



Responsibility Diffusion in Cooperative Collectives

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Introduction; Donelson R. Forsyth, Linda E. Zyzniewski & Cheryl A. Giammanco

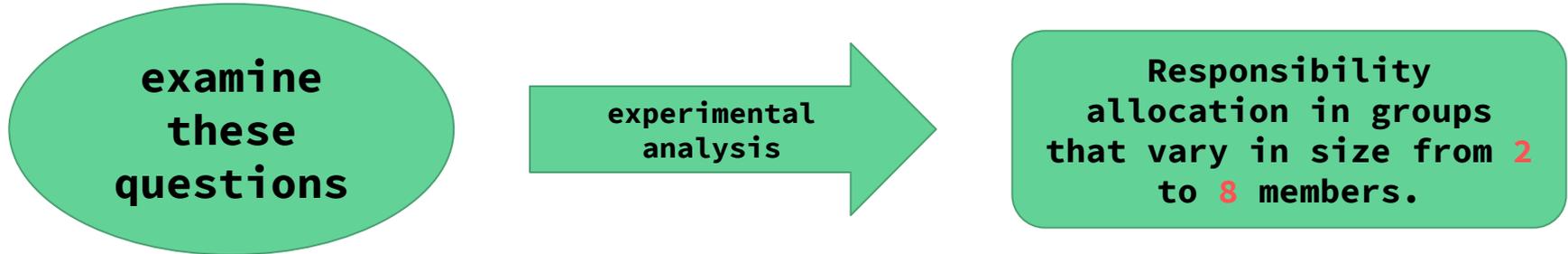
- *Does responsibility diffuse more as groups increase in size but eventually level off in larger groups?*
- *Does responsibility diffuse equally, with each member getting an equal portion, or is it concentrated on certain individuals?*
- *Do group members apportion responsibility in ways that maximize their own self-esteem?*

Introduction; [history](#)

- *...“pressures to intervene do not focus on any one of the observers; instead, the responsibility for intervention is shared among all the onlookers and is not unique to any one” Darley & Latané, 1968, p. 378.*
- *Members of groups made riskier choices and felt less responsible for the negative consequences that ensued. Mynatt and Sherman (1975)*
- *Deindividuation, in addition to reducing self-awareness, also generated feelings of shared responsibility for outcomes. Rogers and Prentice-Dunn (1981)*
- *Participants reported feeling less responsible when working in a group than when working alone. Williams, Harkins, & Latané’s (1981) studies of social loafing in groups*

Introduction; puzzles about the process of diffusion

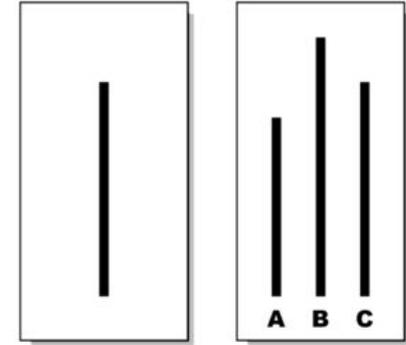
1. *Does this diffusion follow a **pattern** similar to that seen in some studies of conformity, social influence, and social impact?*
2. ***Where** does responsibility go when it diffuses in the group?*
3. ***Why** does responsibility diffuse?*



PATTERNS OF DIFFUSION OF RESPONSIBILITY

- *Asch (1955):*

- 1. Few people conformed when they confronted one or two other people who disagreed with them but that conformity rates increased when one person faced a majority of three.***
- 2. Evidence of a ceiling effect in influence rates, because adding even more people beyond three generated only slight increases in conformity.***



Which line matches the first line, A, B, or C? In the [Asch conformity experiments](#), people frequently followed the majority judgment, even when the majority was wrong.

PATTERNS OF DIFFUSION OF RESPONSIBILITY

- *Milgram, Bickman, and Berkowitz (1969):*

A linear relationship between influence and group size in their study of people's reactions to a group gathered in a public place:

→ *the more people in the group, the greater the group's influence.*

PATTERNS OF DIFFUSION OF RESPONSIBILITY

- *Latané's (1981) Social Impact Theory (SIT):*

- 1. The largest drop in responsibility will occur when a second person joins a lone individual***
- 2. Each additional person will stimulate additional diffusion, but the impact will decrease as the group grows larger and larger.***

$$I = sN^t$$

amount of diffusion (I) will equal the impact of a single person on feelings of responsibility (s) multiplied by the number of other people in the group (N), raised to a certain power (t)

PATTERNS OF DIFFUSION OF RESPONSIBILITY

- *Mullen 's (1983) Other/ Total Ratio (OTR) model*

Responsibility will diffuse in proportion to group size; members of two-person groups will accept half, or 50%, of the responsibility for the group's performance, whereas those in four-person groups will accept one quarter, or 25%, and so on. (Somehow in agreement with Latané's.)

PATTERNS OF DIFFUSION OF RESPONSIBILITY

- *Tanford and Penrod 's (1984) social influence model (SIM):*
 1. *Few people conform when one other person disagrees with them but that conformity rises rapidly when a single person faces a group of three or more.*
 2. *The ceiling effect occurs after that point, with the result that increasing the number of people does not increase the group's influence.*
 3. *Members of dyads will diffuse less responsibility than that predicted by OTR or SIT but that members of larger groups will diffuse responsibility at relatively equal rates.*

CONCENTRATION OF RESPONSIBILITY

- ***Responsibility, like gases, may diffuse unevenly throughout a group, with more being apportioned to group members who occupy more central positions in the group, who have special expertise, or who take a more active role in the group's activities*** (Leary & Forsyth, 1987).

- Zander (1971) and dominos in a group of 3 boys,
- Schwartz & Clausen (1970) and helping.
- Pepitone (1952) and assigning important tasks.
- #Leadership & #Agreement

One's role within the group influences how much responsibility one takes relative to others and also how much responsibility one is given by others.

EGOCENTRIC TENDENCIES IN RESPONSIBILITY ALLOCATION

- *Group members claim personal responsibility for group success but disclaim responsibility for group failures. (Leary & Forsyth, 1987).*
- *Group members display a group-serving, or sociocentric, bias as group members emphasize the group's responsibility after success and the group's blamelessness after failure. (Forsyth, Berger, & Mitchell, 1981).*
- *Students who worked closely with a professor on a successfully completed joint project gave on average more than 80% of the credit to themselves rather than their mentor (Ross & Sicoly, 1979)*
- *Subordinates blamed negative performance appraisals on their boss or external factors but credited themselves for positive reviews (Gioia & Sims, 1985).*

EGOCENTRIC TENDENCIES IN RESPONSIBILITY ALLOCATION

- 1. *The diffusion of responsibility is a partly motivated process rather than a strictly logical one.***
- 2. *A motivated model of responsibility diffusion assumes that individuals' need to view themselves positively distorts their interpretation of their responsibility for good and bad outcomes.***
- 3. *Group members' sense of self-worth prospers when their groups are credited with the successes but not blamed for their failures. (Dietz-Uhler & Murrell, 1998).***

THE PRESENT STUDY

Responsibility Diffusion in Cooperative Collectives

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METHOD

- Participants
- Procedure
- Measures

RESULTS

- Perceptions of Performance
- Perceptions of Own Responsibility
- Perceptions of Other's Responsibility
- Perceptions of Contribution to the group Roles and Responsibility

DISCUSSION

- 61 women and 61 men in cell of the 2 (performance: success or failure) \times 4 (group size: two, four, six, and eight) factorial design.
- The sessions were conducted by one of five experimenters (two men and three women) who conducted nearly equal numbers of sessions across the performance manipulation.
- The study concerned groups that “had no history as a group”
- The group members were all same-sex for all sessions.

Method

- Participants

- An investigation of “the intellectual performance of groups,” measured intelligence and creativity with a test designed for groups rather than individuals.
- Group Ability Test included analogy, vocabulary, mechanical aptitude, and decision-making items drawn from a well-known intelligence test.
- Participants completed nine multiple-choice items individually and one decision-making item in a face-to-face group discussion.

Method

- Procedure

E.g, “Seek is to Find as Hear is to (a) listen, (b) know, (c) understand”

So that the participants could not determine their own level of performance subjectively.

- Final item on the Group Ability Test assessed the group's ability to communicate effectively, think creatively, and efficiently evaluate a number of possible solutions before finding the best answer.
- Participants were then given several slips of paper containing information about a murder mystery and were told that the group was to answer the mystery by discussing these clues.

Method

- Procedure

- Your group did very well and ranks easily in the top 10% of all the groups that we have tested using these tasks. Your Group Ability Quotient was 122, which is quite high. Since your group did so well, please put your names and addresses on these slips so we can put your name in the raffle.
- Your group didn't do well at all. It scored in the lower 20% of all the groups that we have tested using these tasks. Your Group Ability Quotient was 88, which is quite low. I'm sorry but your group did not qualify for the raffle, so don't fill out the slips

Method

- Procedure

Participants completed an extensive questionnaire at the completion of the study. The questionnaire asked general questions about their experiences in groups and their appraisal of the current group, but specific items about responsibility, contributions, and roles also were embedded in the inventory

Method

- Measures

Allocate 100 points among all the members of the group, giving more points to the more responsible member.

Method

- Measures
 - Responsibility points

Participants were given a list of group members, identified only by letter, and asked to give each one a rating from 1 to 5 to indicate the magnitude of their contribution;
(1 = not a contributor and 5= large contributor).

Method

- Measures
 - Contribution

Group members were given a list of **eight possible roles** that may have existed in their group: leader, critic, joker, harmonizer, follower, observer, communicator, and participator. They were then told to assign these role labels to each of the group members, with the stipulation that roles could be used many times and that any individual could be assigned multiple roles.

Method

- Measures
 - Role

Participants rated the quality of their group's performance on a 9-point scale that ranged from very well to very poorly . Participants also responded to three Likert-type items to assess their attraction toward the group:

1. "I liked the other members of the group,"
 2. "I would be willing to work with this group again in the future,"
 3. "There was a feeling of unity and cohesion in my group."
- *All items were answered using a 5-point scale that ranged from 1 (strongly disagree) to 5 (strongly agree). These items were averaged together to yield a total cohesion score.*

Method

- Measures
 - Ancillary items

Results

- **Perceptions of Performance**

- ❖ “How well did the group-as-a-whole do on the test?”
- ❖ Members of groups that failed rated their group’s performance more negatively than did members of successful groups.

- **Perceptions of Other’s Responsibility**

- ❖ Group size and others’ responsibility
- ❖ Patterns of responsibility diffusion

- **Perceptions of Contribution to the Group**

- ❖ Group size and own contribution
- ❖ Group size and others’ contributions
- ❖ Consensus

- **Roles and Responsibility**

- ❖ Role selections
- ❖ Allocation of roles to other group members
- ❖ Leadership and responsibility

<i>Index</i>	<i>Group Size</i>			
	2	4	6	8
1. Personal responsibility (% of responsibility to self)	51.84 ^a (11.62)	27.63 ^b (7.76)	17.80 ^c (5.18)	12.97 ^d (3.60)
2. Other's responsibility (averaged across others)	48.12 ^a (0.12)	24.16 ^b (0.03)	16.43 ^c (0.01)	12.44 ^d (0.01)
3. Discrepancy between most responsible member and average allocation	0.13 ^c (6.35)	3.28 ^{b, c} (3.74)	5.97 ^{a, b} (9.73)	7.12 ^a (4.66)
4. Discrepancy between least responsible member and average allocation	0.13 ^a (6.35)	-4.53 ^b (5.37)	-2.22 ^{a, b} (11.36)	-5.28 ^b (2.98)
5. Range in responsibility allocations	—	7.81 ^b (7.98)	8.19 ^b (6.83)	12.40 ^a (6.51)
6. Own contribution	4.42 ^a (0.83)	4.03 ^a (0.67)	4.23 ^a (1.23)	3.56 ^b (0.84)
7. Others' contributions (averaged across others)	4.21 ^a (1.14)	3.77 ^b (0.69)	3.55 ^b (0.58)	3.44 ^b (0.49)
8. Highest contributor's rating	4.29 ^a (0.85)	4.38 ^a (0.55)	4.45 ^a (0.67)	4.65 ^a (0.48)
9. Low contributor's rating	4.29 ^a (0.85)	3.29 ^b (1.00)	2.45 ^c (0.80)	2.25 ^c (0.84)
10. Range in contribution ratings	—	1.09 ^b (0.90)	2.00 ^a (1.02)	2.41 ^a (0.87)

TABLE 2: The Impact of Performance Feedback and Group Size on Perceptions of Personal and Other Member's Responsibility

<i>Index</i>	<i>Performance</i>	<i>Group Size</i>			
		2	4	6	8
1. Personal responsibility	Success	55.66 ^a (7.60)	24.95 ^c (2.91)	17.78 ^d (2.39)	13.56 ^d (4.06)
	Failure	49.23 ^a (7.60)	32.08 ^b (10.97)	17.82 ^d (6.81)	12.36 ^d (2.98)
2. Deviation from OTR	Success	4.66 ^{a, b} (14.67)	-0.06 ^b (2.91)	1.11 ^{a, b} (2.39)	1.00 ^{a, b} (4.08)
	Failure	-0.77 ^b (7.69)	7.08 ^a (10.97)	2.39 ^{a, b} (6.81)	-0.14 ^b (2.98)
3. Other member's responsibility	Success	45.25 ^b (14.95)	25.07 ^c (1.03)	16.47 ^d (0.43)	12.35 ^d (0.58)
	Failure	50.77 ^a (7.60)	22.64 ^c (3.65)	16.40 ^d (1.35)	12.53 ^d (0.44)

NOTE: For any one index, means without a common single letter superscript differ at $p < .05$ by Duncan's New Multiple Range Test ($df=3, 91$). OTR = Other/ Total Ratio model.

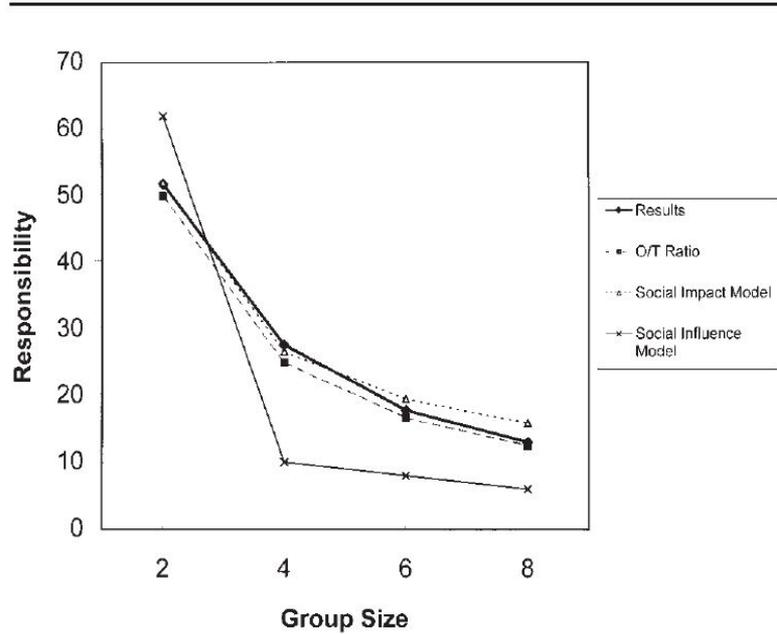


Figure 1 The predicted and obtained relationships between group size and diffusion of responsibility in groups.

NOTE: Social Impact Theory (SIT) = $51.84N$. O/T Ratio = Other/ Total Ratio.

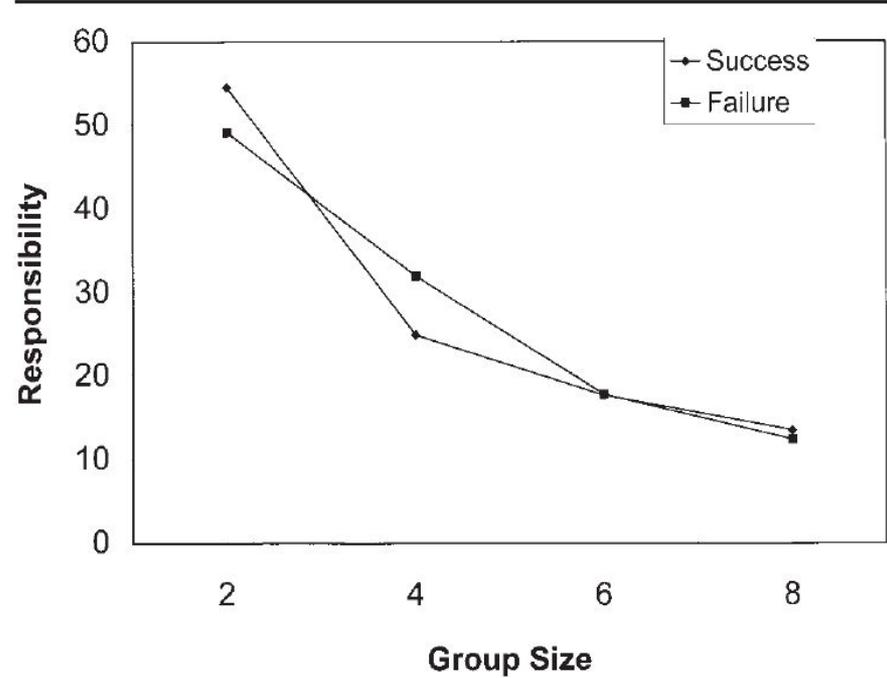


Figure 2 The impact of group performance on diffusion of responsibility in two-, four-, six-, and eight-person groups.

— Overall

- Responsibility diffused in proportion to **group size** as group members concentrated more responsibility on some group members and withheld responsibility from others through specific **role allocations**.
- There was a significant **degree of consensus** in group members' perceptions of individual members' contributions to **performance**, but members generally felt they contributed more to the group than did other members.

Thank You

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