out copy for me. (15 minutes)
2. Break into study groups.
   — Write down group number on individual rankings, collect individual ranking for your group, and return individual rankings to me.

3. Group Discussion, Group Rankings, Group Scoring (40 minutes)
4. Return Group Summary form to me.
5. Take break (15 minutes)
6. Return to class at (One hour from now)

• Why group decision making?
Other Problems

• From you: How many jelly beans are in this jar?

How far off?
Avg. Individual Error = 2,162  
Avg. Error of Individuals = 523  
Avg. Group Estimate = 2,229  
Actual Answer = 2,845

Other Samples

Groups generally better than individuals (Synergy), but often worse than best individual (process loss).
Group Process Loss

Two major sources of process loss:

1. Rational problem-solving mistakes.
2. Mismanaging Interpersonal Dynamics.

Rational Problem Solving mistakes:

1. Poorly defined problem-solving process (What needs to be addressed, and in what order? What is the decision rule?)
2. Poorly identified objective (What is the overarching goal? What are the possible courses of action/inaction?)
3. Poorly analyzed situation (What are the facts versus assumptions?)
4. Insufficient consideration of obstacles and adverse consequences (The Planning Fallacy, Overconfidence, The Illusion of Invulnerability)
5. Insufficient consideration of alternate strategies (Pre-commitment, failing to specify and discuss alternatives).
Group Process Loss

Anatomy of Rational Decision Process:

1. Define problem and problem-solving process (What needs to be addressed, and in what order? What is the decision rule?)

2. Identify main objective or goal (What is the overarching goal?, what are the possible courses of action/inaction?)

3. Analyze the situation (What are the facts versus assumptions?)

4. Privately, then publicly, consider obstacles and adverse consequences (Take worst case scenarios seriously, Where could things go wrong?)

5. Seek and consider alternative strategies.

—Adapted from Forsyth, 1990

Group Process Loss

Mismanaging Interpersonal Dynamics: Fundamental tension

Group-Cohesion: Enables action

1. Shared objectives
2. Efficiency-inducing norms (understood procedures, styles, expectations, etc.)
3. Increased motivation and accountability
4. Fun (intrinsic motivation)
5. Trust (cooperation & creativity)

“Yes, we must, indeed, all hang together or, most assuredly, we will all hang separately.”
—Benjamin Franklin at the signing of the U.S. Declaration of Independence

Also major contributor to process loss—

Enables Groupthink and trips to Abilene…
Group Process Loss

Mismanaging Interpersonal Dynamics: Fundamental tension

Group Cohesion—Enables Action
1. Shared objectives
2. Efficiency-inducing norms (understood procedures, styles, expectations, etc.)
3. Increased motivation and accountability
4. Fun
5. Trust

Heterogeneity (Diversity)—Enables Accuracy
1. Diverse opinions, information, experience, values, etc.
2. Increases variety of ideas when creativity is needed.
3. Yields offsetting mistakes when making predictions.
4. In interdependent tasks, heterogeneous expertise incorporates more varied problem dimensions.

—What’s the problem? (Dearborn & Simon)
• Experiment: Mid-level managers at a large manufacturing firm read a business case and were asked to diagnose the business’s problems.

<table>
<thead>
<tr>
<th>Problem Area</th>
<th>Department</th>
<th>“Sales/Mktg”</th>
<th>“Org. Design”</th>
<th>“Human Relations”</th>
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<td>Sales</td>
<td>84%</td>
<td>16%</td>
<td>0%</td>
<td></td>
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<tr>
<td>Production</td>
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<td>HR</td>
<td>0%</td>
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<td>100%</td>
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Sources of Cohesion:

- **Similarity**
  - People like others similar to themselves
  - One of the most powerful principles of persuasion
  - A major obstacle for heterogeneous teams (need to find similarity in higher-order goals and values)

- **Common identity**
  - Goals, Language, Interests

- **Common enemy**
  - E.g., management, competitors, employees in the *other* building

- **Shared success**
  - Power of early victories—engineer small wins

- **Shared suffering**
  - We’re all in this together.
  - Works with inherently cooperative teams, not inherently competitive teams.

Sources of Heterogeneity (Diversity):

1. **Surface-level diversity** — (demographic diversity)
   
   Social category membership (e.g., Gender, Race, Ethnicity, Age, Physical Disabilities)
   
   Organizational or social status (e.g., Tenure, socioeconomic)

2. **Deep-level diversity** — (psychological/cognitive diversity)
   
   Knowledge or skills (e.g., Education, Practical Knowledge, Expertise, Training, Experience, Abilities)
   
   Values or beliefs (e.g., Cultural Backgrounds, Ideological Beliefs)
   
   Personality Differences (e.g., Chronic Mood, Motivation)
**Group Decision-Making**

“Studies on diversity in teams from the last 50 years have shown that surface-level social category differences such as race/ethnicity, gender, or age tend to be more likely than underlying differences to have negative effects on the ability of groups to function effectively, in terms of variables such as performance, commitment, and satisfaction. Age diversity tends to have the weakest effects, while tenure diversity is often most strongly negatively related to performance in organizational groups. Underlying differences, such as differences in functional background, education, or personality, are more often positively related to performance, for example in terms of creativity or group problem solving, but only when the group process is carefully controlled.”

Mannix & Neale, 2005

Note the factors that increase cohesion can decrease diversity, and vice versa.

Ideal group: Cohesive on high-level goals, ideals, ethics, motivations, and social relations, but is diverse on deep levels (expertise, opinions, practical experience, etc.) in a context that enables dissenting opinions.

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**Barriers to Ideal Groups**

Mismanaging Agreement:

1. Structuring agreement through group membership.
2. Creating agreement through social influence.
3. Imagining agreement through intuitive mind-reading.
Barriers to Ideal Groups

Mismanaging Agreement:

1. Structuring agreement:
   Like being with similar others, dislike dissimilar others.
   Tend to surround ourselves with highly similar others.
   Select groups from those who surround us (within same division, same company level, etc).
   May unintentionally avoid divergent perspectives.

Structured agreement at the White House:
“Bush said he insulates himself from the ‘opinions’ that seep into news coverage by getting his news from his own aides. He said he scans headlines, but rarely reads news stories. ‘I appreciate peoples’ opinions, but I’m more interested in news,’ the president said. ‘And the best way to get the news is from objective sources, and the most objective sources I have are people on my staff who tell me what’s happening in the world.’”
- The Associated Press, 9/22/03

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Barriers to Ideal Groups

Mismanaging Agreement:

1. Structuring agreement:

2. Creating agreement—Social Influence
   
   **Normative Social Influence:** Conformity to group norms in order to avoid social isolation, rejection, or embarrassment.

   “Go along to get along.”
   “Do as most do, and most will speak well of thee.” Thomas Fuller
Barriers to Ideal Groups

Asch (1952)—

| A         | B          | C
|-----------|------------|---
| Standard  | Comparison |

75% conform at least once, 30% conform more than half the time.
2% error rate in private.

Barriers to Ideal Groups

Mismanaging Agreement:

1. Structuring agreement

2. Creating agreement—Social Influence

   Normative Social Influence: Conformity to group norms in order to avoid social isolation, rejection, or embarrassment.
   —Coerces agreement, no internalization of belief.

   Informational Social Influence:
   Others used as a source of information when we are uncertain.
   Rational form of influence, major component of cultural learning.
From the background questionnaire:

Question: What is the average age of Fortune 500 CEOs?

Two conditions: First,
1. What is the last digit of your telephone number, or
2. What are the last THREE digits of your telephone number?

Then, is the average age more or less than…

Finally, what is the actual average age of…

Synergy vs. Process Loss

<table>
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<tr>
<th>Estimated Age</th>
<th>Last Digit</th>
<th>Last Three</th>
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<tr>
<td></td>
<td>49.06</td>
<td>54.76</td>
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</table>
Milgram, Bickman, & Berkowitz (1969):

Sherif (1936)—Autokinetic Effect Experiments
Sherif (1936)—Autokinetic Effect Experiments

"I don't know how it started, either. All I know is that it's part of our corporate culture."
Barriers to Ideal Groups

Mismanaging Agreement:

1. Structuring agreement
2. Creating agreement—Social Influence
   
   **Normative Social Influence:** Conformity to group norms in order to avoid social isolation, rejection, or embarrassment.
   
   —Coerces agreement, no internalization of belief.

   **Informational Social Influence:**
   
   Others used as a source of information when we are uncertain.
   
   Rational form of influence, major component of cultural learning.
   
   Most powerful when you are uncertain, the situation is a crisis, when an expert is present.

   Ambiguity—“If your boss was fudging and you have never worked anywhere else, you just assume that everybody fudges earnings.”
   
   —Former Enron Employee

Barriers to Ideal Groups

Chasing the “Expert”:

Confidence widely used as a guide to accuracy.
Confidence generally poorly correlated with accuracy (.2-.3)
Greatest overconfidence among apparent experts.

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>QUESTIONS</th>
<th>% OF MISSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvard MBAs</td>
<td>General Knowledge</td>
<td>Should be 2% Actually is 46%</td>
</tr>
<tr>
<td>Chemical employees</td>
<td>Chemical industry facts</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Company-specific facts</td>
<td>50%</td>
</tr>
<tr>
<td>Computer company managers</td>
<td>General business facts</td>
<td>5%</td>
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<tr>
<td></td>
<td>Company-specific facts</td>
<td>5%</td>
</tr>
<tr>
<td>Physicians</td>
<td>Patient has pneumonia?</td>
<td>20%</td>
</tr>
<tr>
<td>Physicists</td>
<td>Scientific facts</td>
<td>32%</td>
</tr>
</tbody>
</table>
Barriers to Ideal Groups

Mismanaging Agreement:

1. Structuring agreement

2. Creating agreement—Social Influence
   
   **Normative Social Influence:** Conformity to group norms in order to avoid social isolation, rejection, or embarrassment.  
   —Coerces agreement, no internalization.

   **Informational Social Influence:**  
   Others used as a source of information when we are uncertain. Rational form of influence, major component of cultural learning. Most powerful when situation is ambiguous, a crisis, or when an expert is present.  
   —Persuades agreement, new attitudes internalized.

   Consider: Asch vs. Sherif w/ no others present
   
   Abilene paradox is largely (imagined) normative influence
   
   Groupthink largely represents informational influence

3. Imagined agreement—Following the imagined herd.
   
   **Abilene Paradox**—Groups may agree to a course of action that no individual member prefers because they each assume other members do.

   **Pluralistic Ignorance**—State in which people mistakenly believe that their thoughts and feelings are different from others even though their overt behavior is similar.
   
   Experimental example—Drinking at Princeton

   —The *real* benefit of free speech
Barriers to Ideal Groups

Mismanaged Agreement and Groupthink:

— Illusion of Invulnerability
— Rationalizations
— Belief in Inherent Morality of the In-Group
— Stereotypes of Out-Groups
— Pressuring Deviates to Conform
— Self-Censorship
— Illusion of Unanimity
— Mindguards

“Gentlemen, I take it we are all in complete agreement on the decision here…Then I propose we postpone further discussion of this matter until our next meeting to give ourselves time to develop disagreement and perhaps gain some understanding of what the decision is all about.”

— Alfred P. Sloan, Jr., as Chairman at General Motors
(cited in Russo & Schoemaker, p. 164)
Making Ideal Groups

Conflict is a necessary part of successful groups, but:

Task conflict: Diversity of opinion about the decision at hand, the problem to resolve, or the strategy to adopt.

Relationship conflict: Conflict in social relations among group members.

Your job:

Create cohesion between among deeply-diverse group members.
Create norms that enable dissention and criticism.
Focus conflict on ideas, not individuals.

Overcoming barriers:

Barrier #1—Structuring agreement
Note ease with which you can surround yourself with yea-sayers, and similar others. Note ease with which you and others unintentionally structure agreement.
Seek deep-diversity in groups, not superficial diversity.

Barrier #2—Creating agreement
Create norms that enable dissent—seek, listen to, and encourage divergence of opinion.
Common (bad) strategy—Brainstorming…
Making Ideal Groups

Brainstorming: Many groups begin by…

Identifying a problem
Assembling a group
Generating ideas and solutions under standard rules:
  – Defer judgment
  – Go for quantity
  – Encourage wild ideas
  – Record all ideas
  – Only then evaluate, select, refine

What source(s) of social influence is it designed to reduce?

Making Ideal Groups

An Better Alternative: The Nominal Group Technique

• Description
  – Individuals generate as many options as possible in half an hour
  – All options are pooled and similar options are grouped

What source(s) of social influence is this designed to reduce?
Making Ideal Groups

Brainstorming vs. NGT

• NGT produces
  – More ideas than brainstorming
  – More unique ideas than brainstorming
• Why?
  – Parallel versus sequential production of ideas
  – Also, NGT reduces informational influence
    • Brainstorming groups get trapped in a “hypothesis rut”
• Thus, NGT beats brainstorming on productivity measures
• Ideal method may be to combine the two approaches? NGT first, Brainstorm from those ideas second.

Making Ideal Groups

Overcoming barriers:

Barrier #1—Structuring agreement
  Note ease with which you can surround yourself with yea-sayers, and similar others. Note ease with which you and others unintentionally structure agreement.
  Seek deep-diversity in groups, not superficial diversity.

Barrier #2—Creating agreement
  Create norms that enable dissent—seek, listen to, and encourage, divergence of opinion. (Normative social influence).
  Use Nominal group technique rather than brainstorming…

Barrier #3—Imagined agreement
  Assign “devil’s advocate.”
  Break into smaller groups.
  Measure actual opinions (might be surprised by others’ opinions).
  Hold a “second-chance” meeting.
Group Decision-Making: Main Points

1) Groups can enable more effective action and increased accuracy.

2) Fundamental tension: Cohesion enables action, diversity enables accuracy. Factors that increase cohesion can reduce diversity.

3) Ideal group is cohesive on high-level goals, expresses task-level conflict.

4) Avoiding barriers requires:
   — Structuring diversity (seek advice from outsiders)
   — Avoiding normative & informational social influence (use Nominal Group Technique)
   — Avoiding imagined agreement (Devil’s Advocate, second chance meetings, etc.)

5) Creating ideal groups is facilitated by organizational policies that preserve heterogeneity & independence of opinions, within a cohesive culture.