Effects of group-discussion integrative complexity on intergroup relations in a social dilemma

Guihyun Park[a,*], Richard P. DeShon[b]

[a] Singapore Management University, Singapore
[b] Michigan State University, United States

ABSTRACT

Organizations increasingly rely on team-based work systems—yet intergroup behavior is predisposed toward competition, which can render conflict management in organizations especially difficult. Based on the integrative complexity model of group decision-making and the literature on intergroup social dilemmas, we argue that a lack of quality group discussion (i.e., low integrative complexity) can heighten group members' sense of greed toward and fear of other groups—and, by doing so, increase the likelihood that a group will decide to compete. Accordingly, we propose and evaluate two interventions that target group-discussion dynamics to promote the integrative complexity of group discussion and intergroup cooperation: structured group discussion and discussion led by a group member who favors cooperation. Two hundred eighty-five participants were assigned to groups of three and played an iterated prisoner's dilemma game. Results demonstrate that participating in a structured group discussion increased the integrative complexity of group discussion, during which different perspectives were fully deliberated before making a final decision. This, in turn, decreased the sense of greed and fear, and reduced the likelihood that a group would decide to compete against other groups. In contrast, a cooperative discussion leader was only helpful in reducing group decisions to compete in the first round: Because it did not increase the integrative complexity of group discussion, this method failed to motivate cooperation over time. Theoretical and practical implications are discussed.

1. Introduction

Intergroup conflicts and tensions can cause extensive damage, yet they arise frequently. Whether the competing groups are nations, political parties, ethnic groups, or companies, egregious acts are repeatedly committed by one group against the other. What psychological mechanism causes a group to be so prone to compete? Why are groups so shortsighted that they choose an extreme act instead of being flexible? How can groups resolve conflicts and cooperate? As reliance on work groups grows in organizations, this lack of coordination between groups can be costly on a number of levels (Blake, Shepard, & Mouton, 1964; Hinsz & Betts, 2011).[1] For example, work groups may hoard information to maintain their high status within an organization, even though sharing information would enhance overall performance, or refuse to allocate critical resources that rival groups need to achieve higher levels of performance. Work groups may also fail to negotiate an optimal solution. The value of knowing how to manage intergroup

cooperation and competition is reflected in every call to build prosocial and cooperative relationships in organizations (e.g., Demoulin & De Dreu, 2010; Insko, Wildschut, & Cohen, 2013; Kugler & Bornstein, 2013).

Social-dilemma studies of intergroup relations have demonstrated that increased greed and fear are important determinants of intergroup conflict and competition (e.g., Insko, Schopler, Hoyle, Dardis, & Graetz, 1990; Morgan & Tindale, 2002; Wildschut, Pinter, Vevea, Insko, & Schopler, 2003). *Greed* denotes a group's selfish motive to maximize its own outcomes relative to the opponent. *Fear* denotes a group's distrust of the opponent, which encourages a group to compete as a form of preemptive action. People experience a heightened sense of greed in groups as the group provides a "shield of anonymity" that promotes egotistic, competitive decision-making against other groups (e.g., Schopler et al., 1993; Wildschut, Insko, & Gaertner, 2002). In-group favoritism norms exist in groups, which manifest as a moral double standard whereby actions toward in-group members are prosocial and

---

reciprocal, and actions toward out-group members are egoistic and exploitative (Tajfel, 1982). In addition, due to vigilance against and distrust of out-groups as a result of the apparently shared belief that groups are ruthless and more aggressive, intergroup relations are often subject to fear (Hoyle, Pinkley, & Insko, 1989; Insko et al., 1990; Messick & Mackie, 1989). Competitive intergroup interactions are often heightened over time as groups adopt competition as a defensive tactic (Hoyle et al., 1989). Indeed, the presence of a strong conflict scheme and a norm of in-group favoritism prevents groups from drawing on the collective's greater cognitive potential and attaining the benefits of mutual cooperation (Charness & Sutter, 2012; Kugler & Bornstein, 2013; Wildschut et al., 2003).

While there has been extensive research on the factors that contribute to greed and fear as the key determinants for intergroup conflict, group decision-making dynamics by which greed and fear act on group decisions to cooperate or compete have received surprisingly little attention. Yet psychologists have suggested a close link between group decision-making dynamics—specifically, the quality of the group's decision-making process—and intergroup conflict (e.g., Suedfeld, 2010; Tetlock, 1998; Wildschut et al., 2003). Indeed, situations that involve intergroup conflict are rarely conducive to highly complex decision-making. Suedfeld and Tetlock (1977) have shown that international crises are exacerbated when the nations involved make premature group decisions that fail to consider the full scope of the relevant issues (i.e., low information-processing complexity). Intergroup social dilemma research has consistently demonstrated that groups are often blinded to the possible consequences of their actions, because the intergroup context carries an increased sense of greed, fear, and bias against the out-group (Morgan & Tindale, 2002; Wildschut et al., 2003). In his original groupthink case studies, Janis (1982) reported that in the presence of intergroup tension, group members tend to quickly polarize in their opinions, adopt a stereotyped view of the out-group, and display heightened aggression. When it comes to intergroup relations, groups are at high risk of falling into a downward spiral, in which the inherent tension between groups activates a simplified, consensus-seeking decision-making process that, in turn, further aggravates intergroup conflict. In this study, we examine the impact of group decision-making dynamics on intergroup relations. More specifically, what is the effect of high-quality decision-making on intergroup relations? Would groups that engage in high-quality decision-making processes be able to sustain better cooperation over time?

Using the integrative complexity approach to intergroup relationships, we argue that intergroup competition is due, in part, to a lack of systematic, thorough processing of information during the group's decision-making process. Stemming from cognitive complexity theory, which focuses on individual differences in depth of information processing (i.e., need for cognition or epistemic motives), studies of group integrative complexity demonstrate that groups differ in their use of heuristic-driven, consensus-seeking decision-making or systematic and deliberative decision-making (e.g., Scholten, Van Knippenberg, Nijstad, & De Dreu, 2007; Suedfeld, 2010; Tetlock, 1998). Specifically, the integrative complexity of groups is high when they are exposed to multiple perspectives or dimensions of an issue (i.e., differentiation) and understand how the different perspectives are related (i.e., integration); such groups make higher-quality decisions (Gruenfeld, 1995). Past studies have identified various factors that reduce a group's integrative complexity, such as lack of accountability, a strong consensus norm, time pressure, and a sense of threats to the group's status (e.g., Lerner & Tetlock, 1999; Scholten et al., 2007; Staw, Sandelands, & Dutton, 1981; Suedfeld & Wallbaum, 1992).

For this study, we examine the integrative complexity of groups as an antecedent of cooperative intergroup relations (Fig. 1). Groups in our sample engaged in a repeated prisoner's dilemma game, which allowed us to identify the effects of high-quality group discussion on groups' success in achieving and maintaining a cooperative relationship, in which both groups enjoy the optimal shared outcome.

Specifically, we examined two discussion interventions with the expectation that, in a repeated interaction, they would differ in their ability to increase the quality of group discussions and maintain an initial desire to cooperate. The first condition employed structured group discussion, and the second used group discussion led by a co-operative group member. Group discussions were rated in terms of integrative complexity, which reflects the extent to which groups considered multiple perspectives and how they were interrelated. In addition, and consistent with previous intergroup social-dilemma studies, we examined greed and fear as mediating variables that shape a group's decision to compete or cooperate with other groups. Our focus, therefore, is to examine how group integrative complexity predicts greed, fear, and decisions to cooperate with other groups, such that group decision-making dynamics uniquely contribute to our understanding of how intergroup relations can be better managed.

1.1. Integrative complexity of group decision-making and intergroup relations

Group decision-making is often a preferred way of making intergroup decisions, not only because intergroup relations have significant implications for the fate of group constituencies, but also because the group's increased pool of information increases its ability to reach a well-informed decision (Kugler, Kausel, & Kocher, 2012). Group discussion functions as a collective information-processing mechanism that involves searching for diverse information, interpreting the consequences of various strategies, and forming a collective judgment (Hinsz, Tindale, & Vollrath, 1997). Through group discussion, members move from uncertainty to consensus, during which different perspectives are explored to shape group-level attitudes and decisions (Fisher, 1991). Group discussion allows groups to engage in active reconciliation and integration of group members' perspectives, ideas, and arguments, which facilitate the emergence of consensus on decisions. In addition, group authorities are a salient aspect of intergroup attitude, whereby their opinions and endorsement often play an essential role in the group's decision against the out-group (Pettigrew, 1998).

In this study, we suggest that the integrative complexity of group decision-making could positively contribute to intergroup relations. At low levels of integrative complexity during group discussion, groups are less likely to reap such benefits of collective information processing, as group decisions are subject to simple, collective heuristics that are commonly held by individual members (Gruenfeld, 1995). Morgan and Tindale (2002) have shown that shared representations of greed and fear against out-groups function as a heuristic basis for groups' decisions to compete with other groups. Accordingly, they argue that salient intergroup contexts allow exploitative sentiments to quickly spread through group discussion, causing group decisions to become polarized in favor of competition.

In addition to in-group favoritism norms that pressure individual members to prioritize the maximization of selfish outcomes for their own group at the expense of other groups, this intergroup context also activates the learned stereotype of out-groups as competitive and untrustworthy, which in turn makes the decision to compete an obvious course of action (Insko et al., 1990). At low levels of integrative complexity, groups fail to consider and deliberate on multiple views and perspectives, relying instead on more rigid, narrower, and fewer perspectives (Gruenfeld, 1995), thus missing out on the opportunity to learn and gain more from each interaction in the discussion. That is, each episode of intergroup interaction would mainly be interpreted as mere confirmations or disconfirmations of their pre-existing perspectives (e.g., "We were right about them," "We are not right about them"), while failing to capitalize on the opportunity to reconsider or reconfigure their perspectives and build a deeper, richer, and more nuanced understanding.

In contrast, with high integrative complexity, trade-offs between different alternatives are deliberated more deeply during group