

**Shared Anxiety and Group Effectiveness:  
The Role of Narrowing Interactions**

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THE ROLE OF NARROWING INTERACTIONS

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## Shared Anxiety and Group Effectiveness: The Role of Narrowing Interactions

### Abstract

This research explores how negative emotions shared among group members influence group effectiveness, and how narrowing interactions mediate this relationship. Prior research has neither conceptually specified nor empirically tested the causal mechanisms that explain how and why group emotions influence group outcomes. I seek to fill this gap by introducing narrowing interactions as a group level mechanism. Drawing from the psychological theory of emotions (e.g., Easterbrook, 1959) and the threat-rigidity hypothesis (Staw, Sandelands & Dutton, 1981), I propose that group members that share an emotion of anxiety will exhibit more frequent narrowing interactions (i.e., planning, monitoring and critical evaluation) than those that share neutral emotions. In turn, narrowing interactions are expected to enhance group decision quality but decrease group creativity and member learning. I discuss the theoretical contributions of the research to group, individual emotions, and group emotions literatures, as well as the future research directions.

## INTRODUCTION

Research on the relationship between negative emotions and organizational behaviors has found mixed results at the individual level (George & Brief, 1992). For example, negative emotion has been found to both increase helping behavior (Carlsmith & Gross, 1969; Cialdini, Darby & Vincent, 1973) and decrease helping behavior (Moore, Underwood & Rosenhan, 1973). Isen and Baron (1991) provided rationales for these confusing results regarding negative emotions. On the one hand, negative emotions are likely to result in negative behaviors such as aggression or hostility to others. This is because individuals behave in a congruent way with his or her current affective state. On the other hand, negative emotions may result in positive behaviors to repair the current negative feelings. Negative emotions signal that something is wrong, which motivates individuals to engage in behaviors that can alleviate or change the current situation that causes negative feelings. This focus on outcomes of negative emotions limits our understanding of why there are inconsistent results. In this paper, I propose narrowing interactions as a mechanism that explains how negative group emotions influence group effectiveness and how negative emotions lead to conflicting outcomes.

### **Negative Emotions and a Narrowed Scope of Cognition and Attention**

Unlike positive emotions that broaden individuals' thought-action repertoire, a long-standing proposition in psychology is that negative emotions tend to limit the range of possible reactions by the individuals (Lazarus, 1991). For example, people experiencing fear or anger exhibit narrow action tendencies by focusing on certain actions such as fleeing or attacking (Frijda, Kuipers & Schure, 1989; Lazarus, 1991). Fredrickson (1998) argue that, from evolutionary perspective, these negative emotions may have helped human ancestors survive in life-threatening situations by focusing on specific actions. A recent finding by Fredrickson and Branigan (in press) supports this argument by showing that negative emotions narrow individuals' thought-action repertoires. They found that individuals experiencing negative emotions listed fewer things that they would like to do at the moment, compared with those

experiencing positive and neutral emotions. Earlier literature also found that negative emotion was likely to make individuals restrict attention and use narrow categorization (for review see Easterbrook, 1959).

### **Threat-Rigidity Hypothesis**

Similarly, several organizational scholars have proposed in the threat-rigidity hypothesis (Staw et al., 1981) that threat narrows the scope of cognition and attention and results in rigid responses. People experience anxiety through threat appraisal, that is, when they perceive potential danger to their well-being or self-esteem, or when they have low confidence in their ability to cope with the given situation (Lazarus, 1991; Skinner & Brewer, 2002). The threat-rigidity hypothesis posits that under threat or time pressure, groups tend to seek consensus so that a group as a whole can respond to the situation efficiently. As a result of consensus seeking, the group's attention span narrows, its sensitivity to peripheral cues declines, and the group ends up ignoring divergent information (Gladstein & Reilly, 1985; Staw et al., 1981). Under threat, groups become rigid in their responses and operations by restricting the amount of information and relying on formalized and routine procedures (Staw et al., 1981). This perspective suggests that the group emotion of anxiety caused by threatening situations or time pressure, may narrow members' scope of attention and cognition and influence member interaction.

### **Narrowing Interactions at a Group Level**

In this paper, I conceptualize narrowing interactions with three types of interactions: planning, monitoring, and critical evaluation. Research by Jehn and Shah (1997) and Weldon, Jehn and Pradhan (1991) propose information sharing, planning, monitoring, and critical evaluation as task-related interactions that occur dominantly within work groups. Among these different types of task-related interactions, I suggest that planning, monitoring, and critical evaluation are the three interactions that manifest narrowing interaction. I chose these three types of interactive behaviors because they are likely to narrow the course of action and

idea generation while working on group tasks, and because they may be detrimental to building enduring social resources by criticizing one another. Information sharing is excluded from narrowing interaction, because it is rather broadening by expanding knowledge. Also, a confirmatory factor analysis by Jehn and Shah (1997) revealed that information sharing and morale-building communication belonged to one factor, termed “positive communication”. Therefore, I use only three types of interactive behaviors in conceptualizing the narrowing interactions

Planning. Planning involves suggesting an order and direction of acts to be performed in completing a task. Examples are “specifying task procedures, delegating task responsibility, determining temporal order for task duties, and determining actions necessary to complete the task” (Weldon et al., 1991: 556). Planning tends to narrow down the range of possible courses and order of actions for the purpose of accomplishing group tasks in time with efficiency.

Monitoring. Monitoring takes place when members assess the progress of group performance (Jehn & Shah, 1997). Group processes at the midpoint tend to focus on monitoring because it is the point when group members become realistic about deadlines and the likelihood that the group will achieve its goal (Gersick, 1988). Checking the clock to assess how much time is left in accordance with the task procedure, talking about efficiency and progress, and refusing to digress from the task (e.g., Gersick, 1988) are examples of monitoring. Monitoring also tends to narrow the range of potential course of actions in accomplishing group tasks by emphasizing efficiency and focusing on finishing the tasks.

Critical evaluation. Critical evaluation includes “disagreements or arguments about the way a group member performs her duty, criticism about a member’s performance, or disapproval of a member’s suggestion” (Jehn & Shah, 1997: 778). In particular, I suggest that critical evaluation requires straightforward, direct expression or total ignorance.

Directness means no discrepancy between sentence meaning and speaker meaning, that is,

expressing what the speaker intends to convey and the listener interpreting the sentence meaning literally (e.g., Sanchez-Burks et al., 2003). Rejecting or disagreeing with others' ideas or opinions straightforwardly, or ignoring them is narrowing because it discourages any further development of the ideas. Also, critical evaluation may be detrimental for building social resources among group members such as friendship and a sense of closeness, because criticizing each other's ideas or opinions in a straightforward manner or ignoring them implies lack of support and agreement.

### **Negative Group Emotion, Narrowing Interaction and Group Effectiveness**

I develop five hypotheses on how negative group emotion shapes group effectiveness through the mediating mechanism of narrowing interaction. In developing the hypotheses, I focus on the emotion of anxiety in particular. People experience anxiety when there is an existential threat and they are uncertain about what will happen and what to do to prevent it (Lazarus, 1991). Anxiety may be one of the most prevalent negative emotions experienced in organizational settings where time pressures and pressure from competition often exist (Gersick, 1988; 1989). Similar to the broad nature of emotion of joy that occurs often in combination with other positive emotions such as pride or contentment, anxiety has been defined as a combination of emotions including distress, anger, shame, guilt, and interest (Izard, 1977). Because the emotion of anxiety occurs with a diverse set of negative emotions, it may capture emotional experiences in diverse situations. Therefore, I build hypotheses with a focus on the emotion of anxiety.

### **Negative Group Emotion (Anxiety) and Narrowing Interactions**

Psychological and organizational research on negative emotions has consistently shown that experiencing negative emotions narrows scope of attention and cognition (Fredrickson, 1998; Lazarus, 1991; Staw et al., 1981). With a narrowed scope of attention and cognition, group members may interact in ways that narrow the range of thoughts and actions exchanged within the group. Of various types of interactions, I suggest that planning, monitoring, and



critical evaluation may represent certain types of interactions that narrow the range of thoughts and actions within groups. More specifically, planning and monitoring imply that the group discourages digression from the plan and emphasizes completing a group task in time. These types of interactions can limit the breadth of thoughts and actions by neglecting or refusing new ideas that may delay the task progress. Also, critical evaluation may narrow the range of thoughts and actions by disagreeing with and rejecting new ideas and opinions.

Therefore, I predict that when group members share negative emotions (especially the emotion of anxiety), they are likely to engage in narrowing interactions. More specifically, I hypothesize that a higher degree of convergence of anxiety among group members will lead to a greater frequency of narrowing interactions.

***Hypothesis 1.** Greater convergence of a negative emotion of anxiety among group members will increase narrowing interactions among the members.*

### **Narrowing Interactions and Group Effectiveness**

Group Creativity. Narrowing interactions are likely to hamper group creativity. Narrowing interaction such as planning, monitoring, and critical evaluation occur intensively when group members become sensitive about the task deadline (Gersick, 1988). At that point, members tend to restrict new thoughts or information (e.g., “John, I don’t think that’s a good idea. Let’s stick to our original plan.”), and put emphasis on completing the task. Glynn (1994) found that groups that focused on performance quantity or achievement, rather than on the task process, generated outputs that were mechanistic rather than organic or creative. Therefore, I hypothesize that narrowing interaction, and critical evaluation in particular, will reduce group creativity.

***Hypothesis 2.** More narrowing interactions among group members will increase group creativity.*

Group Decision Quality. Decision-making is a complex cognitive task that involves analyzing different alternatives and narrowing down these alternatives with accuracy (Forbes &

Milliken, 1999). Narrowing interaction is expected to enhance group's decision-making performance, especially when the group needs to make a decision with given alternatives or when the decision-making task does not require generation of a large number of alternatives. Planning has been shown to increase group performance (Weldon et al., 1991) through the formation of task performance strategies (Hackman & Morris, 1975). Task performance strategies can have a considerable impact on successful performance, especially in the case of complex group task such as decision-making (e.g., Weldon et al., 1991). Also, research suggests that monitoring enhances group decision-making performance (Jehn & Shah, 1997). Monitoring involves assessing and providing feedback about the group's progress and its likelihood to complete the task in time (e.g., Ashford & Cummings, 1983), which may motivate members to narrow down their actions and strategies to the most efficient ones.

Critical evaluation also contributes to group decision-making (Jehn & Shah, 1997). Research has suggested that conflict can improve decision-making if it is properly structured (Janis & Mann, 1977). Devil's advocacy technique, a dialectically styled interaction technique, has been found to promote decision quality by synthesizing conflicting perspectives into a single decision (Amason, 1996; Valacich & Schwenk, 1995). Similarly, critical evaluation involves criticizing, rejecting or disagreeing with others' ideas that may improve the quality of decision by providing an opportunity to learn and integrate conflicting ideas and perspectives. Thus, I propose that narrowing interactions that involve planning, monitoring, and critical evaluation will enhance the quality of group decision-making.

***Hypothesis 3.** More narrowing interactions among group members will increase the group's decision-making performance.*

Group Satisfaction. Satisfaction with the group indicates members' satisfaction with other group members in regard to accomplishing group tasks, which leads to members' intention to work together with current members in the future (Hackman & Oldham, 1980).

Research suggests that planning and monitoring may increase members' satisfaction with the group while critical evaluation may reduce members' satisfaction.

The emotion-motivation perspective (Morris & Reilly, 1987) suggests a positive relationship between narrowing interaction (planning and monitoring in particular) and group satisfaction. The perspective proposes that the negative emotion of anxiety will prime the goal of reducing uncertainties. Planning may fulfill members' goal of reducing uncertainties by specifying task procedures and order of acts that may reduce ambiguities in performing the task. Through monitoring, members learn the pace of task progress and the appropriateness of their current level of effort (Jehn & Shah, 1997), which may reduce uncertainties by giving a sense of control over the task progress. Research has shown that people become satisfied when their needs and objectives are fulfilled (e.g., Diener, Oishi & Lucas, 2003). For example, subordinates became more satisfied when managers supported the subordinates' needs for self-determination (e.g., autonomy, non-controlling feedback) (Deci, Connell & Ryan, 1989). Thus, planning and monitoring may increase members' satisfaction with the group by fulfilling their needs for uncertainty reduction.

***Hypothesis 4a.** More planning and monitoring among group members will increase members' satisfaction with the group.*

Disagreement, rejection, and ignorance in critical evaluation are likely to increase conflict and reduce morale and harmony in groups (e.g., Jackson, May & Whitney, 1995; Williams & O'Reilly, 1998). Critical evaluation accentuates differences among members' perspectives, which is likely to provoke some acrimony (Amason, 1996). Studies have demonstrated that groups with high level task conflict showed low satisfaction with the group and less desire to remain in the group (Jehn, 1995; Schweiger, Sandberg & Ragan, 1986). Therefore, I predict that groups engaged in narrowing interaction will be less satisfied with the group.

***Hypothesis 4b.** More critical evaluation among group members will decrease member satisfaction with the group.*

Member Learning. Member learning involves self-evaluation of how much knowledge and skill they acquired through group experience (Hackman, 1987). Narrowing interactions may inhibit individual member learning because the interactions are likely to discourage experimentation with new ideas and exploration of new field of knowledge (e.g., Edmondson, 1999). Organizations that are concerned about efficient short-term performance tend to discourage or even punish members' learning attempt (Srikantia & Pasmore, 1996). Also, groups in an emotional state of anxiety may engage in planning and monitoring in order to reduce uncertainties. Because experimentation and exploration are basically trial and error procedures that accompany risk of failure, groups experiencing anxiety are not likely to engage in those learning practices. Thus, planning and monitoring will discourage experimentation and exploration, which results in decreased member learning.

Critical evaluation, that is, disagreement and rejection of another person's ideas or opinions in a straightforward manner, may not contribute to psychologically safe climate for experimentation and exploration (e.g., Edmondson et al., 2001). Edmondson (1996), in her study of patient care groups in hospitals, found that nurses were reluctant to report errors in the environment where general attitudes toward drug errors were more focused on blame, rather than learning. In fear of possible rejection by other group members, individuals may be reluctant to share new information openly or experiment with new ideas, which is detrimental to member learning. Therefore, I hypothesize that narrowing interaction including planning, monitoring, and critical evaluation will decrease the extent to which individual member learns from group experience.

*Hypothesis 5. More narrowing interactions among group members will decrease member learning.*

## **DISCUSSION**

This research attempts to help our understanding of the mechanisms through which negative group emotion influences group effectiveness. I presented several predictions based

on the principle of narrowing effects (Easterbrook, 1959; Lazarus, 1991; Staw et al., 1981) derived from theories of negative emotions. I proposed that negative group emotions, through narrowing interactions, would influence group effectiveness including performances on group creativity and decision-making tasks, member satisfaction with the group, and individual member learning from the group experience. The negative group emotion of anxiety was expected to lead to narrowing interactions (planning, monitoring, and critical evaluation). The narrowing interactions, in turn, were hypothesized to enhance the quality of group decision-making rather than group creativity, and to decrease members' learning. Among the narrowing interactions, planning and monitoring were predicted to increase member satisfaction with the group whereas critical evaluation was predicted to decrease member satisfaction.

This paper will make contributions to the literatures on groups and emotions in three ways. First, I develop a conceptual mechanism – narrowing interactions – that unpack the underlying group mechanism that explains how negative group emotions may shape group effectiveness. Second, I seek to contribute to the literatures on the narrowing effect of negative emotions by expanding the level of study from individuals to groups and by elaborating how narrowing effects will be manifested at the group level. Finally, this paper attempts to shed light on socio-emotional components of group processes, group emotions in particular, a notion that has only recently gained interest of organizational scholars. In sum, this paper expands the domains of psychological and organizational theories by suggesting a framework of how emotions at the group level may shape group effectiveness.

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