



RESEARCH ON MANAGING GROUPS AND TEAMS
VOLUME 10

Series Editors: ELIZABETH A. MANNIX and MARGARET A. NEALE

AFFECT AND GROUPS

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Editors

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AFFECT AND GROUPS

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CHAPTER 1

THE AFFECTIVE CONSEQUENCES OF DIVERSITY AND HOMOGENEITY IN GROUPS

Katherine W. Phillips and Robert B. Lount, Jr.

ABSTRACT

Understanding the impact of diversity on group process and performance has been the focus of much research, yet there are still unanswered questions about how diversity impacts group process and performance. One factor that is clearly a consequence of group composition is affective tone. In this chapter, we discuss the impact of diversity and homogeneity on affective responses from group members and argue that the relatively negative affective tone experienced in diverse groups may fuel more systematic information processing and improve decision-making performance. The implications for managing both positive and negative affect in groups will be considered.

THE AFFECTIVE CONSEQUENCES OF DIVERSITY AND HOMOGENEITY IN GROUPS

An extensive and growing body of research has examined the effects of diversity on the process and performance of work groups (for reviews see

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Jackson, Joshi, & Erhardt, 2003; Milliken & Martins, 1996; Williams & O'Reilly, 1998). Although there is a shared understanding that group composition can have a profound effect on group dynamics and performance, the exact nature of this impact is not yet fully understood (Mannix & Neale, 2005). Various types of surface-level characteristics that are more immediately apparent in groups (Harrison, Price, & Bell, 1998; Jackson, May, & Whitney, 1995; Riordan, 2000), such as gender, race, and ethnicity, are thought to have a negative impact on the communication and conflict patterns of groups (e.g., Jehn, Northcraft, & Neale, 1999; Maznevski, 1994; Pelled, Eisenhardt, & Xin, 1999; Zenger & Lawrence, 1989), decrease cohesion and morale, and lead to greater turnover in groups (Jackson, 1992; McCain, O'Reilly, & Pfeifer, 1983; O'Reilly, Caldwell, & Barnett, 1989; Tsui, Egan, & O'Reilly, 1992). Generally speaking, the literature suggests that demographically diverse groups are full of interpersonal and task conflict, and the difficulty of interaction makes such work groups less pleasant to be a part of than homogenous ones (for reviews see Milliken & Martins, 1996; Williams & O'Reilly, 1998).

However, although surface-level diversity can make group interactions more difficult, there is growing evidence that group performance may benefit from the mere presence of surface-level diversity as novel task perspectives (i.e., information, knowledge, preferences, and/or opinions) are likely to be introduced, triggering deeper thought and consideration for alternative perspectives, more thorough processing of information, and ultimately improved performance of the group (e.g., Antonio et al., 2004; Gruenfeld, 1995; Nemeth, 1986; Phillips & Loyd, 2006; Phillips, Liljenquist, & Neale, 2005; Phillips, Northcraft, & Neale, 2006; Sommers, 2006). This may be especially true for decision-making groups that require the pooling and systematic processing of various sources of information and opinions. Even before individuals enter a diverse group setting, the expectations that people hold about working with similar and dissimilar others may impact the ultimate group outcomes (Sommers, 2006; Wang, Phillips, Loyd, & Lount, 2005). These expectations come with affective feelings and emotions that may be a primary consequence of being in a diverse or a homogeneous setting (Levine, 1979; Simmel, 1950). These discrete emotions, which have not been directly examined by diversity researchers, may have consequences for subsequent group interactions. Diversity researchers have examined interpersonal or emotional conflict (e.g., Jehn et al., 1999; Pelled et al., 1999), surprise and irritation (Phillips, 2003), and feelings of satisfaction and cohesion (e.g., O'Reilly et al., 1989) as consequences of interaction in diverse settings.

In this chapter, we will consider the *immediate* affective consequences of diversity that may impact the initial cognitive processing of information, subsequent interactions among group members, group process, and the ultimate performance of the group. These immediate affective reactions are expected to be most intense early in the life cycle of a group and may dissipate as group members become more familiar with one another. Yet, research suggests that homogeneous and diverse groups may still have relatively different levels of positive and negative affect over time as it may take more time for diverse groups to reach the same level of comfort and familiarity as homogeneous ones (Phillips et al., 2006; Watson, Kumar, & Michaelsen, 1993). We use the term positive affective tone to refer to the general positive emotions that people experience in homogeneous settings. Homogeneity fuels feelings of certainty, anticipated satisfaction, agreement, and smooth interactions. In contrast, diversity is often accompanied by feelings of uncertainty and anxiety, anticipated disagreement, and more difficult interactions. We use the term negative affective tone to refer to these general negative emotions (George, 1990). The model presented will be derived from current research on surface-level diversity as well as that on the impact of emotion on cognitive processing. These two bodies of research have developed in parallel, yet, by linking what we know about the affective consequences of diversity with the growing resurgence of work on emotion, new insights may be developed. We will focus our discussion here on intellectual tasks (cf. McGrath, 1984) that require the sharing and processing of information that characterize decision-making groups, such as juries or problem-solving teams. While these groups often engage in some creative thinking during the process of discussion, their ultimate goal is to solve a problem or to make a decision, rather than to generate creative ideas.

To develop our model of the affective consequences of diversity and homogeneity, we first review recent research on the impact of diversity on group process and performance. We summarize the findings of several studies, which ultimately suggest that the outcomes that are characterized as negative affective consequences of diverse settings may be partially responsible for the increased cognitive and information processing seen in such groups. People expect and want similar others to agree with them (e.g., Allen & Wilder, 1975, 1979; Heider, 1958; Phillips, 2003; Phillips & Loyd, 2006) leading to expectations that interactions in homogeneous groups should be positive and smooth. One feels more able to predict the behavior of similar others, creating greater feelings of certainty about group interactions. In contrast, interacting with dissimilar others in diverse settings may trigger greater feelings of uncertainty. People generally have less

experience interacting with dissimilar rather than similar others (e.g., McPherson, 1983; McPherson & Smith-Lovin, 1986; Newcomb, 1961), and this alone can make diverse settings less predictable environments. Uncertainty, and the emotions associated with it, is argued to increase information processing (Smith & Ellsworth, 1985; Tiedens & Linton, 2001). Moreover, as people experience greater uncertainty and negative affect in diverse groups, they may use that affect as information, and thus engage in greater systematic and attentive processing in an effort to reduce any threat to the achievement of goals (e.g., coming to consensus on a decision). In contrast, individuals' expectations and affective reactions for being in a homogeneous group may lead to more positive affective responses that signal more certainty and safety, thereby decreasing need for thorough processing of the information (e.g., Bless, 2001; Bless, Schwarz, & Wieland, 1996; Schwarz & Clore, 1983). This and other approaches for understanding the impact of affect on cognitive processing may lend insight into the pattern of results that characterize the literature on diversity in groups. People do not necessarily feel as good about the interactions in diverse groups as they do about the ones they have in homogeneous settings (especially early in the group's life cycle), but the increased cognitive effort, resulting from this discomfort, may ultimately benefit group process and performance (Phillips et al., 2005).

Diversity, Group Process, and Performance

Researchers have typically argued that the benefits of diversity come from the possibility that people with different characteristics will bring different perspectives to the table, and that these new perspectives will benefit the performance of the team. This argument, called the information/decision-making perspective by Williams and O'Reilly (1998), posits that diverse groups should have access to a broader range and depth of information than homogeneous groups. This perspective depends on individuals who are different from others, representing and sharing perspectives that are unique from the majority of group members. In several recent studies, Phillips and her colleagues have questioned the logic of this argument (Phillips, 2003; Phillips & Loyd, 2006; Phillips, Mannix, Neale, & Gruenfeld, 2004; Phillips et al., 2006; Phillips et al., 2005). The assumption that groups can only benefit from diversity when different people bring different perspectives to the table limits our understanding of the effects of diversity. Researchers have approached the study of diversity and the

interpretation of their findings in ways which presume that people who are different are the only individuals who can bring divergent perspectives to the table. For example, most arguments explaining why conflict will increase in diverse groups are based on the assumption that people who are different are fighting with each other (e.g., [Pelled et al., 1999](#)). This interpretation presumes that individuals who are part of the majority group will share the same perspectives and information with one another. This assumption of congruence or consistency between the characteristics people possess (e.g., race, gender, functional background) and the things they have to say (e.g., information, opinions) is a questionable assumption that is likely to be violated in many group settings ([Phillips, 2003](#); [Phillips & Loyd, 2006](#)).

[Sommers' \(2006\)](#) work on the impact of racial diversity on jury decision-making provides support for this argument. He examined juries that were either all Caucasians or that had four Caucasians and two Black jurors. Diverse groups deliberated longer, and exchanged a wider range of information than all-Caucasian groups. However, this was not wholly attributable to Black participants bringing more perspectives to the table. Instead, it was found that the behavior of the Caucasian jurors in diverse groups differed from those in the homogeneous settings. White jurors in diverse groups cited more case facts, made fewer errors, and were more open to the discussion of racism than Caucasians in all-White juries. Moreover, even before the group discussion, Caucasians in diverse groups showed signs of taking in multiple perspectives, being open to change and learning, and were argued to be thinking in more complex ways. Sommers argued that some of these effects on Caucasian jurors may be due to concerns regarding appearing racist that Caucasians may experience in the presence of Blacks (e.g., [Gaertner & Dovidio, 1986](#); [Richeson & Nussbaum, 2004](#); [Sommers & Ellsworth, 2000, 2001](#)). This argument is relevant more for race than for other types of differences, especially given the fact that the case being discussed was of a Black defendant accused of sexually assaulting two White victims.

Independent of this racially charged context, yet in line with this work, [Antonio et al. \(2004\)](#) conducted an experiment examining integrative complexity following group discussion of a controversial social issue (either international child labor practices or capital punishment). They found that Caucasians demonstrated more complex thinking in an essay written following group discussion when assigned to a diverse group (including a Black confederate) than when assigned to a homogeneous group of all Whites. This work, albeit still examining the potentially unique situation of

Caucasian–Black race relations, examined a discussion setting that was divorced from specifically racial considerations, providing more evidence that diversity may increase cognitive processing of information during and after discussion.

However, the recent work by Phillips and colleagues suggests that these effects on people in the social majority are not dependent on having racial differences in the group. Instead, there may be fundamental psychological processes that are fueled by emotional reactions to diverse settings, which change the behavior of group members in diverse versus homogeneous groups. More specifically, Phillips and Loyd (2006) examined two different sources of “surface-level” diversity: one which was task-relevant (functional background) and one which was not (geographic affiliation). They argued that even when the people who are different do not have unique perspectives to share, the group may benefit from their mere presence. Phillips and Loyd (2006) found that when a member of the social majority possessed a unique opinion, they perceived that diverse groups were more positive and accepting, fostered more persistent and confident voicing of dissenting perspectives, were more aware of their unique information, and displayed greater task engagement than homogeneous groups (containing all similar individuals). Consistently, Phillips et al. (2006) also found better performance by racially diverse groups (two Caucasians and one other race) as compared to that of homogeneous groups (all Caucasians). While at first glance these results may seem contrary to the notion that diverse groups may have a more negative affective tone, these results shed light on exactly the processes we want to highlight here. To extrapolate these findings back to the Sommers (2006) paper, the Caucasian participants in homogeneous groups may have been less focused and open to processing information because of their expectations that the homogeneous setting should be characterized by agreement and easy interaction. These expectations then lead to less information processing. In contrast, when in the diverse setting, Caucasian participants may have expected more disagreement and discussion of the case. These expectations may foster feelings of uncertainty and, simultaneously, lead group members to process information more thoroughly. Thus, rather than assuming that people who are socially “different” will also bring different task perspectives to the table, this research argues that unique perspectives may sometimes be held by members of the social majority (i.e., in-group members who are expected to have the same perspectives as those with whom they share social characteristics). When this is so, the presence of surface-level diversity may *help uncover incongruent* but equally helpful perspectives that might not otherwise be voiced during

the group discussion (also see Phillips et al., 2006). Phillips et al. (2006) argued that the presence of surface-level diversity legitimizes the expression of unique perspectives. In addition, while making individuals a little more uncomfortable, it might also fuel their willingness to share divergent views. They found better performance by racially diverse (two Caucasians and one other race) than homogeneous decision-making groups (all Caucasians) where all group members possessed unique information that had to be pooled for effective performance.

Phillips et al. (2005) extended this work in an examination of how homogeneous groups are affected by the addition of either a socially similar (i.e., in-group) or a socially dissimilar (i.e., out-group) newcomer. Phillips et al. (2005) started with groups composed of three members who were all part of the same sorority (or fraternity) and added a new member after just 5 min, who was either from the same or a different sorority. When this new member was added to the group, they either brought a unique perspective about the problem to be solved, or they shared perspectives with one or two of the current group members (see Fig. 1). They found that consistent with the other work cited above, groups that gained an out-group newcomer ultimately performed better on the decision-making task, presumably processing and discussing the available information in ways that allowed group members to find the correct answer. The members of diverse groups were more willing to change their minds than were members of homogeneous groups. Phillips et al. (2005) argued that the members of the social majority who agreed with the out-group newcomers (i.e., allies) were more uncomfortable and concerned about maintaining their social relationships with their fellow in-group members. This discomfort motivated those individuals to understand the situation and attempt to reconcile the discrepancy in opinions. It was those social majority members' attention to the newcomer and persistent consideration of the information that drove the improved performance of the diverse groups. These same individuals reported that they felt less socially validated (accepted, liked) in that group setting than the other members of the social majority (non-allies). Again, this work suggests that the behavior and emotional reactions of members of the majority may be more important to garnering the benefit of diversity than whether the person who is different brings a unique perspective to the table. To link this argument back to the work done by Sommers (2006) yet again, the hypothesis would be that the Caucasian members of the jury who agreed with the Black jurors would work the hardest (e.g., citing more case facts, being open to discussion) to reconcile the different opinions represented and to bring the group to consensus.

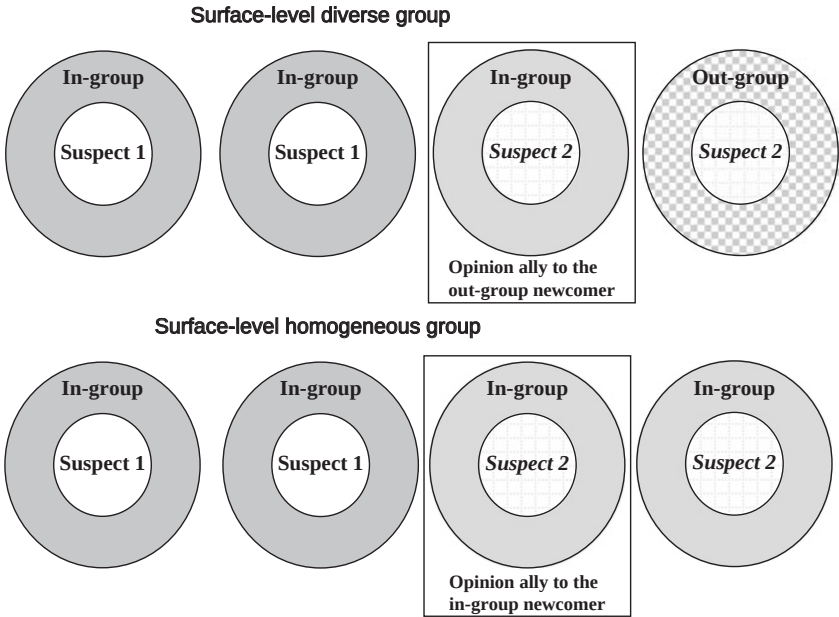


Fig. 1. Design From Phillips et al. (2005).

Interestingly, Phillips et al. (2005) found that diverse groups with out-group newcomers reported that their groups were less comfortable and less effective working together than groups with in-group newcomers, even though they performed significantly better. Likewise, groups with out-group newcomers were less confident about the quality of their performance than were groups with in-group newcomers. McLeod, Lobel, and Cox (1996) also reported a study where participants enjoyed a brainstorming task more when they were in racially homogeneous groups, even though diverse groups generated more creative and feasible ideas. Members of diverse groups are often unable to recognize the benefits that have accrued from diversity. Moreover, as argued earlier, individuals often find diverse settings to be more difficult to traverse than homogeneous ones. Their concerns about maintaining relationships with similar others may be just as critical to their behavior as the somewhat negative relationships they expect to have with dissimilar others. In fact, multiple studies (Phillips et al., 2005; Sommers, 2006; Wang, Phillips, Loyd, & Lount, 2005) suggest that the dynamics seen in diverse groups, where cognitive processing of information

is more thorough and systematic, yet affective responses are more negative, may begin even prior to any interaction in the group. That is, the differences discussed thus far may have an even more fundamental basis that is independent of what actually happens during the group discussion. It is not the case that diverse groups are so antagonistic that individuals cannot have productive discussions; instead, we are arguing that relative to homogeneous settings where individuals' expectations of satisfaction and comfort are high, members of diverse groups are likely to experience greater anxiety and discomfort that can fuel increased information processing.

The Impact of Expectations on Affect and Cognition

Research has documented that members of diverse work groups report experiencing more emotional conflict and lowered satisfaction than members of homogeneous groups (Jehn et al., 1999; Pelled et al., 1999; Tsui et al., 1992). Furthermore, Milliken and Martins (1996) have proposed a model that hypothesizes that working in diverse groups can elicit negative affective consequences. More specifically, their model argues that diverse groups should experience *less* identification, satisfaction, and commitment, and *more* perceived discrimination, role conflict, role ambiguity, and work-related friction than homogeneous groups. Although Milliken and Martins predict that working in a diverse group setting will *cause* these negative affective outcomes, it may be possible that negative affective responses can occur prior to actual interaction in a diverse group. More specifically, if people were to hold expectations that working in diverse groups will produce negative outcomes, the mere knowledge that one might be joining a diverse group may be sufficient to influence one's affective responses and cognitive functioning.

The findings of recent research suggest that the mere expectation of working in a diverse group may be sufficient to influence group members' immediate affect and cognition. Although this hypothesis has received little attention in the literature, there are a few studies which suggest that individuals may process information differently and expect interactions with dissimilar others to be less pleasant than those with similar others. Sommers (2006) found that prior to deliberation, Caucasian jurors were less likely to report that they thought the Black suspect was guilty when in diverse groups than when in homogeneous ones. He argued that the composition of the group can have effects on how members of the majority think and process

information. According to [Sommers \(2006\)](#), Caucasians were likely to be more thorough in their consideration of the information prior to entering a diverse than a homogeneous group. Moreover, [Antonio et al. \(2004\)](#) found that membership in a diverse group led to marginally more complex thinking about a discussion topic even prior to discussing that topic. Again however, these studies were in the context of race and may be partially explained by Caucasian group members' concerns about appearing prejudiced toward Blacks.

Wang et al. (2005), examining political affiliation as a basis of distinction, found that individuals exhibited more cognitive complexity when anticipating that they would work with an out-group member than with an in-group member. Students were brought into the lab and told that they would be making a decision about who committed a fictional murder with a partner who was also present in the lab. They were told that the experimenters were interested in the impact of different communication media and that they would be communicating with the other person, first in written format and then in a face-to-face discussion. This other person was either to be similar in political affiliation (i.e., a fellow Democrat or Republican) or different from the participant. After learning that their partner agreed with them or not about who committed the murder, participants were asked to write an essay that would be read by their discussion partner prior to the face-to-face interaction. The cognitive complexity of these essays was examined to get a better sense of how people prepare for interaction with similar (i.e., in-group) versus dissimilar (i.e., out-group) partners. The researchers found that even prior to any discussion, when individuals thought their upcoming interaction partner was an out-group member, they put forth more cognitive effort to process the information systematically. Moreover, when individuals anticipated working with an in-group member, they displayed even less cognitive complexity when the in-group member disagreed rather than agreed with them.

These findings shed light on the antecedents of the performance differences of diverse groups. First, individuals seem to have processed information more carefully before entering diverse rather than homogeneous groups. This increased processing of information may be beneficial for task performance, especially when information sharing and processing are critical for performance. In contrast, in anticipation of working with an in-group member or in homogeneous groups, individuals may be reluctant to engage in the cognitive processing that is necessary for the thorough consideration of multiple perspectives, even when they know there is disagreement present. Because individuals may be more concerned about

building positive relationships with in-group members than they are with out-group members, they focus their attention on their relationship rather than getting the right answer.

Moreover, this and other work suggests that there may be a direct link between diversity and affective feelings, which may underlie cognitive processing. Wang et al. (2005) found that people's concerns about relationship building and anticipation that a positive interaction should occur mediated the relationship between diversity and cognitive processing. In a second study when individuals paired with an out-group member were told to focus on building a relationship, they lost the benefit of the cognitive processing that they had before. In other words, less concern about building relationships combined with anticipation of a potential negative interaction filled with conflict and disagreement may have led group members to consider the available evidence more thoroughly and prepare themselves for the interaction.

Up to this point, we have argued that being in a diverse group can influence an individual's cognitions as well as their emotional reactions. More specifically, our review of this literature suggests that working in diverse settings can elicit relatively negative emotional responses and expectations, but can also lead to a more careful processing of information (i.e., engage in more systematic processing) as compared to working in homogeneous groups. We should also note that the evidence is just as strong or stronger that homogeneity leads to expectations of more positive social interactions (for review see Williams & O'Reilly, 1998). People expect similar others to agree with them (Allen & Wilder, 1975; Phillips, 2003), are more attracted to similar others (Byrne, 1971), and enjoy homogeneous settings more (McLeod et al., 1996; Phillips et al., 2005). These groups are likely to have a more positive affective tone than diverse groups, and this positive tone may actually lead to less careful processing of information in those settings. Instead of conceptualizing these emotional and cognitive outcomes as being relatively independent of one another, we expect that an individual's emotional response will influence processing of information. More specifically, we posit that just thinking that one's group is diverse (or homogeneous) may trigger a negative (or positive) emotional response, which in turn may elicit more (or less) systematic cognitive processing of information. This processing of information may help explain the trade off between people's experience of diversity and its potential benefits. Insight into why an individual's emotional reactions can influence effortful cognitive processing is illustrated below in our brief review of how emotions influence cognitive processing.

Emotion and Cognitive Processing: A Brief Summary

Researchers have argued that current emotional states influence cognitive processing with positive and negative moods having somewhat opposite effects on processing effort. More specifically, negative affective states have been associated with more cautious, controlled, detailed, and analytic processing strategies (Bless et al., 1996; Bodenhausen, Mussweiler, Gabriel, & Moreno, 2001; Schwarz & Bless, 1991) and positive affective states being associated with faster and less effortful information processing strategies (Bodenhausen et al., 2001; Mackie & Worth, 1989; Schwarz & Bless, 1991). These two forms of cognition are conceptually similar to Chaiken, Liberman, and Eagly's (1989) dual-route model of cognition, which argues that people can process information in a systematic fashion (i.e., effortful and detailed processing) or in a heuristic fashion (i.e., low effort, quick processing).

Consistent with Schwarz and Clore's (1989) "affect-as-information" model, Bless (2001) argues that when people are asked to make decisions or form a judgment, current feeling states will influence cognitive processing style (i.e., systematic or heuristic). More specifically, Bless has suggested that a positive mood signals that everything is alright and that there is no need to expend cognitive energy, leading to a reduced motivation to carefully examine information. Negative moods, however, are argued to signal that the situation poses a possible threat, leading individuals to engage in systematic processing. Moreover, Fiedler (2000) has argued that people in a negative mood more carefully process information and are especially motivated to avoid making mistakes. Consistent with the expectation that moods will influence information processing, persuasion researchers have frequently documented that people in positive moods, as compared to those in neutral or negative moods, tend to be less influenced by the quality of arguments and are more attuned to simple heuristic cues that allow a quick and easy response (Mackie & Worth, 1989; Schwarz, Bless, & Bohner, 1991; Worth & Mackie, 1987). Further evidence that an individual's affective state can impact information processing comes from research examining how mood impacts stereotyping.

Stereotype activation has been associated with heuristic processing strategies (cf. Fiske & Taylor, 1991). In several experiments, Bodenhausen, Kramer, and Susser (1994) had both emotionally happy and neutral participants judge the guilt of a student who was accused of either assault or cheating. Information about the infraction was manipulated so that it was

either congruent or incongruent with participant's stereotypes associated with whom would be likely to commit the infraction (student athletes and Hispanics were used as stereotypic defendants in cheating and assault cases, respectively). As predicted, they found that happy participants were significantly more likely to assume guilt when the information about the student (athlete vs. Hispanic) was consistent with the transgression (cheating vs. assault). Furthermore, Bless and colleagues (e.g., [Bless & Fiedler, 1995](#); [Bless et al., 1996](#)) also found that compared to people experiencing a positive mood, participants experiencing a negative mood were *less* affected by activated stereotypes.

[Kelly \(2006\)](#) has recently argued that the impact of mood on cognitive processing is not only limited to how individuals process information but also to how a group's mood will influence its ability to process information (cf. [Hinsz, Tindale, & Vollrath, 1997](#)). To examine the impact of a group's mood on its ability to process information accurately, [Kelly \(2006\)](#) had groups experiencing a positive or neutral mood complete a hiring simulation where it was necessary for members to discuss information with one another to identify the best candidate. Individual group members were given pieces of information about the candidates, with some of this information being shared amongst all group members, while other pieces of information were not shared. For groups to choose the best-qualified candidate, it was necessary for group members to share their unique pieces of information. Consistent with individual-level research on the effect of positive mood on reduced cognitive processing, [Kelly \(2006\)](#) found that groups experiencing a neutral mood were significantly more likely to choose the correct candidate as compared to groups experiencing a positive mood.

Taken together, these findings have important implications for *why* diversity may influence cognitive processing. More specifically, if an individual were to associate diversity with tension, increased conflict, lowered satisfaction, and uncertainty, they should be more inclined to experience a more negative or a less positive emotional reaction in anticipation of contact with this group. This negative affect may there in-turn trigger more systematic instead of heuristic processing of information, which should increase decision-making accuracy on task or problems requiring the sharing and integration of differing perspectives. Moreover, the opposite may occur for people who anticipate working in a homogeneous team (i.e., a positive or more certain emotional reaction may trigger reduced cognitive processing).

Model: The Affective Consequences of Diversity

Our review of the diversity literature suggests that the often cited information/decision-making perspective of diversity (Williams & O'Reilly, 1998) (that diverse groups make better decisions because they have access to a broader range and depth of information than homogeneous groups) is unlikely to provide a full account for *why* diversity may improve group performance on intellectual tasks. We propose that some of the positive benefits of group diversity may actually stem from the more negative affective reactions (e.g., uncertainty and anticipation of relational conflict) that frequently accompany people's associations with diversity. Adopting an information-processing perspective of the role of emotions on cognitive processes (e.g., Bodenhausen, 1993; Tiedens & Linton, 2001), we propose that the relatively negative affective tone associated with working in a diverse setting may fuel more detailed and systematic thought processes, which can increase decision-making accuracy and performance. Likewise, we propose that working in homogeneous groups will result in a positive affective reaction, causing group members to reduce their cognitive complexity and detailed processing while decreasing decision-making accuracy and performance (see Fig. 2).

Although, our model expects that diversity (or homogeneity) will generally increase negative (or positive) affect, we anticipate that diversity beliefs (i.e., the expectations individuals hold about the value of diversity (van Knippenberg & Haslam, 2003)) will moderate this relationship. As compared to people who hold negative diversity beliefs, we expect that people who hold positive beliefs about diversity will not experience negative affect on learning that they will be working in a diverse group. More specifically, people who hold positive diversity beliefs are not expected to experience negative affective reactions (i.e., uncertainty, surprise, and anxiety) while anticipating working in a diverse group.

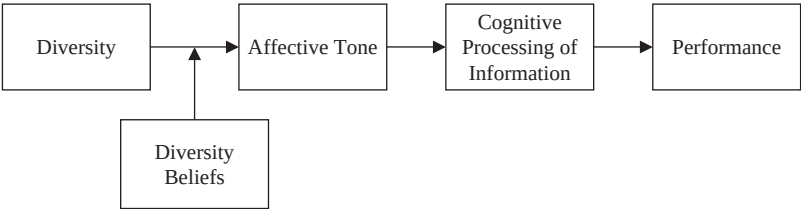


Fig. 2. Affective Model of Diversity.

Diversity beliefs are not expected to be entirely static, and may change depending on an individual's experiences (i.e., positive or negative) after working in diverse work groups. One can easily imagine a situation where a person with negative diversity beliefs experiences considerable uncertainty and surprise upon learning that they will be working in a diverse group. However, if this group experience was enjoyable and rewarding, his/her diversity beliefs may become more positive. Assuming that person continues to have enjoyable interactions in this diverse group, she or he may eventually develop positive diversity beliefs, thereby eliminating the negative affective responses that she or he had previously experienced when anticipating working in a diverse group. In this case diverse groups, assuming that they have unique information and perspectives at their disposal, may still benefit from their differences as positive diversity beliefs are usually characterized by an expectation that the task at hand can really benefit from the diverse perspectives present in the group (van Knippenberg & Haslam, 2003). However, as diversity beliefs become more positive and negative affect is reduced, group members may report greater satisfaction and increased perceived performance (Stroebe, Diehl, & Abakoumkin, 1992), while the potential information processing benefits which stem from the presence of negative affect may disappear. By consequence, group performance may actually be reduced on intellectual tasks. In other words, if members of diverse groups do not experience negative emotional reactions to the presence of diversity, this absence of negative affect may reduce the motivation to carefully process and evaluate all available pieces of information.

Discussion

Understanding the impact of diversity and homogeneity on decision-making groups is a critical goal for researchers and managers alike. In this chapter, we have argued that the current research on affect and cognitive processing may lend new insights into the *how* and *why* of diversity. The trade-off or double-edged sword often faced by surface-level diverse teams suggests that there is a downside to diversity, characterized as negative affective tone here, and an upside to diversity in terms of cognitive processing of information. Past research has generally considered these two outcomes to be independent of one another. Prescriptions for trying to minimize the downsides of diversity by making people feel better about working in diverse groups or by minimizing the negative anxiety and uncertainty that people sometimes feel in diverse settings may be missing the point. Here we

argue that the cognitive gains associated with diversity may not be possible without the affective pain of working with people who are different.

We have presented recent empirical evidence that lends credence to our arguments, but there is obviously a need for direct empirical testing of the causal links of our model. In addition, there are at least two caveats that might serve as boundary conditions for the arguments we have made here. Much of the research presented here is based (1) on short-lived groups where (2) the problems that are being solved or decisions being made have a “correct” answer (i.e., intellectual tasks) against which the performance of the team can be tested. In organizational settings, where the groups have a longer life span and performance cannot always be accurately measured, it may be difficult to test these claims. For instance, as people gain experience with diversity and actually come to value diversity (see work on diversity beliefs by [Homan, Van Knippenberg, Van Kleef, & De Dreu, 2005](#)), they may not report or have the same negative affective tone about working in those groups. However, even in those settings, members may still have a greater level of uncertainty about their interactions with dissimilar than with similar others. Given that uncertainty does not have to be associated only with negatively valenced emotions ([Tiedens & Linton, 2001](#)), so long as diverse settings are perceived by group members to be more uncertain than homogeneous ones, these arguments should still hold.

In addition, if group members receive feedback about their positive performance in a diverse setting, the negative affective tone might decrease. The question then would become, will those diverse teams begin to rest on their laurels and become less vigilant information processors? This is an empirical question, worthy of being tested. Past research on diverse groups over time has suggested that diverse groups actually get better over time, meeting, or exceeding the performance of their homogeneous counterparts ([Watson et al., 1993](#)). There may be some curvilinear relationship between the level of negative affective tone present in the group and cognitive processing. Too much and too little negative affective tone may both undermine the ability of diverse groups to fully gain the cognitive processing benefits. Likewise, the arguments behind why time is beneficial for diverse group performance often presume that it is because over time the members have gotten to know one another and now have a more positive affective tone. On the contrary, the results may be due to the development of norms of conflict and information processing that makes the expression of differences more acceptable, leading to more benefit as the group progresses through the problem to be solved. Ultimately, understanding why and how diversity and homogeneity affects the performance of decision-making and

problem-solving groups will require a creative research agenda using both experimental and field methodologies that allow for the close examination of both how people feel and how they think. We are aware that these ideas may leave some managers puzzled about how they should proceed with managing diverse groups. Adjusting expectations and acknowledging the natural anxiety and uncertainty that people may feel about working in diverse groups may be one place to start. Recognize, also, that the impact of diversity on groups starts even prior to putting the group together. People prepare for such discussions in ways that may be beneficial to group performance, but only if they recognize the importance of having such discussions and are willing to engage others with respect. So, the key to getting benefits from diverse groups is not about making the people in such groups like each other, but rather about embracing the anxiety and uncertainty and helping people see the potential benefits of learning from one another.

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CHAPTER 2

THE PIVOTAL ROLE OF NEGATIVE AFFECT IN UNDERSTANDING THE EFFECTS OF PROCESS CONFLICT ON GROUP PERFORMANCE

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ABSTRACT

In this chapter, we attempt to better understand the mechanisms underlying the effects of process conflict on team performance by exploring the role of negative affect in explaining the negative effects of process conflict on performance. Our findings show that negative affect does fully mediate the relationship between process conflict and group performance. Additionally, we investigate a set of conditions relating to fairness concerns and group context, which may have an influence on the relationship between process conflict and negative affect. We find that when voice is high and perceived goal obstruction and subgroup existence are low, the relationship between process conflict and negative affect is ameliorated, thus allowing for more positive effects of process conflict to emerge.

Process conflict, or conflict about logistical issues, is a fundamental part of life in organizational teams. While process conflict has been proposed to help

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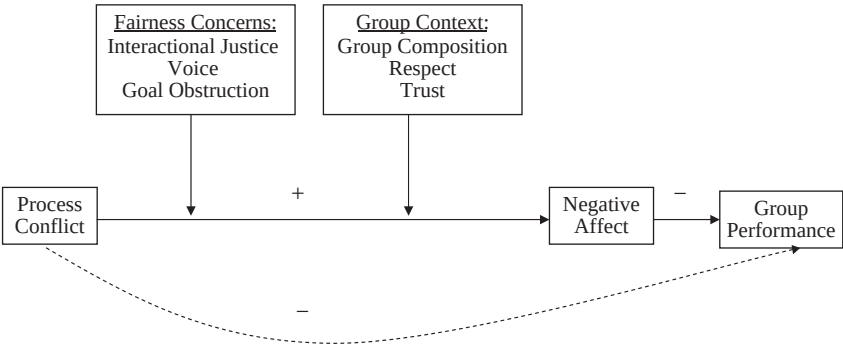


Fig. 1. Model of the factors that may influence the degree to which process conflict is associated with negative affect.

performance by, for example, increasing the fit between member abilities and task requirements (cf. Jehn & Bendersky, 2003), research has primarily found process conflict to have a negative impact on performance (e.g., Behfar, Mannix, Peterson, & Trochim, 2002; Greer, Jehn, & Thatcher, 2005, 2006; Hinds & Bailey, 2003; Vodosek, 2005). However, much still remains to be learned about *why* exactly process conflict impedes group performance. In this chapter, we attempt to bridge this gap by exploring the role of negative affect as a primary mechanism in explaining the negative effects of process conflict on performance.

After exploring the role of negative affect in explaining the effects of process conflict on performance in our first study, we then investigate in our second study the factors that could increase the negative affect associated with process conflict (see Fig. 1). We propose two key categories of moderators – fairness concerns and group context – that may influence the degree to which process conflicts are associated with negative affect. We propose that these moderators will influence the likelihood of whether or not members will take process conflicts personally, thus increasing the chance that negative affect will be associated with process conflict. For example, when members feel that process issues are unjust, they may take the issues more personally, which could upset them more during process conflicts. Following our presentation of these proposed factors affecting the relationship between process conflict and negative affect, we will use our findings on the effects of process conflict and negative affect to lead to a discussion of the most effective ways to manage process conflict within groups.

THEORETICAL BACKGROUND

Intragroup conflict, in its broadest sense, has been defined as the process arising from perceived incompatibilities or differences between team members (Boulding (1962); Thomas, 1992; Wall & Callister, 1995). Three main sources of incompatibilities have been identified in past research: task, relationship, and process issues (Jehn, 1997; Jehn & Mannix, 2001; Mannix & Jehn, 2004). Task conflict concerns disagreements between group members about ideas and opinions relating to the task, such as disagreements about defining project goals (e.g., De Dreu & Weingart, 2003; Jehn, 1995, 1997). Relationship conflict, in contrast to task conflict, stems from non-work related issues between members, such as value differences or personality conflict (e.g., De Dreu & Weingart, 2003; Jehn, 1995, 1997). Process conflict occurs because of disagreement over the logistical aspects of task accomplishment (Jehn, 1997). Such logistical disagreements have arisen as a basis for conflict in past theorizing, such as research discussing “conflicts of resources” (e.g., Kelley & Thibaut, 1969; Rapoport, 1960) or distributive conflicts (Kabanoff, 1991). While process conflicts are thus similar to task conflicts in their work-related nature, Weingart (1992) found that organizational members distinguished between process and task conflicts because process issues, according to the members, concerned planning and task delegation, while task issues focused more on the content or goal of the task itself. Thus, task conflicts can be seen to revolve around the content of a task, such as understanding and clarifying the goals of a task (*what* should we do?), while process conflicts revolve around the logistics related to task accomplishment, such as scheduling and timing issues and contribution and workload issues (*how* should we do it?) (Behfar et al., 2002). In a consulting project team, for example, a task conflict would be about the decision of what the most relevant benchmarks are for assessing their client’s position, while a process conflict would be about deciding which consultant will be responsible for obtaining the data for the benchmarks.

In predicting the effects of process conflict on performance, initial research on process conflict proposed that process conflicts may improve the fit between individual member abilities and task requirements, thereby enabling higher performance (e.g., Jehn, Northcraft, & Neale, 1999). However, the majority of empirical research on process conflict since then has typically found process conflict to have a negative effect on performance and innovation (e.g., Behfar et al., 2002; Greer et al., 2005; Jehn & Chatman, 2000;

Jehn & Mannix, 2001; Jehn et al., 1999; Matsuo, 2006; Porter & Lilly, 1996; Vodosek, 2005). The negative relationship between process conflict and performance has been suggested to exist because the interpersonal aspect of process conflict may detract from its more work-related benefits of clarification and improved fit of assignments. Specifically, the substantive issues of process conflict – task delegation, role assignment – are likely to carry personal connotations in terms of implied capabilities or respect within the group (cf. Jehn & Bendersky, 2003). When disagreements arise over such logistical issues as role assignment, the personal connotations inherent in such debates (i.e., you received that role based on your abilities, or lack thereof) may serve to upset and distract members from the task at hand, decreasing their ability to perform. In the following section, we will delineate how the negative affect associated with such personal connotations can explain why process conflicts detract from performance.

The Relationship between Process Conflict and Negative Affect

In order to better understand the mechanisms leading to the negative effect of process conflict on performance, we explore in this chapter the role of negative affect as a mediator in the relationship between process conflict and performance. Negative affect may include a variety of negative feelings and emotions (e.g., Fiske & Taylor, 1984; Lazarus, 1982; Park, Sims, & Motowidlo, 1986; Zajonc, 1984). Negative emotions likely to occur during process conflict include frustration (“why am I not getting the assignment I want?”) (Guetzkow & Gyr, 1954), resentment (“the system for delegating tasks in this group is never fair”) (Stearns, 1972), anger “they should have respected me enough to set the meeting at a time I could come”) (Russell, 1978), and reproach (“the members in this group are biased – they always give me the worst tasks”) (Allport, 1937). In the following section, we will discuss how the personal connotations inherent to process conflicts may make process conflict especially likely to be associated with negative affect.

Process conflict may often be especially linked to negative affect for several reasons. First, process conflicts may often incite emotive reactions (cf. Behfar et al., 2002) as they tend to invoke personal connotations, relating to, for example, skills, competencies, or personalities. When members attribute process issues to these interpersonal roots, negative affect may be likely to result, as according to attribution theory, how people appraise situations may determine their emotional reactions (Weiner, 1986; for a review, see Lazarus, 1991). Research has found, for example, that when

a group member perceives a situation as a threat, in which the requirements exceed the resources that the member has available, a threat response, including high negative affect, may result (e.g., Blascovich & Tomaka, 1996). Because of the centrality of personal judgments and personal interests to process conflicts, group members may be especially likely to make affect-inducing attributions in response to process conflicts. Thomas and Pondy (1977) noted that such attributions may play an important role in how parties react to conflict. Conflict in general is especially susceptible to such misattributions. Past research has consistently shown that when individuals lack mitigating information, they are likely to attribute a person's behavior to stable characteristics or traits rather than to the situation (Ajzen & Fishbein, 1975; Kelley, 1973; Trope, 1986). This phenomenon, known as the "correspondence bias" or the "fundamental attribution error," is especially likely in process conflict as the substantive issues of process conflict – task delegation, role assignment – do traditionally carry personal connotations in terms of implied capabilities or respect within the group (cf. Jehn & Bendersky, 2003). Second, process conflict is a result of perceived incompatibilities of members in regards to how to accomplish a task, which may lead to negative affect (cf. Bell & Song, 2005). Appraisal theories of emotion suggest that emotion arises from the appraisal that an event is interfering with one's goals or interrupting one's plans, thus when process incompatibilities exist, negative affect is likely. Third, process conflict concerns the allocation of desired resources or undesired assignments (Jehn, 1997). Research has found that when events are perceived as inconsistent with what one wanted or as making a situation worse, negative affect is likely to result (e.g., Roseman, Antoniou, & Jose, 1996). In summary, the personal connotations inherent in process conflicts as well as the inherent incompatibilities and concerns over resources and assignments may lead to negative affect by increasing the likelihood that members will make personal (mis)attributions about their process-related conflicts.

The Effect of Negative Affect on Performance

The negative affect associated with conflict may detract from performance in a variety of ways. First of all, negative affect may overrun and oversimplify rational and instrumental reasoning, leading to irrational decisions and behaviors (for review see Brief & Weiss, 2002). This is consistent with research in the negotiation literature which found negative affect to decrease the likelihood of negotiation partners achieving joint gains (e.g., Allred,

Mallozzi, Matsui, & Raia, 1997) and has found an angry opponent to lead a negotiator to make lower demands and higher concessions (van Kleef, De Dreu, & Manstead, 2004). In addition, research in the marital and family conflict literature has also found negative affect to impair problem solving among partners in close relationships (Forgatch, 1989; Prager, 1991). Second, negative affect may cause group members to lose perspective of the task being performed (Kelley, 1979), leading to less effective communication and cooperation among group members (Baron, 1991). Third, emotions may manifest themselves in actual behaviors (e.g., Morris & Keltner, 2000), which in the case of negative affect may detract from group performance. For example, the work on the social function of emotions suggests that emotional expression conveys information about a social environment, including its members and events. When emotional expression is negative, behavioral responses by other group members are likely, such as the raised voices, hostility toward others, making threats, pressure or intimidation of others (cf. Yang & Mossholder, 2004), and the engagement in workplace deviance (Lee & Allen, 2002). Together, this reasoning is consistent with research on groups and conflict that has found negative affect to decrease team effectiveness (e.g., Jehn, 1997; Thomas, 1992) and effective decision making (Daly, 1991; Staw & Barsade, 1993) through decreased cognitive processing, distraction from the task, and increased negative, non-goal oriented behaviors. Therefore, we propose in our study that the negative affect associated with process conflict may decrease group performance, providing a possible explanation of the past findings showing process conflict to decrease group performance.

STUDY 1

In our first study, we focused on establishing the role of negative affect in explaining the effects of process conflict on group performance. We tested our hypotheses on a sample of 45 MBA student groups formed as part of a class exercise. During the class exercise, students engaged in a computer simulation where they played the role of a team of consultants who had to introduce and convince managers within an organization to adopt a decision support system. After forming teams, each participant received a packet, including a description of the task and background information for the simulation. After being allowed to examine the background materials for 90 minutes, the participants met in their groups for 3 hours to create a strategic plan for accomplishing the simulated task. The day after this strategy

formulation session, team members met again for the three-hour execution stage, which was videotaped with permission of the students. During this stage, the participants entered their strategy, one tactic at a time, to the simulation software. For each implemented tactic, the software notified the team of the consequences. Following completion of the simulation, the software calculated an objective score of success that can be compared across teams (the number of managers who adopted the proposed system), as well as an objective measure of team efficiency (the amount of time it took for the group to make a decision to implement a strategy). After the simulation, the participants were asked to complete a post-experimental questionnaire and then were debriefed regarding the experiment.

To assess the constructs used in this study, we used the [Jehn and Mannix \(2001\)](#) process conflict scale to measure process conflict. To measure the negative affect associated with process conflict, a four-item process conflict negative affect scale was used which included items such as, “people in our team got very emotionally upset about process conflicts,” “there was a lot of sensitivity around process conflicts,” “there was a lot of emotion around process arguments,” and “emotional displays about process fights (yelling, angry tone) were sometimes evident.” Performance was assessed using external performance ratings, including an efficiency measure from the simulation and video ratings of effective performance. All scale items exhibited sufficient reliability, and factor analysis revealed that process conflict and process conflict negative affect loaded onto separate factors.

Findings and Discussion

Our findings revealed that process conflict during the simulation was, as expected, positively related to negative affect, and negative affect was negatively related to group performance (in terms of both efficiency on the simulation and video ratings of group performance). Process conflict was found to negatively impact both performance measures, and this effect was fully mediated by negative affect.

These findings show that negative affect does play an important and central role in the relationship between process conflict and performance. Negative affect did fully mediate the relationship between process conflict and performance, which suggests that if the negative affect associated with process conflict is reduced, the negative effects of process conflict on performance could be minimized as well and the possibility could arise for process conflict to actually improve performance, as theory has proposed (e.g., [Jehn et al., 1999](#)).

In our next study, we explore the factors that could determine the degree to which process conflict becomes emotional and examine a list of potential moderators in a field setting (see Fig. 1).

STUDY 2

Factors Affecting the Negative Affect Associated with Process Conflict

In Study 1, we found that the relationship between process conflict and performance was indeed mediated by negative affect. In Study 2, we explore factors that influence the negative affect associated with process conflict. We specifically look at fairness concerns (i.e., perceptions of injustice) and the group context (i.e., group composition or levels of trust and respect within the group) as affecting the likelihood of process conflicts being associated with negative affect. Additionally, we now look at three different types of process conflict in testing this model. We use the traditional implementation of general process conflict as introduced by Jehn (1997) and we also now include two new subtypes of process conflict, as introduced by Behfar et al. (2002) – people-focused and task-focused process conflict. In their exploratory study, Behfar et al. (2002) found two types of process conflict: process conflict around the coordination of people (e.g., people arriving to meetings late) and process conflict around the coordination of the task (e.g., the amount of time to spend on a task). In exploratory analyses, they found people-related process issues, such as people not completing their assignments or arriving to meetings late, to be associated with less effective teams. In contrast, they found that task-coordination issues, such as disagreements about the amount of time to spend on the task or the meeting, were associated with highly effective teams. Therefore, in our second study, we extend our examination of process conflict to also include these subtypes of process conflict. We extend the work by Behfar et al. (2002) by proposing (and testing) the possibility that negative affect will play a central role in both process conflict types and examining the moderating factors that will influence this affect.

Factors Moderating the Relationship of Process Conflict with Negative Affect

In this study, we propose a set of variables that may affect the likelihood of general process conflict as well as the new process conflict subtypes

(i.e., task-oriented and people-oriented) being associated with negative affect. Specifically, we look at the role of fairness concerns and group context as moderating the relationship between process conflict and negative affect. We propose that when fairness concerns, including justice, voice, and perceived goal obstruction become an issue, process conflict is more likely to be associated with negative affect. This is in line with past research that has shown justice perceptions to be strongly related to affective reactions to events or incidents (e.g., [Wiesenfeld, Brockner, & Martin, 1999](#)), suggesting that justice perceptions may determine how people react to process conflicts in terms of negative affect.

We also propose that group context will play a central role in affecting the relationship between process conflict and negative affect. As discussed earlier in this chapter, the attributions group members make about process issues are likely to affect how emotional they become. Group context, as representing the situational aspect of the group, is likely to heavily influence the attributions members make. For example, in a group where members do not feel respected, members may be more likely to attribute unfavorable task assignments to personal disrespect, rather than objective task concerns, because of the prevailing context in the group. In the following sections, we will elaborate on these moderating factors and explain the mechanisms by which we propose that fairness concerns and group context will affect the relationship between process conflict and negative affect.

Fairness Concerns

Because process conflict involves the delegation of tasks or resources, concerns about fairness or justice may play a major role in determining the resulting negative affect. While past justice literature has identified three types of justice (distributive, procedural, and interactional) ([Colquitt, 2001](#)), we focus specifically in this chapter on interactional justice. Interactional justice revolves around the statements and behaviors of other group members (cf. [Nowakowski & Conlon, 2005](#)) and the fairness with which they treat each other ([Colquitt, 2001](#)). This can include the sensitivity and politeness with which group members treat each other, as well as the explanations or information group members provide each other about the use or outcomes of certain group procedures. Given its roots in interpersonal relations, interactional justice may have more important implications for emotional reactions to intragroup interactions than other forms of justice. For example, [Goldman \(2003\)](#), in a study of terminated employees, found interactional injustice to display a stronger relationship with anger than other forms of injustice. This anger partially mediated the relationship

between injustice and behavioral reactions. Therefore, in this chapter, we propose that interactional justice in particular will moderate the relationship between process conflict and negative affect.

Interactional (in)justice is likely to impact the relationship between process conflict and negative affect for several reasons. First of all, interactional justice may increase positive processes, such as satisfaction (Colquitt, 2001; Cohen-Charash & Spector, 2001), which may help increase acceptance of process issues. When people are more accepting of different opinions about process issues within the group, such as task delegation, they may be less likely to experience negative affect associated with process conflict. Second, *in*justice is thought to lead to “moral outrage” (Bies, 1987), where group members may feel anger and resentment toward the situation (cf. Beugre, 2005). Fairness theory (Folger & Cropanzano, 2001) proposes that emotions play an important role in reactions to justice and that these reactions are made automatically. Therefore, during a process conflict, people who reach the conclusion that they have been unfairly treated by their group members, such as receiving the largest amount of work during the delegation of tasks, are more likely to experience negative affect, including emotions such as anger or hostility (e.g., Folger, 1987; Judge, Scott, & Ilies, 2006). We propose in our study that when individuals involved in a process conflict perceive themselves to be unfairly treated by their group members, they are more likely to become emotional over process issues than if they had a process disagreement but did not feel they had been unfairly treated.

Another fairness concern that may affect the likelihood of process conflict being associated with negative affect is voice. Voice, or the ability of a member to express his opinion and therefore exert influence in group processes, has been often associated with greater affective acceptance of group decisions (for a review, see Lind & Tyler, 1988) at both the individual level (Baron, 1991; Putnam, 1994) and the group level (Fiol, 1994; Janssen, Van de Vliert, & Veenstra, 1999; Schweiger, Sandbert, & Rechner, 1989), as well as to increased contribution behavior (e.g., Brockner, De Cremer, van den Bos, & Chen, 2005) and satisfaction with outcomes (Brockner et al., 1998). People tend to value voice because people prefer procedures that allow them a substantial amount of control over the manner in which decisions are made (Thibaut & Walker, 1975). By having this control, people feel better able to obtain predictable and satisfactory outcomes (Houlden, LaTour, Thibaut, & Walker, 1978). When people feel they have control over the situation, they are likely to be more accepting of group process decisions, and thus may be less likely to become upset over process issues. Therefore, we

propose that if people feel they have voice during process conflicts, process conflict is less likely to be associated with negative affect.

Finally, a last factor associated with fairness concerns that we propose will moderate the relationship between process conflict and negative affect is perceived goal obstruction. Perceived goal obstruction occurs when members perceive other group members to be acting in a way that obstructs or interferes with member goals. Perceived goal obstruction arises because when people feel procedures are unfair, they are likely to make attributions about the source of the injustice. According to attribution theory, people strive to determine the cause of events or behaviors (Heider, 1958; Weiner, 1986). However, in making these attributions, people often are suspect to the correspondence bias (Ajzen & Fishbein, 1975; Kelley, 1973; Trope, 1986), thus laying the blame for unfair processes on other group members rather than on the situation. Members may thus come to suspect other members of goal obstruction, which could increase the likelihood of process conflict leading to emotions, such as frustration (Buss, 1962). As appraisal theories of emotion (e.g., Lazarus, 1991) predict negative emotions to be associated with perceived obstruction of one's own goals, negative emotions are likely to result during process conflict when members suspect other members of goal obstruction. For example, Bell and Song (2005) found other-blame in a conflict to be positively associated with hostility. Furthermore, such blame has been found in the conflict management literature to be related to retaliation intentions and revenge behavior (Aquino, Tripp, & Bies, 2001; Bradfield & Aquino, 1999; Pillutla & Murnighan, 1996), further escalating the negative affect associated with a group's process conflict.

Group Context

The context shaping group interactions is likely to affect the attributions members make about process conflicts. For example, contexts that are more susceptible to perceptions of discrimination or stereotyping, such as diversity of group members' backgrounds, may make members more likely to attribute unfavorable process issues to personal, rather than objective, task concerns. Diversity, either in terms of heterogeneity or faultlines, may have an exacerbating effect on the relationship between process conflict and negative affect, such that higher levels of heterogeneity or faultlines within a group may both accentuate the likelihood that process conflict will become emotional. Heterogeneity refers to the general diversity in a group, while faultlines refer to the possibility that demographic characteristics in a group could align in such a way as to create demographically homogenous subgroups on the basis of multiple demographic characteristics (Lau &

Murnighan, 2005). Faultlines tend to occur at their strongest in moderately heterogeneous groups. In our study, we propose that when diversity, either in terms of heterogeneity or faultlines, is strong, process conflict will be more likely to become emotional. The presence of diversity – or differences between group members, such as age, sex, race, or job function – within a group can lead to stereotyping and discrimination, thus increasing animosity and misunderstandings (Jehn, Chadwick, & Thatcher, 1997; Thatcher, 1999). These negative processes within a diverse group context may increase the likelihood of misattributions directed toward interpersonal hostilities, increasing the chance that process conflict will become personal. When diversity aligns in such a way that clear subgroups emerge within the group based on the simultaneous alignment of multiple demographic characteristics (i.e., in a group containing two white women and two black men), inter-subgroup competition, in addition to the previously named negative processes associated with diversity, also comes into play (cf. Lau & Murnighan, 1998). For example, Li and Hambrick (2005) found faultlines to increase negative group processes, such as behavioral disintegration. In such situations, process conflicts may also be more likely to be seen as stemming from interpersonal issues, increasing the likelihood that process conflict will be associated with negative affect when group composition is diverse or characterized by faultlines.

Another factor that may affect the group context is intragroup respect. The relational model of authority (Tyler & Lind, 1992) proposed that people value fair procedures because of their implications for individual self-worth. When procedures communicate disrespect (Lind, 2001; Lind & Tyler, 1988; Tyler, 1987, 1989; Tyler & Lind, 1992; Van Prooijen, Van den Bos, & Wilke, 2004), members' feelings of self-worth may be affected. This may increase the likelihood of members taking process issues personally and experiencing negative affect. For example, in a group context characterized by high levels of respect, a member would be less likely to interpret an unfavorable task assignment as being a personal reflection if that member is confident that other group members respect him or her. When group members feel respected by their group, they may be less likely to attribute process conflict to interpersonal issues, such as not being respected by group members. Therefore, we propose that disrespect will increase the likelihood of process conflict being associated with negative affect.

Another group context factor that may affect the relationship between process conflict and negative affect is trust. Trust, defined as “a psychological state comprising the intention to accept vulnerability based on the

positive expectations of the intentions or behaviors of another” (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395). Extrapolating from this definition, trust may thus decrease the fear that group members may have of being taken advantage of on process issues. People may thus be less likely to become emotional during process conflict when they trust their group members. For example, if group members trust each other, they may be more likely to take disagreements at face value and therefore less likely to make misattributions about their task or process disagreements having roots in interpersonal issues (cf. Simons & Peterson, 2000). Therefore, trust may reduce the negative affect resulting from process conflict.

To summarize, we examine in our second study the moderating effects of fairness concerns and group context on the relationship between process conflict and negative affect. For a diagram of the model we are proposing, please see Fig. 1.

Methods

In this study, we surveyed 26 existing workgroups at a multinational company in the telecommunications sector with offices in the Netherlands. Process conflict, negative affect, and the moderators were assessed with self-report items on a survey. Performance of the group was assessed with supervisor ratings. General process conflict was assessed with the scale of Jehn and Mannix (2001). Person-related process conflict and task-related process conflict was assessed with the scale of Behfar et al. (2002). Factor analysis revealed these two process conflict types to be distinct from each other. The negative affect associated with process conflict was assessed with the same four-item scale used in Study 1. Factor analysis revealed that the negative affect associated with process conflict was distinct from both general process conflict as well as from the specific process conflict subtypes. For fairness concerns, goal obstruction was measured with the scale of Chen and Tjosvold (2002), injustice was measured with the scale of (Colquitt, 2001), and voice was measured with a combination of items from the scales of Colquitt (2001) and van den Bos and Spruijt (2002). For group context, trust was assessed with the items from Simons and Peterson (2000), respect was assessed with the items from Sleebos (2005), and perceived faultline existence was assessed with five items, including, for example, “at our team meetings, subgroups will sit together.” All scales exhibited high reliability. Demographic faultlines in terms of actual demographic characteristics were

calculated with the formula of Thatcher, Jehn, and Zanutto (2003). This formula captures the percent of total variation in-group characteristics by the group's strongest faultline. Using this formula, a group with two internally homogenous but externally dissimilar subgroups would have a strong faultline. Demographic heterogeneity was calculated using Teachman's entropy index, as recommended by Harrison and Klein (2007). This formula captures the variety of categories present in a team – when members are spread more evenly across a larger variety of categories, the value of this index is higher.

Findings and Discussion

We found all three process conflict measures – general, task-oriented, and people-oriented – to be positively related to negative affect. We also found that all three process conflict types were negatively related to performance. However, full mediation was not supported as the effects of process conflict did not disappear when emotion was controlled for.

In terms of our moderation hypotheses, we found voice to significantly moderate the relationship between general process conflict and negative affect, although slightly differently than expected. We found that when process conflict levels were low, group members were more likely to become emotional during process conflict when they lacked voice. However, when process conflict levels were high, group members were more likely to become emotional when they had voice. As expected, we found voice to significantly moderate the relationship between both task-oriented and person-oriented process conflict and negative affect, such that when voice was low, high process conflict was the most likely to be associated with negative affect.

We also found perceived goal obstruction to significantly moderate the relationship among all three process conflict types (general, person-oriented, and task-oriented) and process conflict negative affect. When perceived goal obstruction was high, all three process conflict types were more likely to be emotional. We did not find a significant effect of interactional justice on the relationship between process conflict and negative affect.

We then examined the effects of group context on the relationship between process conflict and negative affect. We found perceived faultline existence to moderate the relationship between person-oriented process conflict and negative affect, such that when group members perceived subgroups to exist within their group, process conflict was more strongly

associated with negative affect. We did not find effects of demographic faultlines nor demographic heterogeneity as calculated based on actual demographic characteristics in the group; perceptions of faultline existence seemed to matter more. While we did not find trust and respect to moderate the relationship between process conflict and negative affect, trust and respect did have direct main effects on negative affect, both decreasing the amount of negative affect.

To summarize, we found that goal obstruction, voice, and perceived subgroup existence played a significant role in determining whether or not process conflict became emotional in the groups. We did not find that trust, respect, injustice, or traditional measures of group composition played a significant role in moderating this relationship. Our results suggest that if processes, such as goal obstruction, voice, and subgroup existence are managed, the negative affect, and thus negative effects of process conflict, may be effectively reduced.

GENERAL DISCUSSION

In this chapter, we have provided an in-depth examination of the understudied phenomenon of process conflict and we have set forth emotion as a distinct and separate aspect of group life – rather than an inherent part of conflict – as often suggested in past research. We find in our first study that negative affect mediates the relationship between process conflict and performance, suggesting that the negative effects of process conflict on group performance as found in past research may be explained by the negative affect that process conflicts arouse.

In our second study, we explored different ways that the negative affect associated with process conflict could be reduced, thereby decreasing the negative impact of process conflict on performance, and opening the door for the possibility that process conflict could positively impact group performance as past theory has suggested (cf. [Jehn & Bendersky, 2003](#)). We found that fairness concerns had an important influence on the negative affect associated with process conflict. We found that when group members lacked the ability to voice the opinions about group procedures, process conflict was more likely to be positively related to negative affect. We also found goal obstruction to play a central role in the negative affect ensuing from process conflict. Specifically, we found that when group members perceived other members to be obstructing their goals, they were much more likely to become emotional during process conflict.

We also found that group context, at least in the terms of group composition, played a role in shaping the association between process conflict and negative affect. Specifically, in our second study, we found that perceived subgroup existence moderated the relationship between process conflict and negative affect such that when subgroups were perceived to exist within the group, process conflict was much more likely to be associated with process conflict and negative affect.

FUTURE DIRECTIONS AND LIMITATIONS

Our study does offer a unique examination of the nature of process conflict. We offer insight into the mechanisms by which process conflict may detract from performance, with a specific focus on the role of negative affect in explaining the negative effects of conflict on performance. We also investigate a set of moderators that affect this relationship (group context and fairness concerns), and that may help to clarify how process conflict can be managed in such a way as to not detract from group performance. However, our study does have several limitations. First of all, we did not find support for our full range of moderators as proposed in Study 2. Our lack of findings may be attributable to either a theoretical incompatibility or purely a lack of power as the sample size in the second study examining the moderators was small. Future research would benefit from examining our full range of moderators on a larger sample of organizational workgroups. Second, both studies were conducted at one point in time. Future research would benefit from examining process conflict and negative affect at separate points in time to better determine if negative affect is an aspect of or result of process conflict.

Other research directions may also provide important insights into the nature of process conflict. One such direction is that of relational conflict, or conflict asymmetry. Relational conflict, based on the idea of relational demography, looks at how different an individual's *perception* of the level of conflict is from other group members (Jehn & Chatman, 2000). While relational demography investigates how different an individual is from other group members on the basis of demographic characteristics (e.g., Tsui, Egan, & O'Reilly, 1992), relational conflict investigates how different an individual's perceptions of conflict are from the other members in the group. When individuals within a group perceive there to

be different levels of, for example, process conflict, in their group, this conflict asymmetry may have important implications for performance (Rispens, Jehn, & Thatcher, 2005), motivation, and absenteeism (Jehn, Rupert, & Nauta, 2006).

Comparing the process conflict and resulting negative affect of different group members may also provide interesting insight into the relationship between process conflict and performance. For example, perhaps low-status group members are more likely to become emotional during process conflict than high-status group members. By identifying and understanding such asymmetries, researchers can improve their understanding of how process conflict ultimately impacts group performance. Additionally, the role of emotional contagion (Barsade, 2002; Barsade & Gibson, 1998; Hatfield, Cacioppo, & Rapson, 1994; Kelly & Barsade, 2001) during conflict could be better understood in this manner. For example, if low-status members are likely to be emotional during process conflict, this may spread to high-status members, making groups with status differences more emotional than groups without such status differences.

Another interesting research direction is the role of negative affect in the other conflict types. While research has examined the role of negative affect in conflict transformation, little or no research has examined negative affect as mediating the relationship between either task conflict or relationship conflict and performance. As task conflict and even relationship conflict have been found to show contradictory effects on performance (e.g., De Dreu & Weingart, 2003; Greer & Jehn, 2005; Rispens, Greer, & Jehn, 2006), the presence of negative affect could be one factor determining whether or not the conflict types positively or negatively affect performance.

CONCLUSION

Process conflict may have important implications for the management of teams. When process conflict becomes emotional, process conflict may have a large negative effect on team performance. By understanding and effectively managing factors that could trigger this negative affect, such as voice, goal obstruction, or group composition, managers can help minimize the negative effects of process conflict and create the possibility that their team may be able to capitalize on the benefits of process conflict: increased re-evaluations of processes and standards and increased appropriateness of task and resource assignments.

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CHAPTER 3

POWER, AFFECT, AND VALUE CREATION IN GROUPS

M. Ena Inesi and Margaret A. Neale

ABSTRACT

In this chapter, we present a model for the process of value creation in power-differentiated groups and identify affect as a key moderator. We divide the value creation process into two key steps: information sharing and information processing. Further, we propose that high- and low-power group members each play a critical, albeit different, role in these processes. High-power group members are instrumental in establishing an environment that encourages all group members to share their unique information. Once that information is available, low-power group members use it to formulate solutions that create value. Further, we propose that the affective experience of each of these determines the extent to which they fulfill their role. If high-power group members are happy, they are more likely to create an open and sharing environment. If angry, they will likely squelch broad participation in information sharing. While low-power group members are naturally prone to effortful cognition, we propose that the more suspicious they are regarding the motives of those around them, the more carefully they will process available information.

Power differences are ubiquitous in group interactions. Whether based on explicit titles or on implicitly-understood status markers (Ridgeway, 1991),

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power differences are prone to surface among groups of interacting individuals (Tiedens & Fragale, 2003). While a number of interesting findings have emerged regarding the individual and interpersonal effects of power (see Keltner, Gruenfeld, & Anderson, 2001, for a comprehensive review), less work has investigated how power differentials within groups affect group functioning (see Anderson & Thompson, 2004 for a recent notable exception). Because teams are increasingly viewed as a key source of creativity and innovation for organizations (Dahlin, Weingart, & Hinds, 2005), the influence of power on value creation in groups is an important topic for organizational researchers. In the present chapter, we describe a model that seeks to clarify when power-differentiated groups will be more or less likely to create value.

For a team to create value, it must perform two functions well: sharing information and processing that information to create a new product (De Dreu & Weingart, 2003; Mannix & Neale, 2005). Our model proposes that in the context of a team, both high- and low-power actors have critical, if quite different, roles to play in the value creation process. High-power actors are critical in creating an environment that encourages openness to new information. Low-power actors are key in processing the information provided by other team members to create value. We further propose that the affective experience of these actors will significantly alter the extent to which they are able to perform their functions. High-power actors will foster or hinder information sharing depending on whether their affective state is positive (e.g., happiness) or negative (e.g., anger), respectively. Also, the effortful processing required of those in low power may be influenced by their affective experience; for example, if they are experiencing a high degree of suspicion, they should be more prone to process in an effortful way.

We will begin by reviewing literature on power as well as on group value creation. Next, we direct our focus to the two key steps in value creation. First we discuss information sharing, including an analysis of how group power differentials affect this dynamic. Next we move to discussing information use, again highlighting the impact of power on this process. We will conclude by summarizing a model that describes conditions under which power differentials in groups help or hinder value creation.

POWER

Power is broadly defined as the ability to influence others' outcomes (Galinsky, Magee, Inesi, & Gruenfeld, 2006; Keltner et al., 2001). In groups,

power can manifest in a variety of ways. We highlight a few of these here. French and Raven (1959) proposed five bases of social power: the ability to reward others (reward power), the ability to punish others (coercive power), having an expertise desired by others (expert power), conferral of power by a legitimate outside source (legitimate power), and being admired and respected by others (referent power). Any and all of these can occur in workgroups. For example, a team can be composed of members from different parts of the hierarchy within a company. This group might contain examples of all five bases of power, whether they be distributed across team members or even contained within a single team member.

Status, defined as respect in the eyes of others, can also be a determinant of power within a group (Ridgeway, 1991). For example, Caucasian males are often conferred with high status in a group and thus have more power in that they are able to influence the group as a whole (Fragale, 2006). Note that while power and status often co-occur, they are not synonymous. A person with high status may have the respect of all the group members, but not be able to influence them. On the other hand, a person with power may be able to influence others, but their influence may not be respected.

Sociologists define power in a relative and relationship-specific manner. Specifically, A's power over B is (1) directly proportional to the importance B places on some resource that A can provide B and (2) inversely proportional to the B's ease of attaining these resources outside the A-B relation (Emerson, 1962). For example, if A has something that B values highly, and B has few alternative means for obtaining that object, then A has power over B. At the same time, if B develops alternative means to obtain the object, A's relative power over B is reduced. Given the relative nature and myriad sources of power, teams can develop a situation-specific hierarchy even when efforts are made toward egalitarianism (e.g., all members are at the same level of hierarchy within an organization).

This relative definition is also consistent with how power is conceptualized in negotiations, at both the group and dyad levels. Power in negotiations is similar to that described by Emerson (1962) and can be considered a function of the alternatives or options that parties have to their negotiated agreements (Pinkley, Neale, & Bennett, 1994). Negotiator A is more powerful than Negotiator B to the extent that the former's alternatives are of higher quality than those of Negotiator B. When value is being claimed, Negotiator A will, on average, claim more of the available value than will Negotiator B (Pinkley et al., 1994).

Thus far, we have discussed a variety of ways in which power differences may emerge in groups. However, to understand how power differences affect

value creation, we refer to psychological research on how power affects the thoughts, feelings, and behavior of high- and low-power persons.

Keltner et al. (2001) have proposed that because power is linked to increased access to rewards those in positions of power should display effects consistent with an active Behavioral Approach System (BAS; Gray, 1991). These effects include positive affect, behavioral disinhibition, and attention to rewards. In contrast, low power is associated with a greater likelihood of experienced threats, which should activate the Behavioral Inhibition System (BIS). As a result of BIS activation, low-power people should display greater negative affect, increased attention to threats, and more effortful cognition. A series of experiments have yielded findings consistent with these propositions (Anderson & Berdahl, 2002; Galinsky, Gruenfeld, & Magee, 2003; Galinsky et al., 2006; Gruenfeld, Inesi, Magee, & Galinsky, 2006; Smith & Bargh, 2004).

Importantly, recent work has suggested more narrow emotional concomitants of high and low power. Those in high-power positions are more likely to respond to negative events with anger and to positive events with happiness, amusement, and pride. At the same time, low-power people are more likely to respond to negative events with nervousness and fear (Carver, 2004; Anderson & Berdahl, 2002). In our model, we predict that the particular form that the emotional reaction of high- and low-power group members takes will have important consequences for group value creation. We will return to these effects below as we discuss the relationship between power, information sharing and information processing in groups.

VALUE CREATION

Many organizations bring together people with different areas of expertise in the hopes that such groups will combine their information to come up with something new and innovative. For example, IDEO is a company whose primary product is superior creativity born of an especially effective team process called the "Deep Dive." The company hires employees with disparate areas of knowledge expertise, and has developed a method of combining this knowledge to create innovative products that would not have been possible to create had each of these individuals been working independently (Stone, 2003). Similarly, in many negotiations contexts, negotiators are able to combine their unique preferences in such a way that they find agreements that are of greater benefit to both parties. For example, instead of compromising on all issues, they realize that by trading on issues

of differential importance to each of the negotiators, they are able to create value overall.

This notion that groups of individuals can combine their knowledge to develop something more than the sum of their parts is a departure from the traditional use of teams. While the role of teams was traditionally one of implementing predefined processes (exploitation activities), it has increasingly become one of creativity and innovation (exploration activities). Consistent with the distinction between exploration and exploitation activities (March, 1991), we conceive of value creation as an exploration activity. A group that creates value yields an outcome that is more than the sum of its individual parts. Such activities benefit from the exchange of diverse knowledge and skills, such that the final product combines these perspectives in a multiplicative fashion.

While this informational variety can be beneficial to teams in that it provides the possibility both for learning and for the creation of new products and ideas (Thomas & Ely, 1996; Tushman, 1977; Cox, Lobel, & McLeod, 1991), it can also lead to impediments in group functioning. Differences in opinions and perspectives can lead to both task and interpersonal conflict (see De Dreu & Weingart, 2003 for a review). Also, people may fear that the group will not value their information and that they will be judged negatively (Stasser & Titus, 2003; Amabile, 1988; Nemeth, 1986). For example, high- and low-power members of organizations often have different types of information. Low-power members may be more familiar with detailed information and high-power members with more abstract, high-level requirements (Smith & Trope, 2006). In this situation, low-power members may fear the response of their superiors and decide not to share, and high-power members, who are focused on more abstract concerns, may dismiss information shared as a minor detail.

We have suggested that value creation has two critical sub-processes: information sharing and information processing. Consistent with recent approaches to understanding value creation in teams (Mannix & Neale, 2005) we will focus our inquiry on the factors that affect these sub-processes. Specifically, when discussing information sharing and information processing we will highlight factors that may help or hinder those dynamics. In addition, we conclude each section with our proposals regarding how power and affect are related to these factors.

INFORMATION SHARING IN GROUPS

When individuals come together as a team, each has a store of knowledge that is relevant to the task at hand. While some information is shared

across group members, other information may be held by a single person. A group situation in which many members hold the same information may be more efficient for exploitation-type tasks (March, 1991) in which the group is enacting well-established routines. However, exploration tasks require uniquely held information to be revealed to all group members, such that it can be processed to develop robust, value creating solutions. Unfortunately, there are many barriers that prevent uniquely held information from being revealed. First, commonly-known information is more likely to be mentioned in group discussions than is information held uniquely by one group member (Stasser & Titus, 1985). Further, the more people in a group who know a particular piece of information, the greater the probability that it will be revealed, the greater the probability that it will be mentioned again in the discussion and the greater its effect on the group's final outcome (Gigone & Hastie, 1993).

One possible explanation for this effect is that there is a greater chance of sampling on shared information because more people know it (Stasser & Titus, 1987). However, this effect persists even when all group members are aware of the degree of uniqueness of their information. In one study, participants were given a packet of information. After reading it over, they were told which pieces of information were shared by others and which were uniquely their own. Even equipped with such meta-knowledge, people in these groups were more likely to mention shared versus unique information (Postmes, Spears, & Cihangir, 2001).

A second plausible explanation for team members' hesitation to bring up unique information is the fear of appearing dissimilar from one's team members, and thus being excluded. Indeed, research has shown that people like and gravitate toward those that they perceive to be similar in terms of looks, goals, and attitudes and distance themselves from those perceived as different (Newcomb, 1961; Rosenbaum, 1986). For example, one common signal of "being different" is demographic diversity. Since demographic diversity often underlies differences in experience, perception, and information (Pfeffer, 1983), other group members assume that demographically diverse individuals are dissimilar in meaningful ways from the rest of the group. Such individuals may be excluded and their contribution devalued (Williams & O'Reilly, 1998). In a field study of superior-subordinate relationships the greater the demographic difference between the boss and the subordinate, the greater the conflict between the two and the greater the subordinate's sense of role ambiguity (Tsui & O'Reilly, 1989).

However, perceptions of group differences are not exclusive to demographic variables such as race. The basis for difference and, therefore, potential exclusion from the group or team can vary from technical expertise to tenure in an organization. In fact, as suggested by Mannix and Neale (2005), the differences that become salient and acted upon depends on the situation. It is not even necessary for these differences to signify any substantive difference within an organization (i.e., in terms of knowledge or expertise) for these effects to occur. In short, it seems that people perceived as different, based on what they say or how they look, are more likely to be ostracized from the group and have their information ignored (see van Knippenberg, De Dreu, & Homan, 2004 for possible moderators of this relationship).

Because the experience of dissimilarity breeds distrust (Brewer, 1979) and the group may ostracize those perceived as different (Rosenbaum, 1986), group members are under pressure to conform to the majority (Asch, 1951). They will outwardly agree with the majority, even when they inwardly disagree (Maass & Clark, 1984) because there are clear social costs to being perceived as different or in actual disagreement from the rest of the group. Indeed, the pressure to conform seems to increase with the salience of a potential outgroup. A recent paper studying the effects of congruence between information and relationships provides support for this notion (Phillips, Mannix, Neale, & Gruenfeld, 2004). Participants were put in three-person groups in which two people knew each other and one person was a stranger to the others. Unique information was more likely to be shared and discussed when held by the stranger than when held by one of the previously-acquainted individuals. This is because sharing unique information while in the presence of outgroup members (i.e., the stranger) may yield negative social consequences such as being ostracized from the ingroup. While the threat of ostracism is very real for the two familiars, it holds little consequence for the stranger. Thus the latter is more prone to sharing unique information.

If the perceived fear of social costs is what inhibits the sharing of unique information, then reducing the perceived social costs should result in increased sharing. Established social bonds among the entire group may accomplish this task. By creating a bond among *all* the group members, the concept of and threat represented by an outgroup should be reduced (Gruenfeld, Mannix, Williams, & Neale, 1996; Westphal & Milton, 1995). In one study, teams were composed of people who were either all friends (familiars) or were all strangers to one another (strangers). Among the friends there was no obvious outgroup to which one could be

ostracized: the overwhelming identity was that of friendship. In contrast, people in the strangers group were likely concerned with just being considered a part of the group in the first place. Each team was provided with a mix of unique and shared information (Gruenfeld et al., 1996). Groups of familiars were better at mentioning and using unique information than were groups of strangers, presumably because the familiars' pre-existing relationships made the social costs of sharing such information lower.¹

This discussion raises the question of how to address these impediments to information exchange. In general, the problem is that people within teams are concerned with the threat of ostracism from the team. They fear that by sharing unique information, they risk being perceived as dissimilar, incurring the distrust of other group members, and being thrust out of their ingroup. Instituting cooperative norms within the group is an effective remedy to minimize the threat of ostracism. Companies that espouse collectivistic norms and values had business groups that worked together more cooperatively (Chatman & Spataro, 2005). In a separate study, collectivistic norms and values were shown to reduce conflict and increase intragroup interaction among members of teams with high levels of diversity (Chatman, Polzer, Barsade & Neale, 1998).

A second way of creating group cooperation – related to corporate culture – is to institute a superordinate, unifying identity (Gaertner & Dovidio, 2000). By doing so, attention moves away from possible subgroup differences and toward the common purpose of the whole group. A study of workers in the oil and gas industry provides support for this point. Those groups with a greater sense of a common goal learned more and yielded better outcomes than those who did not have such a superordinate identity (Van der Vegt & Bunderson, 2005). In such an environment differences among team members may be viewed as a valuable asset, necessary to team performance. As a result, team members will be more likely to share their unique perspectives and others more likely to hear and value these differing perspectives.

A third way to encourage information exchange is to alter the status or power of members holding unique information. For example, identifying the expertise of team members can dramatically influence the willingness of that individual to share his or her unique perspective (Franz & Larson, 2002; Stasser, Stewart, & Wittenbaum, 1995; Stasser, Vaughn, & Stewart, 2000). Being identified as an expert reduces the social costs of sharing one's unique perspective and raises the value of that opinion in the lexicon of the team.

INFORMATION SHARING, POWER, AND AFFECT

The idea that having power, whether expert or otherwise, would lead people to share their information more openly is consistent theories that link power to disinhibited behavior (Keltner et al., 2001). Powerful people are simply less concerned about the possibility of being ostracized from the group and thus are more prone to sharing. What becomes important is for other, less-powerful group members to mimic this behavior and share information of their own. We propose that the affective experience of the power holder plays a key role in determining the extent to which this will occur.

To understand the effect of power on information sharing in groups, we start from the notion that powerful group members have a disproportionate influence over their group. People pay more attention to those in power. For example, newly admitted fraternity brothers observe their senior counterparts more than the reverse (Keltner & Robinson, 1997). It has been suggested that people observe those in power in an effort to predict and maybe even control their outcomes (Fiske, 1993). Because of the attention given to high-power group members, they serve as models to others regarding appropriate behavior. Therefore the behavior of the powerful, including their affective displays, should have a large impact on group dynamics. Next, we address how the affective experience of high-power actors influences their behavior, other group members' behavior, and information sharing overall.

High-power people are prone to experience positive affect (Keltner et al., 2001; Young, Keltner, Londahl, Capps, & Tauer, 1999; Keltner, Young, Heerey, Oemig, & Monarch, 1998), happiness, amusement, and pride in particular (Anderson & Berdahl, 2002). Further, positive affect creates a sense of trust, increases friendly prosocial behavior and reduces conflict (Carnevale & Isen, 1986; Anderson & Thompson, 2004). Since high-power individuals often set an example for group behavior, then to the extent that other group members *catch* the positive affect of the high-power individuals (Kelly & Barsade, 2001), trusting, friendly behavior will become the norm of the group. Once this norm is in place, group members should be more open to sharing their own unique information and to accepting that offered by others (Sinaceur, 2006).

One possible concern with high-power actors exhibiting open behavior is that others may mimic the content of their behavior – leading to conformity – instead of the form of their behavior, which is to share one's own information and welcome that of others. However, what we believe to be

unique about happy high-power people is not so much that they share their opinions and beliefs, but that they do so in a non-threatening way that encourages others to follow suit. As mentioned, high power is related to action through the BAS (Keltner et al., 2001; Galinsky et al., 2003), so such group members can be expected to share their views regardless of their emotion. However, if they share their thoughts and information while experiencing positive affect, high-power people may simultaneously express their desire to hear others' points of view or respond to others' thoughts in a manner that does not raise conflict. In this way, information shared by high-power group members does not become doctrine, but becomes part of a discussion that includes others' information.

While those in power may be more prone to experience positive affect, there are also times when they will experience negative affect, most likely in the form of anger (Tiedens, 2000; Carver, 2004). We propose that when high-power group members experience anger, the information-sharing process will suffer. Anger is associated with certainty appraisals. For example, angry participants are more optimistic than fearful participants because they feel a greater sense of certainty about and control over outcomes (Lerner & Keltner, 2001). Therefore, in the context of group value creation, angry high-power group members should be less open to new information presented by others, especially if it challenges their existing belief system. Angry negotiators should also be more likely to display contentious, competitive behavior in group settings. Because they are likely to be less trustful of others, they should approach the group interaction in a more competitive, less cooperative way. Indeed, research in negotiations provides support for this idea: angry high-power negotiators are more likely to claim a larger share of the existing value (Anderson & Neale, 2005; Overbeck & Neale, 2006). Returning then to the idea that those in power often set the tone and norms for the group, when high-power members are angry, certain and competitive, others should be less likely to share their own unique information.

INFORMATION PROCESSING IN GROUPS

The second critical step in creating value in groups is processing the available information in an effective manner. Such processing requires a high degree of effort because it implies sorting out the *noise* from the *news*. Indeed, the more complex the task, the greater the degree of effortful cognition required of team members (De Dreu & Weingart, 2003). Because value creation is a

complex task for groups, it becomes important to understand the circumstances that give rise to effortful processing in individuals, and particularly individuals in groups.

Conflict

One common group dynamic that may affect the amount of thought put into the convergence process is group conflict. While some researchers originally believed that task conflict could be helpful to group outcomes because it would lead them to both share and scrutinize issues (Jehn, 1994, 1997), a recent review found that this was not the case. Instead, both relationship conflict and task conflict were negatively related to team performance (De Dreu & Weingart, 2003). This negative relationship was even stronger for complex tasks. The proposed explanation for this negative effect is that while a little conflict stimulates effortful cognition, too much conflict leads to cognitive overload (Carnevale & Probst, 1998). Cognitive energy is being spent on reducing (or winning) the conflict, not productively contemplating different perspectives. These findings suggest that while discussing issues is beneficial to value creation, doing so in the form of conflict will be unproductive because the cognitive energy will not be spent on value creation.

Suspicion

In the information-sharing section, we discussed how trust is a key component to information sharing. Interestingly, a completely trusting environment may not be best for information processing. Instead, a mix of trust and suspicion within a group has been shown to be beneficial to group interactions. In a recent set of studies, more value was created when one party was suspicious and one trusting than in completely trusting or completely suspicious dyads (Sinaceur, 2006). This may reflect the trade-off between information sharing and information processing, a perspective to which we will return in our proposed model below. Indeed, Sinaceur (2006) attributed the pattern of results to the complementary roles that each negotiator plays. While the trusting negotiator was more likely to provide information, the suspicious negotiator was more likely to engage in the effortful processing necessary to create value. The suspicious partner is particularly well suited to this role because suspicion is defined as a state of uncertainty regarding the other party's motives. In an effort to improve one's ability to predict and understand the other party's motives, the suspicious

negotiator systematically processes more of the information in the environment – much of which has been provided by his or her more trusting counterpart.

INFORMATION PROCESSING AND POWER

We propose that low-power individuals in a group are particularly well suited to engage in the effortful processing required for value creation. First, recent theories on the psychological effects of power suggest that low-power actors are more likely to engage in effortful cognition because their BIS has been activated (Keltner et al., 2001). As mentioned previously, this system functions to evade potential threats in the environment. By effortfully processing information available, low-power individuals should be not only better prepared to avoid threatening situations but also more accurate perceivers of their surroundings and the individuals in it. Indeed, research has shown that low-power individuals are able to predict more accurately the beliefs of those in high-power positions than those in high-power positions are able to predict the beliefs of those in low-power positions (Ebenbach & Keltner, 1998).

Consistent with the idea that those in low-power positions are more likely and motivated to engage in effortful processing, research has shown that low-power actors are more likely than high-power actors to propose value creating offers in negotiations (Mannix & Neale, 1993). One study looked at how power affects the types of offers negotiators make. In particular, the authors focused on the last and second to last offer in a negotiation, which are generally the offers that lead to the final agreement. When the offer's author was the lower-power negotiator, the final agreement created more value than when the author was the higher-power negotiator. This suggests that lower-power negotiators are better at using information from the negotiation to formulate offers that are both acceptable to all parties and create more value overall.

However, we suggest that affect is an important moderator of the relationship between low-power positions and effortful cognition. First, both lay theories of power holders as well as systematic research findings suggest that low-power persons should be and are suspicious of those who have power over them. High-power people are interested in attaining their own personal goals (Bargh, Raymond, Pryor, & Strack, 1995; Gruenfeld et al., 2006; Chen, Lee-Chai, & Bargh, 2001). To the extent that these goals are communal in nature, those in low-power positions have nothing to

worry about. But this is often not the case. Power-holders in pursuit of personally rewarding goals are instead more likely to use other people as simply tools to achieve those goals (Gruenfeld et al., 2006). For example, in negotiations high-power actors are more likely to grab as large a share of the pie as they can, with little concern for the lower-power negotiator (Overbeck & Neale, 2006; Pinkley et al., 1994). Therefore, we propose that increased feelings of suspicion on the part of the low-power actor will lead to increased systematic cognition.

It also seems possible that high-power group members would transfer their affect to other group members. That is, not only is emotion contagious among group members (Kelly & Barsade, 2001), but it is also more likely to be passed from higher- to lower-power actors (Anderson, Keltner, & John, 2003). If this were the case, it might influence the low-power group members' ability to process systematically. For example, angry people tend to be more heuristic processors.

While we agree that some degree of affect will pass from higher- to lower-power group members, we propose that the larger role of high-power affect is to provide information to others regarding their experience of the group process (Frijda & Mequita, 1994; Keltner & Haidt, 1999; Sy, Côté, & Saavedra, 2005). If a high-power person displays anger, this may signal that he or she is unhappy with the progress of the group. This type of conflict will lead low-power actors to process even more effortfully in an attempt to rectify the situation (Sy et al., 2005). However, since there is little information to be processed, the cognitive work will go into resolving the conflict and mitigating negative personal outcomes, not into creating value.

On the other hand, if a high-power group member is happy, this may signal that he or she feels progress is adequate (Sy et al., 2005). We have discussed that happy high-power group members should be more open to new ideas and that these new ideas will not be coded as conflict. This being the case, we propose that low-power group members will capitalize on this opportunity to devise and advocate a greater value claiming solution from which all can benefit (van Kleef, De Dreu, & Manstead, 2004).

VALUE CREATION IN POWER-DIFFERENTIATED GROUPS: A MODEL

In sum, we propose that power differentiation in groups provides great potential for value creation. What drives this process? We believe that high-power actors are critical in fostering an environment in which information is

more freely exchanged. Because of their tendency to experience positive affect, they can create a norm of trust and prosocial behavior among the group members. Such an environment should lead to a reduction in the perceived threat of sharing new information and lower-power group members should thus be more likely to share their own information in turn (see Fig. 1). One possible impediment to this process is the possibility of high-power negative affect in the form of anger (Tiedens, 2000; Carver, 2004). If high-power group members do experience anger, they should be more certain about the best outcome and thus be less open to unique information provided by others. Overall, this should lead to limited information sharing in the group interaction (see Fig. 2).

We also propose that because low power is related to effortful processing (Keltner et al., 2001), lower power parties are well-equipped to process the information provided by the rest of the group. Further, affect should moderate the level of processing. The more suspicious low-power individuals are regarding the motives of those in power, the more they will engage in increased effortful cognition.

It behooves the low-power party to create and propose value-added solutions because it is, perhaps, their best avenue for improving their situation. By increasing the size of the pie, low-power individuals increase their probability of taking home more value themselves. Therefore, low-power actors may be the catalyst needed for value creation to be realized (see Fig. 1). However, to the extent that information sharing is impeded by the anger of high-power actors, those in low-power positions have little information to process. In this case, we propose that their cognition will

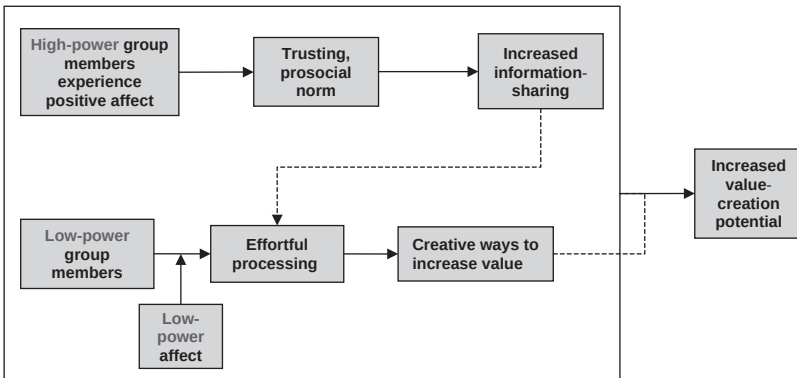


Fig. 1. High-Power Positive Affect (Happiness).

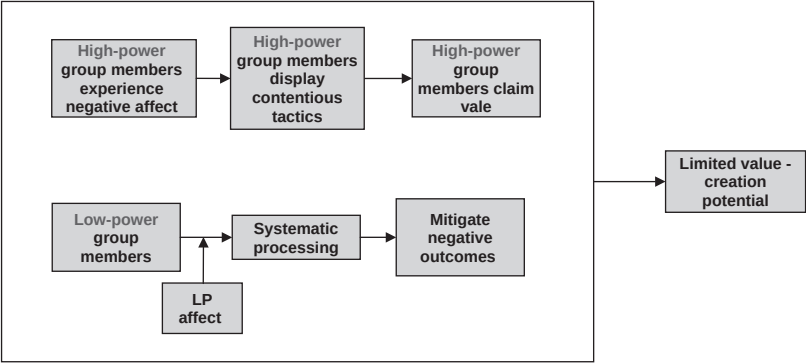


Fig. 2. High-Power Negative Affect (Anger).

go into resolving any conflict and minimizing negative personal outcomes (see Fig. 2).

In short, our model for the creation of value in power-differentiated teams is that of a machine that requires both fuel and an engine to run effectively. Under the right affective conditions, the high-power party provides the fuel in the form of fostering information sharing. The low-power party is the engine that in conjunction with the information provided by others causes the machine to accelerate. Under the wrong affective conditions, the engine suffers from lack of fuel and the value-creation machine sputters to a stop.

CONCLUSION AND FUTURE DIRECTIONS

Hierarchies are ubiquitous in organizations and their effects extend into the behavior of groups. Even when they are not part of the structure of the team, hierarchies can emerge based on status characteristics such as gender, race, or age (Ridgeway, 1991). They can even emerge from the body language displayed by the team members (Tiedens & Jimenez, 2003). While research on value creation in groups, and especially negotiating groups, has progressed significantly over the last 20 years, it has largely left the dynamics of power differentials unstudied. Recent work has begun to change this trend (Anderson & Thompson, 2004; Mannix & Neale, 1993), but more work needs to be done to fully understand the impact and contribution of both high- and low-power group members on value creation.

In this chapter, we propose such a model, highlighting the role of both high- and low-power members in creating value, as well as discussing how the

affective experience of those individuals plays a fundamental moderating role. We believe this theory contributes to a wide variety of existing literature. First, it contributes to our knowledge of the group dynamics that lead to value creation. While much of the work on value creation has discussed how diversity may help or hinder outcomes, recent work has suggested paying greater attention to the processes that underlie the effect (Mannix & Neale, 2005; see Gruenfeld et al., 1996; Phillips et al., 2004; Anderson & Thompson, 2004 for some exceptions to this). This chapter can be considered a reply to this call to action in that we provide a detailed analysis of both the intra- and inter-individual dynamics associated with power that affect value creation.

Our chapter also extends research on the effect of emotion on value creation. Two decades ago, Carnevale and Isen (1986) showed the significant effect of positive affect on value creation in a negotiation setting. Anderson and Thompson (2004) extended these findings by suggesting that it is the positive affect of the high-power actors that is most important. Here, we elaborate on these findings by proposing some alternative reasons why high-power positive affect is helpful and negative affect is harmful to value creation. In addition, we highlight the role of the low-power actors in processing the information shared by the group to create value-added outcomes.

Our model also extends Power Approach Theory (Keltner et al., 2001) to the group context. Much of the research on this theory has studied how high- or low-power affects the psychology of those who possess it. For example, those in power are less likely to take others' perspectives (Galinsky et al., 2006) and more likely to think of other people as instrumental objects (Gruenfeld et al., 2006). Here, we propose one way in which the different psychological effects of high-power (i.e., affect) and low-power (i.e., cognition) may complement each other to create superior outcomes.

NOTE

1. A recent article by Phillips and Loyd (2006) seems on the surface to be at odds with this suggestion. They show that the presence of a superficially different individual in a group (e.g., a woman in a group of men) makes the men more likely to share their information than if she were not there. In short, she symbolizes the expectation of diverse information emerging from the group. However, while in the papers of Gruenfeld et al. (1996) and Phillips et al. (2003), similarity was operationalized as familiarity, Phillips and Loyd (2006) operationalized it as a superficial similarity. None of the group members knew each other. Without going into excessive detail, these different operationalizations of diversity should yield different group dynamics and thus should not necessarily be expected to have consistent outcomes.

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CHAPTER 4

GROUP EMOTIONS AND GROUP OUTCOMES: THE ROLE OF GROUP-MEMBER INTERACTIONS

Seung-Yoon Rhee

ABSTRACT

I argue that while research on collective emotions is gaining in popularity, there has not been sufficient attention paid to understanding the mechanisms that explain how and why group emotions influence group outcomes. The goal of this chapter is to fill this gap by introducing group-member interactions as a group-level mechanism. I explore how positive and negative collective emotions in workgroups link to different types of member interactions, which in turn, influence group outcomes. Finally, I discuss the theoretical contributions of the research and the implications for future research on workgroup emotions and member interactions.

INTRODUCTION

Recently, researchers have begun to explore emotions as a collective property of groups, and emphasize the influence of collective emotions among group members on group processes and outcomes (e.g., Barsade, 2002; Bartel & Saavedra, 2000; Duffy & Shaw, 2000; George, 1990; Totterdell, 2000; Totterdell, Kellett, Teuchmann, & Briner, 1998). These researchers have

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extensively explored what shapes the collective emotions and the consequences of these emotions. For example, collective emotions arise to a greater extent when group members possess similar trait affectivity (George, 1990), are committed to the group, participate in collective activities (Totterdell et al., 1998), and perceive a positive group climate (Totterdell, 2000). Also, characteristics of a group's social system such as stable membership, existence of mood regulation norms, and a high level of task and social interdependence, heighten the extent to which members develop collective emotions (Bartel & Saavedra, 2000). In terms of outcomes, positive group emotions reduce absenteeism (George, 1990) and conflict, and increase the level of cooperation and perceived performance (Barsade, 2002).

Despite the growing interest in emotions as a collective property of groups, researchers understand relatively little about how and why collective emotions in a group influence group outcomes. Why, for example, do some workgroups with collective positive emotions among the members exhibit more cooperation and less conflict? How do some workgroups with collective positive emotions end up exhibiting unrealistic optimism and overconfidence (e.g., Barsade, 2002)? What are the mechanisms between collective emotions in a group and group outcomes that can explain such different results? According to Hedstrom and Swedberg (1998), merely showing systematic covariation between variables without plausible mechanisms does not explain how the relationship was brought into existence. It is a social mechanism that can explain why and how a cause or input generates different effects or conflicting outcomes.

I argue that to develop a deeper understanding of the relationship between group emotions and group outcomes, we need to explore the role of *group-member interactions* as the underlying mechanism of the relationship. Interactions of group members are the essence of a group and of group research (Bales, 1950). McGrath (1984) defines group-member interactions as "the behavior of all of the members of an acting group in relation to each other and to the task/environmental aspects of the setting, while that group is in action" (p. 139). Individual actions and social interactions are the fundamental unit in conceptualizing mechanisms (Hedstrom & Swedberg, 1998). Furthermore, Frijda (1986) suggested that each emotion is associated with different behavioral tendencies at the individual level. Extending this argument, I propose that shared emotions among group members may be associated with certain types of member interactions. For example, at the individual level, the positive emotions of joy and happiness have been associated with action tendencies such as getting close to and sharing positive outcomes with other people, whereas fear, a negative emotion, has

been linked to the action tendencies of avoiding or escaping from uncertainties (Lazarus, 1991). Similarly at the group level, group members with the collective positive emotions of joy and happiness may engage in interactions such as supporting each others' ideas as a way of getting close to each other. Group members with the collective negative emotion of fear may engage in interactions such as ignoring a group member's comment that creates performance uncertainty.

In this chapter, I develop a conceptual framework that articulates the different types of group-member interactions, a key mechanism through which collective emotions among group members can shape group outcomes. I first review the psychological and organizational literatures on collective emotions in groups in which there is a lack of research on mediating mechanisms that explain how and why group emotions influence group outcomes. Next, I build on the *broaden-and-build* theory of positive emotions (Fredrickson, 1998, 2001), play and playfulness literature (Barnett, 1990; Klein, 1980; Lieberman, 1977), and the *emotion-action tendencies* approach (Frijda, 1986; Lazarus, 1991) to identify different kinds of member interactions following the positive group emotions experienced among the members. I also suggest how these member interactions can shape group outcomes including group creativity, member satisfaction with the group, member learning, and group decision quality. Then I draw upon the psychological research on negative emotions (e.g., Easterbrook, 1959; Frijda, 1986; Lazarus, 1991) and the threat-rigidity hypothesis (Staw, Sandelands, & Dutton, 1981) to suggest the types of interactions among group members with negative group emotions. Thereafter, I link these member interactions to group outcomes. I conclude by describing the potential implications and contributions of the framework and suggest directions for future research.

COLLECTIVE EMOTIONS IN GROUPS: A LACK OF MEDIATING MECHANISMS

In this chapter I use the term *group emotions*, that is, collective emotions among group members that emerge through both the subconscious and the conscious processes. Subconscious processes include vicarious learning, behavioral entrainment, interaction synchrony, and primitive emotional contagion (for review see Barsade, Brief, & Spataro, 2003; Kelly & Barsade, 2001). Vicarious affective learning happens when individuals experience emotional arousal by observing others' emotional expression. Behavioral entrainment and interaction synchrony refer to a subconscious process in

which individuals modify and adjust their behaviors in order to maintain coordinated and synchronized interactions with other people. These subconscious processes are likely to occur through the observation of facial, postural, and behavioral expressions (Neumann & Strack, 2000). For example, observers of workgroups accurately detected various group moods using behavioral cues (Bartel & Saavedra, 2000).

However, certain subconscious processes such as primitive emotional contagion do not require observation of other's emotional expressions. Primitive emotional contagion occurs when an individual mimics another person's emotions automatically and unconsciously (Hatfield, Cacioppo, & Rapson, 1992). This is the predominant mechanism that researchers use to explain collective emotions (Totterdell, 2000). For instance, a crowd may develop collective emotions not necessarily because individuals in the crowd observe each others' emotional expressions, but because they unconsciously mimic each others' emotions while experiencing a single emotional situation (i.e., Le Bon, 1896). Similarly, simply facing an emotional situation as a group may generate collective emotions. Under organizational downsizing, members as a collective may feel the emotions of anxiety and anger (i.e., Huy, 2002) even without observing other members' emotional reactions. Being in such an emotion-laden situation together with other members of the organization may provoke an automatic, subconscious process of emotional contagion, thus creating collective emotions.

More conscious and deliberate processes of emotional sharing occur through emotional comparison. Extending Festinger's (1954) social comparison theory, emotional comparison is a conscious process in which people seek and acquire cues from others' emotions to judge whether their emotions are appropriate in a given situation (Schachter, 1959). For example, observing others frowning or grimacing suggests that the situation is threatening (e.g., Gump & Kulik, 1997). Also, individuals may share emotions through social interactions such as conversations about emotional circumstances and related feelings (Rime, 1995). These subconscious and conscious mechanisms result in collective emotions.

In some cases, collective emotions develop without the subconscious and conscious processes. For example, even when individual members are not colocated and do not interact with each other, a group or organizational membership alone may stimulate the same emotional experience among the members because of a common interest or shared fate. Returning to the downsizing example, a company's expatriates who are each located in different countries and who do not interact with each other may exhibit similar emotional reactions at the company's downsizing news. However, because this

chapter discusses collective emotions in a group setting in which group members actively interact with each other, the focus will be on the collective emotions that emerge through the subconscious and conscious mechanisms such as primitive emotional contagion and social sharing of emotions.

The notion of *collective* emotions among group members is based on the idea that the degree of within-group agreement or dispersion regarding the type and level of emotions indicates the level of emotional conversion (e.g., Chan, 1998) through subconscious and conscious processes among the members. Researchers assume certain types of composition models when using individual-level data to conceptualize group or organizational-level constructs. The dispersion model focuses on “the degree of within-group agreement of scores from the lower level of units or attributes” (Chan, 1998, p. 239). Thus, dispersion means the variability within a group, and this variability becomes a group attribute. Researchers have used the dispersion model in exploring the implications of within-group dispersion including moods (Bartel & Saavedra, 2000), demographic variables (Tsui, Egan, & O'Reilly, 1992), and perceptions of work environment (Klein, Conn, Smith, & Sorra, 2001). In this chapter, the convergence of group-member emotions indicates the extent to which members' emotions converge through subconscious processes such as emotional contagion and conscious processes such as emotional comparison and sharing of emotional stories.

Over a century ago, Le Bon (1896) described the phenomenon of emotional contagion in crowds. The primary characteristics of a psychological crowd are “the disappearance of conscious personality and the turning of feelings and thoughts in a definite direction (Le Bon, 1896, p. 6),” and the psychological crowd “feels, thinks, and acts in a manner quite different from that in which each individual of them would feel, think, and act were he in a state of isolation” under the influence of certain violent emotions (Le Bon, 1896, p. 2). As noted earlier, Le Bon's notion of emotional contagion does not involve social interactions among people as a requirement for emotional contagion. The emotional contagion in a crowd is a rather implicit and subconscious process through submergence within the mass.

More recently, several psychologists and organizational researchers have begun exploring the phenomenon of collective emotions in dyads or within groups. Research has focused on two general kinds of collective emotions at the group level. One defines group emotions as a stable property of groups (group affective tone) and the other treats group emotions as a temporary property of groups (emotional contagion and convergence).

First, studies of group affective tone treat collective emotions as a stable characteristic of groups (Barsade, Ward, Turner, & Sonnenfeld, 2000;

George, 1990; for review see George & Brief, 1992). More specifically, the term *group affective tone* refers to “consistent or homogeneous affective reactions within a group” (George, 1990, p. 108). Three mechanisms that lead to similar affective reactions within a group are attraction–selection–attrition, socialization, and social influence processes. The underlying assumption is that workgroups will consist of similar people with similar affective reactions, which leads to consistency and homogeneity in the emotions within the groups. George (1990) empirically tested the existence of group affective tone and its effect on member behaviors. She found in workgroups at a large retail store that positive and negative affectivities of individual group members were positively related to the positive and negative affective tones of each group as a whole. In addition, she found positive affective tone related to less absenteeism and negative affective tone related to fewer prosocial behaviors. Barsade et al. (2000) showed that similarities in trait positive affect in groups (affectively homogeneous groups) were associated with greater satisfaction, cooperation, and performance.

Second, studies of *emotional contagion and convergence* – the focus of this research – treat collective emotions as a temporary property of groups that emerge through both subconscious processes, such as emotional contagion, and conscious processes such as member interactions and social sharing of emotions (Barsade, 2002; Bartel & Saavedra, 2000; Duffy & Shaw, 2000; Eriksson, 2004; Gibson, 2003; Grawitch, Munz, & Kramer, 2003; Pescosolido, 2002; Sy, Cote, & Saavedra, 2005; Totterdell, 2000; Totterdell et al., 1998; Totterdell, Wall, Holman, Diamond, & Epitropaki, 2004). Researchers found emotional contagion between leaders and followers (Sy et al., 2005), within teams of community nurses and accountants (Totterdell et al., 1998), within professional cricket teams after a collective activity (Totterdell, 2000), and among the employees tied through a work interaction network (Totterdell et al., 2004). The rest of this chapter, takes the approach of emotional contagion and convergence studies and treats group emotions as a temporary property of groups.

Antecedents and Outcomes of Collective Emotions

Research on group emotions has examined antecedents and outcomes of emotional convergence. Antecedents include member interdependence, membership stability, emotion regulation norms, high interaction, commitment and cohesion (for reviews see Ashforth & Humphrey, 1995; Brief & Weiss, 2002). For example, Bartel and Saavedra (2000) found that task and

social interdependence among the members, membership stability, and the existence of mood regulation norms positively influenced mood convergence within the workgroup. With community nurses and accountants, Totterdell et al. (1998) found that the collective mood of their coworkers was correlated with the individual's mood. They argued that moods tended to be reciprocated among workgroup members through interpersonal processes over time, which led to a sense of group emotions. This correlation was greater if nurses were older, more committed to their team, perceived a better team climate, and experienced fewer hassles with their teammates. Overall, the conceptual explanations and empirical findings of research on group emotions suggest that group emotions do emerge through sub-conscious and conscious processes.

The outcomes of emotional convergence within groups include cooperation, conflict, affiliative behavior, absenteeism, solidarity psychological involvement, perceptions of group task performance, and individual performance. For example, positive emotional contagion in groups led to positive outcomes such as more cooperation, less conflict, and positive perceptions of task performance (Barsade, 2002). Overall teammates' happy moods increased individual members' perceived performance (Totterdell, 2000). On the other hand, a few researchers have suggested negative outcomes of group emotions. Barsade (2002) proposed possible negative effects of positive group emotions such as the spread of unrealistic euphoria, which could result in groupthink and pressures for group consensus. In their theoretical research, Ashforth and Humphrey (1995) suggested that some elements such as decreased performance, aggression toward out-groups and resistance to change are negative effects of negative group emotions. If negative emotions such as fear or anxiety pervade within groups, members' attention may be diverted to the emotional issues, rather than focusing on the needed group work. These authors contended that the greater problem was that emotional contagion could provide an emotional climate that may legitimate such negative behaviors. In sum, researchers have shown cognitive and behavioral outcomes of group emotions, and have suggested possible counterintuitive results such as negative outcomes of positive group emotions.

Limitations and the Need for Mechanisms

Group emotions have been linked to various group processes (i.e., cooperation, conflict, *social loafing*) and outcomes (i.e., group satisfaction, performance,

absenteeism). A limitation of these studies, however, is that most of the group-emotions research has focused on investigating the relationship between group emotions and group outcomes, without a clear explanation of the mechanisms that mediate the relationship. With an explanation of the underlying mechanisms, we may start to uncover how and why group emotions result in certain group outcomes.

In this chapter, I suggest group-member interactions as the key mechanism that explains the relationship between group emotions and group outcomes. Emotions entail different action tendencies (Frijda, 1986) that may drive member interactions and other group processes such as conflict or cooperation. Hedstrom and Swedberg (1998) noted the importance of individual actions and social interactions in general. They argued that in social science, the elementary *causal agents* that drive generative mechanisms were individual actors and their actions. Because individual actions combined with social interactions are the fundamental unit in conceptualizing and forming mechanisms (Hedstrom & Swedberg, 1998), and because different emotions are associated with different action tendencies (Frijda, 1986; Lazarus, 1991), I argue that it is important to explore different types of member interactions as a potential mechanism underlying the link between group emotions and group outcomes.

Notably, Barsade (2002) showed in a laboratory study that positive emotional contagion among group members is associated with group processes such as cooperation and conflict. More specifically, positive collective emotions among the group members increased cooperation, decreased conflict, and was connected to the members' perceptions of task performance by themselves and by others in the group in a positive light. At the individual level, experiencing positive emotions is likely to result in helpful and cooperative behaviors and acceptance of others rather than rejecting them. Furthermore, individuals feeling positive not only tend to rate their performance highly and show high self-efficacy, but also earn superior job performance ratings from others. Furthermore, Duffy and Shaw (2000) empirically tested the mechanism of how group emotions led to group outcomes. They tested the underlying mechanisms of how a group emotion of envy (envy toward other in-group members) impacts group outcomes. They showed that the group emotion of envy indirectly influenced group performance, absenteeism, and group satisfaction through increased social loafing and decreased cohesion and group self-efficacy. They argued that social loafing could be used as a method of sabotaging a rival's performance and manifesting hostility. Also, high levels of hostility, anxiety, and backstabbing attitudes are detrimental to cohesion and group

self-efficacy. Their study opened the black box of how the group emotion of envy influenced group outcomes by showing detrimental influences of envy in groups.

This chapter complements the previous findings by Barsade (2002) and by Duffy and Shaw (2000) by suggesting specific group-member interactions as the mechanism that mediates the relationship between group emotions and group outcomes. While their research covered rather general group processes as the mediating mechanisms (such as cooperation, conflict, social loafing, cohesion, and group self-efficacy), this chapter takes into account specific action tendencies of group members associated with specific group emotions (e.g., the emotion of envy is linked to an action tendency of seeking and possessing the positively valued person) (e.g., Frijda, 1986; Lazarus, 1991). In the following sections I build on the organizational and psychological research on positive and negative emotions to elaborate on the different types of group-member interactions as the key mechanism, and to explain how the different types of group-member interactions as the mechanism can shape and produce certain group outcomes. Fig. A1 depicts the research model proposed in this chapter. The logic for these predictions will be developed in the following sections.

POSITIVE GROUP EMOTIONS, MEMBER INTERACTIONS, AND OUTCOMES

Emotions have been demonstrated to have profound effects on individual cognition, attitudes, and behaviors (Clark & Isen, 1982; George & Brief, 1992). Isen and colleagues found that team members experiencing positive emotions showed more cognitive flexibility and creativity compared to people experiencing negative or neutral emotions (Isen & Daubman, 1984; Isen, Johnson, Mertz, & Robinson, 1985; Isen, Niedenthal, & Cantor, 1992). For example, people with positive emotions viewed non-typical members of a category as members of the category (Isen & Daubman, 1984). Positive emotions facilitate recall of positive experiences (Bower, 1981). Individuals with positive feelings tend to engage in social activities or interactions (Clark & Watson, 1988), help others (George, 1991; Isen, Clark, & Schwartz, 1976), display prosocial behaviors (George & Brief, 1992), make more concessions (Hollingshead & Carnevale, 1990), use less-contentious negotiating tactics, and cooperate with others (Carnevale & Isen, 1986). On the other hand, when processing information, individuals with positive

feelings are less likely to engage in effortful analytic processing (Bless, Bohner, Schwarz, & Strack, 1990). They are also likely to rely on intuitive or heuristic processes in decision making, instead of analytical and thorough thinking (Isen, 2000).

Broaden-and-Build Theory of Positive Emotions

The broaden-and-build theory of positive emotions integrates the previous findings in emotions research by proposing that positive emotions broaden individuals' scope of attention, cognition, and action; they also build enduring physical, intellectual, social, and psychological resources (Fredrickson, 1998, 2001; Fredrickson & Branigan, 2000). Positive emotions broaden individuals' momentary thought-action repertoires. For example, Fredrickson and Branigan (2005) found that individuals listed more things that they would like to do after an induction of positive emotions, compared to during negative and neutral emotions. Also, Fredrickson and Joiner (2002) showed that persons experiencing positive emotions dealt with a problem using a wider range of perspectives and potential courses of action such as thinking of different ways to deal with the problem or trying to be more objective in solving the problem.

In addition to the broadened range of thought-action repertoires, positive emotions build long-term resources (Fredrickson, 1998). For example, an emotion of joy makes people playful; through this playfulness, individuals build physical resources such as better health and physical ability. Likewise, positive emotions build social resources (e.g., friendships) through helping and cooperation. The enhanced learning and performance derived from feeling positive leads to the building of intellectual resources such as greater knowledge and intellectual complexity. Positive emotions broaden ways of coping with a current stress, and such broad-minded coping becomes psychological resources such as optimism and resilience (Fredrickson, Tugade, Waugh, & Larkin, 2003).

The broaden-and-build theory thus suggests that *broadening* and *building* may be the characteristics of social interactions that follow positive group emotions. For example, positive group emotions may broaden the group's range of attention, cognition, and action and build social resources such as friendship among the members. More specifically, group members experiencing shared positive emotions may show certain types of member interactions that broaden the scope of ideas shared within groups and build social resources among the members. In the following section, I connect the

cognitive broadening and building of social resources to the characteristics of playfulness. I then suggest a few types of member interactions that manifest cognitive broadening and building of social resources among group members.

Positive Group Emotions and Playfulness

Group-member interactions that are cognitively broadening and building social resources correspond to core characteristics of playful interactions – cognitive and social spontaneity (e.g., Barnett, 1990; Klein, 1980; Lieberman, 1977). Experiencing positive emotions triggers playfulness in group members (Fredrickson, 1998) and likely does so in groups as well. Playfulness is a manifestation of psychological well-being (Klein, 1980). Engaging in play enables an individual to feel mastery of troubling situations and a sense of well-being, which in turn, makes him or her playful:

Playfulness is a joyous expression of a state of well-being, often celebrated through successful mutual cueing within the dyad. Secondarily, the playfulness often makes light of any present difficulties. (Klein, 1980, p. 75)

Cognitive and *social spontaneity* are core characteristics of playfulness (e.g., Lieberman, 1977; Barnett, 1990). *Cognitive spontaneity* centers around inventiveness and an unconventional and flexible way of thinking. Fink (1960) described play as a spontaneous, imaginative, and initiative activity, which implies the cognitively spontaneous characteristic of play. Also, Singers and their colleagues found novelty-seeking and curiosity in playfulness (Singer & Singer, 1978; Singer, Singer, & Sherrod, 1980). Play is considered as an exercise in the manipulation of meanings and ideas, which encourages a player to be engaged in thinking reflectively or intelligently in the play (Makedon, 1981).

Social spontaneity addresses the relational quality of interactions, such as being responsive, taking initiative, cooperating, sharing, and leading. Play is fundamental in constituting social life, and by its nature play builds a sense of community (Fink, 1960). Social spontaneity involves positive relational practices, such as being responsive and cooperative; validating and agreeing with each others' ideas and opinions. This positive reciprocity is a core characteristic of social spontaneity. By positive reciprocity, I mean a positive statement being reciprocated positively by another interaction partner, and eventually achieving "positivity as an absorbing state" (Gottman, 1994). To achieve this state in groups, interacting members need

to engage in positive exchanges such as complementing and validating each others' ideas and opinions. These exchanges of positive relational practices (positive reciprocity) help build positive relationships.

Positive Group Emotions and Member Interactions

Member Interactions that are Cognitively Broadening and Spontaneous

Cognitive spontaneity in play and playfulness corresponds with the notion of a broadened scope of cognition, attention, and action suggested by the broaden-and-build theory of positive emotions. People experiencing positive emotions show a broadened scope of cognition (Fredrickson, 1998). More specifically, positive emotions promote the ability to put ideas together in new ways (Isen, 2000). Extending the individual-level findings to the group level, group members with shared positive emotions may be able to put each others' ideas together in new ways. I propose that cognitive broadening and spontaneity at the group level will be manifested by *building on each others' ideas* among group members. Building on each others' ideas means using another person's idea as the basis for generating the next idea, thus moving the idea forward. It is cognitively broadening in the sense that the scope of the original idea expands by encompassing new-but-related ideas. The brainstorming literature suggests that building on each others' ideas develops and expands the original ideas, which improves the quality of the original ideas (e.g., Paulus & Yang, 2000; Sutton & Hargadon, 1996). This indicates cognitive broadening and spontaneity by being cognitively flexible and creative.

The positive emotions of joy and happiness, in particular, may be strongly associated with building on each others' ideas. The action tendency following the emotions of joy and happiness is to approach or get close to others (e.g., Frijda, 1986; Lazarus, 1991). Because developing other group members' ideas involves being attentive to other members rather than being detached, it reflects the action tendency of joy and happiness.

Socially Spontaneous Member Interactions that Build Social Resources

Taking initiative, cooperating, sharing, and leading are manifestations of social elements in children's play (Lieberman, 1977; Barnett, 1990) that builds enduring social resources such as friendship and camaraderie (Fredrickson, 1998). In the case of group-member interactions, I propose that *morale-building communication* and *affirmation of each others' ideas*

manifest social spontaneity and building of social resources. Morale-building comments and gestures include communicating positive and encouraging comments on the group's performance as a whole, and displaying acts of encouragement such as high fives or clapping (Jehn & Shah, 1997). These enhance social resources because these behaviors are likely to foster group membership and a sense of *we-ness*; that we as a group are successful.

In addition, a social element in children's play that builds enduring social resources (e.g., Fredrickson, 1998) involves being responsive to others (Barnett, 1990). In workgroups, affirming each others' ideas and opinions can be a way to be responsive to others. Affirmation involves acceptance of and support for each others' ideas or opinions. It is an indicator of acknowledging other's ideas and opinions as being valid (Gottman, 1994; Losada & Heaphy, 2004). Affirming each others' ideas focuses energy on supporting specific ideas and opinions, whereas morale-building communication puts emphasis on cheering up the whole group by making encouraging comments about the overall progress and performance of the group. Affirming ideas is different from building on each others' ideas, in that affirmation ends at uttering positive, supportive comments on the ideas while building on ideas moves the original idea a step further. Affirming each others' ideas also builds social resources among group members – such as friendship or a sense of closeness – because affirming each others' ideas implies genuine acceptance of and support for them.

Morale-building communication and affirmation also manifest the action tendencies of the emotions of joy and happiness. Morale-building communication includes making encouraging comments on the group's achievement as a whole with an implication that *we* as a group achieved successful outcomes, which is in line with the action tendency of joy to approach others (e.g., Frijda, 1986; Lazarus, 1991)) rather than stay alone. Affirmation also involves approaching others in an encouraging, positive way by affirming others' ideas and opinions.

Positive Group Emotions, Member Interactions, and Group Outcomes

Building on each others' ideas manifests a type of member interaction that is cognitively broadening and spontaneous. Morale-building communication and affirmation indicate socially spontaneous member interactions that can build friendship and social bonds among the group members. In this section, I discuss how the three types of member interactions that follow positive

group emotions may influence group outcomes such as group creativity, members' satisfaction and learning, and group decision quality.

Group Creativity

There has been abundant research examining the relationship at the individual level between a positive emotional state and individual creativity. For example, people experiencing positive emotions saw more interconnect-edness among items and used a more inclusive definition of categories than those experiencing neutral or negative emotions (Isen & Daubman, 1984). People with positive emotions generated more novel solutions to problems (Isen, Daubman, & Nowicki, 1987) and more unusual word associations (Isen et al., 1985) compared to those with neutral emotions.

Similarly, at the group level, Grawitch et al. (2003) found that an induced positive mood in temporary workgroups enhanced performance in a creative production task. Extending the previous finding, I suggest that positive group emotions can enhance group creativity through building on each others' ideas, morale-building communication and affirmation. Building on each others' ideas is likely to enhance group creativity because developing each others' ideas in a way that moves the ideas forward requires putting the original idea and a new idea together in new ways (Rhee, 2006). To build on others' ideas, group members need to pay attention to the current speaker's ideas to use them as the basis for generating the next idea. Paulus and colleagues suggest that group creativity increases as individual group members pay more attention to fellow group members, whose ideas can be a source of cognitive stimulation (Brown & Paulus, 2002; Paulus & Yang, 2000).

Morale-building communication and affirmation of each others' ideas are likely to encourage trying out new ideas by providing support and encouragement, which enhances creativity. A group climate that is positive, encouraging, and non-critical tends to increase creativity (Connolly, Jessup, & Valacich, 1990). Creativity increases in an encouraging environment in which people are collaborative, enthusiastic about new ideas, and free from threatening evaluation (Amabile, 1988). For example, a positive emotional climate through humor and laughter contributes to group creativity (Pollio & Bainum, 1983). Comfort and trust among group members lead to better performance in group brainstorming sessions (Higgins, Qualls, & Couger, 1992).

Member Learning

Building on each others' ideas can enhance member learning by providing opportunities to experiment with novel ideas and perspectives. Sharing the

unique knowledge that each member possesses and experimenting with the new knowledge can enhance members' perception that they learned from the group experience (e.g., Edmondson, 1999; Stasser & Titus, 1987). Mutual support through morale-building communication and affirmation may facilitate group members' learning by providing a psychologically safe climate to experiment with new ideas, ask questions, and seek feedback (e.g., Edmondson, 1996). Team psychological safety is defined as "a shared belief that the team is safe for interpersonal risk taking" (Edmondson, 1999, p. 354). Team psychological safety can facilitate member learning because it alleviates the potential risk of embarrassment or threat, and encourages trial and error and open discussion within the group. In her study of patient-care groups in two hospitals, Edmondson (1996) showed that high-performing units had characteristics such as members treating each other with a high level of respect, collaboration, and a climate of openness. In these units, people were willing to speak openly about mistakes and errors, which provided an opportunity for the entire unit to learn from each others' mistakes and problems. In this way, morale-building communication and affirmation are likely to enhance group member learning by creating a climate of open discussion and support.

Satisfaction with the Group

Building on each others' ideas as well as using morale-building communication and affirmation indicate favorable member interactions, which increase satisfaction and reduce tension (e.g., Mossholder & Bedeian, 1983). In a study of workgroup climate, Peiro, Gonzalez-Roma, and Ramos (1992) found that groups with a positive climate of mutual support reported higher satisfaction than those with an unfavorable climate. Morale-building communication and affirmation increase group member satisfaction and the desire to continue working in the group in the future, because these interactions indicate a supportive and cooperative workgroup climate (Rhee, 2006).

Group Decision Making

Individual-level psychological research has demonstrated that people experiencing positive emotions tend to be more heuristic and intuitive in solving problems, rather than being more critical and analytical (Isen & Means, 1983; Isen, Means, Patrick, & Nowicki, 1982). Research on the effect of emotion on information processing also suggests that members with positive emotions use simplified, heuristic processing in analyzing information and evidence (Mackie & Worth, 1989). Individuals experiencing positive emotions engage in such effort-minimizing processing because they are motivated to maintain their current positive states by avoiding effortful

and stressful thinking about problems (Isen & Baron, 1991), or because positive emotions signal a satisfactory state in which careful processing does not seem necessary (Schwartz, 1990; Schwartz & Bless, 1991). Because decision making is a complex process that involves a careful and thorough analysis of the alternatives, the quality of the decision that individuals experiencing positive emotions make is likely to be low.

Extending the individual-level findings to the group level, building on each others' ideas, morale-building communication and affirmation tend to enhance members' current positive emotional state by validating and moving each others' ideas forward, cheering up the group, and supporting each other enthusiastically. These kinds of interactions may motivate members to savor the moment and avoid effortful, unpleasant analytical processes in making decisions, thus reducing the quality of group decisions. In addition, the three types of member interactions may lead to the pitfall of groupthink in which the members of a group reach potentially dangerous decisions without any vocal dissent that could challenge the group consensus (e.g., Janis, 1972). Because the three types of interactions focus on affirming and developing members' ideas and evaluating the group's overall progress in a positive light, there is little expectation of challenging comments and criticism in this kind of member interaction. With a focus on positive interpersonal interactions, these types of interactions can create positive interpersonal ties among individual group members, which become a basis of social cohesion in the group (e.g., Cartwright, 1968). Janis (1972) noted that group cohesion is a necessary condition for groupthink in that cohesive groups tend to suppress dissent and emphasize total compliance toward group consensus. Thus, building on each others' ideas as well as morale-building communication and affirmation have a potential to lead to defective decision making, resulting in poor decision outcomes.

NEGATIVE GROUP EMOTIONS, MEMBER INTERACTIONS, AND OUTCOMES

In this section, I review literature on negative emotions and the threat-rigidity hypothesis, and elaborate on how individual negative emotions have been associated with a narrowed scope of attention, cognition, and action. Based on these works, I propose three types of member interactions that manifest the narrowed scope of attention, cognition, and action, and suggest how the three types of member interactions may influence group outcomes.

*The Narrowing Effect of Negative Emotions and the
Threat-Rigidity Hypothesis*

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, 1986; Lazarus, 1991). Fredrickson (1998) argues that from an evolutionary perspective these negative emotions may have helped our ancestors survive in life-threatening situations by focusing on specific actions. A recent finding by Fredrickson and Branigan (2005) supports this argument by showing that negative emotions narrow an individual's thought-action repertoires. They found that actors experiencing negative emotions listed fewer things that they would like to do at the moment, compared with those experiencing positive or neutral emotions. Earlier literature also found that negative emotions were likely to cause people to restrict attention and use narrow categorization (for review see Easterbrook, 1959). For example, anxious persons took a longer time than stable individuals to shift attention from a visual location that they were engaged in previously (Avila, 1995), which implies a restricted and a narrowed range of attention.

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). Under threat, groups become rigid in their responses and operations by restricting the amount of information processed, and by relying on formalized and routine procedures (Staw et al., 1981). This perspective suggests that the group emotion *anxiety*, caused by a threatening situation or time pressure, may narrow members' scope of attention and cognition and influence member interactions.

Negative Group Emotions and Member Interactions

Researchers in organizational behavior have used the concept of play mainly in the context of framing tasks as play or work (Glynn, 1994; Sandelands, 1988). They found that the framing of tasks influenced task processes and outcomes. For example, tasks framed as play resulted in more process orientation rather than outcome orientation, and the task outputs were more genuine and elaborated, rather than mechanistic and streamlined. Consistent with the literature that distinguishes work from play, I suggest that negative group emotions trigger outcome-focused interactions because the narrowed scope of attention, cognition, and action drives group members to focus on completing the task. In the outcome-focused interactions, group members are less likely to attend to the socio-emotional aspect of interactions such as encouraging other group members through morale-building communication, one of the interactions suggested to follow positive group emotions.

In addition, Gersick (1988, 1989) found that near the midpoint of a project, group members began to feel anxious, impatient, and desperate, and consequently the emphasis on completing the project increased dramatically. At this point, instead of solving internal interaction problems, group members expressed urgency in finishing the task on time, designated new roles and activities, and monitored the time remaining, all of which indicate more task-oriented and outcome-focused interactions. Similarly, Jehn and colleagues revealed that task-related interactions occurring dominantly in workgroups include information sharing, planning, monitoring, and critical evaluation (Jehn & Shah, 1997; Weldon, Jehn, & Pradhan, 1991). Among these different types of task-related interactions, I suggest that planning, monitoring, and critical evaluation are the interactions that indicate a narrow scope of attention, cognition, and action. These interactions are likely to narrow the course of action and idea generation while working on group tasks, and may be detrimental to building enduring social resources by criticizing each other.

First, planning involves generally suggesting a sequential 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, p. 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.

Next, 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 may or may not 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 courses of actions in accomplishing a group task by emphasizing efficiency and focusing on finishing the tasks.

Finally, 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, p. 778). Rejecting or disagreeing with others’ ideas or opinions 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 others’ ideas or opinions implies lack of support and agreement.

Negative Group Emotions, Member Interactions, and Group Outcomes

The previous sections suggested that negative group emotions narrow the scope of attention, cognition and action of members, and foster task-oriented member interactions such as planning, monitoring, and critical evaluation. This section suggests how these task-oriented, outcome-focused interactions may influence group outcomes, including group creativity, member satisfaction and learning, and group decision-making performance.

Group Creativity

Individual-level research has shown that negative emotions are generally associated with decreased creativity. Negative emotions tend to constrict the span of attention and the breadth of thought–action repertoires in individuals (Easterbrook, 1959; Fredrickson & Branigan, 2005). Because of the restricted information processing and a decline in cognitive flexibility, negative emotions tend to hamper individual creativity.

Similarly extended to the group level, planning, monitoring, and critical evaluation may decrease group creativity. Planning involves narrowing down the scope of actions to complete a task in a timely, efficient manner. Thus, it may decrease group creativity, which requires a consideration of the multiple alternatives before committing to any one decision or course of action (Hackman, 1987). Monitoring requires pacing the use of time and

resources to finish a group task by the deadline. Because the group's emphasis is on completing the task on time, there may not be enough room for flexible, creative thinking – which can decrease group creativity. Critical evaluation is likely to discourage group creativity by disagreeing with and rejecting ideas, inciting the group to prematurely abort them. In fact, brainstorming literature posits that rules and norms which restrain critical evaluation of ideas will result in the generation of a greater number of novel ideas (e.g., Woodman, Sawyer, & Griffin, 1993). Interpersonal conflict due to criticism and the discomfort and mistrust it creates can hamper group creativity (e.g., Higgins et al., 1992).

Member Learning

Planning and monitoring may decrease the extent to which members learn from their group experience. Because the focus of planning and monitoring is on completing the group task efficiently, trial and error processes, experimenting with new ideas and exploring new fields of knowledge are likely to be discouraged – although they are critical for learning (e.g., Edmondson, 1999). Critically evaluating each others' ideas may not help to establish a psychologically safe climate for experimentation and exploration, thus decreasing opportunities for members to learn from their group experience. Edmondson (1996) showed in her study of patient care groups in two hospitals that when shared perceptions about the consequences of making mistakes were threatening and blame-oriented, nurses were not willing to report errors and discuss mistakes openly. In a climate of fear rather than openness, important data such as experiences of making errors and mistakes which could enhance learning and improvement in practices, can be lost.

Satisfaction with the Group

Critically evaluating each others' ideas, in particular, may decrease members' satisfaction with the group because disagreement and rejection 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). Jehn (1995) revealed that task-related conflicts involving disagreements and different viewpoints and ideas related to the tasks being performed decreased the level of satisfaction among group members. On the other hand, some structured decision-making techniques assign group members a position to critically evaluate others' ideas, and these techniques such as dialectical inquiry technique tend to increase member satisfaction by providing opportunities for active participation (Priem, Harrison, & Muir, 1995). In this case, because critical evaluation is contrived to take place

during the group discussion, members may perceive it as less offensive and conflict inducing.

Group Decision Making

According to the literature on emotions and information processing at the individual level, people experiencing negative emotions tend to engage in critical, analytical thinking, and cautious, systematic information-processing strategies (Schwartz, 1990; Schwartz & Bless, 1991). Because a negative emotional state suggests a problematic, unsatisfactory situation or environment, individuals with negative emotions are motivated to change their current emotional state by engaging in effortful and stressful analyses of information (Bless et al., 1990). Decision making is a complex task and can benefit from an analytical, systematic approach when thoroughly evaluating decision alternatives. Therefore, individuals experiencing negative emotions are likely to generate quality decisions.

At the group level, planning, monitoring, and critical evaluation can increase the quality of group decisions. Planning and monitoring involve a systematic approach to decision making by articulating the order and direction of actions and by pacing the limited resources and time. Critical evaluation of group member ideas may enhance the group's performance in decision making as well. In their study on group norms and quality of decision making, Postmes, Spears, and Cihangir (2001) found that groups with critical norms that promoted deviance and critical thought did better on a group decision task (choosing the best candidate for a university position among three) than those with consensus norms that promoted the importance of consensus *per se*. The groups with critical norms were more investigative and challenging, and showed more frequent critical contributions toward each other during discussion by actively making use of previously unshared information. Jehn (1995) also showed that groups benefited from task conflicts that facilitated critical evaluation and criticism – especially when the groups performed non-routine tasks that required problem solving with a high degree of uncertainty.

DISCUSSIONS AND DIRECTIONS FOR FUTURE RESEARCH

I began this chapter by inquiring what the mechanisms are that explain the effects of group emotions on group outcomes. In response to this question, I suggested that group members experiencing positive group emotions

would exhibit cognitive broadening and spontaneity by building on each others' ideas, and show building of social resources and social spontaneity through morale-building communication and active affirmation. Group members experiencing negative group emotions may show a narrowed scope of attention, cognition, and action, manifested by planning, monitoring, and critical evaluation of each others' ideas. These member interactions, in turn, may influence group outcomes such as group creativity, satisfaction with the group, member learning, and group decision making.

In particular, group emotions may influence different types of group outcomes differently through certain kinds of member interactions. Positive emotions at the individual level have been associated with enhanced creativity and reliance on heuristics in information processing. This chapter extended the previous findings to the group level by suggesting that positive group emotions may result in increased group creativity and decreased quality in group decisions through member interactions such as building on each others' ideas, morale-building communication, and affirmation. Positive group emotions may be a more appropriate emotional state for groups working on creativity tasks, rather than for groups that need to make quality decisions. Conversely, negative group emotions may improve groups' decision-making performance, but not group creativity through task-oriented interactions such as planning, monitoring, and critical evaluation. Thus, depending on the type of group tasks, positive group emotions can result in both positive and negative group outcomes, and vice versa.

In this chapter, I hoped to improve the understanding of how and why group emotions influence group outcomes, and attempted to contribute to the two areas of discussion. First, the focus on member interactions as an important mechanism complements group-emotions research that has focused on antecedents (Bartel & Saavedra, 2000; Totterdell, 2000; Totterdell et al., 1998) and outcomes of group emotions (Barsade, 2002; Barsade et al., 2000). For example, positive group emotions have been associated with enhanced group creativity and implementation efficiency (Grawitch et al., 2003). With the understanding of member interactions as a mechanism between group emotions and group outcomes, we can detect the types of member interactions that contribute to positive group outcomes. In the case of the study by Grawitch and colleagues (2003), group members experiencing shared positive emotions may have built on each others' ideas to generate more creative solutions and ideas for efficient implementation.

Although this chapter treated group emotions as a temporary property of groups that emerge through member interactions and subconscious and conscious emotional convergence processes, it also contributes to research

on group emotions as a stable property of groups (Barsade et al., 2000; George, 1990) by focusing on member interactions as a mechanism. More specifically, depending on the type of group affective tone or trait affectivity (e.g., whether it is joyful or anxious), there may be certain types of member interactions that are prevalent within a group. And these member interactions may explain how the group achieved certain outcomes such as more prosocial behaviors and less absenteeism (e.g., George, 1990).

Member interactions may strengthen, weaken, or make no change to the initial group emotions. An individual group member's emotion shapes his or her action, which may trigger another member's emotions and reactions. This reaction from another member can stabilize or change the initial emotion of the individual member who originated this interaction. For example, emotions of dormitory roommates tended to become similar over the course of an academic year. More interestingly, emotional convergence was an asymmetrical process in that the roommate with the lower status changed emotions more to match the other roommate's emotions (Anderson, Keltner, & John, 2003). This finding suggests that an individual group member's emotions can be influenced by another member's emotions, actions, and different social status as well. Future research may explore how the exchange of emotions, actions, and reactions over time shapes relationships among group members and group dynamics.

Next, by a focus on the socio-emotional component of group processes, this chapter contributes to the body of group literature that has focused on understanding group structures, norms, and performances. Research about shared social processes in groups has primarily emphasized cognitive processes such as the sharing of ideas, knowledge, and cognition. Those researchers have studied how ideas and knowledge are shared and stored within groups, and how shared knowledge structures such as shared mental models or shared social cognition influence group outcomes (Klimoski & Mohammed, 1994; Levine & Moreland, 1990). However, emotional processes in groups including sharing of emotions or emotional contagion have commanded little research attention (Barsade, 2002).

In particular, this research has implications for understanding temporary structures or norms of groups. Certain group emotions can create temporary group structures or norms by facilitating certain types of member interactions. Gersick's (1988) study suggests that groups experiencing anxiety tend to engage in planning and monitoring of group processes. Planning and monitoring may function in a way similar to group norms. Group norms result from member interactions, which guide appropriate and acceptable actions in certain situations (Forgas, 1985; Patton & Giffin, 1973; Sherif,

1936). By guiding procedures and order of actions, planning may create temporary structures and norms in completing group tasks. Monitoring may also regulate member behaviors and sanction those that delay task completion, thus forming temporary group norms. The focus on the emotional aspect of groups advances our understanding of group socio-emotional processes and other features of groups as well such as temporary norms.

Future research on group emotions and member interactions might build upon the suggestions of this chapter in several ways. First, this chapter took a general valence-based approach in understanding the effects of positive and negative group emotions, instead of focusing on specific emotions such as joy, contentment, anger, or anxiety. There are benefits in studying specific emotions instead of taking a general valence-based approach (e.g., pleasant–unpleasant) (Lerner & Keltner, 2000). Different emotions are associated with different behavioral tendencies (Frijda, 1986). For example, both joy and relief belong to the category of emotions with positive valence. However, the action tendencies in joy or happiness involve sharing of positive outcomes and approaching others, whereas the action tendency in relief involves slumping down with a cessation of vigilance (Lazarus, 1991). Because of this link between specific emotions and action tendencies at the individual level, studying the effects of specific emotions, rather than general positive or negative emotions may better illuminate the relationship between group emotions and member interactions.

Second, I assumed that group members share emotions through both implicit and explicit processes such as emotional contagion (Schoenewolf, 1990) and sharing of emotional stories and related feelings (Rime, 1995). Several researchers have suggested that certain group characteristics influence the degree of emotional sharing among the members including the level of group commitment, perceived group climate, existence of collective activity, and availability of emotion information through behavioral cues (Bartel & Saavedra, 2000; Totterdell, 2000; Totterdell et al., 1998). It would be interesting to investigate other potential antecedents that influence the degree of emotional sharing among group members. For example, status or power composition of a group may influence the extent to which members share emotions because there are social expectations about emotional display (i.e., high-status individuals are expected to display emotions of anger or pride, while low-status individuals are expected to display sadness, guilt or appreciation) (e.g., Tiedens, Ellsworth, & Mesquita, 2000).

Third, further research may examine how various degrees of emotional sharing among group members change member interactions. The convergence–dispersion model by Chan (1998) suggests that groups may

vary in terms of the degree to which members' emotions are converged or dispersed. Based on the degree of emotional convergence or dispersion, group-member interactions and group dynamics may differ. For example, a group with the majority of members experiencing positive emotions may exhibit more frequent morale-building communication and affirmation of ideas than a group in which an equal number of members experience either positive or negative emotions.

Finally, researchers might also investigate what causes different group emotions. For instance, regulatory focus theory (Higgins, 1998) suggests situational factors related to compensatory schemes (i.e., promotion-focused or prevention-focused situations) to influence emotions. These contextual or situational factors can induce specific group emotions that lead to different types of member interactions. More research on different group emotions and how they influence different types of member interactions and outcomes differently is warranted.

While researchers have explored emotions as a collective property of groups, prior work has not specified the causal mechanisms that explain why and how group emotions influence group outcomes. In this chapter, I described how positive and negative group emotions may influence group outcomes through different types of member interactions. By exploring the role that group-member interactions play in the relationship between group emotions and group outcomes, this chapter may shed light on emotional dynamics and processes across workgroups.

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APPENDIX

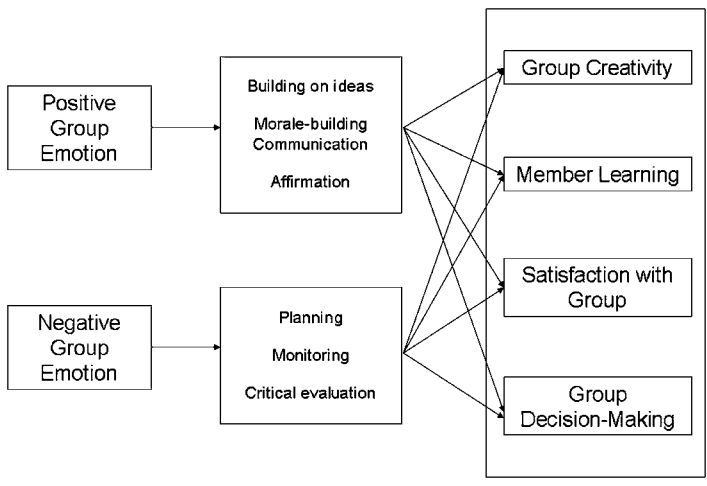


Fig. A1. Model of Group Emotions, Member Interactions and Group Outcomes.

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CHAPTER 5

POTENTIAL PITFALLS OF AFFECT CONVERGENCE IN TEAMS: FUNCTIONS AND DYSFUNCTIONS OF GROUP AFFECTIVE TONE

Jennifer M. George and Eden B. King

ABSTRACT

We propose that group affective tone may be dysfunctional for teams faced with complex, equivocal, and dynamically changing tasks and environments. Group affective tone (and in particular, a positive affective tone) may exacerbate pre-existing tendencies of teams to develop a single-shared reality that team members confidently believe to be valid and to be prone to group-centrism. Alternatively, heterogeneity in member mood states within teams may lead to the development of multiple-shared realities that reflect the equivocality of the teams' tasks and circumstances and other functional outcomes (e.g., multiple perspectives and minority dissent), which ultimately may enhance team effectiveness.

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In 1990, George theorized that affect may be meaningful as a group level construct and coined the term *group affective tone* to describe consistent or homogenous affective reactions in a group. She theorized that through attraction–selection–attrition processes and socialization in groups (Schneider, 1987), workgroups would come to be comprised of similar kinds of individuals who would therefore experience similar mood states at work. While mood is clearly something that is experienced by and within individuals, if there are theoretical reasons for expecting that members of a workgroup will experience homogeneous mood states on the job, and if, empirically, it can be demonstrated that there is within-group agreement in terms of moods that are experienced by group members, group affective tone is a meaningful construct at the group level of analysis and may be linked to group behaviors and outcomes. Consistent with this rationale, after demonstrating within-group agreement on positive and negative mood within a sample of workgroups comprised of salespeople, George (1990) found that the negative affective tone of the workgroups was significantly and negatively related to the extent to which the groups behaved pro-socially or were helpful to customers and the positive affective tone of the groups was significantly and negatively related to group absence rates. Moreover, she found that characteristic levels of the personality traits of positive affectivity (PA) and negative affectivity (NA) within groups were significantly and positively related to the positive and negative affective tones of the groups, respectively. (As mentioned above, affective tone refers here and throughout this chapter to relatively consistent or homogeneous affective states (i.e., moods) within groups.)

Subsequent theorizing and research has sought to further understand the nature of group affective tone as a construct, its antecedents, and its potential consequences, while recognizing that some groups do not have affective tones because their members experience heterogeneous mood states. While a few researchers have acknowledged the potential benefits of heterogeneity in affect in groups (or the lack of an affective tone in some groups) (e.g., Tiedens, Sutton, & Fong, 2004), implicitly, and also explicitly through the choice of hypothesized variables and relationships, a thread through this literature is that group affective tone (and more specifically, a high positive affective tone and a low negative affective tone) is functional for groups and can lead to positive group outcomes. In this chapter, after reviewing the literature on group affective tone and related constructs, we propose that the functions and dysfunctions of group affective tone are both an interesting theoretical and empirical question. More specifically, we explore the conditions under which group affective tone may actually have

dysfunctional consequences for groups and their members (regardless of how positive it is and how pleasant it is to be a member of a group with a strong positive affective tone), and when heterogeneity in affect (i.e., lack of a group affective tone) may be advantageous.

THEORETICAL TREATMENTS OF GROUP AFFECTIVE TONE

While it has long been acknowledged that group life can prompt affective reactions and thus, attention has been paid to constructs such as group cohesiveness (Seashore, 1954), the recent interest in group affective tone mirrors, in some sense, contemporary concerns with the role of moods and emotions in the workplace (Brief & Weiss, 2002). Group affective tone is concerned with how group members feel: the mood states they experience on the job (regardless of the origins of these mood states) and their potential homogeneity within groups.

Moods are pervasive and generalized affective states that, while not interrupting cognitive processes and behaviors, can have wide-ranging effects (e.g., Brady, 1970; Forgas, 1995; Forgas & George, 2001; Forgas & Vargas, 2000; Nowlis, 1970; Schwarz, 2002; Schwarz & Clore, 2003). In contrast to emotions (which are more intense, short-lived, interrupt thought processes and behaviors, and are linked to discernable causes), moods provide the affective context for cognition and behavior (Forgas, 1992; George, 2002; Morris, 1989; Simon, 1982). While mood states change and fluctuate over time, they are not as fleeting as emotions and also are not necessarily linked to discernable causes. Regardless of its initial source, a mood state can persist and have widespread ramifications for cognition and behavior (Forgas & George, 2001; George, 2002).

Extensive theorizing and research suggests that mood is best described by two independent dimensions, positive mood and negative mood, rather than a single bipolar dimension (ranging from positive to negative) (e.g., Meyer & Shack, 1989; Watson, 2000; Watson, Clark, & Tellegen, 1988; Watson & Pennebaker, 1989; Watson & Tellegen, 1985; Watson, Weise, Vaidya, & Tellegen, 1999). Some researchers alternatively conceptualize affect as varying in terms of the dimensions of pleasantness and activation (e.g., Green, Salovey, & Truax, 1999; Russell & Feldman Barrett, 1999). Thus, while there is consensus in the literature that affective experience in general, and mood in particular, is most appropriately described by two

dimensions, there has been some disagreement concerning whether these dimensions are best described in terms of positive and negative affect, or the alternate pleasantness and activation dimensions. Research on group affective tone has tended to rely on the dimensions of positive and negative mood, with some exceptions (e.g., hedonic tone; [Totterdell, 2000](#)).

Given the relative newness of the affective tone construct, it is informative to first consider theoretical treatments of this construct and then move on to the extant empirical literature. Building on [George \(1990\)](#), theorizing and research has focused on the status of group affective tone as a theoretical construct that nonetheless requires empirical verification in terms of relatively consistent or homogenous mood states within groups, acknowledging that some groups will not have an affective tone because their members' moods are heterogeneous (e.g., [George, 1996, 2002](#); [George & James, 1993](#)). Theorized determinants of a group's affective tone include composition effects (e.g., resulting from attraction–selection–attrition processes), primitive emotional contagion, socialization and social influence processes, normative pressure, leader affect, and exposure to common group tasks, events, and outcomes ([George, 1996, 2002](#)). George proposed that group affective tone, in turn, has the potential to influence the mental models groups develop and rely on, group decision making, pro-social behavior, withdrawal behaviors, and group member well-being.

Additional determinants of group affective tone have been identified. For example, Barsade and colleagues suggest that behavioral entrainment and interaction synchrony, affective impression management, organizational emotion norms, group emotional history, intergroup relations, and physical and technological conditions all have the potential to determine and influence group affective tone ([Barsade & Gibson, 1998](#); [Kelly & Barsade, 2001](#)).

[George \(1996, 2002\)](#) also acknowledged that not all groups will have affective tones and that there can be forces, which push toward heterogeneity rather than homogeneity in affect within groups. Power and status differences within groups can lead to heterogeneous within-group affect, such that those in high-power/high-status positions experience higher levels of positive affect and lower levels of negative affect than those in low power/status positions ([Kemper, 2000](#)). Group members' multiple identities and roles, both in and outside of the workplace ([Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964](#)), can lead them to experience different mood states in reaction to exposure to the same common events and outcomes. For example, consider two members of a new product development team, who have differing roles and responsibilities outside the workplace, working long and intense hours to meet a deadline. One team member is new to the area,

single, and childless, with few established ties to the community. The other is a single parent with multiple commitments and ties. While each may be equally engaged in, enthusiastic about, and motivated by the team's work, the single parent may nonetheless experience more negative moods given competing time demands and frustration over not having enough hours in the day to meet multiple and diverse commitments (i.e., role conflict and overload; Kahn et al., 1964). The team member new to the area, on the other hand, may experience less role conflict and overload and thus, fewer negative moods as a result of the team's collective immersion in meeting the deadline. Under such conditions, a group affective tone might not emerge.

Other researchers have acknowledged the very real potential for heterogeneous affect in groups (e.g., Barsade & Gibson, 1998; Kelly, 2004; Tiedens et al., 2004). In particular, Tiedens et al. (2004) proposed that affective heterogeneity in groups can arise from individual differences, norms stressing variation rather than similarity, group roles, and social hierarchies, and that heterogeneity can be advantageous for certain types of groups and group tasks.

EMPIRICAL STUDIES OF GROUP AFFECTIVE TONE

Empirical studies of group affective tone have tended to focus on both the etiology and existence of group affective tone and its relation to group behaviors. A recurrent implicit – and at times explicit – theme appears to be that a more positive group affective tone is generally beneficial for groups. After reviewing literature that has examined processes relevant to the experience of collective or shared mood, we offer an alternative perspective concerning when group affective tone can potentially be dysfunctional for groups and the conditions under which heterogeneity in affective experience may be beneficial for groups.

George (1995) studied 51 sales groups and found that 41 of the groups had a positive affective tone (i.e., there was agreement within groups on positive mood for 41 of the groups; there was heterogeneity in positive mood for 10 of the groups). Among the 41 groups, positive affective tone was significantly and positively associated with levels of customer service provided by the groups.

Totterdell, Kellett, Teuchmann, and Briner (1998) sought to understand to what extent group members' individual moods are influenced by the collective moods of the rest of their group in two longitudinal field studies. The first study, using a sample of 64 nurses working in 13 groups who reported on

their mood on a daily basis for 3 weeks, found that a nurse's own mood was significantly associated with the mood of the other members of his/her work group, independent of common negative events. Additionally, the association between a focal nurse's mood and the collective mood of other group members (i.e., the average) was stronger for nurses who were older, more committed to the group, rated the group climate more positively, or had fewer problems with other group members. The second study, utilizing experience sampling methodology, tracked nine members of a financial accounting group for a period of 4 weeks. Group members were signaled three times per day by a handheld computer and responded to questions concerning their own current mood, the current mood of other group members, and whether or not they were currently experiencing a problem. Individual team members' moods were significantly and concurrently associated with the collective mood of their team. Consistent with these findings, in an experience sampling study of members of two professional cricket teams, [Totterdell \(2000\)](#) found that happy moods of players were significantly associated with the collective happy mood of their team.

Among a sample of 70 workgroups performing a variety of tasks across 51 organizations, [Bartel and Saavedra \(2000\)](#) found that third-party observations of workgroup moods were associated with the self-reports of group members. Higher levels of convergence of mood within groups was associated with more stable group membership, the presence of mood regulation norms within groups, task interdependence, and social interdependence.

In a laboratory study using undergraduates performing a managerial decision-making task, [Barsade \(2002\)](#) found evidence for mood contagion from a trained confederate displaying different mood states to group members. Positive emotional contagion was associated with increased cooperation, lessened conflict, and higher perceptions of performance.

In a longitudinal field study of government employees engaged in a variety of tasks in 97 workgroups, [Mason and Griffin \(2003\)](#) found evidence supporting the existence of positive affective tone and found that positive affective tone was a significant and negative predictor of group absence rates. [Gibson \(2003\)](#) found, in a laboratory simulation and a field study of nurses, that groups with higher levels of positive affect had higher levels of group efficacy. In two laboratory studies, Grawitch and colleagues ([Grawitch, Munz, Elliott, & Mathis, 2003a](#); [Grawitch, Munz, & Kramer, 2003b](#)) found that induced positive moods in temporary groups were associated with higher creativity ratings on laboratory tasks.

In two field studies, [Totterdell, Wall, Holman, Diamond, and Epitoropaki \(2004\)](#) found that affective convergence was associated with social networks

and work ties. In a laboratory study, Sy, Cote, and Saavedra (2005) found that leader mood influenced group affective tone and that groups with leaders in positive moods had better coordination, whereas those with leaders in negative moods exerted more effort.

Overall, these empirical studies suggest that group affective tone is indeed a meaningful construct for many groups which can originate and be sustained through a variety of mechanisms (e.g., Barsade, 2002; Bartel & Saavedra, 2000; George, 1990; Totterdell et al., 1998, 2004; Totterdell, 2000; Sy et al., 2005). And the nature of group affective tone, or whether it is positive or negative, can have real consequences for groups and their members (aside from its influence on their own individual affective experiences). Positive affective tone has been linked positively to customer service behavior, cooperation, coordination, and absence of conflict, perceptions of performance, group efficacy, and creativity on laboratory tasks; and also linked negatively to group absence rates (e.g., Barsade, 2002; George, 1990, 1995; Gibson, 2003; Mason & Griffin, 2003; Sy et al., 2005). Negative affective tone has been linked negatively to pro-social or customer service behavior (e.g., George, 1990).

Of course, in large part, these studies were not designed to investigate potential functions or dysfunctions of affective tone per se. Rather they were designed to explore how affective tone comes about and to investigate its potential consequences. Thus, it is important to note the ways in which this research may be limited before making broad generalizations about the outcomes of affective tone. First, of the studies from this set that examine outcomes of group affective tone, few assess team performance per se. More specifically, these studies focus on pro-social behavior (George, 1990), customer service behavior (George, 1995), conflict and cooperation (Barsade, 2002), member-rated perceptions of group performance (Barsade, 2002), absence (Mason & Griffin, 2003), efficacy (Gibson, 2003), leader coordination (Sy et al., 2005), and creativity (Grawitch et al., 2003a, 2003b). Second, very few of these studies examine real teams working interdependently on complex tasks outside the lab. For example, data presented in the papers by Barsade (2002), Grawitch et al. (2003a, 2003b), Gibson (2003), and Sy et al. (2005) are based on laboratory research. These conditions limit the ability of these studies to be generalized to the situations central to the theoretical propositions of the current paper; by and large, these studies do not focus on how group affective tone is related to the effectiveness of real teams working on complex tasks.

An additional study, not described previously because of its focus on personality (trait affect) rather than mood (state affect), has implications for

this discussion. In a survey of 62 top management teams (TMTs), Barsade and colleagues (Barsade, Ward, Turner, & Sonnenfeld, 2000) found that group-level variability in TMT trait-level PA was negatively related to participative decision making. In addition, variability in PA was marginally positively related to the logged annual market-adjusted return in 36 organizations for which the relevant data was available. Clearly, temporary mood states are distinct from enduring global traits that encompass multiple tendencies and proclivities. Moreover, individuals predisposed by the nature of their personality to experience certain kinds of mood states do not necessarily experience them across contexts and situations. That is, a wide variety of contextual factors can influence individuals' mood states independent of the effect of trait affect. This is precisely why factors such as emotional contagion, emotion norms, and social influence are important for understanding the etiology of group affective tone. Hence, the effects of heterogeneity in personality or disposition – while an interesting topic in its own right – tells us little about the effects of state affect (i.e., mood) convergence or divergence in ongoing groups. Furthermore, evidence contradicting Barsade and colleagues' findings can also be identified. For example, a study of 82 teams of customer service employees found that diversity (i.e., variability) in group-level extraversion and emotional stability (traits analogous to PA and NA; Wiggins, 1996) was positively related to group performance (Neuman, Wagner, & Christiansen, 1999). Although Barsade and colleagues did examine real teams and assess an effectiveness outcome, their focus on personality rather than mood, their marginally significant results, and the lack of any subsequent replication in the literature that we are aware of, all underscore the need for more theoretical and empirical work linking group affective tone to effectiveness in real teams.

In any case, the extant literature paints a picture in which affective tone can come about and be sustained through a variety of mechanisms. And while potential consequences of affective tone have received limited attention, with positive affective tone receiving relatively more attention than negative affective tone, affective tone appears to be meaningfully related to at least certain group behaviors. In the remainder of this chapter, we address when and why affective tone may be dysfunctional, focusing more heavily on positive affective tone, given its emphasis in the literature and the underlying theme that it is beneficial for groups. Negative affective tone also can be dysfunctional for groups; however, an in-depth discussion of potential dysfunctions of negative affective tone is beyond the scope of this chapter. Given the relative independence of positive and negative affect (Watson, 2000) and the greater attention the former has received in the

literature and its purported benefits, we focus here more prominently on positive affective tone. As we will enumerate more clearly below, our premise is that under certain conditions, heterogeneity in affect within groups is advantageous, and that homogeneity (whether in positive or negative affect) is disadvantageous.

WHEN AFFECTIVE TONE MAY BE DYSFUNCTIONAL

In order to understand when affective tone has the potential to be dysfunctional, it is crucial to consider the kinds of tasks and information with which a group works. More specifically, our focus here is on real teams (Hackman, 2002) dealing with complex tasks and equivocal information (Weick, 1995). For such teams, a group affective tone (especially, a positive affective tone), might lead to the development of a single-shared reality that provides members with a false sense of confidence and certainty that the reality the team has created for itself is unequivocal. Below, after describing the kinds of teams with which we are concerned, we discuss how affective tone might lead to a single-shared reality that has the potential to be dysfunctional for teams and how heterogeneity in affect within teams might lead to the development of multiple-shared realities that more closely mirror the range of the teams' work. We then describe how affective tone and a single-shared reality can lead to a group centrism syndrome (Kruglanski, Pierro, Mannetti, & De Grada, 2006) with concomitant negative consequences. Finally, we discuss how positive and negative mood tune cognitions and information processing (George & Zhou, 2007; Kaufmann, 2003; Schwarz, 2002; Schwarz & Clore, 1996, 2003) and why teams might be well served by heterogeneity in the affective experience of their members.

Teams with Complex Tasks

While the terms *groups* and *teams* are often used interchangeably, here we use the term *team* to connote those groups whose members are highly interdependent and who work intensely together to achieve common group goals (George, 2002; Hackman, 2002). The kinds of goals teams strive to attain are fundamentally collective in nature and are not simply an aggregate of the goal attainments/performances of individual members. For example, designing a new product, restructuring a subsidiary, and creating a new expert knowledge system are collective goals with collective outcomes.

On the other hand, selling insurance policies, seeing patients in a medical office, and preparing income tax returns are typically not collective activities in that they are performed by individuals, working semi-independently, and group performance or goal attainment results from the aggregation of individual contributions.

So our concern here is with what [Hackman \(2005\)](#) refers to as “real teams,” or teams that are collectively responsible for a common task and who have the authority to manage internal processes and external relations with other individuals, groups, or organizations. Real teams have identifiable boundaries in terms of who is and is not a member of the team, and some degree of stability in membership over time ([Hackman, 2002](#)). Often, traditional workgroups – which are sometimes referred to as command groups or co-acting groups – are now referred to as teams due to the popularity of the latter label ([Hackman, 2002](#)). However, groups whose members work semi-independently on predominantly individual tasks and report to the same supervisor are not teams. For example, the early studies of group affective tone using salespeople shed light on the role of affective tone in workgroups, not necessarily in teams ([George, 1990, 1995](#)). Given the increasing reliance on real teams in contemporary organizations, it is important to understand how affective tone might influence team processes and functioning. As will become clearer below, affective tone may have differential consequences for real teams than for traditional co-acting groups.

A key differentiator between groups and teams is the nature of the task. In co-acting groups, tasks can be individually based or additive in nature ([Steiner, 1972](#)). In teams, tasks are collective or unitary ([Steiner, 1972](#)) in nature. While the actual nature of group tasks is critical for understanding group processes and effectiveness, tasks are often not the critical focus of studies of group processes and outcomes per se ([Tschan & von Cranach, 1996](#)). Team tasks are collective precisely because they are usually broader and more complex, difficult, uncertain, and dynamic. Complex tasks often involve unclear goals, unclear means to attain goals, multiple steps to achieve goals, and considerable barriers and obstacles to goal achievement ([Hirokawa, 1990; Orlitzky & Hirokawa, 2001](#)).

When organizations rely on teams to accomplish key tasks, it is commonly thought that for any number of reasons, better outcomes will be achieved by having teams be collectively responsible for unitary team tasks than by trying to divide up unitary tasks into additive subtasks and pooling the efforts of individuals working relatively independently of each other. This could be due to the size and complexity of work tasks, the extent to which work tasks require a diversity of knowledge and skills, information

processing requirements, or the difficulty of work tasks. Ultimately, teams are relied on in the hopes of not only obtaining adequate performance due to the contributions of team members, but also achieving real synergies whereby the team really is more than the sum of its parts and amasses accomplishments that could not be equaled by pooling the efforts of individuals working relatively independent of each other. In forming teams, managers are advised to consider how each member can contribute to team effectiveness; the expertise, skills, and knowledge each can bring to bear on the team's work; and the complementary contributions that team members can make.

For teams to be effective, members need to bring their diverse capabilities and perspectives to bear on team tasks, and the team needs to provide mechanisms for the accommodation of different points of view and angles on problems. Group affective tone, and in particular, a positive affective tone, might seem to be advantageous in this regard. For example, teams with positive affective tones might reap the benefits of high levels of cooperation, coordination, and collective efficacy and avoid the costs of excessive conflict (e.g., Barsade, 2002; George, 1990, 1995; Gibson, 2003; Sy et al., 2005). However, as we describe below, a positive affective tone might actually mitigate against the consideration of alternative views and lead to teams developing a consensual perspective that does not reflect the range of the teams' circumstances and the diversity of perspectives team members possess.

A Single-Shared Reality or Multiple-Shared Realities

Two overarching human requirements that exert powerful influences on individuals both in and outside of the workplace are: the need for viable social relations with others, and the need for knowledge and understanding about oneself and one's surroundings (e.g., Asch, 1952; Festinger, 1954; Higgins, 1981; Hardin & Conley, 2000; James, 1907/1992; Mead, 1934; Schacter, 1959). While both of these forces have spawned extensive research in contemporary social psychology by streams of research that have proceeded in parallel, it has increasingly been recognized that they are highly interdependent and complexly intertwined (Hardin & Conley, 2000) – though this was a fundamental premise of earlier writings (e.g., James, 1907/1992; Sullivan, 1953). That is, the quest for knowledge and understanding is a social phenomenon, cognition is truly *social* cognition, and the extent to which something is *known* depends on the *sharedness* of the

knowledge (Hardin & Conley, 2000; Hardin & Higgins, 1996). One becomes certain in their understandings when those understandings are shared with others (Echterhoff, Higgins, & Groll, 2005; Hardin & Conley, 2000; Hardin & Higgins, 1996).

The shared reality that groups (and, in this particular case, teams) create is an essential aspect of team processes and functioning that has ramifications both at the collective level and also at the level of the cognitive processes of individual team members (Levine & Higgins, 2001). As Hardin and Higgins (1996, p. 28) indicate:

...in the absence of social verification, experience is transitory, random, and ephemeral ... But once recognized by others and shared in an ongoing, dynamic process of social verification we term "shared reality," experience is no longer subjective; instead it achieves the phenomenological status of objective reality. That is, experience is established as valid and reliable to the extent that it is shared with others.

Sherif's (1936) classic experiments on the autokinetic effect demonstrate how a shared reality, once constructed, serves to influence individual perceptions and experience, without conscious awareness, and also is maintained and reinforced overtime (Hardin & Higgins, 1996). Extensive social psychological theorizing and research suggests that there is a drive to create and maintain a shared reality with others that, in turn, forms the basis of individual experience and knowing (Hardin & Conley, 2000; Hardin & Higgins, 1996; Levine & Higgins, 2001).

Thus, in any group, members strive to develop a collective sense of the reality facing the group and its work (Levine, Higgins, & Choi, 2000). In work teams dealing with complex, ambiguous information, and high levels of uncertainty, team members may be especially driven to develop a shared reality concerning the nature and goals of the team, challenges and opportunities, means-end relations, parameters of decisions, and states of the environment.

Once a team develops a shared reality, this reality is likely to be maintained, reinforced, and strengthened as the team's *objective* reality guiding members' perceptions, interpretations, and interactions – likely without their conscious awareness. Having this shared reality verified collectively increases and perpetuates members' confidence in the veridicality of their perceptions, assumptions, and expectations (Baron et al., 1996; Goethals & Darley, 1977; Levine & Higgins, 2001; Sniezek, 1992).

However, on the work tasks for which a real team is most suited, there are likely to be high levels of uncertainty, ambiguity, dynamism, and equivocality (Weick, 1995). Thus, it is highly unlikely that any single-shared

reality will accurately capture the dynamics of the current and future situation. Teams might actually be better served by having and engaging multiple-shared realities that reflect the uncertainty and equivocality (Weick, 2003) of their circumstances and tasks. Subsets of team members can potentially create and maintain these multiple-shared realities based on how they come to share certain perspectives, views, and issues. These multiple-shared realities will be differentially engaged depending on their relevance to the team's ongoing activities. Importantly, having multiple-shared realities rather than a single-shared reality will help to ensure that teams do consider issues from a variety of perspectives, acknowledge the range of the team's work and tasks, and are attuned to dynamically changing circumstances.

This brings us to a potential pitfall of a positive affective tone for work teams: the development of a single-shared reality within the team rather than multiple-shared realities. Members of teams with a positive affective tone experience positive moods when working as part of the team. When people are in positive moods, they tend to be more confident, adopt a looser, top-down, heuristic mode of information processing, rely on schemas and scripts, interpret ambiguous stimuli more positively, feel good about their progress on work tasks and the world around them, engage in more flexible and divergent thinking, and adopt a satisfying approach to problems (Abele, 1992; Fiedler, 1988, 2000; Hirt, McDonald, & Melton, 1996; Kaufmann, 2003; Kaufmann & Vosburg, 1997; Schwarz, 2002; Vosburg, 1998a, 1998b; Watson, 2000).

These effects of positive mood, experienced collectively, likely reinforce each other, and in the aggregate, are likely to lead to a single-shared reality developing in the team that members embrace and reinforce. As occurs in all social situations, when a team starts working together, members will seek to develop a shared reality (Levine et al., 2000). And if a team has a positive affective tone, team members' looser, top-down information processing modes will enable them to collectively develop a single-shared reality that they confidently perceive as reliable and valid. The forces that drive the development of a single-shared reality (i.e., fundamental needs for knowledge, understanding, and social connections), along with the information provided by positive moods (i.e., thinking all is well), likely result in positive mood processes operating in ways that support a single-shared reality. Team members' flexibility in cognitive processing (promoted by their positive moods) may enable them to perceive and incorporate divergent information in ways that are consistent with and actually support the shared reality the team develops, even when there is evidence to suggest the contrary. Team members' positive moods will inform them that all is well (Schwarz & Clore,

2003), and there is no need to question the team's shared reality or develop alternative ones. Consistent with this reasoning, research has found that people in negative moods are more likely to break with a mental set when the data at hand suggest it is inappropriate than are people in positive moods (Gasper, 2003).

Thus, for teams working on complex tasks, convergence in affect within groups and a positive affective tone might mitigate against the very reasons for using a team in the first place rather than the pooled efforts of individuals working relatively independently of each other. In other words, a positive affective tone might lead to a team providing its members with a false sense of epistemic certainty in which their diverse inputs and perspectives are short-changed in the interest of a convergence of views and opinions, and the shared reality the team creates for itself is maintained and strengthened (Hardin & Higgins, 1996; Kruglanski et al., 2006) at the expense of an appreciation of uncertainty, change, and equivocality, critical thinking, and multiple perspectives (Weick, 1995, 2003).

Conversely, when a team does not have an affective tone, and members experience heterogeneous mood states, there is greater likelihood of multiple-shared realities developing rather than a single-shared reality. When they are originally formed, teams are typically composed of members who can make complementary contributions and have wide-ranging knowledge, skills, and experience to reflect task demands so that different perspectives and viewpoints are reflected and brought to bear on the team's work. To the extent that this is actually the case for any given team, the input necessary for the development of multiple-shared realities is present.

When members experience heterogeneous moods, some team members will experience the effects of positive mood described above. Simultaneously, other team members will experience negative moods. When people are in negative moods, they tend to be more critical and discerning, engage in bottom-up information processing based on the facts at hand, notice and be aware of problems and discrepancies, adopt a tight, analytical mode of information processing, and adopt optimizing strategies for problem solving (Gasper, 2003; George & Zhou, 2002; Kaufmann, 2003; Kaufmann & Vosburg, 1997; Martin & Stoner, 1996; Schwarz, 2002; Schwarz & Clore, 2003; Schwarz & Skurnik, 2003; Vosburg, 1998b). Thus, for example, as a team seeks to develop and maintain a shared reality, team members in negative moods are likely to notice potential problems, discrepancies, and inconsistencies with the facts at hand, and process information in a bottom-up way that leads to alternative realities that may come to be shared by some subset of team members. Team members in negative moods also are more

likely to notice and be concerned about how a position that a team is considering adopting runs counter to their own knowledge or experience or is inconsistent with other observations and information. Given that their negative moods signal a problematic state of affairs and promote attention to detail (Kaufmann, 2003; Schwarz, 2002; Schwarz & Clore, 2003), they will be more likely to bring these to the attention of other team members so that multiple perspectives are considered.

To the extent that a team develops multiple-shared realities, they likely will not be all-encompassing, mutually exclusive realities but rather focused in on some subset of the stimuli the team perceives and engages with in order to accomplish its goals and perform its tasks. And these multiple-shared realities will help the team incorporate into its processes and work the variety of its own activities and the wider environment.

Group Centrism

The effects of a positive affective tone and a single-shared reality may be exacerbated by the natural tendency of teams to try to reach cognitive closure on team activities and tasks which can potentially lead to a group-centrism syndrome, or the enhanced importance of coherence in a team (Kruglanski et al., 2006). The need for cognitive closure reflects the desire for answers to questions and firm knowledge and the concomitant reduction of uncertainty and ambiguity (Kruglanski, 1996; Kruglanski et al., 2006; Kruglanski, Shah, Pierro, & Mannetti, 2002). While individuals may differ in their own fundamental needs for closure, of more concern here are contextual factors that promote a relatively high need for closure. These contextual factors relate to the perceived costs and benefits of achieving versus failing to achieve closure (Kruglanski et al., 2006). Thus, for example, time pressure has been found to increase the need for closure as it increases the perceived costs of failing to achieve closure (e.g., failing to meet a deadline) (Kruglanski, 2004; Kruglanski & Webster, 1996; Webster & Kruglanski, 1998).

Work teams often face both internal and external deadlines and are under pressure to complete their tasks in a timely fashion. Moreover, members of any work team typically also belong to other teams, so they face their own individual time pressures due to multiple team memberships and commitments (Hackman, 2002). Reaching closure on key questions related to the team's work (such as ultimate objectives, means-end relationships, state of the external environment, and constraints and opportunities) enables the team to move forward and make progress toward task completion. Failure to reach

closure carries the potential costs of wasting time, missing deadlines, missing opportunities, failing to respond in time to threats, and being trumped by competitors. Of course, reaching a false closure has definite costs and accordingly, in experimental settings, giving participants instructions stressing the importance of accuracy tends to reduce the need for closure (Kruglanski & Freund, 1983). And failing to achieve closure has the potential benefits of eventually achieving more accurate and valid answers to questions.

Work teams, established to accomplish goals and expected to deliver results, naturally have to reach closure at some point if they are to be effective. And there are likely to be strong pressures within teams and from external sources to reach closure. When teams have a positive affective tone, members are likely to be both more confident and have higher collective efficacy (Gibson, 2003) and thus perceive the benefits of reaching closure to be quite high and potential costs to be quite low. That is, team members will be confident that the closure the team does achieve is accurate and valid and that potential risks of invalid closure are relatively low. These effects are likely to be exacerbated by the information processing effects of positive mood (e.g., reliance on heuristics and top-down information processing).

A single-shared reality and high need for closure may lead to what Kruglanski et al. (2006) refer to as a group-centrism syndrome; positive affective tone may exacerbate this tendency. Group-centrism reflects “the degree to which the ‘groupness’ of a collectivity, or its coherence [matters to a group]...the degree to which individuals strive to enhance the groupness of their collectivity...” (Kruglanski et al., 2006, pp. 84, 87). A dominant single-shared reality, a high need for closure, and a positive affective tone may all combine to result in, reinforce, and maintain group-centrism whereby coherence and agreement within the team is emphasized at the expense of an appreciation of diversity, meaningful dissent, and consideration of alternative perspectives.

Group-centrism is theorized to lead to a drive toward consensus within groups, conformity to norms that tend to be relatively stable, suppression of dissenting opinions, elevation of the ingroup and denigration of outgroups, and resistance to change (Kruglanski et al., 2006), characteristics similar to Janis’s classic conceptualization of “groupthink” (Janis, 1972). And when a team possesses a positive affective tone, these pressures should be all the greater given that the positive tone (and team members’ individually experienced positive moods) will signal to team members that all is well and the team is on track (George & Zhou, 2002; Martin & Stoner, 1996; Schwarz, 2002; Schwarz & Clore, 2003); maintenance of the status quo will be desired as will maintenance of the team’s positive affective tone. The

positive moods of team members, and the shared positive affective tone, will reinforce the team's shared reality and signal its objectivity and validity. Of course, individual team members will also enjoy the team experience, which will be positively reinforcing.

Conversely, heterogeneity in affective experience within teams is likely to lessen the need for closure, as team members are much more likely to be aware of the potential for an invalid closure being reached and its concomitant costs. When there is heterogeneity in affective experience (i.e., an affective tone does not exist within a team), team members in negative moods will adopt a more critical, analytical, and bottom-up style of information processing focused on the facts at hand and real sources of ambiguity and uncertainty. As mentioned earlier, the multiple-shared realities that are more likely when there is affective heterogeneity in teams will also lessen the need for closure, which will mitigate against the development of group-centrism. Given the nature of many of the tasks teams are charged with in today's dynamic environment, premature closure cannot and should not be reached on at least certain key issues the teams face as they are inherently ambiguous, uncertain, and changing. And closures that are reached should be adopted with a certain degree of tentativeness that opens the door for change should new information or data come to light. Multiple-shared realities in teams help to keep team members aware of alternative perspectives and provide options for change when evidence accumulates that a prevailing shared reality may be deficient or invalid.

Consistent with this reasoning, a recent meta-analysis of research from the functional perspective on group decision making found that assessment of the negative consequences of potential solutions to problems was one of the strongest predictors of effective decision making in groups (Orlitzky & Hirokawa, 2001). As another example, research has found that authentic minority dissent in groups can result in more information being taken into account when groups solve problems and make decisions, more alternative solutions being generated, and ultimately superior and more creative solutions to problems (Nemeth, 1986; Nemeth, Brown, & Rogers, 2001; Nemeth & Staw, 1989).

Minority dissent and consideration of the negative potential consequence of alternatives may be less likely when teams have a positive affective tone due to a variety of factors. The shared reality the team maintains may lead to overconfidence and sincere beliefs in the validity of the team's shared perspective. The fact that group members are more likely to share information with other group members when that information is held in

common rather than when they are in sole possession of the information (Stasser & Stewart, 1992), combined with the information processing effects of positive mood (e.g., top-down information processing and use of heuristics), will lead team members to truly believe in the consensus around which the team is rallying and feel positively about it, downplaying or ignoring any potential negative consequences.

Benefits of Mood Heterogeneity in Teams

Up until this point, we have focused on the potential negative consequences of a positive affective tone for teams focusing on complex team tasks. And in doing so, we have highlighted how team members in negative moods may mitigate against a single-shared reality developing and group-centrism as well as increase the likelihood of multiple-shared realities, minority dissent, and realistic fact-driven consideration of potential problems with favored perspectives and alternatives. Does this lead to the conclusion that perhaps teams might be better served by a negative affective tone? As described below, consideration of mood effects on information processing does not suggest so. Rather, it leads to the conclusion that affective heterogeneity in teams might actually lead to superior outcomes and enable teams to benefit more fully from the diverse knowledge, experience, and contributions of their members.

While focused on the individual level of analysis, mood as information theory and research (e.g., Schwarz & Clore, 1983, 1996, 2003; Schwarz, 2002), together with evidence regarding dual-tuning effects of positive and negative mood (George & Zhou, 2007), provide insight into how heterogeneity in affect within teams might facilitate team effectiveness. Consistent with the functional perspective on groups (Wittenbaum et al., 2004), team effectiveness can be thought of as revolving around inputs and processes within teams. Heterogeneity in moods within teams might facilitate effectiveness both in terms of the ways in which individual team members' differing moods lead them to contribute in different ways to the teams' collective endeavors and the ways in which team processes are shaped by the tuning effects of member mood states.

Mood-as-information theory and research suggests that mood states provide people with information and that to understand how mood affects cognitive processes, judgments, and behavior, one needs to consider the kinds of information and cognitive processes tuned by positive and negative mood (Schwarz, 2002; Schwarz & Clore, 1983, 1996, 2003). In work teams,

the moods members experience provide them with information about the current situation and the task environment.

Positive moods signal to team members that all is going well, the team is on track, and that progress toward team task and goal accomplishment is as it should be (George & Zhou, 2002; Martin & Stoner, 1996). In signaling an unproblematic state of affairs, positive moods induce looser, less effortful and systematic information processing, and increased reliance on top-down simplifying heuristics, schemas, and scripts (Schwarz, 2002; Schwarz & Clore, 2003). They also can promote more divergent and expansive thinking, playfulness, and novelty (Bless & Schwarz, 1999; Clore, Gasper, & Garvin, 2001). More generally, positive moods bring with them a sense of self-efficacy, enthusiasm, confidence, and well-being (Watson, 2000).

Negative moods inform team members of a problematic state of affairs and thus, lead them to try to figure out what is going on and why, address potential problems, and improve the current situation (Kaufmann, 2003; Schwarz & Clore, 2003). Team members in negative moods are more likely to feel that current efforts are insufficient and thus, push themselves to work harder to improve the status quo (George & Zhou, 2002; Martin & Stoner, 1996). Although individuals' negative moods can facilitate performance in these ways, convergence in the experience of negative moods within a team (or a negative affective tone) might have dysfunctional consequences such as high turnover, debilitating criticism, and an inability to reach consensus.

Thus, just as individual creativity likely benefits from the dual tuning effects of both positive and negative moods (experienced at different times) (George & Zhou, 2007), so too might team effectiveness benefit from the dual tuning effects of both mood states to the extent that they are differentially experienced by team members. Team members in positive moods will provide a sense of confidence, efficacy, and enthusiasm and may be a source of novel ideas for solutions to problems (George & Zhou, 2007). Team members in negative moods will be more likely to recognize potential problems and discrepancies, be in tune with the realities of dynamically changing circumstances, and recognize when the evidence at hand is inconsistent with the team's shared reality(s). They will push the team to more carefully consider options and alternatives and work harder to solve problems and accomplish tasks as their negative moods indicate that current efforts and approaches are insufficient (George & Zhou, 2002, 2007).

Real teams working on complex tasks (Hackman, 2002, 2005) will likely benefit from heterogeneity in member affect due to these dual-tuning effects (George & Zhou, 2007). Team members in negative moods will encourage

the team to consider potential problems with the current course of action and proposed solutions to problems, will be focused on the facts and data at hand, and will push the team to work harder to accomplish its goals. Team members in positive moods will provide the team with a sense of confidence and efficacy and may encourage more divergent and integrative thinking.

Given the equivocality of the complex tasks with which teams are faced (Hirokawa, 1990; Orlitzky & Hirokawa, 2001), it is likely that team effectiveness benefits from the dual-tuning effects of both mood states (George & Zhou, 2007). Each is functional in the presence of the other as the team will be able to take advantage of both types of information processing and cognitions while not erring too much in one or the other direction. Essentially, heterogeneity in affect within a team enables the team to incorporate the fundamental uncertainty of the team's work both into the nature of the inputs of individual team members and the kinds of processes used by the team to accomplish tasks and achieve goals. Consistent with this reasoning, Tiedens et al. (2004) suggest that heterogeneity in affect within groups might be beneficial for group creativity, decision quality, and ability to persuade others.

Thus, while some prior research suggests potential benefits of homogeneity in affect within groups (e.g., Barsade et al., 2000; George, 1995), we propose that more research is needed that assesses the effectiveness of real teams in relation to group affective tone. For example, while Barsade et al. (2000) found that similarity in trait PA in TMTs had a marginally significant relation to firm-level logged annual market-adjusted return, their theorizing and results concern trait, rather than state, affect. State affect is determined by the interaction of trait affect and situational factors. People who are high on trait-positive affect do not necessarily experience positive moods all of the time and people who are low on trait-positive affect still can and do experience positive moods. In fact, contextual elements that influence temporary mood states, but not global traits, could even be those factors that create challenges in performing complex tasks. For a variety of reasons, individuals who are otherwise similar in personality may experience heterogeneous moods. As another example, while George (1995) found that positive affective tone was positively associated with customer service behavior in a sample of 41 sales groups, the groups in her sample were not real teams working on complex, unitary, and equivocal tasks. In sum, based on the theorizing in this chapter and the relative lack of research on the effects of homogeneity/heterogeneity in affective states (i.e., moods) within teams, we question the premise that positive affective tone necessarily has

positive outcomes in real teams. More specifically, we propose that heterogeneity of state level affect may facilitate team performance and effectiveness by encouraging multiple-shared realities that reflect the equivocal nature of the team's work and environment and dual-tuning effects of both mood states (George & Zhou, 2007).

CONCLUSIONS

Clearly, more research is needed to understand the functions and dysfunctions of group affective tone and to elucidate when heterogeneity in affect within groups might be a desired state of affairs. Additionally, given the tendency in the literature to consider positive affective tone to a greater extent than negative affective tone, the latter should be better integrated into future research. Integration of the construct of time is also needed to help understand the development of group affect and shared realities in periods of transition and stability (see Gersick, 1988). Importantly, such research needs to take into account the kind of work and tasks groups are faced with and what kinds of inputs and processes are most crucial for group effectiveness. For example, for groups performing very algorithmic tasks on which high levels of cooperation, synchronization, and coordination are necessary, a positive affective tone might indeed be beneficial. For real teams faced with complex, equivocal decisions and tasks for which high quality is important and somewhat elusive, heterogeneity in affect might be more advantageous. As Tiedens et al. (2004) note, homogeneity and heterogeneity in affect within groups can both have advantages and disadvantages and are likely to have different consequences depending on a variety of factors. On a related note, an interesting issue for future theorizing and research is exploring the effects of other aspects of group heterogeneity/homogeneity in teams (e.g., demographic composition and personality) (see also Bowers, Pharmer, & Salas, 2000).

While additional research on group affective tone and its consequences is certainly needed, research also is needed that focuses on heterogeneity in affect within groups, its sources, and its consequences. Importantly, this research needs to be firmly grounded in the context. That is, the consequences of homogeneity and heterogeneity in affect within groups and teams are likely to vary depending on the kinds of decisions, problems, and tasks groups face, the range of the information they need to process, and the wider environment in which they function.

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CHAPTER 6

HOW AND WHEN LEADER BEHAVIOR AFFECTS INTERGROUP LIKING: AFFECT, APPROVAL, AND ALLOPHILIA

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ABSTRACT

We report on research that investigated the emotional mediation of leader behavior on observers' affinity for the members of a leader's group. Participants (N=181) read a vignette describing the positive, negative, or neutral behaviors of a national leader, and the approval or disapproval of that leader's followers for that behavior. Results revealed that liking (i.e., allophilia) for the leader's followers decreased when the group leader behaved negatively and group members expressed approval for their leader. These changes in allophilia were mediated by the amount of anger experienced by the participant. Implications of these findings for future work on leadership and intergroup relations are discussed.

Relations between groups are often characterized by conflict. Indeed, intergroup conflict is ubiquitous. Examples of large-scale intergroup

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conflict can be seen in the ethnic cleansing or genocide that occurred in the former Yugoslavia between 1991 and 2001 and more recently in the Darfur region of western Sudan. Intergroup conflict is a common, almost endemic feature of social organization (Brewer, 1999; Sumner, 1906). Integral to the understanding of intergroup conflict are intergroup attitudes – how members of one group evaluate the members of another group.

Negative intergroup attitudes inhibit cooperation and often stoke intergroup conflict (Allport, 1954/1979). The degree to which members of one group dislike the members of another group can quickly become both cause *and* consequence of intergroup conflict, creating a downward, self-reinforcing cycle (for a discussion, see Brewer, 1999; Duckitt, Callaghan, & Wagner, 2005; Duckitt & Mphuthing, 1998). Although intergroup attitudes can range from dislike to neutrality to affinity, the typical approach of social scientists is to study intergroup liking as shades of dislike, i.e., prejudice. A complementary approach is the emphasis and examination of shades of liking – positive attitudes beyond neutrality, i.e., allophilia (Pittinsky, 2005).

ALLOPHILIA IN INTERGROUP RELATIONS

Allport (1954/1979, p. 25) observed early on that although much attention is paid to negative stereotypes and negative prejudice, scant attention is paid to positive stereotypes and positive prejudices. When researchers do study intergroup affinity, they all too often use standard measures of prejudice, which measure factors of dislike and report on changes in relative degrees of intergroup dislike. Alternatively, allophilia is a global measure of intergroup liking that taps cognitive, affective, and behavioral evaluations. Allophilia is conceptually and empirically distinct from the constructs used by prominent models of intergroup relations and has distinct predictive ability vis-à-vis prejudice measures for positive intergroup behaviors (Pittinsky, Rosenthal, & Montoya, 2007).

Allophilia is also distinct from one of the few positive-prejudice constructs discussed in the literature: ambivalent sexism, or sexism comprised of both benevolent sexism and hostile sexism (e.g., Glick & Fiske, 1996). Ambivalent sexism is a particular form of an ambivalent attitude (Hass, Katz, & Rizzo, 1991; Petty, Fleming, & Priester, 2001; Priester & Petty, 1996) that refers to the “set of interrelated attitudes toward women that are sexist in terms of viewing women stereotypically and in restricted roles but are subjectively positive in feeling tone (for the perceiver)” (Glick & Fiske, 1996, p. 491). Allophilia differs from benevolent sexism in two principal

ways. First, allophilia measures global positive feelings toward members of a racial, ethnic, or national identity group. Benevolent sexism, in contrast, is restricted to the measurement of women. Second, allophilia – but not benevolent sexism – measures attitudes that both an observer and the individual holding the attitude are likely to agree are positive. Ambivalent sexism expects variability on the degree of agreement or disagreement between the actor and the target (or the actor and an observer) on whether or not the gender attitude is positive. An example illustrates the difference. A male coworker might feel and even remark to a female coworker that he finds her “cute”: an oft-cited example of benevolent sexism. The actor may experience that attitude and act as positive. It is not, however, likely to be experienced as benevolent or positive by many targets (Glick & Fiske, 1996).

Recognizing that affinity between groups can be distinct from the absence of dislike, and that liking is deserving of study, an important question emerges: what influences whether members of one group like the members of another group? Research on antecedents of intergroup attitudes has focused on social categorization (e.g., Brewer, 1979; Brewer & Kramer, 1985; Kramer & Brewer, 1984; Messick & Mackie, 1989; Tajfel, 1982; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), the salience of group membership (Brewer & Gaertner, 2001; Brown, Vivian, & Hewstone, 1999), group competitiveness (Kelley & Stahelski, 1970; Rabbie & Bekkers, 1978), and intergroup contact (Allport, 1954/1979; Pettigrew & Tropp, 2006), among others.

Although scholars have considered these and other causes of intergroup attitudes, the popular media provide suggestive evidence of another possible determinant of intergroup attitudes: leader behavior. The argument usually suggests that the actions of a leader directly impact how his or her followers are regarded. Media accounts of the presidency of George W. Bush, for example, suggest that popular opinion of the American people rests heavily on actions taken by the American government: “The American people will be held directly responsible for accelerating global instability and jeopardizing the security of Americans and the world for generations if Bush is elected” (Young, 2004); “... (T)here is undeniably a rise in enmity toward the American government – and maybe, by association, the American people – across the world” (Kennard, 2005); “The fact of the matter is that people hate America and Americans because of the nature and modus operandi of America’s foreign policy” (Nantambu, 2003). These examples stress that the actions of a leader – to one degree or another – may influence how his or her followers are perceived. Thus, though not typically

studied by intergroup relations researchers, the behaviors of group leaders are a possible determinant of intergroup attitudes.

LEADER BEHAVIOR AND INTERGROUP ATTITUDES

The media examples cited above illustrate that there are contrasting views on whether leader behaviors affect intergroup attitudes. Although a growing body of research has investigated leadership in the context of intragroup processes (see Hogg, 2001; Reicher, Haslam, & Hopkins, 2005), researchers have not, to our knowledge, directly tested the relationship between leader behavior and intergroup attitudes. The media examples cited above are also noteworthy for a second reason: they point out that observers often have emotional responses to leader behaviors. Research and theory on emotions suggest that the experience of emotions in response to leader behaviors may influence changes in intergroup attitudes, which would then only perpetuate the influence of a leader's behavior on intergroup attitudes.

Anger in Intergroup Evaluations

Emotions can be especially strong predictors of a group's evaluations of another group (e.g., Bodenhausen & Moreno, 2000; Haddock, Zanna, & Esses, 1993; Maio, Esses, & Bell, 1994; Stangor, Sullivan, & Ford, 1991; Wilder & Simon, 2001). More specifically, anger is a particularly potent intergroup emotion, as it can be easily provoked in intergroup contexts (Miller, Smith, & Mackie, 2004; Mackie & Smith, 1998; Bodenhausen, 1993) and has been shown to mediate intergroup hostilities (Mackie, Devos, & Smith, 2000; Wilder & Simon, 2001).

Our work examines whether a leader's behavior can change the level of anger experienced by observers, and in turn influence observers' attitudes toward the leader's followers. Research has demonstrated that, in general, aversive stimuli will generate anger (Berkowitz, 1990), and how we appraise events is key to how we feel about them (Arnold, 1960; de Rivera, 1977; Frijda, 1986; Lazarus, 1984; Weiner, 1982). Anger results from an appraisal that one's group may be harmed (Smith, 1993, 1999). An anger response to the threat or occurrence of harm may not be restricted to the cases common to appraisal theories of emotions – cases in which emotions follow events that are personal or self-relevant (Frijda, 1986; Roseman, 1984; Scherer, 1988; Smith & Ellsworth, 1985), or are generated by collective aspects of the

Table 1. Predictions of Anger Response in Bystanders by Group Leader Behavior and Group Members' Approval.

Follower Approval	Leader Behavior		
	Negative	Neutral	Positive
Approve	Highest anger	–	Lowest anger
Disapprove	High anger	–	Low anger

self (as in Intergroup Emotion Theory; Mackie et al., 2000). Extending past work leads to the prediction that observing a leader who is harming other groups may trigger an anger response in observers. More generally, real, threatened, or even observed pain (via empathy) can amplify the perception of injustice, which can also stoke anger (Harter & Whitesell, 1989; Fischer, Shaver, & Carnochan, 1988).

Research and theory predict that negative leader behaviors perceived to be unjust are particularly likely to stoke anger in observers. Perceived injustice plays a critical role in the elicitation of negative emotions (Mikula, Scherer, & Athenstaedt, 1998). Mikula and colleagues found that injustice was important for several negative emotions, especially anger (also see Clayton, 1992; Sprecher, 1992). In a study of consumers' reactions to service failures, for example, emotions were first triggered by the failure of service but subsequent assessments of the justice or injustice of the failure were associated with more anger (McColl-Kennedy, Daus, & Sparks, 2003). In another study linking negative emotions to perceptions of injustice, anger-producing events were found to be those that were also perceived as unfair (Mikula et al., 1998).

Follower Support

Whereas the experience of anger may mediate leader behavior effects on intergroup attitudes, there may be boundary conditions to the general effect. Follower support for a leader's negative behaviors is one likely moderator in the relationship among leader behavior, anger responses in observers, and changes in attitudes for the leader's followers. Table 1 illustrates the potential relationship between leader behavior and follower support.

Responses of anger may be stronger when followers approve of their leader's negative behaviors. This may be in part because the injustice may be perceived to be greater and, as a result, associated with a greater anger response. Because both the leader and the followers – who might have the

ability to stop the leader (or at least express their outrage to the government) – support the negative action, the experience of injustice should increase. Moreover, past research has shown that the perception of injustice is greatest when harm is caused, but ownership for the harm is not made (Miller, 2001). In instances in which group members approve of the negative act of a leader, ownership for that act is more diffuse and as a result, anger should increase. Alternatively, a group disapproving of a leader's negative behavior provides an observer with greater validation that the negative act was, in fact, wrong. For these reasons, it is hypothesized that follower support will moderate the influence of leader behavior on intergroup attitudes.

A study was designed to examine whether leader behavior would affect attitudes toward the leader's followers, the possible role of anger as a mediator of these effects, and whether or not follower support moderates the effects.

THE PRESENT STUDY

The central question of the research is whether emotions mediate the effects that leader's behaviors have on observers' attitudes for the members of the leader's group (the followers). We conducted research to test a model in which a group leader's behaviors (positive, negative, or neutral) interact with group members' approval (approval or disapproval) to influence allophilia (i.e., intergroup affinity). We hypothesized that anger should mediate the relationship, and explain the increase or decrease in allophilia.

Although the goal of the research was to examine possible affective mediation of leader behavior effects on allophilia, several intergroup factors might also explain the hypothesized effects. For example, the *prototypicality* of the country might mediate the hypothesized effects (Waldzus, Mummendey, Wenzel, & Weber, 2003; Hains, Hogg, & Duck, 1997; Hogg, Cooper-Shaw, & Holzworth, 1993; Hogg & Hardie, 1992). Prototypicality is derived from self-categorization theory (Turner et al., 1987), and refers to the degree to which a particular case illustrates the typical qualities of a group. Country prototypicality refers to the degree to which the country from which the target leader and his or followers come is representative of the countries of the United Nations. A second intergroup factor that might mediate a leader's behavior effects on intergroup attitudes is *entitativity* (e.g., Campbell, 1958; Gaertner & Schopler, 1998). Entitativity refers to the extent to which a group is perceived to be a bounded whole rather than a

loosely associated aggregate (Yzerbyt & Rogier, 2001), that is, the extent to which the members of a group are perceived to have the quality of a unit (Gaertner & Schopler, 1998; Welbourne, 1999). A third intergroup factor that might mediate a leader behavior's influence on intergroup attitudes is group homogeneity, i.e., how similar to each other group members are perceived to be. Although our research focused on collecting evidence for affect-based mediation of intergroup attitudes, our method allowed us to examine whether our data suggested potential concurrent, or alternative, mediation by these intergroup factors.

METHOD

Participants

One hundred and sixty-eight participants were recruited. Participants were United States residents between the ages of 18 and 64 years ($M = 37.81$). The gender breakdown of the sample was 47.6% male and 52.4% female. The majority of participants were United States citizens (94.2%). Prospective participants were recruited through e-mail advertisements that they had signed up to receive through an online survey sampling service. Participants were randomly assigned to one of the six conditions of a 3 (leader behavior: negative vs. neutral vs. positive) $\times$ 2 (follower response: approval vs. disapproval) between-subjects factorial design.

Procedure

Participants completed the survey online, completing the intergroup affinity questionnaire first (see section "*Measures*"). Next, participants read a vignette about a possible negative world event in the future, the French leader's response to the event, and the reactions of the French people to their leader's behavior. All participants learned of the event, by reading this passage:

In the last month, severe earthquakes devastated areas of Southern Asia. Even three weeks after the major quakes, mudslides and aftershocks have kept many communities out of reach of emergency personnel. Current estimates number the victims of this disaster between 250,000 and 300,000. In leading financial relief efforts, international humanitarian organizations have been seeking aid from all sources.

The study's two independent variables – group leader behavior and group members' approval – were manipulated in the event. For the leader behavior variable, the French leader was described as providing assistance (positive), refusing assistance (negative), or preparing to make a decision for the victims of the natural disaster (neutral). For half of the participants the leader described was male, and for half of the participants the leader described was female. In the positive leader behavior condition, participants read:

In response to the pressing nature of this need, the French Prime Minister spoke ardently and voted in support of a U.N. resolution to create an earthquake fund. Moreover, he (she) proposed an initiative to substantially increase government spending on international humanitarian aid. These decisions were based on the Prime Minister's belief that countries should find a way to care for each other and help each other become independent.

In the negative leader behavior condition, participants read:

In spite of the pressing nature of this need, the French Prime Minister spoke out and voted against a U.N. resolution to create an earthquake fund. Moreover, he (she) proposed an initiative to cut government spending on international humanitarian aid. These decisions were based on the Prime Minister's belief that international aid organizations are corrupt, and that countries should learn to care for themselves and not be dependent on other countries.

In the neutral leader behavior condition, participants read:

Similar in response to other world leaders, the French Prime Minister proposed to look into the situation. A decision on how to respond to the disaster in Southern Asia would be made within the week.

The final passage participants read was a description of the degree of group members' approval for their leader's behavior: approval or disapproval. Participants in the group member approval condition read:

The French people responded overwhelmingly positively to the news, some even flooding the streets in praise of the Prime Minister. Public opinion polls administered in France shortly after the announcement revealed that roughly 75% of the French people supported the Prime Minister and his (her) statement. Interviews with French citizens as well as government officials confirmed that there had been a general consensus of approval of their leader.

Participants in the group member disapproval conditions read:

The French people were outraged when they heard the news, some even mobbing the streets in overwhelming opposition to the Prime Minister. Public opinion polls administered in France shortly after the announcement revealed that roughly 75% of

the French people opposed the Prime Minister and his (her) statement. Interviews with French citizens as well as government officials confirmed that there had been a general consensus of opposition to their leader.

After reading the vignette, we first collected information regarding the participants' affective state; second, participants completed the Allophilia Scale to assess intergroup liking. Next, we asked the participants two manipulation check questions. The first assessed the nature of the French leader's impact on the victims of the natural disaster, and the second assessed the extent to which the French people approved or disapproved of their leader's behavior. After completing the manipulation check questions, participants were then debriefed.

Measures

Allophilia

Intergroup affinity was assessed using the affective evaluation subscale of the Allophilia Scale developed by Pittinsky et al. (2007), adapted for attitudes toward the French. Five items were included: I have positive feelings about the French; I care about the well-being of the French; I feel warmly about the French; For the most part, I like French culture; and Overall, I like the French. The subscale was reliable, $\alpha = .87$. Item responses were scored on a 7-point scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Anger

We used the 3-item anger subscale from the 30-item Differential Emotion Scale (DES; Izard, 1972). Participants were asked to indicate the degree to which they were experiencing a particular emotion at that moment, ranging from 1 (*not at all*) to 5 (*very much*).

Country Prototypicality

Country prototypicality was measured using attributes that were generated by participants as being distinctive for each group compared to their own group and a baseline group (Waldzus et al., 2003). First, participants were asked to generate four attributes that were characteristic of the French people in comparison to other member countries of the United Nations. Participants then generated four attributes that were characteristic of the American people. Participants were asked to rate the self-generated attributes of the French and Americans in terms of their applicability to

other citizens of the United Nations on a 5-point scale ranging from 1 (*does not apply at all*) to 5 (*applies very much*). The mean applicability score of each group's attributes was the indicator of the typicality of the respective country in general.

Entitativity

Participants rated the perceived entitativity of the French people by using the group entitativity measure (GEM; Gaertner & Schopler, 1998) in which participants view a series of six diagrams that illustrate circles that surround a center circle at various distances. Participants were told that the circles represent the French people. The diagrams were numbered 1–6, with each successive diagram illustrating more proximal circles, each representative of greater entitativity.

Homogeneity

Perceived homogeneity for the United States was measured by asking to what extent participants thought the people in the United States differed from each other. The perceived homogeneity for France was measured by asking to what extent the people of France differ from each other (both on a 7-point scale ranging from 1 [*not at all*] to 7 [*very much*]). The homogeneity rating for the United States (ingroup) was subtracted from the homogeneity rating for France (outgroup). A negative score indicates that participants perceive the outgroup as more homogeneous than the ingroup, whereas a positive score indicates that the ingroup is perceived to be more homogeneous than the outgroup.

RESULTS

We assessed the participant's gender and we also manipulated the gender of the French leader. There were no significant gender differences for allophilia. Moreover, there were no significant interactive effects of gender and any other independent variable; therefore, we do not discuss gender further.

Manipulation Checks

Follower Approval

The degree to which participants thought the followers approved of their leader's behavior was entered into a 2 (follower approval: approval,

disapproval) $\times$ 3 (leader behavior: positive, negative, neutral) ANOVA. There was a significant main effect for follower approval, $F(1, 162) = 153.10$, $p < .05$, such that participants perceived more approval in the approve condition ($M = 5.97$, $SD = 1.16$) than in the disapprove condition ($M = 2.81$, $SD = 2.02$). The main effect for leader behavior was also significant, $F(2, 162) = 13.75$, $p < .05$, but leader behavior did not interact significantly with follower approval, $F(2, 162) = 2.76$, $p = n.s.$

Leader Behavior

The degree to which participants evaluated the impact of leader's behavior as positive or negative was entered into a 2 (follower approval: approval, disapproval) $\times$ 3 (leader behavior: positive, negative, neutral) ANOVA. There was a significant main effect for leader behavior, $F(1, 161) = 85.84$, $p < .05$. Two non-orthogonal contrasts probed this effect: the first contrast compared the positive and neutral conditions, and the second contrast compared the neutral and negative conditions. The first contrast revealed that the impact of the positive leader behavior ($M = 5.63$, $SD = 1.15$) was more positive than the impact of the neutral leader behavior ($M = 4.17$, $SD = 1.74$), $t(166) = 5.38$, $p < .05$. The second contrast indicated that participants evaluated the behavior in the neutral leader behavior condition as more positive than the impact of the negative leader behavior condition ($M = 2.09$, $SD = 1.14$), $t(166) = 7.30$, $p < .05$. The main effect for follower approval was also significant, $F(2, 161) = 7.89$, $p < .05$, but follower support did not significantly interact with leader behavior, $F(2, 161) = .72$, $p = .48$.

Overall Model

Table 2 displays the means for post-test allophilia as a function of leader behavior and follower approval. We entered allophilia into a 3 (leader behavior: positive, negative, neutral) $\times$ 2 (follower approval: approve, disapprove) ANOVA with pre-test affective allophilia entered as a covariate. As expected, pre-test allophilia was a significant covariate, $F(1, 161) = 258.06$, $p < .05$, such that higher pre-test allophilia scores corresponded with higher post-test allophilia scores. Important to our predictions, although neither the main effect for leader behavior nor follower approval was significant, $F(2, 161) = 2.32$, $p = .10$, and $F(1, 161) = .79$, $p = .70$, the critical Leader Behavior $\times$ Follower Approval interaction was significant, $F(2, 161) = 3.16$, $p < .05$ (Fig. 1).

Table 2. Mean Ratings of Affective Allophilia and Anger by Leader Behavior and Follower Approval.

Follower Approval	Leader Behavior		
	Neutral	Negative	Positive
Affective allophilia			
Approval	3.81	3.53	4.18
Disapproval	3.80	3.97	3.91
Anger			
Approval	2.05	2.75	1.34
Disapproval	2.40	2.21	1.84

Note: $N = 173$. Allophilia ratings ranged between 1 and 7 with higher values indicating greater allophilia. Anger ratings ranged between 1 and 5, with higher values indicating more attraction or anger. Means for affective allophilia adjusted (pre-test scores covaried out). Means for anger are actual.

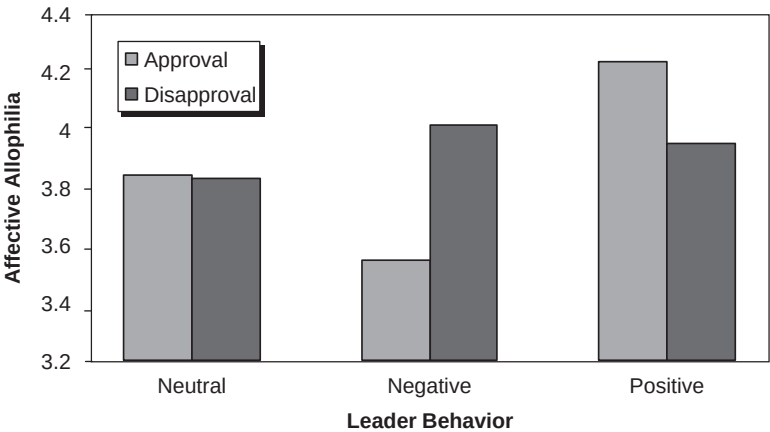


Fig. 1. Adjusted Mean Ratings of Affective Allophilia by Leader Behavior and Follower Approval.

We examined the Leader Behavior $\times$ Follower Approval interaction by comparing the effect of follower response at different levels of leader behavior. The first comparison of scores on allophilia for participants in the neutral-disapprove and the neutral-approve conditions was not significant, $t(167) = .10$, $p = .90$. The second comparison revealed that allophilia was

lower among participants in the negative-disapprove condition compared with those in the negative-approve condition, $t(167)=1.99$, $p<.05$. The third contrast revealed that there were higher allophilia scores among participants in the positive-approve condition ($M=4.18$) than among those in the positive-disapprove condition ($M=3.91$), yet the effect was not statistically significant, $t(167)=1.39$, $p=.16$. Thus, lower allophilia scores were observed only when both the leader behavior was negative and the followers approved of the negative behavior.

Mediated Moderation of Allophilia

The potential mediation of allophilia by anger was assessed using MacKinnon, Lockwood, Hoffman, West, and Sheets's (2002) modification of Baron and Kenny's (1986) procedure. According to MacKinnon et al., mediation is established when (a) the independent variable significantly influences the mediating variable, (b) the influence of the proposed mediator is significant when including the proposed mediator and the independent variable as predictors of the dependent variable, and (c) the indirect effect of the mediating variable is significant.

An initial analysis tested for heterogeneity of regression. With allophilia as the dependent variable, we entered anger along with leader behavior and follower approval as predictors. There was no evidence of heterogeneity of regression for anger, $\text{Anger} \times \text{Follower Approval} \times \text{Leader Behavior}$, $F(1, 155)=.70$, $p=.49$.

As indicated above, the $\text{Leader Behavior} \times \text{Follower Approval}$ interaction was significant for allophilia, $F(2, 161)=3.16$, $p<.05$, and for anger, $F(1, 167)=4.43$, $p<.05$. Observers experienced the greatest degree of anger when a leader behaved negatively and his or her group members approved, and observers experienced the least anger when a leader acted positively and group members approved.

Further analyses indicated that the predictive power of anger on allophilia was significant when follower response, leader behavior, and interaction terms were included in the model, $B=.14$, $SE=.05$, $p<.05$. Using MacKinnon et al.'s (2002) empirically derived critical values for the assessment of indirect effects (critical values for z' of .05 and .01 are .97 and 1.1, respectively), the indirect effect of the $\text{Follower Approval} \times \text{Leader Behavior}$ interaction on allophilia via anger was significant, $z'=1.72$, $p<.05$. The interactive effect of leader behavior and follower approval on allophilia was no longer significant when the assessment of anger was included in the model, $B=.55$, $SE=.29$,

$p = .35$. These results are consistent with total mediation of the moderating effect of leader behavior on follower approval by anger.^{1,2}

Intergroup Factors

We further tested three potential intergroup mediators: perceived homogeneity, entitativity, and prototypicality. For none of the variables was the Group Leader $\times$ Group Approval interaction significant, nor did any of the variables produce a significant indirect effect for the Group Leader $\times$ Group Approval interaction on allophilia.

GENERAL DISCUSSION

This study examined the attitudes observers hold for a group, and how observers respond emotionally to the actions of that group's leader in the context of his or her followers' approval or disapproval for those actions. Specifically, we demonstrated that affinity for a leader's followers was significantly reduced only when the leader acted negatively and the followers approved of the negative behavior. The data suggest that the effects of a leader's behavior must be interpreted in relation to the perceived approval/disapproval of the leader's followers for the behavior. Importantly, observers' emotional responses of anger mediated the effects of leader behavior and followers' approval on liking for the French people. Though our study was not directly designed to rule out mediation by other intergroup processes, we failed to find significant effects for any other potential mediator.

One important implication of the current work is the particular impact of group member approval. Liking for the group members was primarily influenced by the follower's approval of positive leader acts – rather than follower's disapproval of negative leader acts. Consider the previously discussed cases involving citizens of one country learning about the actions of the leaders of other countries. Our data suggest that when one learns about the actions of the leaders of another country, the degree to which the followers of that leader approve or disapprove of their leaders' actions *will* influence attitudes toward the followers. However, our findings suggest that only discovering that the followers *approve* of their leader's negative actions will change evaluation of the followers.

Through our study, we found evidence that anger mediated changes in liking. Interestingly, participants who were neither members of the leader's group nor members of the group affected by the leader's behaviors became angry as a result of observing a negative act toward a group. This occurrence of emotional responses in observers of intergroup relations is significant, and has practical implications. We often learn information about groups that experience injustices at the hands of other groups when we are not members of the perpetrating group or the victim group, but rather are members of an observing group. Our data suggest that even observers are capable of experiencing strong emotional responses to negative, unjust acts by leaders, even when they are not directly involved as perpetrators or victims.

Though our results met theoretical expectations, there are some limitations of the present work that should be considered in future work. First, we would want to see how the domain in which the leader is behaving positively or negatively affects the interaction and experience of anger by observers. Additional work should also measure emotional responses using multiple methods. Interestingly, we were able to pick up emotional effects in the present research using a fairly blunt measure, suggesting that other measures of emotional responses may show even stronger effects. It should also be noted that the assessment of anger in this study was of a general emotional state; future work should also specify more closely the target of observer anger (e.g., whether anger was directed toward the leader, toward the outgroup in general, or toward other entities). Further research could also usefully examine the impact of group members' approval or disapproval in a broader range of contexts, such as when the leader is presumed to be democratically elected (as in the case reported in this chapter) and when the leader is not democratically elected by the group. Finally, the model we tested predicted attitudes toward an outgroup whose leader behaved positively, neutrally, or negatively toward a third group. A more complete model, developed over time with additional data, might predict behaviors toward the members of a third group – the beneficiaries or victims of the leader's behaviors. Finally, future work might examine the effects of leader behavior on participant behavior toward members of the leader's group. Anger has implications not only for attitudes, but also for action and behaviors, and there is evidence to suggest that attitude–behavior connections can be stronger in context of emotion (e.g., [Talaska, Fiske, & Chaiken, in press](#)).

Nonetheless, findings from the present research offer preliminary insights regarding how observers' perceptions of the relationships between leader's

behaviors and followers' responses contribute to observers' experiences of anger, and how these factors together contribute to the formation of intergroup attitudes.

NOTES

1. The anger response measured may be directed at the group leader, group members, or both. The likelihood that the anger is directed at the group members is perhaps most consistent with our data. If anger was directed solely at the leader, then the experienced anger would have been exceedingly high in both the negative leader behavior conditions. However, we found that anger was highest when the leader did something negative and the group members approved, and was lower when the leader did something negative and the group members disapproved. This suggests that what is important to predicting anger is not based solely on what the leader does, anger is also dependent on what the group members do.

2. Although we were primarily interested in anger, we also assessed the other emotions measured by the DES (i.e., interest, enjoyment, surprise, distress, disgust, contempt, fear, shame, and guilt). The other emotions, however, did not produce a significant Group Leader $\times$ Group Approval interaction, nor did they mediate the effect of the interaction on affective allophilia, so we do not discuss or report them further.

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CHAPTER 7

INTERGROUP EMOTIONS IN WORKGROUPS: SOME EMOTIONAL ANTECEDENTS AND CONSEQUENCES OF BELONGING

Patricia Garcia-Prieto, Diane M. Mackie,
Veronique Tran and Eliot R. Smith

ABSTRACT

In this chapter we apply intergroup emotion theory (IET; Mackie, Devos, & Smith, 2000) to reflect on the conditions under which individuals may experience intergroup emotions in workgroups, and to explore some possible consequences of those emotions. First, we briefly outline IET and describe the psychological mechanisms underlying intergroup emotion with a particular emphasis on the role of social identification. Second, we describe some of the antecedents of shared and varied social identifications in workgroups, which may in turn elicit shared or varied intergroup emotions in workgroups. Finally, we consider potential consequences for both relationship and task outcomes such as organizational citizenship behavior, workgroup cohesion, relationship and task conflict, issue interpretation, and information sharing.

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THE EMOTIONAL LIFE OF WORKGROUPS

Research on the emotional life of workgroups is enjoying a surge of popularity (Kelly, 2001; Kelly & Barsade, 2001). This interest is driven not only by a “bottom-up” concern with how shared individual-level factors such as affects, moods, or emotional dispositions contribute to workgroup emotion, but also by a “top-down” focus on the extent to which contextual factors, organizational norms, and the emotional history of a group can shape affective experiences in workgroups (Kelly & Barsade, 2001; Barsade & Gibson, 1998). Consequently, a number of implicit and explicit psychological mechanisms such as emotional contagion (Barsade, 2002; Bartel & Saavedra, 2000), behavioral entrainment or interaction synchrony (Kelly, 1988; Totterdell, Kelett, Teuchmann, & Briner, 1998), and intentional affective induction (George, 1995) have been identified by which individual members’ experience of emotion is shared in workgroups (for a review see Kelly & Barsade, 2001).

Surprisingly, social categorization and social identification have rarely been evoked as potential psychological mechanisms for such effects (for exceptions see De Dreu, West, Fischer, & MacCurtain, 2001; Parkinson, Fischer, & Manstead, 2005; Tiedens, Sutton, & Fong, 2004). In fact, the question of the extent to which categorization into and identification with social group memberships can lead to the experience of emotions in workgroups has never been directly addressed. Yet in workgroups, members may more often than not appraise situations and respond to them emotionally, bearing in mind that they are members of multiple social groups rather than unique individuals. Indeed, in workgroups, members have a whole range of group memberships that may be salient and to which they feel attachment at any given time. Consider, for example, a cross-functional team from a multinational company with their headquarters in the US, composed of five people, with a mix of functional expertise (e.g., marketing, sales, production, research and development, and HR), a mix of nationalities (e.g., France, US, Australia, Nigeria, and Chile), and both genders represented (e.g., two women, three men). Depending on the context, any membership, whether workgroup, gender, age, professional occupation, or ethnic or national demographic categories, might be salient and relevant to any of the team members, with crosscutting consequences of shared membership for different members (Ashforth & Johnson, 2001; Foreman & Whetten, 2002; Pratt & Foreman, 2000; Pratt & Rafaeli, 1997).

In this chapter we apply intergroup emotion theory (IET; Mackie, Devos, & Smith, 2000; Smith, 1993), a theory that considers emotion as based on group

memberships, to reflect on the conditions under which individuals may experience intergroup emotions in workgroups, and to explore some possible consequences of those emotions. Building on IET we argue that the way workgroup members appraise a situation (concerning relationships or the task at hand) and react emotionally to it – and the extent to which they intend to act on it or not – will be a function of their identification with a salient group membership. Thus, unless the shared common identification of workgroup membership is salient and important, we expect the emotional experiences of workgroup members in the same situation are unlikely to be shared. Although previous approaches to the study of emotions in workgroups have been useful in understanding how bottom-up and top-down processes determine shared group emotion, the application of IET offers the advantage of predicting more specifically when and why individual workgroup members may come to experience emotions on behalf of the workgroup, potentially leading to *shared emotions in the workgroup*, and when they will experience emotion on behalf of other ingroups than the workgroup, potentially leading to *variation of emotions in the workgroup*.

In this chapter, we first briefly outline IET and describe the psychological mechanisms underlying intergroup emotion, with a particular emphasis on the role of social identification. Second, we describe some of the antecedents of shared and varied social identifications in workgroups that may in turn elicit shared or varied intergroup emotions in workgroups. Finally, we consider potential consequences for both relationship and task outcomes such as organizational citizenship behavior, workgroup cohesion, relationship and task conflict, issue interpretation, and information sharing.

INTERGROUP EMOTIONS

The theory of intergroup emotions (Mackie et al., 2000; Smith, 1993, 1999) was founded with an understanding of emotion as a group-based phenomenon: that an individual who identified himself or herself as a member of a social group appraised and interpreted events as relevant not to the self but to that group membership, that such appraisals generated group-based emotion directed toward both the ingroup and the relevant outgroups, and that those emotions in turn acted as motivating conditions for ingroup- or outgroup-directed behaviors (see Fig. 1).

IET drew from the social identity approach (Tajfel & Turner, 1986; Hogg & Abrams, 1993; Oakes, Haslam, & Turner, 1994) and from appraisal theories of emotion (Frijda, 1986; Lazarus, 1991; Roseman, 1984; Scherer,

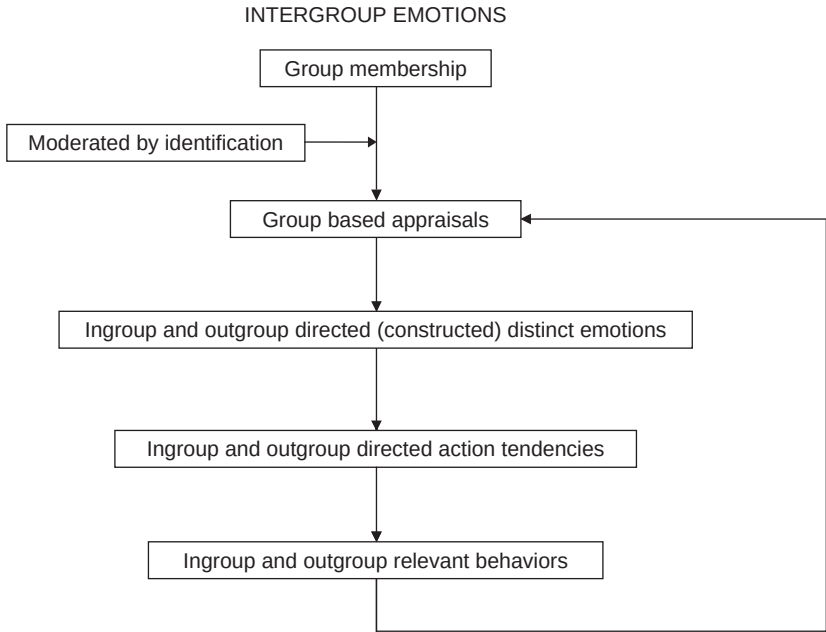


Fig. 1. Model of Intergroup Emotions.

1984a, 1984b, 2001; Smith & Ellsworth, 1985) to propose that social identifications derived from group memberships are important aspects of the self-concept, and when self-categorization and social identification occur, situations are appraised in terms of their consequences for the ingroup rather than in terms of personal consequences. The appraisal processes that generate intergroup emotions are thought to be identical to appraisal processes that have been identified as generating emotion for individuals, with the important difference that the appraisal involves the individual’s “social identity” instead of his or her “personal identity” (Smith, 1993; also see Garcia-Prieto & Scherer, 2006). If cognitive appraisal theories of emotion posit that emotions are experienced by individuals because an event has relevance to them as individuals, IET posits that intergroup emotions are experienced by individual group members because an event has relevance to them as members of a social group. Intergroup appraisals evaluate the implication of events or situations for the ingroup, rather than for the self. To put it simply, when a social identification is “switched on” it blurs the distinction between ourselves and the ingroup (Smith &

Henry, 1996) and emotions are experienced on behalf of the ingroup. Because individuals vary in their level of identification with social groups, IET posits that the more an individual identifies with a group, the more easily, frequently, and intensely he/she will experience intergroup emotion (Mackie, Silver, & Smith, 2004).

What are the consequences of experiencing intergroup emotion? Just as the social identity approach argues that social identity makes intergroup behavior possible (Turner, 1982), IET argues that intergroup emotions regulate behavior directed toward the ingroup and outgroup. Just as emotion theory assumes that emotional responses are adaptive signals that prepare the individual to take action because a relevant event is occurring (Lazarus, 1991; Frijda, 1986), IET argues that intergroup emotions are motivators of action tendencies directed toward the ingroup or the outgroup. Such intergroup emotions make particular intergroup behaviors more or less salient, likely, and/or desirable. When those behaviors are inhibited, facilitated, or blocked, feedback processes intensify, dampen, or eliminate the triggering emotional reaction in a continuous process of emotional and behavioral regulation.

Thus, depending on the circumstances, a member of our cross-functional team might feel like a member of the workgroup, or like a woman, or like a French person, or like a sales manager, and see others in the organization as members of another work team, or as men, or as Australians, or as being from another function. Any policy introduced by top management, for example, will be appraised in terms of its costs and benefits for whichever of these available social categories with which the individual identifies, and those costs and benefits will dictate the emotion or emotions any team member feels about the policy and toward her own and other groups' behavior in the organization. For example, a new budget voted by top management to support the marketing and sales of a new product that clearly targets the Asia-Pacific market may be appraised positively and strongly supported by the French sales manager if her professional social identity is activated. The emotions elicited could be relief, hope, or satisfaction. When feeling relief, one can allow some relaxation (Lazarus, 1991), thus enabling the organism to regain energy for new events. Paez, Asun, and Gonzales (1995) describe hope as a powerful social tool to make a group keep faith and committed to actions. Thus, the sales manager should remain engaged in her team activities. This budget, however, may also be seen as a threat to the needs or goals of France/western Europe if her French identity is salient, thus eliciting envy or sadness, depending on other relevant appraisals. If associated with anger, envy includes potential attack

(Lazarus, 1991) and if felt for a long period of time, it can poison all relationships (Lazarus, 1991), namely with colleagues at work (Lazarus & Cohen-Charash, 2001). Thus, envy may lead to behavioral opposition to smooth team collaboration. Sadness is a withdrawal emotion (Scherer & Tran, 2001), and in this particular context would precisely lead to withdrawal from team activities and restrained participation.

Empirical Evidence

In the last 12 years an impressive body of research has provided support for the nature and function of intergroup emotions (for a recent review see Mackie et al., 2004; Parkinson et al., 2005). We focus here on reviewing those studies that have specifically demonstrated that categorization and social identification are necessary antecedents of intergroup emotion.

The most comprehensive data in this regard come from two studies in which Smith, Seger, and Mackie (2006) asked participants to first think about themselves in terms of individual identity and then in terms of particular relevant group memberships (Americans, Republicans, men, and so forth) and to report the emotions they felt when thinking about themselves in those ways. The results across the two studies were compelling. For each social categorization activated, participants produced separate emotional profiles, which were both distinct from one another and distinct from the emotional profiles participants produced when thinking about themselves as unique individuals. That is, even though a particular individual might report feeling happy and relaxed as an individual, that same individual might report feeling angry and anxious as an American and guilty and depressed as a Democrat. Moreover, similar patterns of emotions were shown by other individuals in the same social category, so that the emotional experience of any one Republican participant, for example, was more closely aligned to the emotional experiences of other Republicans than to his or her own emotional experience as an individual. Social categorization clearly dictated the emotions reported by group members just as the theory predicted. Also as predicted by IET, the relation between category membership and emotion was moderated by identification. Across the several groups studied, greater identification with a particular group membership (as measured by centrality and importance of the membership to the self) was associated with more intense positive ingroup-directed emotion and more anger toward outgroups, as well as with reduced negative emotions toward the ingroup. Finally, these data provided converging evidence for the regulatory function of intergroup emotions. For each categorization activated, participants reported their

desire to engage in a wide range of behaviors reflecting affiliation with the ingroup and confrontation with the outgroup. In particular, intergroup emotions and intergroup anger were powerful predictors of these desires. For example, anger at the outgroup predicted the desire to both criticize the outgroup and to confront an outgroup member critical of the ingroup.

Research by Yzerbyt and colleagues (for a review see Yzerbyt, Dumont, Mathieu, Gordijn, & Wigboldus, 2006) has also clearly demonstrated that variations in social categorization and the level of social identification can have a strong impact on the experience of intergroup emotion. For example, Yzerbyt, Dumont, Wigboldus, and Gordijn (2003) confronted students at a French-speaking Belgian university with a press article that described a situation of intergroup conflict between university students and professors at a Dutch-speaking Belgian university. The article said that professors at the Dutch-speaking university wanted to impose English as the only language for students. Participants were either categorized into a common group with the victims (by telling them their responses would be compared to those of professors) or categorized into a different group than the victims (by telling them their responses would be compared to those of students at the Dutch-speaking university). Results showed that participants who saw themselves as sharing a common group membership with the victims felt stronger anger than participants in the other conditions. In addition, the more participants identified with the shared group membership, the stronger the reported anger and the stronger the action tendencies to confront the outgroup (see also Gordijn, Wigboldus, & Yzerbyt, 2001).

Other studies have confirmed the powerful role that intergroup emotions play in regulating intergroup behavior. In one such set of studies (Maitner, Mackie, & Smith, 2007), participants were reminded of acts of aggression perpetrated on an outgroup by their ingroup. Ingroup members who reacted with guilt to such events were motivated to end such attacks and their guilt became even more intense when the ingroup failed to do so. In contrast, those who felt satisfaction at the attacks were more motivated to attack again, and satisfaction increased when the ingroup did so. Importantly, highly identified members of the group were more likely to appraise the original acts of aggression as justified and more likely to react to them with satisfaction, which explained why highly identified group members found ingroup aggression even more desirable than group members who were not so highly identified. In another set of studies (Maitner, Mackie, & Smith, 2006), anger provoked by an outgroup insult was intensified by the ingroup's failure to confront the outgroup, but ameliorated when the ingroup went on the offensive. Thus, intergroup emotions acted as

motivators for specific types of intergroup behavior, and whether or not this behavior occurred had important consequences for either increases in instigating emotional state (when the desired behavior did not occur) or its decrease (when the desired behavior did occur) demonstrating its regulatory role.

In sum, this growing body of research confirms the main tenets of IET. Social categorization determines the experience of intergroup emotion, a relation that is mediated by group-level appraisals and moderated by social identification. The triggering of distinct ingroup- and outgroup-directed emotions in turn motivates specific and predictable behaviors toward the ingroup and the outgroup, and are in turn regulated by whether or not those behaviors are executed.

Intergroup Emotion Theory and Emotion in Workgroups

In this section, we briefly highlight some of the ways in which the IET approach offers a distinct perspective of emotions in workgroups.

First, and perhaps most uniquely, IET claims that emotions are connected with categorizations and identities. Social categorization determines the type of emotional reaction; identification moderates the strength of this reaction. Since in workgroups individuals might differentially identify with any of multiple group memberships (i.e., the organization, the workgroup, their nationality, the profession, etc.), group members are capable of multiple emotional reactions to events and entities that have consequences for workgroup processes and functioning. And any or all of those intergroup emotional reactions might be quite different from the interpersonal emotional reactions that would be provoked by the same event or entity if workgroup members were focused on their “unique” personal self.

Second, IET moves beyond a simple positive or negative evaluation of categorization of individuals into ingroups and outgroups to focus on the *distinct and differentiated* emotional reactions that ingroups and outgroups can provoke. Thus, IET is able to predict when a workgroup member categorized as an outgroup (e.g., because of his race) will be feared, hated, or regarded with contempt, as well as when a workgroup member categorized as an ingroup will evoke pride, satisfaction, or guilt. Such a view requires a re-thinking of traditional views of stereotyping processes and prejudice in workgroups.

Third, IET privileges action (or at least the intention or inclination toward action) toward or against individuals categorized as ingroups and outgroups. The traditional attitudinal model of prejudice that has dominated intergroup relations had no inherent action component other

than the strain toward consistency in action and belief. In fact, much research interest has focused on why behaviors do not follow attitudes. In contrast, IET's focus on emotion entrains the view of evaluation as readiness for action, the intention to strike out when angered, to shun when disgusted, to nurture when affectionate, or to flee when frightened. From this perspective, the theoretical focus is what ingroup or outgroup members in workgroups *do* to one another rather than what they *think* of one another (which might well follow rather than provoke action). The theoretical urgency is to be able to intervene between emotion and action to enhance workgroup processes and functioning, and not how to make workgroup members' actions consistent with their attitudes.

Fourth, IET encompasses the variability that characterizes intergroup relations. Whereas stereotypes and prejudice are regarded as stable over time and context, emotional reactions vary over both. The iterative chaining among appraisal, emotion, and behavior allows for similar situations and entities in workgroups to be appraised and responded to differently depending on changes in: the perceiver's categorization and identity, the context and event, and the number and intensity of emotions generated. Response variability in workgroups may also arise because of regulatory pressures: members may prefer and seek to experience some emotions rather than others (i.e., pride), and may experience contextual pressures (e.g., organizational or workgroup) to experience and display some emotions (i.e., anger) rather than others (i.e., sadness).

Fifth, IET is a peculiarly social perspective on emotion. Not only does it see emotion as springing from social categorizations, but also as socially influenced at all levels. The social influence that group membership entails may influence changes in core affect, the causal attributions people make for such changes, the degree of emotional convergence they experience, the way they categorize those emotional experiences, and the types of actions that they may seek to perform under the influence of emotional states. All of these aspects of the interplay among intergroup appraisals, emotions, and behavior are no doubt also influenced by the power and status relations among and between groups (Alexander, Brewer, & Hermann, 1999; Herrmann & Fischerkeller, 1995; Kemper, 1990) making intergroup emotion in workgroups equally dependent on social relations between as well as within groups represented in the workgroup.

Sixth, IET sees emotion as functionally regulatory at the group level just as emotion is functionally regulatory at the individual level. Indeed, such group-level functionality is to be expected, for group living is elemental in humans as well as in related primate species. Just as emotion has changed from being

seen as inherently disruptive of the best functioning of the individual to being understood as part of an intricate system that promotes adaptive functioning, so too do we view intergroup emotion as occurring for adaptive reasons and not merely as an event inherently disruptive to intra- or intergroup relations. The consequence of emotion at the individual or intergroup might be disruptive and destructive but might also serve connectedness and sustaining functions. We believe that understanding the regulatory function of intergroup emotion in workgroups regardless of its negative or positive consequences will ultimately serve the area of emotions in workgroups well in its attempt to ameliorate workgroup processes and functioning.

Finally, IET may be complementary to previous approaches to emotion in groups. In particular, we argue that IET is complementary to Barsade's (2002) research on emotional contagion in groups. Barsade (2002) posits that when people enter a group, they are exposed to other group members' emotions (which vary in terms of valence and energy) and that the process of emotion contagion occurs through two basic mechanisms: (1) the perception of the expression of others' emotion via non-verbal signals (facial expression, body language, and tone) rather than words and (2) the afferent feedback received from mimicking others' emotion, i.e., by engaging in the mimicking behavior, individuals experience the emotion itself. The degree to which emotional contagion then occurs is said to be mediated by attentional processes, with greater contagion occurring when more attention is allocated. Though the actual mechanisms by which emotions are transferred may be subconscious and automatic, they can also be more conscious emotional comparison processes. Specifically, Barsade suggests that there are social comparison processes in which, after determining the amount of attention to be paid, people compare their moods with those of others in their environment and then respond according to what seems appropriate for the situation. Finally, Barsade argues that when emotional contagion involves positive feelings it is more likely to lead to more helpful and cooperative behavior, less group conflict, and higher ratings of self and others' task performance. IET directly examines some of the social comparison processes that may occur in workgroups (i.e., categorization of members into outgroup and ingroup and identification with the ingroup) that determine the amount of attention paid to others' emotions. In fact, from the IET perspective, group members need not even be physically present for intergroup emotions to be generated; thus, shared emotions in workgroups do not rely purely on contagion. In the context of our cross-functional team example, team members can feel similar emotions (e.g., anger or resentment if their team is criticized or pride if the team has achieved its objectives in a difficult context) as a result of their

membership to that particular team, especially if team cohesion has reached a significant amount, but they do not need to be present in the same room to feel these emotions. The identification to the team is internalized and channels the individual's appraisals accordingly. So while Barsarde's research on emotional contagion has focused on processes that could heighten or sharpen emotion sharing in face-to-face interactions, IET sees emotion generation as fundamental to group membership and processes, such as contagion and social comparison as mechanisms that subserve the idea that social categorization dictates emotional experience. Moreover, this impact of workgroup membership on emotion generation among workgroup members is determined by identification of the members, which no doubt determines attentional focus and so forth. Even more importantly, IET allows us to make predictions about shared cognitive antecedents and shared behavioral consequences for different types of emotions, beyond positive and negative feelings. Indeed, these two claims – that emotions are linked to categorization and identification and that group-based emotions are differentiated – are the two most central and important theoretical claims IET makes.

THE ROLE OF SOCIAL IDENTIFICATION IN DETERMINING INTERGROUP EMOTION IN WORKGROUPS

In the past, a few researchers have pointed to the importance of group membership and social identity concerns in general in determining emotional experience in workgroups. For example, [De Dreu et al. \(2001\)](#) suggested that workgroups can play an important role in satisfying individuals' need to belong. According to these authors, whether or not group membership needs are satisfied or not can give rise to a wide range of emotions. On the one hand, being included, accepted, and welcomed by the workgroup may lead to positive emotions such as happiness, elation, or contentment. On the other hand, being rejected, excluded or ignored by the workgroup may lead to negative emotions such as anxiety, grief, jealousy, or loneliness. The satisfaction or thwarting of such needs to belong has some particularly compelling implications for theories such as IET. It might be, for example, that group membership, with its attendant triggering of intergroup appraisals and intergroup emotions, depends on the satisfaction of such needs: that only *happy* group membership has the psychological consequences that IET claims. At the very least, whether needs to belong are

satisfied or not (perhaps as measured by the positive or negative emotions De Dreu and colleagues suggest) might act as an emotional index of social identification, a possibility that warrants further investigation.

Parkinson et al. (2005) proposed that group membership is of primary importance in determining *shared group emotion*. These authors have suggested that group members are more likely to be exposed to same kind of emotional objects and events. In addition, group members are more likely to interact directly with one another, thus exerting influence on each other's appraisals, emotion experience, and expression. Group members are also more likely to share norms and values, which may promote similarities in appraisals and emotions. Finally, these authors posit that to the extent that members identify themselves as members of a common group (e.g., the workgroup) they are likely to have similar appraisals and emotion reactions to events. For all these reasons, group categorization itself, and heightened social identification in particular, is likely to promote emotional reactions that are shared by and common to all members of a particular group.

Tiedens et al. (2004) proposed that strength of group identification is an important individual difference which may help explain *emotion variation in workgroups*. For example, these authors argue that it is quite likely that in reaction to the workgroups' successes, members with stronger group identification may experience different emotions (i.e., pride) than members with weak identification (i.e., admiration). In addition, drawing on research on intergroup emotion (Mackie et al., 2000), they suggest that group identification differences are very likely to lead to variation in appraisals of workgroup coping resources, in turn leading to varied emotional responses to group-related events.

Our position is that IET can help explain both (a) shared workgroup emotion (instances when individuals experience emotion on behalf of the workgroup) and (b) *variations in workgroup emotion* (instances when individuals experience emotion on behalf of other ingroups than the workgroup). According to IET, social categorization and social identification are necessary conditions for the elicitation of intergroup emotion. Based on IET, we posit that to the extent that members share a categorization and a similar level of ingroup identification with the workgroup, they are likely to share appraisals and therefore share emotional reactions to events. To the extent that social categorization is shared but identification varies, we expect that those emotional reactions to events might be amplified or suppressed. In contrast, to the extent that members see themselves in terms of varied categorizations and identifications with

other ingroups than the workgroup, they are likely to have varied appraisals and varied emotion reactions to events.

Therefore, if we are to understand when workgroup members will share emotion and when they will experience varied emotions, we must first understand the conditions that are likely to make *shared* or *varied* social identifications salient among workgroup members.

When Members Share a Social Identification with the Workgroup

Van Knippenberg and Van Schie (2000) have suggested that in organizational contexts, employees' primary identification will often not be with the organization as a whole but rather with their specific workgroup. First, they argue that identification with the workgroup may prove less threatening to the employee's need to remain distinct than identification with a large entity such as the organization as a whole, while still satisfying employees need to feel included (Brewer, 1991). Second, employees will have more in common with their workgroup than with their organization as a whole in terms of work-related fate and history. Third, in most organizational contexts, employees are likely to be approached in terms of their subgroup memberships (such as workgroup, or department), rather than in terms of their membership with the organization (Kramer, 1993). Consistent with their hypothesis, Van Knippenberg and Van Schie (2000) found in two organizational samples (local government employees and university employees) that identification with the workgroup was higher than with the organization. Importantly, it was identification with the workgroup that was more predictive of job satisfaction, job involvement, and intention to continue working for the organization.

When Workgroup Members have Varied Social Identifications in the Workgroup

Nevertheless, there are many factors that might muddy the identification waters for any particular group member, and the increasing diversity of modern workgroups probably makes the range of social categorization options more salient. For example, the demographic or skill diversity composition of workgroups may make varied social identifications salient (Brewer, 1995; Chatman, Polzer, Barsade, & Neale, 1998; Chattopadhyay,

Thuchowska, & George, 2004; Northcraft, Polzer, Neale, & Kramer, 1995; Randel, 2002; Tsui, Egan, & O'Reilly, 1992). Most researchers studying diversity in workgroups maintain that it is the visibility of such differences that leads inevitably to ingroup–outgroup categorizations that crosscut workgroup composition, and thus produce intragroup conflict and miscommunication (Jehn, Northcraft, & Neale, 1999; Pelled, Eisenhardt, & Xin, 1999; Tsui et al., 1992).

However, as posited by self-categorization theory (Turner, 1982), categorization and identity salience in diverse workgroups will depend on the extent to which (a) homogenous categories can be clearly distinguished from each other (i.e., comparative fit), (b) workgroup members are ready to use a given category, i.e., which category comes to mind and is accessible based on past experience, beliefs, etc. (i.e., cognitive accessibility), and (c) category is meaningful for workgroup members (i.e., normative fit). Thus, the mere presence or even prominence of diversity in the group does not necessarily have these dire social categorization and group identification consequences (Van Knippenberg, De Dreu, & Homan, 2004). In fact, Chattopadhyay et al. (2004) have argued that the strength of identification to categories such as race and gender in diverse workgroups will be different for high- and low-status members. Based on self-categorization theory these authors suggest that in demographically diverse workgroups members from high- and low-status groups are likely to adopt very different self-esteem enhancing strategies. High-status group members such as Caucasian males may show a stronger identification with their demographic categories to maintain their high status. In contrast, low-status group members such as women and minorities may either show a stronger identification with high-status demographic categories to achieve social mobility (i.e., social mobility strategy) or show a stronger identification with their demographic categories as a result of creatively focusing on a positive aspect of their category (i.e., social creativity strategy), or as a result of contesting the legitimacy of the high-status group (i.e., social competition strategy). Moreover, these authors posit that workgroup demographic composition per se can also affect identification with race and gender categories and with the workgroup. As demographic dissimilarity increases in the workgroup, high-status group members (e.g., Caucasians) are predicted to identify only with their demographic categories rather than simultaneously with the workgroup and their demographic categories. Similarly, lower status group members using social creativity or social competition strategies are expected to identify with their demographic categories rather than simultaneously with the workgroup and their demographic categories.

In contrast, low-status group members using the social mobility strategy are expected to identify more with higher status demographic categories and with the workgroup rather than with their own demographic categories.

Unfortunately, most empirical research that has applied the social identity approach to the study of diverse teams has assumed that diversity in a given category (e.g., race) will lead to social categorization and presumably identification processes, more or less inevitably leading to intergroup biases. Accordingly, most field studies have used measures that reflect the degree of similarity among group members on a given dimension (Tsui et al., 1992), and experimental studies typically do not go beyond manipulating group composition in one demographic category (for a detailed discussion see Van Knippenberg et al., 2004). In fact, research that has directly measured the effect of group identification on workgroup outcomes is rare. Randel (2002) found that the numerical distinctiveness of gender workgroup composition triggered the salience of gender for members, and that gender identification acted as a moderator of the relationship between gender composition and workgroup relationship conflict. Similarly, Randel and Jaussi (2003) found that in cross-function teams, functional social identification was positively related to individual performance, and this relationship was stronger when the individual was more similar to other members in terms of functional background.

Given the more sophisticated theoretical analyses of the psychological antecedents of categorization and particularly identification that have recently appeared, a feasible application of IET to workgroups depends first on a more fine-grained understanding of when and why particular identifications will be activated.

THE IMPACT OF INTERGROUP EMOTION ON RELATIONSHIP AND TASK OUTCOMES IN WORKGROUPS

The specific intergroup appraisals triggered, and the specific intergroup emotions aroused, by identification with the workgroup or with other (possibly multiple) social categories will affect both the *relationship dimension* (i.e., relationships with individuals and groups) and the *task dimension* (i.e., interpretation of issues, policies, procedures) of workgroup life. In this section we discuss the ways in which social categorization and social identification processes may elicit (a) intergroup emotions experienced

on behalf of an ingroup toward other ingroup and outgroup individuals and groups, and (b) intergroup emotions experienced on behalf of the ingroup toward workplace tasks, practices, and policies based on their consequences for the salient ingroup.

Intergroup Emotions and the Relationship Dimension of Workgroup

Group identifications are very likely to shape members' emotional reactions toward fellow workgroup members. In this section we first briefly outline some of the existing work on social identity processes in organizations that has shown that social categorization and group identification processes have an effect on several aspects of relationships in workgroups including workgroup citizenship behavior, workgroup cohesion, and workgroup relationship conflict. Second, we illustrate, based on IET, in which ways intergroup emotions may act as mediators or moderators of these effects.

Citizenship Behaviors

When people strongly identify with their organization they are more likely to work hard to promote the interests of the organization and to engage in activities that advance the organization or fellow team members (Ashforth & Mael, 1989; Haslam, 2001; Van Knippenberg & Ellemers, 2003). When employees identify with the organization they internalize the values and goals of the organization by defining them as part of themselves, and internalized values are a significant predictor of organizational citizenship behavior (Tyler, 1999). Tyler and Blader (2000) studied the question of the influence of social identification on cooperation in organizations and found that the stronger the identification with the organization, the more employees engaged in beneficial behaviors for the organization that were not required or rewarded.

However, there is also some suggestion that at the workgroup level negative feelings such as discomfort with being different may actually lead to an *increase* in team citizenship behaviors. Recently, Randel (2003) examined to what extent cultural identity salience in multinational teams affected team citizenship behaviors. Instead of assuming that the cultural background of team members was important to each other, participants were asked to rate to what extent they thought of their team members in terms of their cultural origin. Contrary to predictions, results suggested that the greater the dispersion of perceptions of cultural identity salience in the team, the more participants displayed team citizenship behaviors. In addition, the author

suggested that individuals in multinational teams may engage more in team citizenship behavior to counterbalance discomfort feelings elicited by the perception of feeling different from other team members.

From the IET perspective, the impact of identification on the presence or absence of citizenship behavior is mediated by emotional reactions (see also [Spector & Fox, 2002](#)). Support for such a position has been accumulating. For example, Tyler and his colleagues ([Tyler, 1999](#); [Tyler & Blader, 2000](#)) have found that workplace identification is more strongly related to emotions such as pride (positive feeling about the organization) and respect (the organization's positive feelings about the employee) than to assessment of overall available rewards, and that those emotions contribute positively to citizenship behaviors. In another study, [Tyler, Degoey, and Smith \(1996\)](#) examined the influence of pride and respect on compliance with group rules and "above and beyond the call of duty" behavior within family, work, university, and political contexts. They found that pride and respect predicted compliance across all contexts, and that pride and respect predicted extra-role behavior in the family, work, and university contexts.

Applying an IET framework to the issue has the added benefit of allowing more specific predictions about the cognitive appraisals (e.g., fairness, coping potential) and emotions (e.g., pride, respect, discomfort) underlying displays of citizenship behaviors toward workgroup members. By establishing under what conditions social identification processes lead to either positive emotions such as pride and respect or negative emotions such as discomfort, guilt, or shame, we may be able to better understand differences in people's motivation to display citizenship behaviors in workgroups. Let us consider two scenarios in which our cross-functional team would feel either ingroup pride or ingroup shame, and what the implications would be for citizenship behaviors. On the one hand, ingroup pride may be elicited by team members' appraisal of the cross-functional team being powerful, accomplished, and in control of an event ([Lazarus, 1991](#); [Scherer, 1984b](#)). In this case, it can be hypothesized that those team members with a higher level of team identification will feel stronger ingroup pride and thus be more likely to multiply citizenship behaviors toward aspects or members of the team that need help, so that the positive collective outcome is maintained at the desired high level of excellence. In other words, in order to protect and nurture the positive image the cross-functional team has, efforts to bring less positive team members up to par will be deployed, in particular by team members strongly identifying with the team. Pride and joy together are other emotions that may lead team members to want to be with each other ([Frijda, 1986](#); [Izard, 1991](#)), and to see the team's environment through rose-colored glasses

(Lazarus, 1991), which in turn may promote team solidarity (Kemper, 1991) and citizenship behaviors. On the other hand, team members may also feel ingroup shame when appraising that the team is responsible for illegitimate and harmful actions toward others in the past. This emotion may encourage pro-social team behaviors that match high team social standards (Lazarus, 1991), and also act as a motivator for team conformity and collective responsibility. Thus, in this case it may be conjectured that those team members with a higher level of team identification will feel greater ingroup shame which in turn is likely to enhance citizenship behaviors in order to maintain these high team social standards and act as a mechanism of socializing other team members (e.g., by restraining certain behaviors that could be shameful).

Cohesion

Self-categorization theorists have argued that the more members identify with an ingroup, the more they will experience *social attraction* (i.e., attraction based on group memberships), as opposed to *personal attraction* (i.e., attraction based on personal qualities), to other members of that ingroup, leading to greater group cohesion and conformity (Hogg, 1992). Personal and social attractions are said to be experienced as positive/negative attitudes or feelings by one person for another in small groups. Personal attraction is believed to be specifically grounded in interpersonal attraction, whereas social attraction is presumed to be based on intergroup attraction and to be determined by the extent to which members reflect the standards, norms, and values of the group. Research has shown that when a social identity is salient in small groups, liking other group members does appear to be based on group-level attraction, rather than interpersonal liking (Hogg & Hardie, 1991; Hogg & Hains, 1996). In the workplace, individuals with higher workgroup identification have been found to exhibit more favorable attitudes and behaviors toward other workgroup members than those less identified (cf., Chattopadhyay et al., 2004; Chatman et al., 1998; Riordan & Weatherly, 1999).

Cohesion has often been considered as “the affective component” of workgroup life and has been referred to as a transient affective state (Leana, 1985), as the chief affective component of group functioning (Harrison, Price, & Bell, 1998), as affective bonds (Mudrack, 1989), and as interpersonal liking and friendship (Zaccaro, 1991). We think IET may help us differentiate between the concepts of emotion and cohesion in workgroups. For example, from the IET perspective, identifications determine appraisals and emotions, which in turn direct the kinds of behaviors that constitute

cohesion. Recall that in groups ranging from political affiliations to nationality, we found that highly identified group members felt more positive emotions toward the group and that those emotions were in turn associated with affiliative behaviors such as wanting to be in close proximity to other group members (Smith et al., 2006).

Moreover, because IET allows us to make predictions about the specific cognitive appraisals, emotions, and action tendencies of individual workgroup members, we can make predictions about specific intergroup emotions (beyond just the positive/negative attitudes proposed by self-categorization theory) that may motivate social attraction in workgroups, potentially leading to workgroup cohesion. An important contribution would be to demonstrate in workgroups that intergroup emotions (i.e., elicited by social identity) lead individuals to action tendencies that reflect social attraction and that interpersonal emotions (i.e., elicited by personal identity) lead individuals to action tendencies that reflect personal attraction. In addition, such an analysis may reveal ways in which social attraction could be motivated by both positive and negative emotions leading to greater workgroup cohesion. In our cross-functional team example, a positive intergroup emotion such as ingroup joy may lead individual members to action active tendencies of wanting to be together (Frijda, 1986), and wanting to celebrate with other ingroup members (De Rivera, 1984), thus nurturing workgroup cohesion. Alternatively, a negative emotion such as fear of an outgroup, which may be represented by a competing outgroup member inside the workgroup (e.g., the marketing team member is attached to the marketing department once her work is finished with the cross-functional team) or outside the organization (e.g., a competing sales force in the field), may lead individuals to look to reinforce bonds with or comfort other ingroup members (Paez et al., 1995), which could also lead to greater workgroup cohesion. This process also has the possibility of becoming self-perpetuating; as Parkinson et al. (2005) noted, greater cohesion increases mutual influence, making it more likely that emotional events will be interpreted, responded to, and acted upon, similarly. Thus, an event that prompts ingroup pride might promote cohesiveness in a way that makes interpretation of a future event more likely to result in ingroup pride, and so forth.

Relationship Conflict

Several researchers have applied the social identity approach to the study of workgroup relationship conflict in demographically diverse workgroups. Relationship conflict refers to disagreements and incompatibilities among

workgroup members about personal differences, such as interpersonal style, attitudes and preferences, and personality, basically non-task-related issues (e.g., Jehn, 1997; De Dreu & Van Vianen, 2001). As previously discussed, the basic argument when applying the social identity approach is that in diverse workgroups individuals will tend to categorize themselves and others into social categories based on visible demographic characteristics (e.g., race, sex, age, etc.), which then in turn lead to ingroup favoritism and biased behavior toward the outgroup. In addition, individuals in workgroups may also categorize themselves and other workgroup members along specific subgroups or so-called *faultlines* (e.g., Black women) (Lau & Murnighan, 1998), the prediction being that members of one subgroup (i.e., ingroup = Black women) will tend to develop negative stereotypes toward members of a target subgroup (i.e., target outgroup = White women) while maintaining positive stereotypes of their subgroup (Prentice & Miller, 2002). The ingroup and outgroup differentiations along subgroups or faultlines may also lead to ingroup favoritism and biased behavior toward the target outgroup, creating aggressive reactions (Labianca, Brass, & Gray, 1998). Thus, subgroup ingroup–outgroup categorizations in workgroups may also result in high levels of intragroup relationship conflict and low levels of satisfaction.

We have previously argued that the intergroup approach to emotions is directly applicable to the understanding of conflict in workgroups – in particular in those workgroups where multiple identifications have become important (Garcia-Prieto, Bellard, & Schneider, 2003). After all, the more diverse the workgroups, the more likely individuals are to experience negative emotions such as anger, frustration, hostility, and anxiety that can result in high levels of relationship conflict and low levels of workgroup satisfaction (Jehn, 1997). For example, ethnic and sex diversity has been found to be related to increased tension and decreased well-being and satisfaction (Jehn et al., 1999; O'Reilly, Caldwell, & Barnett, 1989; Pelled, Xin, & Weiss, 2001; Riordan & Shore, 1997; Tsui et al., 1992).

Because in our approach specific appraisals and distinct emotions intervene between identification and behavior, we argue that IET offers a more detailed analysis than social identity theory of how categorization and social identification processes may shape workgroup members' appraisals of conflict situations (e.g., in terms of goal obstruction, attributions of causality, coping potential) eliciting specific intergroup emotions (e.g., anger, contempt, satisfaction, anxiety, fear, empathy) and action tendencies which may potentially lead to different behavioral conflict management

strategies (e.g., compete, collaborate, avoid, accommodate, compromise; see Thomas, 1976; Gladwin & Walter, 1980). Let us imagine that our cross-functional team has to solve the issue of launching a new product (presented by the marketing representative), which implies some major changes in the production line compared to the existing product lines (involving the production team member). The stage is set for a potential relationship conflict if workgroup members identify strongly to their respective job function and appraise the other function based on negative stereotypes. In a business context, team members will label others' job function affiliation through surface manifestations such as dress or mannerisms (Sawyer, Houlette, & Yeagley, 2006) or deeper manifestations such as attitudes, beliefs, and values (Harrison et al., 1998). In the early stage of the encounters, marketing and production members may appraise outgroup behavior as obstructing ingroup goals and feel contempt toward the outgroup. Action tendencies associated with contempt are looking down on others and indirect aggression such as trickery and deceit (Izard, 1991), as well as prejudice. Although it may constitute a defense mechanism to overcome competition, emotions such as contempt are likely to impact workgroup performance negatively.

In this way more specific predictions can be made about those conditions that lead to more constructive forms of relationship conflict. Moreover, IET may also shed light on the role that different psychological mechanisms – social identification, appraisal, emotion, and action tendencies – may play in determining the success/failure of interventions commonly used to reduce destructive forms of relationship conflict in workgroups, such as the imposition of superordinate goals or task interdependence, and attempts to change social categorizations through crosscutting or re-categorization (Hewstone & Greenland, 2000). For example, IET allows us to better understand how contextual changes in categorization in workgroups may lead to changes in members' social identifications in turn affecting appraisals, emotions, and action tendencies. IET may help guide how contextual changes in categorization are planned in workgroups so that the perspectives of different parties are shifted toward a more constructive approach to the conflict situation. Based on the research on categorization and intergroup emotions done by Yzerbyt et al. (2006) opposing parties of an intergroup conflict situation can be made to see themselves as sharing a common group membership, which leads them to experience similar appraisals, emotions, and action tendencies, and in turn reduces conflict.

Intergroup Emotions and the Task Dimension of Workgroup

Group identifications are very likely to shape members' emotional reactions toward different aspects of the task at hand. In this section we briefly outline some of the existing work on social identity processes in organizations that has shown that social categorization and group identification processes have an effect on several aspects of the task dimensions of workgroups including issue interpretation, information sharing, and task conflict. We then illustrate, based on IET, the ways in which intergroup emotion may act as a mediator or moderator of these effects.

Issue Interpretation

Organizational researchers have studied the cognitive antecedents involved in strategic issue interpretation in depth (Daft & Weick, 1984; Dutton & Jackson, 1987; Gioia & Chittipeddi, 1991). Dutton and Jackson (1987) originally proposed a cognitive process by which strategic issues are interpreted either as threats (based on perceptions that the situation is negative, that there is a likelihood of loss, and that one has little control) or opportunities (based on perceptions that the situation is positive, that gain is likely, and that one has a fair amount of control). These authors argued that the interpretation of strategic issues as threats or opportunities has important consequences for organizational cognitions (e.g., cognitive biases, selective attention and retrieval of information, threat rigidity, etc.), affective reactions (e.g., anxiety or excitement), and organizational behaviors (i.e., centralization and formalization of decision making, risk taking, and direction and magnitude of issue response) (Staw, Sandelands, & Dutton, 1981; Tversky & Kahneman, 1974). This approach, which links issue interpretation (i.e., threat and opportunity) to specific issue responses, has received substantial empirical support (Jackson & Dutton, 1988; Milliken, 1990; Schneider & DeMeyer, 1991; Thomas & McDaniel, 1990).

Such an approach, with its emphasis on identification, appraisal or interpretation of issues, affective reactions, and organizational behaviors, is closely parallel to an IET analysis of the situation. Other research has similarly noted the way that emotions can mediate between identification and issue interpretation. For example, in a study of one municipal authority's attempt to deal with the impact that homeless people had on the organization, Dutton and Dukerich (1991) (see also Dutton & Penner, 1993) found that organizational identity affected the interpretation employees gave to this issue and the level of emotion expressed with regard to the issue, which in turn had an impact on actions taken. In a study of librarians'

responses to various social issues including the homeless, [Pratt and Dutton \(2000\)](#) found that once issues were noticed, they were interpreted in the light of salient social identities and emotions, which in turn lead to issue ownership and potentially to action. These authors further argued that “instead of acting simply as initiators of sense-making by serving to signal an interruption in continuing organization action ... emotions also facilitate the ongoing sense-making process by becoming linked to the interpretation of issues via identities” ([Pratt & Dutton, 2000, p. 126](#)).

It is a central tenet of IET that when social identities become salient for individuals in workgroups, the interpretation (or appraisal) of practices, policies, and issues will be affected, and will in turn impact the emotions evoked. Consider our cross-functional team example and a potential reaction to a new hiring policy at headquarters that aims at attracting and recruiting more women organization wide. If the three men in the team strongly identify with their sexual identity and they appraise the new recruitment policy as threatening to the ingroup’s interests or goals, and if the ingroup is appraised as more powerful than the outgroup, the resulting emotion toward the policy may be resentment and anger, accompanied by the action tendency of opposing that policy. If on the other hand the issue is appraised by male team members from the perspective of a salient cross-functional team identity, it might lead them to appraise the policy as potentially beneficial for the ingroup’s goals (e.g., because of the promise of improved group productivity and innovation due to increased diversity), and the policy is likely to elicit emotions such as happiness and hope, thereby increasing supportive action tendencies.

Obviously one of the benefits of such an analysis is the development of interventions that break negative identification, appraisal, emotion, and behavior cycles. For example, one of the questions we are currently exploring in our work is whether we can break the cycle of Caucasians’ negative appraisals, emotion reactions, and behavioral tendency responses toward diversity management in the workplace through contextual interventions aimed at changing ingroup categorization. In a recent set of studies ([Garcia-Prieto & Mackie, 2006](#)) we asked Hispanic and Caucasian participants to review the application materials of an ethnic minority hired through either a merit or a diversity recruitment procedure. On the one hand, Caucasians appraised the hire of a minority under a diversity procedure as more harmful, and reported more anger and opposing tendencies. On the other, Hispanics appraised the diversity procedure as more beneficial and reported more pride and supportive tendencies. For Caucasians, the relationship between appraisals of harm and opposing

tendencies was mediated by anger. Importantly, highly identified Caucasians were more likely to appraise the diversity procedure as harmful. In a series of follow-up studies we are currently exploring to what extent different ways of framing a diversity procedure (e.g., specific to minorities or specific to women) may elicit different ingroup categorizations (e.g., Caucasian or women) which in turn may change Whites' appraisals, emotions, and behavioral reactions from negative to positive.

Information Sharing

Information sharing in workgroups generally refers to the disclosure of factual, task-relevant information to other members (Stasser, 1992). Past research suggests that information sharing can have a positive impact on workgroup performance (Jehn & Shah, 1997; Saavedra, Earley, & Van Dyne, 1993). First, it has been shown that workgroups will make better decisions when pooling information (Gigone & Hastie, 1993), which might lead to an increase in performance (Hackman, 1990). Second, at least in long-term established workgroups, information sharing leads to less relationship and task conflict increasing performance (Moye & Langfred, 2004).

Past research on information sharing in workgroups has shown that the critical determinant of enhanced workgroup performance is *what* type of information is shared. Considerable research has shown that if suboptimal decisions are often made in workgroups, it is because discussions tend to be biased in favor of exchanging *shared information* (information already known to all members) at the expense of *unshared or unique information* (known by only one or a few members; Stasser & Titus, 1985; for a review see Wittenbaum & Stasser, 1996). Wittenbaum, Hubbell, and Zuckerman (1999) have shown that one reason why group members may be biased in favor of discussing shared information is that they seek mutual personal enhancement, "a process whereby group members develop enhanced evaluations of each other's task capabilities when shared information is mentioned" (p. 967). In other words, it seems that workgroups often fail to take advantage of the unique knowledge and expertise of their members because they feel better about themselves and more reassured when they share known information than when they share unique information.

Researchers working on information sharing in workgroups have not yet fully explored the potential impact of social identification (for recent reviews see Wittenbaum & Stasser, 1996; Wittenbaum, Hollingshead, & Botero, 2004). However, recent research on information sharing in diverse teams has shown that unique information is more likely to be used in the discussion if

held by a social outsider (someone likely to be categorized as an outgroup member) especially if he or she is alone (Phillips, Mannix, Neale, & Gruenfeld, 2004). In line with these results, Van Hiel and Schittekatte (1998) showed that mixed-sex groups (i.e., where one would expect greater ingroup–outgroup categorization based on sex) shared more unique information than same-sex groups. Mennecke and Valacich (1998) also showed that groups composed of members with an established relationship tended to bring up less unique information than groups of strangers.

These results offer the intriguing possibility that information sharing is one domain in which varied social identification might promote positive outcomes. Obviously more research is needed to establish whether and to what extent social categorization and identification affect information sharing. A second question left unaddressed is whether and to what extent emotions (interpersonal or intergroup) may actually moderate information sharing behavior in workgroups (see Raus & Liu, 2004). IET would allow us to address both questions. First, IET would permit us to make predictions about when social categorizations and group identification in workgroups should lead to more or less sharing of common or unique information. Second, it would allow us to explore whether specific intergroup emotions (e.g., ingroup pride or outgroup fear) moderate the effects of identification on different types of information sharing behaviors. Ingroup pride might create an emotional atmosphere known in the persuasion domain to broaden the focus of inquiry and open recipients to unusual, minority, and creative information (Isen, 2000). On the other hand, outgroup fear might induce behavior designed to promote confidence in an established position.

Task Conflict

Task conflicts occur when there are disagreements among workgroup members about how to accomplish tasks, in particular with regards to procedural, policy, and resource allocation issues (e.g., Jehn, 1997; De Dreu & Van Vianen, 2001). In workgroups, individuals often reflect a diversity of educational, training, and socialization experiences (Lovelace, Shapiro, & Weingart, 2001; Mortensen & Hinds, 2001). This type of workgroup diversity has often been associated with positive outcomes, such as a greater potential for creativity and innovation because these differences may reflect a variety of ideas and perspectives (Milliken & Martins, 1996). However, just as with demographic diversity, skill diversity may also lead to strong disagreements (Wittenbaum & Stasser, 1996) potentially creating task-related conflict (Pelled et al., 1999). In fact, there is empirical evidence that workgroups with diversity of functional backgrounds and education can

experience high levels of task-related conflict (Jehn, Chadwick, & Thatcher, 1997; Pelled et al., 1999).

In general, task-related conflict is thought to be less emotional and thus more beneficial to workgroups than relationship-related conflict, particularly when working on non-routine tasks (Jehn, 1994; Van de Vliert & De Dreu, 1994). Task conflict may encourage a better cognitive understanding of the task at hand (Simon & Peterson, 2000) and has been shown to lead to greater team confidence and effectiveness (Alper, Tjosvold, & Law, 1998; De Dreu & West, 2001; Jehn, 1995). However, a recent meta-analysis revealed that both task and relationship conflicts may be negatively related with workgroup outcomes (De Dreu & Weingart, 2003). The average intercorrelations between task and relationship conflicts are quite high (.52 according to De Dreu & Weingart, 2003; and .47 according to Simons & Peterson, 2000). In fact, increasing attention has been paid to the interactions between task- and person-related conflicts, and the dynamic nature of conflict over time by which task-related conflict may become person-related conflict (or vice versa) (Eisenhardt, Kahwajy, & Bourgeois, 1997; Janssen, Van De Vliert, & Veenstra, 1999; Jehn & Mannix, 2001), both having performance implications.

In contrast to the traditional view that relationship conflict is emotional, whereas task conflict is cognitive, Yang and Mossholder (2004) have argued that conflict should be considered as conceptually independent from emotion. In their view, the experience and expression of negative emotions in workgroups may in turn determine members' subsequent conflict-related behaviors. They also note that such emotions can also impact the perception of conflicting issues, thus re-triggering the appraisal, emotion, and behavior cycle. To bolster such views, IET research might first demonstrate that differing social identifications shape workgroup members' appraisals of conflict situations eliciting specific intergroup emotions and action tendencies that may potentially lead to different behavioral conflict management strategies. IET could also help us identify if there are specific negative (or positive) intergroup emotions that are more likely to be associated with relationship conflict versus task-related conflict. For example, some authors have documented that guilt focuses on the shortcomings of an action, whereas shame focuses on the shortcomings of the actor (Lewis, 2000). At the group level, then, events that instigate ingroup guilt might focus the group's attention on task performance issues, whereas events that instigate group shame might make relationship conflict more likely. As in the case with issue interpretation, analyses of the emotional consequences of the activation of certain identifications and their

attendant appraisals should also make obvious interventions that interrupt the identification–appraisal–emotion cycle.

In sum, the application of an IET framework to the antecedents and consequences of emotional experience in groups holds the promise of a finer grained analysis of when such emotions moderate or mediate the now-well-established impact of group membership on workgroup relationships and task outcomes. IET also offers some specificity about the types of opposition or support that particular people or tasks in the workplace are likely to encounter because of the emotions they engender. Finally, IET also offers a perspective on when group emotions are likely to be shared or varied in a workplace setting. As it stands, the literature appears to suggest that shared affectivity may facilitate positive intragroup relations (Barsade, Ward, Turner, & Sonnenfeld, 2000), although exploration of this topic is just beginning. In contrast, the case is less clear for task outcomes. Although emotional group harmony seems necessary to eliminate destructive forms of conflict and motivate group-level action, it is not yet clear whether conflicting intergroup emotions, if well managed, might not spark the extra productivity or creativity that makes for successful group performance (Milliken, Bartel, & Kurtzberg, 2003).

FUTURE DIRECTIONS

In this section we describe some more general promising future research directions for research on intergroup emotion and workgroups.

The first topic to which we would like to call attention is the study of intergroup emotion in workgroups across *time*. Time has come to be seen as a fundamental issue in workgroup research and theory (for a review see Arrow, Poole, Henry, Wheelan, & Moreland, 2004). For instance, empirical research has shown that time affects how workgroup members categorize one another. As described by Harrison et al. (1998), workgroups that spend more time together will focus more on deeper level diversity characteristics than on surface-level diversity. In the initial stage of a workgroup's life, members will categorize themselves at first in terms of demographic characteristics or other detectable diversity characteristics such as domain of specialization or job title. As the workgroup evolves over time, perceptions of other members shift and attention is more devoted to not immediately detectable features such as personality, values, norms, etc. Harrison et al. (2002) replicated these findings. In addition, research on the temporal aspects of workgroups has also shown that time affects workgroup

outcomes, including conflict and information sharing discussed in this chapter. In a longitudinal study of workgroup conflict, [Jehn and Mannix \(2001\)](#) found that workgroups that performed better were more likely to have lower levels of relationship conflict in the beginning of interaction, with an increase toward project deadline, and moderate levels of task conflict at the mid-point of the interaction. With regards to information sharing, Larson has shown ([Larson 1997](#); [Larson, Foster-Fishman, & Keys, 1994](#); [Larson, Christensen, Abbot, & Franz, 1996, 1998a](#); [Larson, Foster-Fishman, & Franz, 1998b](#)) that workgroup members tend to mention more shared information earlier in discussion than unshared information. In part, his research suggests that workgroup members mention unshared information later during discussion because they have run out of shared information to discuss.

It has been recently suggested that theoretically, workgroup performance can actually be conceptualized as a series of related input-process-outcome (IPO) episodes over time ([Marks, Mathieu, & Zaccaro, 2001](#)). Marks et al. contend that workgroups oscillate between action phases and transition phases: IPO episodes are nested in action and transition phases, so that outputs generated from processes that occur during a transition phase can become inputs for the next action phase. In action phases, workgroups are engaged in activities directly contributing to their goal accomplishment, whereas in transition phases, workgroups go through evaluation and/or planning activities that could guide them toward their goal accomplishment. Interpersonal processes, such as conflict management, motivation, or confidence –building, are expected to occur naturally, sometimes during action phases, sometimes during transition phases.

A temporal analysis of workgroups concurs with appraisal theorists who view emotion as a series of related emotional episodes ongoing in time ([Parkinson, 2001](#); [Scherer, 2001](#); [Frijda, 1993](#); [Russell, 2003](#)). Emotions are inherently time-dependent as they occur at a specific point in time and are limited in duration ([Frijda, 1994](#)). [Scherer \(2001\)](#) has suggested that the appraisal process should be conceived as a continuously updating sequence of cognitive evaluations or *checks* that allow the individual to adapt to the ongoing situation by producing a suitable emotion response. As a function of information coming from the ongoing situation, action tendencies can be modified to become specific behavioral responses to a specific aspect of the situation ([Frijda, 1986](#)). According to [Russell \(2003\)](#), when individuals note a change in their core affect (i.e., pleasantness and arousal states) and make attributions about its causality, it signals the beginning of an emotional episode. Changes in core affect and attributions combine with aspects of the

situational context, the individual's overt behavior, and physiological changes as input to a categorization process by which the individual consciously decides whether he or she is angry or sad, for example.

Applying Russell's (2003) analysis to intergroup emotions, we have recently argued (Smith & Mackie, 2006) that when an event occurs that is relevant to a group membership (e.g., learning of bombing attacks carried out by Arab Muslims), it may trigger changes in core affect and attributions which then lead to emotional labeling and the onset of an intergroup emotion episode. Often emotion episodes are not reactions to unique events, but to ongoing, recurrent series of events in time with a single underlying theme (Frijda, 1993). Thus, a recurrent series of related intergroup events under the same theme in a workgroup (e.g., sales member interrupting production member when she speaks) will lead to an intensification of emotional reactions and action tendencies to later intergroup events. We have argued that there may be several reasons why intergroup emotional reactions, even to the same or similar events, differ from one time to another including: the subjectivity of appraisals, the possibility that multiple emotions are elicited by the same intergroup event, the variability in group identification, and emotional regulation (see Smith & Mackie, 2006 for details). But perhaps the most pertinent of these aspects to the current discussion involves the variance in group identification. Indeed, past research has shown that group identification is highly context-dependent and may easily change in time (e.g., Ethier & Deaux, 1994). Any shifts in workgroup member identification in time (e.g., from identifying primarily as a production team member to identifying primarily as a Black female) will inevitably result in changes to appraisals, emotion, and behavioral tendencies.

The second topic for future research, closely related to the first, involves the investigation of feedback loops and bi-directional causal links between components of intergroup emotion in workgroups. To date, emotion researchers have mostly focused on describing unidirectional effects (i.e., cognitive appraisal processes producing emotion, emotion affecting cognition in the form of judgment and decision making, and emotion being perceived and cognitively represented). However, as pointed out by Scherer (2003), one of the most intriguing aspects of the cognition-emotion interaction is the recursive chaining that can be shown to exist between these influence processes. Similarly, recent research on group-based emotions has shown that bi-directional or feedback loops may exist between identification and emotion (Kessler & Hollbach, 2005). In a study of the relationship between east and west Germans, Kessler and Hollbach (2005) found that happiness toward the ingroup and anger toward the outgroup

increased identification, and happiness toward the outgroup and anger toward the ingroup decreased identification. Moreover, they found that higher intensity emotions lead to greater changes in identification. Other work has documented the effect of (appraisal-triggered) emotion on appraisals (Keltner, Ellsworth, & Edwards, 1993; Lerner & Keltner, 2000; Tiedens, 2001; Tiedens & Linton, 2001), such that the generation of an emotion may then make emotion-consistent future appraisals more and more likely. Our own work on the feedback loops between appraisal and emotion-generated behavioral intention, behavior, and re-appraisal, re-reaction, and re-adjustment of motivational tendencies offers another example of the recursive chaining of processes that underlie a group's emotional life (Maitner et al., 2006, 2007).

The most obvious implication of thinking about intergroup emotion in workgroups as time-dependent phenomenon that may involve bi-directional causal links is methodological. A more dynamic view of intergroup emotions in workgroups would necessarily entail greater use of longitudinal designs in which identifications, appraisals, emotions, and action tendencies are measured over time (e.g., multiple waves of questionnaires, experience sampling, etc.). A more substantive implication involves the possibility that the repetition of similar intergroup events in workgroups may lead to chronic intergroup emotion cycles (identification–appraisal–emotion–action tendency), which may become automatic. Once intergroup emotion cycles become chronic, they are likely to feed back into intergroup emotion reactions at a later time in the life of the workgroup. This last point leads us to evoke a more practical implication, previously discussed throughout this chapter, which is the possibility of developing interventions that break negative identification–appraisal–emotion–action tendency cycles in workgroups.

CONCLUDING REMARKS

Throughout this chapter we have suggested ways in which an IET analysis of the intervening role of emotions between identification and workgroup outcomes might prove beneficial. We have argued that whenever a shared group membership (i.e., the workgroup) or varied group memberships (i.e., demographic categories) become salient, the way members appraise a given situation, react emotionally about it and act on it, is a function of their identification with these group memberships. We have reviewed some evidence that indicates that intergroup emotions are elicited by categorization and identification. In addition, we have described some of the

antecedents of shared and varied group memberships in workgroups that may in turn elicit shared or varied intergroup emotions. We have also speculated about some of the ways in which intergroup emotions may act as mediators or moderators between identification and relationship and task workgroup outcomes. Finally, we have pointed to two promising future research directions for research that suggest a more dynamic view of intergroup emotion in workgroups.

An IET analysis of the emotional consequences of group interaction for intra- and intergroup behavior thus offers a particularly generative medium for the growing interest in the antecedents and consequences of emotion in workgroups and the workplace more generally. At the same time, the relationship- and task-related interactions of workgroups offer a crucial testing ground for IET, providing a microcosm of the interplay of theoretically important variables in an environment with high stakes, not just for individual workgroups and their members, but also for companies, corporations, and national and international economies. Finally, we believe that the already accumulating research on workgroup and workplace emotion, as well as the kind of research directions that we have suggested here, will only further confirm the essentially socially constructed nature of emotion. Emotion is just as much a product of social processes as it is of intraindividual ones and no where can this be seen more clearly than in the contemporary workplace.

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CHAPTER 8

AFFECT AND GROUP ATTACHMENTS: THE ROLE OF SHARED RESPONSIBILITY

Edward J. Lawler

ABSTRACT

This paper theorizes the role of shared responsibility in the development of affective group attachments, interweaving ideas from social exchange and social identity theories. The main arguments are that (1) people engaged in task interaction experience positive or negative emotions from those interactions; (2) tasks that promote more sense of shared responsibility across members lead people to attribute their individual emotions to groups or organizations; and (3) group attributions of own emotions are the basis for stronger or weaker group attachments. The paper suggests that social categorization and structural interdependence promote group attachments by producing task interactions that have positive emotional effects on those involved.

INTRODUCTION

This paper theorizes the role of emotion and affect in person-to-group attachments. Affect is one of three bases of attachment found in the literature

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on organizations, the other two being instrumental and normative (e.g., Kanter, 1968). The prime question posed here is: how and when do people develop *affectively-based* attachments to groups and, in the process, come to value the group identity *in and of itself*. This typically involves the transformation of an instrumentally-based person-to-group tie to an expressively-based person-to-group tie. Group attachments are defined here as the strength of the ties individuals have to a social unit (e.g., local group, larger organization, community). Such attachments presuppose an existing group membership or group identity (e.g., definitions of self and others in terms of the group membership). To specifically address the question above, I use and apply recent theories of emotion and affect in social exchange (Lawler, 2001; Lawler & Yoon, 1996; Lawler & Thye, 1999, 2006), and forge connections between social exchange and social identity frameworks.

Group attachments can be construed as a mechanism through which large, impersonal organizations generate and sustain high levels of group-oriented behavior such as commitment and citizenship behavior. These attachments to the organization may be even more important when members are physically separated and communicate from a distance, as is more and more common in the workplaces of today. Group attachments also may be important if the organization moves managers or employees frequently to different locations or if there are significant costs associated with turnover. Affective ties in which the organizational identity becomes self-defining for employees should have strong effects on employees' willingness to make personal sacrifices for the organization.

Affective attachments involve enduring feelings or sentiments about a group or organization. My theoretical analysis ties these attachments to transitory emotions or feelings. Specifically, there are four interrelated points based on a larger program of work (e.g., Lawler, 2001; Lawler & Yoon, 1996; Lawler & Thye, 1999, 2006). First of all, the affective attachments of people to groups develop from the episodic or transitory emotions or feelings they experience within the group. Second, recurrent social interactions or exchange are the fountainhead or underlying engine producing the transitory emotions and feelings. Third, under certain structural or task conditions transitory emotions, repeatedly experienced, are associated with or attributed to a group or larger organization. Fourth, group attributions of individual emotions or feelings produce more enduring affective sentiments about that group. More specifically, if people attribute transitory emotions to a common group affiliation then that group becomes an object of affective attachment if the emotions are positive, but an object of affective detachment if the emotions are negative (see Lawler, 2001).

Simply put, people become more affectively attached to groups within which they repeatedly or regularly experience positive emotions or feelings, insofar as they attribute these emotions to the group (Lawler, 2001). When this occurs, the group membership or identity takes on greater intrinsic value.

Members of groups and organizations develop attachments of varying types and strength to other group members (i.e., person-to-person ties) and/or to the group or organization as a social unit (person-to-group ties). This suggests an important contrast between *common-bond* groups, which are based on the attachments of members to each other, and *common-identity* groups, which are based on the direct ties of members to the group itself (Prentice, Miller, & Lightdale, 1994). People may remain in a group, therefore, primarily because of the ties developed with other members (e.g., coworkers, colleagues) or because of characteristics of the group (e.g., values, identities). Some research indicates that groups based primarily on interpersonal ties or interpersonal cohesion generate weaker person-to-group attachments than groups based primarily on the common ties of individuals to the group (Brewer & Gardner, 1996; Prentice et al., 1994). The capacity of groups to mobilize members and to orient their actions toward collective goals is due in no small part to the strength of person-to-group attachments. I adopt a sharp distinction between interpersonal (person-to-person) and group (person-to-group) attachments, as proposed by the social identity tradition (Hogg, 2004; Kramer, 2006; Tajfel & Turner, 1986; van Vugt & Hart, 2004) and some sociological theory (Mead, 1934; Parsons, 1951). The implication is that actors can be strongly attached to the group without necessarily being strongly attached to its members.

That person-to-group attachments have important effects, independent of interpersonal ties, is indisputable. There has been substantial research on such effects over the last 10 years, most of it informed by social identity theory and organized under the rubric of “group identification” (e.g., Hogg, 2004; Kramer, 2006; van Vugt & Hart, 2004).¹ As a whole, such research indicates that strong person-to-group attachments lead individual actors to take account of and be more responsive to group interests, to conform to group norms, to trust other members of the group, and to contribute more in the face of social dilemmas. Person-to-group attachments may be a solution to social dilemma problems (e.g., Kramer & Brewer, 1984; McAuliffe, Jetten, Hornsey, & Hogg, 2003). If members are strongly attached to an organization, they should require less formal monitoring and, in this sense, person-to-organization ties reduce the transaction costs associated with maintaining compliance. To understand the sources of affective group attachments, I interweave basic ideas of the social identity tradition in

psychology with those of the social exchange tradition in sociology, and treat an emotional/affective process as a unifying mechanism or point of convergence for these traditions.

CONCEPTUAL BACKGROUND

My argument builds on Homans's (1950) classic work. He suggests that any group context can be analyzed in terms of the *activities* (tasks) people are engaged in, the *social interactions* (exchange) involved in the activities, and the *sentiments* (affect) generated by the social interactions. In Homans's (1950) analysis, frequent interactions around joint activities, among the same actors, were the basis for interpersonal sentiment and for enduring relations and groups. I take off from this framework and argue that *joint* activity and common emotional responses to it are bases for sentiments about group memberships and identities (see Lawler, 2006).

This paper specifically uses principles from two interrelated theories of emotion in exchange: the *theory of relational cohesion* (Lawler & Yoon, 1996; Thye, Yoon, & Lawler, 2002) and the *affect theory of social exchange* (Lawler, 2001, 2006). Together these theories explain how an instrumentally-based exchange can foster more relational, group-oriented behaviors (e.g., cohesion, commitment). The general line of argument is that, in the context of opportunities and instrumental incentives to form mutually-profitable exchanges, repeated exchanges make actors feel good whereas failures to exchange make them feel bad. When experienced repeatedly, these feelings tend to promote perceptions of unity or cohesion in relations and groups (Lawler, Thye, & Yoon, 2000; Lawler & Yoon, 1996), which then shape future exchanges and interactions. The most important condition or mechanism is the degree that the joint tasks or activities generate a *sense of shared responsibility*, that is, the perception that members are jointly and mutually responsible for the results of the exchange or interaction (Lawler, 2001). The *affect theory of social exchange* argues that when structural conditions, such as how work is organized, generate greater sense of shared responsibility, individuals are more likely to interpret their feelings as jointly produced and due to the common group affiliation or identity. If the emotions are positive and attributed to the group, affective attachments to the group become stronger; if the emotions are negative and attributed to the social unit, affective attachments become weaker (Lawler, 2001). Whereas contemporary social exchange theories tend to focus on cognitions, such as risk and trust, as explanatory mechanisms, the *affect theory of social*

exchange puts emotions and affect at the very center of social exchange explanations. This theory is the focus of this paper.

The term “social exchange” refers to interactions or relations among individuals within which each provides the other valued benefits. The exchanges may be implicit or explicit, negotiated or not negotiated, and the benefits can be anything, tangible or intangible that actors value. One can argue that virtually any social interaction involves an exchange of some sort and, thus, my *affect theory of social exchange* should be applicable beyond more strictly- or narrowly-defined exchange situations (Lawler, 2002). This paper develops some of these broader implications (see also Lawler, 2003; Lawler & Thye, 2006). The relational and emotional themes of the theory make it a viable framework for forging connections between the interpersonal and network focus of most social exchange theories (Cook, 2005; Molm, 2003) and the person-to-group focus of most social identity theories.²

To summarize, this paper applies and broadens the *affect theory of social exchange* to analyze how and when members of a group develop stronger affective attachments to their group. A group attachment assumes an already existing group identity, and this makes it feasible to integrate notions from social exchange and social identity to address this problem. The mechanisms by which structures of exchange and group identities produce affective group attachments involve repeated (successful) interactions, transitory emotions, and a sense of shared responsibility. Before proceeding with the task of interweaving ideas from social exchange and social identity theories, however, we need to define and discuss emotion and affect.

Concepts of Affect and Emotion

The literatures on psychology and sociology of emotion reveal significant variation and some inconsistency in how basic terms are used. I adopt a standard definition of emotion as positive or negative evaluative states that have physiological, neurological, and cognitive elements or manifestations (Izard, 1991; Kemper, 1978). The terms “emotion” and “feeling” are used interchangeably here and in related works (e.g., Lawler, 2001; Lawler & Thye, 2006; Lawler & Yoon, 1996). Affect is generally construed as an overarching concept, subsuming both transitory feelings that respond to situational stimuli and enduring affective states that are often termed moods or sentiments. Moods are diffuse feelings, without objects or targets, and sentiments are enduring feelings attached to or about objects. In my approach, emotions and feelings are episodic products of social interactions

and affective attachments are enduring sentiments about relations and groups.

In recent years, there has been a virtual explosion of research in the neuroscience of emotion, some of which informs my approach to emotion. Damasio's (1999) pioneering work distinguishes feelings from "feeling feelings." Feelings entail neurological states of the organism that are wired, learned, and unconscious; they are not perceived or "felt" by the individual. When individuals "feel feelings," there is an awareness of the body's response to external stimuli and, more importantly, of the distinction between one's bodily organism and environmental conditions. One implication of this is that emotions produce organism-wide neurological effects, such that actors who feel good, feel good from head to toe and actors who feel bad, feel bad from head to toe. A second implication is that "feeling of feelings" is a fundamental source of consciousness of self (Damasio, 1999). An actor's rudimentary sense of self develops from the experience of emotions because of the information emotions provide about one's connection to environmental conditions or stimuli. Damasio has not analyzed social interaction in groups, but it is a relatively short leap to query whether the emotions people experience in social interaction with others can become associated with or attached to social units that bring them together or represent a larger context for their interaction. Social identity and social exchange theories each contain useful ideas for addressing how this might happen.

SOCIAL IDENTITY AND SOCIAL EXCHANGE

Talcott Parsons (1951) argued that person-to-person ties and person-to-group ties are fundamental dimensions of social order. To ask how social order comes about and is maintained is to ask about how person-to-person and person-to-group ties are interconnected. Social identity and social exchange theories approach this order problem from different starting points. Social identity starts from the idea that people categorize self and others and act differentially toward people who fall in different categories. Relations and groups are based on common social categories and, in particular, the social identities generated by these. Person-to-group ties or affiliations involve common social categories or identities. Social exchange theory starts from the idea that people seek out and interact with others from whom they anticipate valued rewards and benefits (Molm & Cook, 1995). They form and maintain relations as long as they receive valued benefits that are not readily available elsewhere. Whereas relations and groups are instrumental in social

exchange theory, they are non-instrumental or expressive in social identity theory. Moreover, social identity emphasizes the person-to-group dimension, and social exchange emphasizes the person-to-person dimension. I suggest below that the non-instrumental analyses of person-to-group ties in social identity theory are complementary to the instrumental analyses of person-to-person ties in social exchange theory.

Social Identity Theory and Research

Social identity theory characterizes groups and person-to-group ties in cognitive terms (Brown, 2000; Tajfel & Turner, 1986). A group exists on a psychological level when "...two or more people define themselves as members of [a group] ..." (Brown, 2000, p. 3). To be a group means there is an implicit, if not explicit, demarcation of and recognition that other groups or social categories exist. If two or more actors perceive themselves as a group, they will act in a group-oriented way (toward in-group and out-group members), even *without* interacting with each other and *without* collective goals. One of the most fundamental and provocative propositions of the theory is that social categorization (of self) is sufficient to generate group formation and group-oriented behavior. Group formation essentially entails an emergent group identity. Early – now classic – research by Tajfel and associates offered support to this proposition, where subjects do not interact or see one another, but are simply given nominal labels and then asked to allocate rewards to in-group and out-group members (Tajfel, 1969; Tajfel & Turner, 1986).

In the social identity tradition, the underling conditions for group formation (i.e., a group identity) boil down to *perceived commonality* (i.e., being in the same category) and *perceived distinctiveness* (i.e., being different from other categories). Recognizing a common or shared group membership (category) induces psychological group formation and, by implication, forms or activates a group identity (Tajfel & Turner, 1986). Where the categories come from is given relatively little attention. The contribution is to show how subtle group effects are, how easy they are to generate, and the important consequences for relations within and between groups (Hogg, 2004; Turner & Reynolds, 2004). Extrapolating from this viewpoint, social interaction is not necessary for attachments to a group to form and shape behavior.

Several studies have suggested situational conditions under which social categorization-to-group-formation (group identity) effects are stronger or weaker. For example, Ellemers, Spears, and Doosje (1997) found that

defining an individual task as a group task enhances the salience of the group category (in-group identity) which, in turn, promotes group attachment (commitment). Brown and Wade (1987) revealed that intergroup *cooperative interaction* around a common goal promotes the perception of a single overarching group that bridges in- and out-group boundaries (see also Dovidio, Gaertner, & Validzic, 1998; Gaertner et al., 1990). Rabbie and associates showed that group formation occurs especially when actors perceive underlying interdependencies (Rabbie & Horwitz, 1988); moreover, these perceptions develop from repeated interactions among members. Finally, Hogg and colleagues demonstrated that social categorization promotes group formation primarily when the social situation involves substantial uncertainty, suggesting that aside from its self-evaluation effects, social categorization is an uncertainty-reduction mechanism (Grieve & Hogg, 1999; Hogg & Mullin, 1999). Extrapolating, the research suggests that stronger group identification or attachment should occur when group members have *shared, cooperative tasks or experiences*, when they face *high uncertainty*, and when they *perceive interdependence*. These conditions are typically present in social exchange contexts, which suggest the potential for building bridges across these theoretical traditions.

Overall, social identity theory adopts a relational approach to person-to-group ties or attachments, emphasizing the self-defining, self-enhancing, and uncertainty-reducing effects of group or organizational memberships and identities. It assumes that people form and maintain relations based on meaningful commonalities or similarities, but it relegates affective processes to a subsidiary role and downplays the effects of recurrent interactions among group members as well as the structural conditions giving rise to such interactions. These may be especially important to understand variations in group attachment, and social exchange theory can elaborate the structural and interaction conditions.

Social Exchange Theory and Research

Contemporary exchange theory in sociology has been informed largely by the structural (network) approach of Emerson (1972) and his emphasis on power and reward (profit) allocations. Since the mid-1990s, there has been increasing interest in the question of how enduring relations and groups develop in the context of social exchange because it is well-known that relations can endure even if better payoffs can be found or are readily available elsewhere (e.g., Uzzi & Lancaster, 2004). To deal with this, ideas have been imported from psychology, economics, or rational choice theories

(Molm, 1997, 2003): one class of explanations for stable, enduring relations centers on uncertainty, risk, or trust (Kollock, 1994; Molm, 2003), and a second class of explanations focuses on affect (Lawler & Thye, 1999; Lawler & Yoon, 1996). One can interpret “enduring relations” as implying a rudimentary person-to-unit (i.e., relation) attachment.

In an influential study of uncertainty reduction in exchange, Kollock (1994) conducted an experiment that compared two markets, one in which the quality of products was known (low uncertainty) and one in which the quality of products was not known (high uncertainty). He found that “commitments” (defined as repeated exchange among the same pairs of actors) occurred more often under conditions of high uncertainty. Repeated exchange with the same partners was an uncertainty-reduction strategy that could lead actors to forego or to miss better prices in the market. Research by Molm and colleagues has shown further that commitment and positive feelings about an exchange partner are stronger under conditions of higher risk because cooperation under these conditions fosters positive attributions about the partner’s intentions (Molm, 2003).

Elaborating the role of uncertainty and risk, Yamagishi and Cook have proposed *trust* as the *glue* around which exchange relations form and are held together (e.g., Cook, 2005; Yamagishi & Yamagishi, 1994). Defining trust as a *generalized* expectation for others, they argue that trust in others makes it possible for actors to take the necessary risks to establish new relationships, whereas institutional *commitments* inhibit such risk-taking. Commitments generate a bias toward staying in existing relationships and thereby lead actors to miss opportunities for new joint endeavors and mutually-beneficial exchanges. In an interesting series of studies, Cook and Yamagishi compare trust and commitment levels within Japanese and American business practices. They find that Americans have higher levels of generalized trust in others than Japanese and, therefore, rely less on family and other institutional ties in their business activity. In social exchange theory and research, uncertainty, risk, and trust are all cognitive phenomena that point to the importance of expectations of cooperation by partners.

Overall, in contrast to the relational approach of social identity theory, social exchange theory adopts a transactional approach to person-to-person and, by implication, to person-to-group relationships, analyzing what benefits actors receive from others or the group and what benefits they provide in return to others or the group. Trust and positive affect are central, although the primary attachments of interest in this tradition are to other members rather than to the group. Nevertheless, the transactional focus of exchange theory and relational focus of social identity theory can

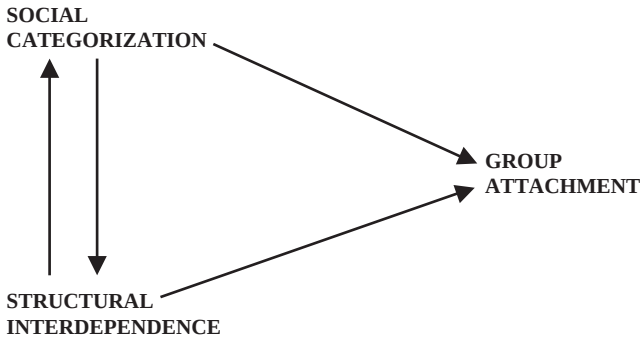


Fig. 1. Social Identity and Social Exchange.

be viewed as complementary. They point to analytically distinct exogenous conditions for group attachments, which are essentially two sides of the same coin. Fig. 1 represents a first step at interweaving some of the basic notions.

Social exchange theory explicitly assumes that structures of interdependence shape who is likely to interact with whom, and where among a set of actors, the strongest relationships are likely to form. Interdependencies have such effects because of the incentives to exchange that are built into the structure. Social identity theory implies that people who fall within similar social categories are more likely to have access to and interact with each other, and as they develop a common group identity they will treat each other more favorably. Although the exogenous conditions – social categorization (group identity) and structural interdependence – are analytically distinct, they also are interrelated in some contexts. As the figure portrays, interdependencies can be a basis for social categories and social categories can foster interdependencies. The next section specifies how and when social categories and structural interdependencies generate affective group attachments.

THEORIES OF AFFECT IN EXCHANGE

This section addresses two related theoretical questions. First, what are the endogenous processes linking these exogenous conditions to group attachments? Second, what one can get from the transitory emotions, felt in exchange or interaction, to enduring attachments or sentiments about

groups? I draw relevant principles from *relational cohesion theory* and the *affect theory of social exchange*. These are discussed, in turn, below.

Relational Cohesion Theory

The theory of relational cohesion proposes an emotional or affective explanation for enduring relations in social exchange (Lawler & Yoon, 1996), which contrasts with the uncertainty-reduction explanation above. Fig. 2 diagrams the theory. It argues that power dependence conditions produce relational commitments through an *endogenous* process, consisting of three moments or steps: (1) *the frequency of successful exchange*, (2) *the positive emotions* or feelings that are generated by successful exchange, and (3) *perceptions of unity or cohesion in the exchange* relation. The underlying theoretical rationale is that consummating exchange (all other things equal) is an accomplishment or success, and positive individual feelings result from this success and in turn lead to more inclusive perceptions of self and other³. The perception of unity or relational cohesion is the proximal cause of commitment behaviors such as staying in the relation, providing each other unilateral benefits (gifts), and engaging in new joint ventures that involve risk or require trust. In sum, the exchange *frequency-to-emotion-to-cohesion* process constitutes the intervening mechanism between structures of dependence or interdependence and behavioral forms of commitment.

Several experiments have supported the main predictions of relational cohesion theory for commitment behavior (Lawler & Thye, 2006; Lawler et al., 2000; Lawler & Yoon, 1996, 1998). Equal power (dependence) relations and those with greater total power (mutual dependence) in them promote commitment through the posited endogenous process: *frequency-to-emotion-to-cohesion*. Moreover, the mediation is complete, meaning that the impact of structural dependencies on commitment are indirect and operate through the emotions and feelings (e.g., Lawler & Yoon, 1996).

Other research findings also are noteworthy. First, research shows that the relational cohesion process operates under unequal power, even though it is clearly stronger under equal than unequal power (Lawler & Yoon, 1993, 1996, 1998). The only exception is when the low-power actor is virtually



Fig. 2. The Theory of Relational Cohesion (Adapted from Lawler and Yoon (1998)).

The model in Fig. 3 suggests that some effects of social categorization on group formation may be mediated by an affective process and, in social exchange, relational ties can generate or signal an emergent group identity. Repeated success at coordinating behavior (interaction) or exchanging valued benefits, not only makes people feel good, but also fosters a stronger sense of unity (cohesion). This implies an emergent sense of *we* or collective identity or the reaffirmation of an existing common identity. The *affect theory of social exchange* can build on the model in Fig. 3 because it elaborates structural conditions for emergent group identities and explains how emotions become associated with or attached to groups in this process (Lawler, 2001; Lawler & Thye, 2006).

The Affect Theory of Social Exchange

This section presents the main elements of the theory. I focus on the orienting assumptions about interaction and emotion, and the central or core propositions. Whereas the initial formulation (Lawler, 2001) focuses strictly on social exchange, I recast it here in more general terms as a theory about affective processes in task-oriented social interaction.

Orienting Assumptions

Below are six underlying assumptions of the theory. These articulate and justify the broad connections between social interaction and emotion and set the stage for theorizing conditions that generate affect directed at the group. Where appropriate, direct or indirect empirical support for the assumptions is briefly explained or noted.

First, *social interaction involves joint tasks or activities that actors accomplish with other people*. Even simple behaviors, such as getting on a bus, involve a joint task or activity. If there is a line, each person needs to coordinate their moves to the door to avoid unwanted bumping, dirty looks, etc.; moreover, in dropping money in a slot (or using a metro card), riders interact with the bus driver who watches to see that they pay while they look to see if he knows they have paid. The subtle ways that interdependencies are manifest and play out in such simple everyday social interactions are treated in the classic work on symbolic interaction by George Herbert Mead (1934). In most research on groups, the implied *jointness* of tasks or activities is taken for granted and not subject to careful analysis. Such jointness can vary significantly, and this is important to my analyses.

Second, *social interaction generates global feelings along a positive-negative dimension*. Virtually any episode of interaction should have immediate, global emotional effects such as *feeling good* or *feeling bad*. If the interaction is successful, the feelings are positive; if unsuccessful, the feelings are negative.⁴ A distinction is made between “global” and “specific” emotions. This contrast stems from Weiner’s attribution theory of emotion (Weiner, 1986). He posited that emotional responses occur on two levels. The immediate responses are global (he used the term “primitive”) and involve automatic, unmediated positive, or negative responses to a situation. These are dependent on outcomes, but independent of cognitions and attributions (Weiner, 1986). The second level is that of specific emotions, which are attached to particular objects (i.e., self and other) and are generated by an attribution process. Specific emotions stem from *cognitive work* interpreting the sources or causes of these global emotions and feelings (Weiner, 1986). Global emotions are comparable to the “feeling of feelings” in Damasio’s (1999) neurological analyses of emotions. Neuroscience research indicates that emotions are experienced and felt on multiple levels, and the global-specific distinction is a useful way to represent this (Damasio, 1999; LeDoux, 1996).

Third, global emotions are internal reinforcing or punishing stimuli. Rewards or reinforcements (as well as punishments) produce immediate internal organism-level responses, that is, feeling good or feeling bad. The immediacy of global emotions should render them powerful reinforcers. In Bandura’s (1997) terms, these are self-reinforcements that constitute a distinct class of reinforcement. Moreover, recent research in neuroscience shows that rewarding stimuli activate different regions of the brain than punishments; correspondingly, feelings of happiness and sadness are associated with different brain activation patterns (Blood & Zatorre, 2001; Damasio et al., 2000; Small, Zatorre, Dagher, Evans, & Jones-Gotman, 2001). Such findings imply a significant correlation between subjective feelings and neurological events in the brain (Damasio et al., 2000).

Fourth, *actors in interaction strive to reproduce global positive emotions and avoid global negative emotions*. This is a motivational assumption that complements the third assumption above. Feeling good is something people want to re-experience and feeling bad is something they wish to avoid in the future. It is well known that emotions are potentially powerful forces in organizing and shaping patterns of behavior because of their motivational properties (Izard, 1991). Thus, if a work organization is a context for feeling good, people should be motivated to stay, to be more involved, to enact citizenship behavior, avoid absenteeism, etc. Meyer, Allen, and Gellatly (1990), in a review of work on organizational commitment, makes a telling

comment, indicating that employees with instrumental commitment stay with an organization “because they need to;” those with normative commitment stay because “they believe they ought to;” and those with affective commitment stay because “they want to.” The last reflects the motivational property of emotions.

Fifth, *global emotions produce “cognitive work” as an effort to understand the sources or causes of global feelings.* The source of global emotions, felt immediately and automatically, tends to be ambiguous and actors look to their environment for an explanation. An understanding of the global feelings is important to them because of assumptions 3 and 4; they need this understanding to figure out how best to promote positive emotional experiences and avoid negative ones in the future. Global emotions are a stimulus for cognitive work, and specific emotions emerge out of this cognitive work (Lawler, 2001).

There is considerable debate among psychologists about the interrelationships of and causal priority of emotion and cognition (e.g., Forgas, 2000). A key finding, of relevance to the affect theory of exchange, is that positive affect fosters *global processing* of information, meaning a focus on general features rather than specific details. For example, Gasper and Clore (2002) found that people in positive moods, who are attempting to solve a task, focus on the big picture (i.e., the “forest”) and thereby engage in global processing, whereas those in negative moods engage in local processing and focus on the details (i.e., “trees”). These effects were documented across two experiments with different tasks (i.e., one had individuals reproduce a drawing from memory and the other asked them to interpret or classify interrelated geometric figures). Extrapolating, global processing of information about a group task may lead actors to give greater weight than otherwise to the group that is the context for the task activity with others.

Recent research in neuroscience and in organizational behavior reveals further that positive affect enhances cognitive flexibility. Ashby, Isen, and Turken (1999) show that positive affect induces dopamine secretions in the same regions of the brain as do rewarding stimuli. These dopamine secretions promote greater cognitive flexibility in how people approach a task than negative affect. Those experiencing positive affect with dopamine release tended to view a task from different perspectives and be more adaptive and creative in solving the task. Similarly, a recent study of teams across a variety of organizations finds that positive affect generates more creative problem solving and that, while the emotions are transitory or short-lived, their effects on creativity continue for several days (Amabile, Barsade, Mueller, & Staw, 2005). Overall, these very different studies converge in suggesting that

positive affect broadens how people approach problems and expands the range of information attended to or called forth from memory. This could increase the salience of groups or *groupness*.

Sixth, *given a joint task or activity in a group, the group itself becomes a possible target for emotional attributions, that is, actors may attribute their individual emotions or feelings to the group affiliation*. There are at least three reasons for this: (A) greater jointness makes it more difficult for members to allocate responsibility for the group results unequally across individual members, (B) if actors engage in global processing of information about the causes of these feelings (Gasper & Clore, 2002), the group is part the big picture or “forest” within which positive feelings are interpreted, and (C) to the degree that groups or group affiliations are stable, persistent aspects of the social environment, they are potentially attractive targets for emotion attributions (Weiner, 1986). Attribution processes typically involve a search for stable causes of behavior. However, the term “possible” in the above assumption implies an important issue for the theory: how do people choose among the possible objects or targets for their emotions?

Attributing Emotions to Groups

Table 1 contains a framework for linking different emotions to different social objects. The theory distinguishes four social objects: task, self, other, and social unit. This scheme integrates the global-specific distinction from Weiner’s (1986) attribution theory of emotion, adopts a *differentiated approach* to emotions following Izard (1991), and treats pleasure as a fundamental dimension in accord with Russell, Weiss, & Mendelsohn (1989) affect grid. My purpose is to associate a key emotion or feeling with each object and to examine the implications. The framework is not designed to be fully comprehensive.

Table 1. Emotions Directed at Each Object.

Social Object	Valence of Emotion	
	Positive	Negative
Task	Pleasantness	Unpleasantness
Self	Pride	Shame
Other	Gratitude	Anger
Social unit	Affective attachment	Affective detachment

Note: Reprinted from Lawler (2001).

The global emotions from task activity fall along a generalized pleasant–unpleasant dimension. If positive global feelings (pleasantness) are attributed to the other, it generates the specific emotion of gratitude toward other(s); if positive global feelings are attributed to self, the specific emotion is pride in self. If negative emotions from the task activity are attributed to the other(s), the specific emotion is anger toward others; if attributed to self, the specific emotion is shame in self. For group attributions of positive global feelings, the specific emotions are *affective attachment* to or *affective detachment* from the group as a unit. My theory suggests that group or social unit attributions of these individual feelings are the precursor to group affective attachments. The question remains: when do people make social unit or group attributions for their own individual feelings?

Attribution research in psychology does not include social unit or group attributions as defined here. That work focuses primarily on inferences about individual actors from those individuals' behavior (e.g., Jones & Davis, 1965), whereas my focus is on when people attribute their own emotional states to social units (groups, organizations, etc.). One pervasive pattern observed in attribution research is that individuals make self-serving attributions, for example, they give credit to self for success and blame the situation (or others) for failure. From this standpoint, successful task activity is likely to generate pride in self rather than gratitude toward others, and social unit attributions may not occur at all.

There is some social psychological research on *group attributions*. Its focus is on how qualities or attributes of groups or group memberships contribute to dispositional attributions to a person (Taylor & Tyler, 1986; Zaccaro, Peterson, & Walker, 1987), that is, when a person's behavior is attributed to its "group serving" relevance or impact. Research on group-serving attributions indicates that perceivers treat groups or group affiliations as real and as a potential source of stable behavior dispositions. A particularly important finding is that "group entitativity" (i.e., the perceived reality of a group) induces group-serving attributions for individual behavior (Yzerbyt & Rogler, 2001). In other words, the more real a group is to its perceivers, the more likely they are to infer qualities of one another based on the group membership. Thus, in attribution theory and research group attributions are a special case of self-serving attribution.

The perceived *reality* of a group is important to my theory as well, but the focus is somewhat different. Social unit (or group) attributions are inferences (attributions) *about a group* based on a person's *emotional experiences* within it; thus, social unit attributions of emotion reflect, reaffirm, or change the meaning and value of a group identity or membership. They may set the

stage for or strengthen group-serving attributions for individual behavior within the group, but the object for social unit attributions remain the group as a unit, not as another individual's behavior. Conceived in this way, social unit attributions may not only mitigate the tendency of actors to make purely self-serving attributions, but also increase their tendency toward group-serving attributions for individual behaviors and toward recasting self-serving as group-serving. The central propositions of the theory indicate when social unit attributions of individual emotion are most likely to occur.

Central Propositions

The most fundamental principle of the *affect theory* is that the *jointness* of the interaction or exchange task determines whether actors perceive the group as a source of their global emotions or feelings. Individuals ostensibly attribute individually-felt emotions to their relation or group if the task is high in jointness. Jointness can vary on both an objective and subjective level because tasks often can be framed and interpreted in different ways. For example, an organization may define the tasks of a work group in joint or in individual terms and, in the process, highlight individual or collective aspects of the task activity. A team may be organized around individual tasks and responsibilities or joint tasks and shared responsibilities. Objective structural or task conditions are important but so are the subjective definitions of tasks.

The *affect theory of exchange* (Lawler, 2001) offers a basic structural (objective) and a basic cognitive (subjective) condition for social unit attributions. The structural dimension of jointness is the degree that each individual's contributions to task success (or failure) are separable (distinguishable) or non-separable (indistinguishable). This contrast is from Oliver Williamson's analysis of work structures (Williamson, 1985, pp. 245–247). He used it to analyze the work conditions under which relational modes of governance predominate. The affect theory adopts Williamson's idea to understand when social unit attributions are likely.

The cognitive dimension of jointness is the degree that the joint activity or task generates a sense of shared responsibility for the results produced among members. If social interactions or exchanges among a set of actors generate a sense of shared responsibility, they are more likely to interpret their individual feelings as jointly produced in concert with these others, and therefore they are more likely to attribute their individual feelings to the group or group identity. The basic idea is quite simple: if employees perceive a shared responsibility for group performance, the group generates stronger affective attachments to the group. The effects of shared responsibility on

attributions of positive versus negative emotions should be parallel: a sense of shared responsibility may lead to inferences that “we can get things done together” in the case of task success and positive emotions but inferences that “we do not work well together” in the case of task failure and negative emotions.⁵ Three core propositions capture the logic of the theory, as follows (Lawler, 2001, 2006):

Proposition 1. The less distinguishable individuals’ impact on task activity (non-separable), the more they perceive shared responsibility for the results of the task activity.

Proposition 2. The more individuals perceive shared responsibility for the results of the task activity, the more inclined actors are to attribute their global and specific emotions to the group.

Proposition 3. The more individuals attribute their positive emotions to a group, the stronger their affective attachment to that group; the more they attribute their negative emotions to a group, the stronger their affective detachment from that group.

Any structural or task conditions that vary the degree that individual efforts and contributions are distinguishable, objectively or subjectively, should produce these sort of effects. The original formulation of the theory (Lawler, 2001) indicated that different forms of exchange (negotiated, reciprocal, generalized, and productive) and different types of networks (positively- and negatively-connected) produce differential group attachments. Other structural conditions also may be specified. For example, equal power and greater mutual dependence should produce a greater sense of shared responsibility and stronger affective attachments, but, only to the degree that the individual contributions to the results are indistinguishable. Task interdependences may make collective results more salient and thereby promote a sense of shared responsibility. It is important to note, however, that high interdependence does not necessarily imply non-separable/indistinguishable task efforts or contributions. Perceived interdependencies may involve clear reward contingencies between the behavior of individuals rather than the intertwining or fusion of individual contributions or efforts. Based on the theory, we need to examine interdependencies and ask whether individual contributions are distinguishable or indistinguishable within them.

Implications of the central propositions are exemplified by two provisional hypotheses about task structures or interdependencies that can be derived from them. First, additive tasks (where group results are an aggregate of

individual performances) should strengthen the sense of individual responsibility, whereas conjunctive tasks (where the group result is a multiplicative function of individual performances or behaviors) should strengthen the sense of shared responsibility. Thus, all other things equal, groups with conjunctive tasks should generate stronger affective attachments to the group than those with additive tasks. Second, discrete, specialized, independent roles draw attention to individual responsibilities, whereas overlapping, collaborative roles highlight shared responsibilities. This has some counter-intuitive implications for the design of jobs. Job designs that promote shared responsibility should generate stronger affective attachments to an organization than those that focus solely on individual responsibility. Systems of accountability that target individual performance versus those that target group performance should have differential consequences for group attachments. In each of the cases, the *sense of shared responsibility* is the central explanatory principle and the primary mechanisms are affective.⁶

There is some supporting evidence for the notion that joint tasks and shared responsibilities generate group salience and weaken self-serving attributions in task situations. In a study of quotes from athletes and coaches after wins and losses, Zaccaro et al. (1987) found that self-serving attribution biases were weaker when the sport was group-based and involved joint, interdependent tasks and activity (e.g., baseball, football, basketball) than when it was individual-based (e.g., tennis or golf). Similarly, Forsyth and Kelley (Forsyth & Kelley, 1996; Kelley, 1967) conducted an experiment with a survival task and found that people not only experienced more positive affect when the group succeeded, but also gave the group more credit than themselves for its success. The implication is that greater task interdependence and shared responsibility reduces self-serving attributions for group success, which supports a key notion of the affect theory (e.g., see also Dovidio et al., 1998; Yzerbyt & Rogler, 2001).

In a recent study, Savitsky, Van Boven, Epley, and Wight (2005) also found that allocations of responsibility or credit for a collective task depend on whether members view the group as a unitary, undifferentiated whole or as set of coordinated individuals. Self-serving allocations of responsibility were reduced if actors view the group, not only as a homogenous whole, but also consider others in the group as individuals. That is, when others in the group are *individualized*, credit is shared more and people take less responsibility for themselves. The authors term this an *unpacking* effect on group perceptions. Their interpretation is that actors' own contributions are more accessible to them, and that considering other's contributions, individually, increases access to the other's contributions (Savitsky et al., 2005). The implications are

that, on the one hand, a sense of shared responsibility should be easier to generate in groups where actors interact frequently and have ready access to each others' task behaviors; but, on the other hand, depersonalization of the in-group members may make self-serving attribution biases more difficult to overcome with social unit attributions. This is worthy of attention in future research. A plausible hypothesis from the notion of depersonalization in social identity theory is (Hogg, 2004): Depersonalization in groups reduces the degree that individuals give credit to others for group performance and, therefore, weaken social unit attributions of emotions and feelings. My theory suggests a group-attachment process that should not produce such depersonalization because of the role of social interaction around a joint task in which people have access to others behaviors.

Having overviewed the theory, how does the *affect theory of social exchange* elaborate or add to the integration of social identity and social exchange theories, as represented in Fig. 3? The sense of shared responsibility (and, by implication, task non-separability) should be a moderator of the *frequency-to-emotion* and *emotion-to-cohesion* links, discussed earlier, and this is portrayed in Fig. 4. If task contributions are indistinguishable and responsibilities for results shared, repeated interactions or exchange have stronger positive emotional effects; and also these positive emotions have even stronger effects on the sense of unity and cohesion. This suggests that the social unit is more salient, a more stable part of the persons' environment, and a more viable target for emotions felt.

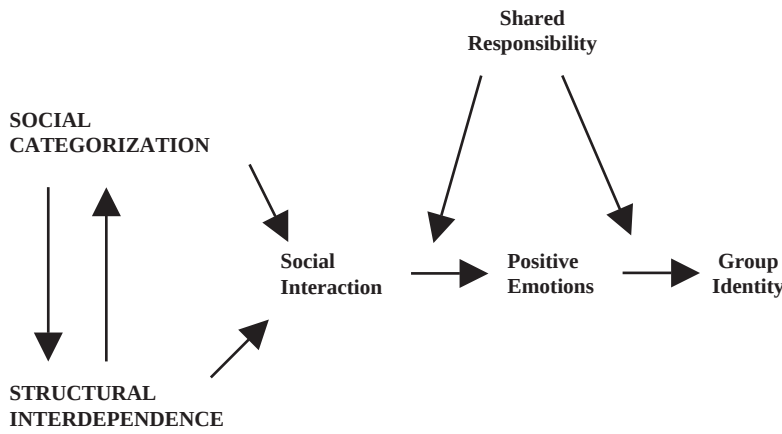


Fig. 4. Moderating Effects of Shared Responsibility.

Brief Summary

The affect theory of exchange assumes a group of individuals who are undertaking a joint task. They succeed or fail and this has emotional effects on them. Transitory emotions produced by this task activity are attributed to the group if the social structure produces a sense of shared responsibility. The theory treats these group attributions of emotion as individual-level effects that, in the aggregate, produce a prevailing perception of a larger, encompassing social unit (i.e., a group or organization). The main result is stronger group attachments and more group-oriented behavior (Lawler, 2001). Implied here is a local-to-global or micro-to-macro process in the sense that individual experiences and emotions make group members more responsive to an overarching group identity. In doing so, individual actors are essentially making a leap from their own individual experience to the larger group or organization. That is, the actors themselves are forging a micro-to-macro or local-to-global connection – cognitively, emotionally, and behaviorally.⁷ The larger group context gives meaning to individual emotional experiences. The next section suggests additional processes that bear on the connections that actors make between their individual experiences and the group or organizational context.

Elaborations of the Theory

Two individual-to-group processes elaborate the role of the shared-responsibility mechanism in the theory: (1) the spread of emotion (emotional contagion) across people and (2) the interrelationship of multiple nested attachments to local and larger groups or organizations within which the local ones exist.

Spread of Emotions in Groups

Emotions tend to spread from person to person in social situations. This has been empirically documented in a number of recent studies of affect and mood in work settings (Barsade, 2002; Brief & Weiss, 2002; George, 1995, 1996; Kelly & Barsade, 2001; Sy, Cote, & Saavedra, 2005). Research on *emotional contagion* by psychologists has suggested that there are two fundamental interaction processes through which emotions spread. First, people tend to mimic and synchronize nonverbal expressions of emotion, for example, a smile by A leads to a smile by B. Second, such physiological changes, generated by mimicry and synchronization, have feedback effects that produce the corresponding emotion internally. Thus, if A feels good and smiles at B, B will smile back and then experience similar feelings (Hatfield, Cacioppo, & Rapson, 1993).

Recent research on behavior in organizations leads to a number of general inferences or conclusions about the spread of emotions in work groups. First, when people interact over time, their emotions and moods (felt and expressed) tend to converge. People adjust their emotions to those of others, and those with lower status tend to adjust more than those with higher status (Anderson, Keltner, & John, 2003). Second, in groups with stable memberships and high task interdependence, there is more convergence of affect across individuals in the group (Bartel & Saavedra, 2000). This finding demonstrates group-level effects and is consistent with role of shared responsibility in my theory. Third, research on work groups and teams indicates that emotional contagion among members generates prevailing affective states or tones at the group level with important consequences, for example, positive affective tones enhance cooperation and reduce conflict (Barsade, 2002; Brief & Weiss, 2002). From such work, it is reasonable to hypothesize that emotional contagion is stronger when tasks generate a sense of shared responsibility.

Aside from spreading among people within a group, emotions also can spread across unrelated situations and tasks. This is indicated in the theorizing of Collins (2004) on the transfer of emotional energy from one situation to another, as well as the research of Isen and colleagues (e.g., Isen, 1987) on positive affect. Isen shows that if a person is in a state of positive affect, regardless of its source, they will interact differently with others who have nothing to do with the affect they are experiencing. That is, if person A is feeling good in situation B, but then enters situation C, then that person will carry the emotion over to situation C, which then has an impact on others in that new situation. Collins's (2004) theory of interaction ritual chains makes a related point. He argues that people derive emotional energy (uplift, confidence) from interactions and carry them to other interactions with different people. One can argue that emotions and moods not only connect people in a given situation or group, but also spread to other situations or groups to the degree that individuals in a given group are carriers of affective tones or moods produced in and by that particular group. This is one way that emotions attached to subgroups can spread to other subgroups or to the larger group or organization, and also why a leader who exudes enthusiasm can have widespread effects in an organization.

These ideas about the spread of emotions can be incorporated into the *affect theory of social exchange*. Specifically, a sense of shared responsibility should foster the spread of positive emotions across individuals in a group because people are likely to express emotions and to carefully attend to each

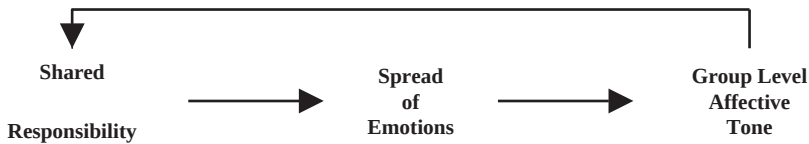


Fig. 5. Spread of Emotions (Proposition 4).

other's emotional expressions. This, in turn, should enhance mimicry and synchronization effects (see [Hatfield et al., 1993](#)). Once emotions spread across actors, they foster a group-level affective tone which, in turn, should have feedback effects on the sense of shared responsibility. The group-level affective tone then becomes an integral part of what group members accomplish together. The following proposition is implied:

Proposition 4. Greater sense of shared responsibility produces more spread of emotions across individuals; and, the spread of emotions generates a group-level affective tone which, in turn, has feedback effects on the sense of shared responsibility.

These relationships are diagrammed in [Fig. 5](#). The upshot is that the sense of shared responsibility promotes the spread of emotions across members as well as the corresponding affective tone at the group level; this further enhances the sense of shared responsibility and propensity toward social unit attributions.

Nested Group Attachments

Organizations have members with multiple group commitments to work groups, teams, departments, divisions, professions, unions, or other associations. A particularly interesting case is where an immediate, local group is nested within a larger more encompassing group, for example, a department in a corporation, a local union within a national union, a neighborhood within a community. If a work group is nested within a larger organization, can we predict which unit is likely to be the most salient target for emotions felt from task activity? Will feelings be attributed to the larger, encompassing group or to the local group? This issue of nested groups captures a problem corporations tend to face in generating or sustaining organizational commitments of employees. Paradoxically, delegating decision making, empowering employees, using self-managed teams may generate stronger attachments to local units than to larger units; if so, such

practices may strengthen silos and balkanization despite the fact that their purpose is to do otherwise.

I previously theorized this problem in an analysis of multiple group or organizational attachments (see Lawler, 1992; Mueller & Lawler, 1999). The main idea proposed was that people become more attached to groups and organizations that give them the greatest sense of control (i.e., self-efficacy). The reason is that a sense of control produces positive feelings, and these are attributed to the group or organization that provides the control. All things being equal, people are more likely to attribute a sense of control and resulting positive feelings to proximal or local groups, while attributing a lack of control and negative feelings to more distal groups (Lawler, 1992). The theoretical rationale for this is that local, proximal groups have an interaction advantage as the social place where subjective meanings, interpretations, and attributions are formed. The implications are that group members are inclined to credit their local, immediate groups for good experiences and blame their larger more distant groups for bad experiences. The following hypothesis is suggested: *positive emotions stay locally-focused and negative emotions tend to be pushed outward to larger and more distant groups* (for further analysis see Lawler, 1992; Turner, 2002).

Based on the *affect theory of social exchange*, structures or tasks that generate more sense of shared responsibility should lead people to interweave their own (self) efficacy with the efficacy of the group (i.e., collective efficacy). Specifically, they perceive the group activity as a means to self-efficacy; self-efficacy is mediated by the group activity and success (Lawler, 2001, pp. 345–346). If the sense of shared responsibility is experienced primarily at the local level, the tendency for positive emotions to be focused on the local group should be accentuated, as should the tendency to shift negative emotions to the more distant group. Thus:

Proposition 5. To the extent that members of a group, nested within an organization have a strong sense of shared responsibility for task results, positive emotions are more likely to be attributed inward to the local, immediate group, whereas negative emotions are more likely to be attributed outward to the larger group or organization.

Applied to a work unit within an organization, this effect could be reduced, forestalled, or even reversed if the vision, strategies, and policies at the organizational level produce a stronger sense of shared responsibility there than at the local level (see Lawler, 1992). Many policies and practices of corporations could be interpreted in these terms. One simple example is the practice of redefining employees as partners or associates.

CONCLUSIONS

Understanding fundamental bases of group attachments, especially emotional/affective ones, seems important and timely. Changes in the employment contract and globalization of workplaces are modifying standard, historic relationships between people in the workplace and between them and their group or organizational affiliations. These pose challenges to organizations that derive benefits from low turnover and from having employees who intrinsically value the organizational affiliation; they also pose challenges for employees who value group identities, associated with a particular employer or work organization, or who derive a strong sense of belonging from an enduring organizational affiliation. If employees are geographically and culturally distant from one another and from their organization, how and when will they develop attachments at the group or organizational level? If the employer organization is committed to promoting the *employability* of its employees (i.e., imparting transferable experiences and skills) but not to continued employment, how can that organization generate strong attachments in return from its employees? The implicit or explicit social exchanges that form the foundation for employment contracts are under significant stress. Relational ties between employees and employers are being replaced with purely transactional ties. One can argue that such employment and workplace trends weaken organizational attachments, change the meaning of organizational membership, and reduce the importance and value of the organizational identity. This paper suggests how organizational attachments may be generated from the bottom up, that is, from joint activities and tasks of employees.

I theorize that the sense of shared responsibility is a central condition for group attachments, and that positive affect is the mediating mechanism through which shared responsibility generates strong group attachments. The main argument can be summarized as follows. In work groups individuals tend to exchange knowledge, expertise, and experiences in order to accomplish their individual and collective tasks. These exchanges of information are particularly important when employees engage in joint tasks that they cannot accomplish alone. An organizational structure may bring them together in the first place to interact and solve problems, but in the course of doing such tasks, individuals are likely to experience positive or negative feelings, for example, pleasure, uplift, confidence, enthusiasm, displeasure, downtrodden, insecure, and boredom. When they succeed at the task they feel good and when they fail they feel bad. The greater the jointness of the task and the stronger the sense of shared responsibility for it, the more likely they are to

view their individual emotions and feelings as jointly produced; and, therefore, the emotions become a basis for stronger or weaker affective attachments to the group. Overall, the *affect theory of social exchange* explains how and when the transitory emotions from task successes becomes a basis for enduring affect about a group identity or organizational affiliation.

In broader theoretical terms, this paper suggests how social exchange processes at the heart of any social interaction can be linked with ideas about social categorization and social identity. Social identity theories take a decidedly non-instrumental and cognitive approach to group formation and group attachments, whereas social exchange theories take a decidedly instrumental and behavioral approach to group formation and group attachments. This paper points to areas of convergence and complementarities across these approaches and uses these to forge some important connections. The unifying explanatory theme entails an endogenous process, linking structures to enduring affective attachments to a group; the process involves recurrent task interactions that have emotional effects on individuals. Thus, if a social structure generates a strong sense of shared responsibility, the emotional and relational effects are similar regardless of whether the interactions of group members stem from the instrumental conditions assumed by social exchange theory or the shared social categories assumed by social identity theory. This paper offers a way to build emotion and affect into fundamental social identity and social exchange notions and to explain how and when people form and sustain strong or weak affective attachments to a group.

NOTES

1. The terms “group identification” from the social identity literature and “group attachment” in this paper have important similarities and differences. Both assume the existence of a group category or identity and refer to the strength of the individual–group tie. However, the term “group attachment” is broader and captures objective, structural ties (e.g., through networks, interdependencies, or payoffs to the individual) as well as subjective ties, either cognitive or emotional. In the social identity tradition, group identification is typically limited to subjective, cognitive ties. An *affective* group attachment in my theory is essentially group identification with an emotional foundation or what [Ellemers et al. \(1997\)](#) refers to as “group commitment.”

2. Among theories of human development, Bowlby’s (1969) attachment theory examines how bonds (attachment) develop by a child to a parent. He assumes that humans have a fundamental need for attachment. This idea is developed more generally in recent work on the need for belonging (e.g., [Baumeister & Leary, 1995](#)). Needs for attachment or belonging may underlie some principles of my theory, but this would not alter the principles themselves.

3. The theory does not analyze the dispositional affect of individuals in interaction or the affective states they bring to the situation. These currently fall under the "all other things equal" clause of the theory but warrant theoretical attention in the future.

4. The theory does not make a priori assumptions about what constitutes "success" because this is likely to be situational. "Successful interaction," getting on and off a bus in a crowd, may be matter of how well actors coordinate their behaviors and how cooperatively (e.g., quickly and politely) they adjust their behavior when coordination breaks down. Repeated unsuccessful interaction (e.g., bumping, shoving, frowning, expressions of anger) would generate negative emotions and little sense of cohesion. In the context of a group identity, this would reduce attachment to it.

5. Negative emotions, such as anger and fear, generally have stronger immediate effects on actors than most positive emotions, in part because they are "hotter." Differences in intensity between positive and negative emotions should not alter the propositions or basic processes posited by the theory, but the strength of the relationships specified by the propositions could differ by emotional valence. For example, the emotional effects of frequent group task success may be less intense than the emotional effects of frequent task failure.

6. These hypotheses are intended to illustrate some potentially provocative implications of the theory for precise and exact role definitions, job designs, and measures of accountability. The theory implicitly suggests that prevailing approaches to the design of roles, jobs, and accountability could forestall or undermine the development of affective group attachments. However, there are several unanswered questions. For example, if responsibilities not only are shared, but also are vague or confusing, how can a group avoid a lack of coordination, internal conflict over responsibilities, and related negative feelings? If a sense of shared responsibility is so strong that individual performances cannot be judged by them or others, how can individual merit be rewarded and individual performance motivated? Clearly, there is a need for theoretical and empirical work on the conditions under which these hypotheses apply.

7. For measurement purposes, this means that aggregation or averaging of individual emotional responses and perceptions of shared responsibility is a viable way to test the theory, as currently formulated. Repeated interaction should promote a convergence of their responses insofar as they can observe or interpret each others responses. Thus, difference or variance measures should be useful supplements for aggregation measures in testing the theory.

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CHAPTER 9

UNDERSTANDING AFFECTIONAL TIES TO GROUPS FROM THE PERSPECTIVE OF ATTACHMENT THEORY

Sujin Lee and Leanne Ling

ABSTRACT

Substantial developmental psychology research on attachment theory documents that children with secure affectional ties (attachments) to caregivers are more likely to excel in psychosocial and behavioral performance than their peers with insecure attachments. We review attachment theory and research in the developmental psychology literature and propose causes of secure short-term attachments to workgroups. Whereas traditional attachment research has documented social–emotional antecedents, we propose social–emotional and task-related antecedents of secure attachment to workgroups. Suggestive data are presented to illustrate our propositions. We discuss theoretical and practical contributions of our attachment theory-based perspective on workgroups, as well as areas for future research.

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High-performing groups tend to have an open atmosphere in which members trust and respect one another and feel comfortable sharing different views (Jehn & Mannix, 2001). Unfortunately, creating such a positive social environment is a challenge for most groups. For example, in many groups, members avoid disclosing unpopular views, and such withholding can undermine group performance (Phillips, 2003; Phillips, Mannix, Neale, & Gruenfeld, 2004; Wittenbaum & Stasser, 1996). To achieve optimal performance, groups must nurture each member's willingness to trust, take personal risks, and share potentially self-damaging information. Most groups face multiple barriers when attempting to establish such nurturance.

In this paper we propose conditions under which individuals should feel more secure in workgroups. In doing so we explore the construct of "attachment to groups" as an extension of the broader attachment theory from developmental psychology (Smith, Coats, & Murphy, 1999; Smith, Murphy, & Coats, 2001; cf., Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969). Attachment to groups is embodied in individuals' beliefs about themselves as valuable or less valuable group members, along with their beliefs about the group's acceptance or rejection of them (Smith et al., 1999, 2001). More specifically, when individuals have positive beliefs about themselves as worthy members of a group and view the group as accepting of them, they are referred to as having secure affectional bonds to the group. Just as children with secure affectional ties to their caregivers feel less threatened when engaging in risky actions (Ainsworth et al., 1978; Bowlby, 1969), group members whose affectional ties to groups are secure feel less threatened undertaking potentially unsafe actions (Lee, 2005). Here we review attachment theory and research and propose conditions under which people are more likely to feel securely attached to new workgroups. We also present suggestive data that illustrate our propositions. Thus, we limit the scope of our conceptual formulation and data description to antecedents (as opposed to consequences) of secure attachments to newly constituted groups.

In the context of this study, it is important to delineate how attachment to groups departs from alternate constructs. For example, attachment to groups is related to, yet distinct from, group identification (Tajfel & Turner, 1979). Whereas group identification is an individual's *depersonalized cognitive self-identity* based on an overlapping of her personal attributes with those of her group (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Dutton, Dukerich, & Harquail, 1994; Smith & Henry, 1996), attachment to groups is a *personalized affect-driven relationship tie* to the group. For example, a person may believe that her self-identity is based on her

occupational group (i.e., “I am a professor in this management department”); however, that person may not necessarily feel secure in regard to her relationships within the specific occupational group (i.e., “I worry about whether my management department colleagues value me and my work”).

Attachment to groups is also differentiated from team psychological safety (Edmondson, 1999). Team psychological safety is a *group*-level construct that involves a shared belief among team members that individual failure will not be punished by the team (Edmondson, 1999). Whereas team psychological safety does not specify individuals’ attachment to groups as the source of safety, attachment to groups, as an *individual*-level construct, stresses an individual’s relationship to a group as the root of security. However, this contrast does not imply that attachment to groups and team psychological safety are orthogonal; rather, the two constructs may be related. In particular, team psychological safety may be a bi-dimensional construct that involves tasks and relationships within a group. Knowing that a team’s acceptance is unconditional even in face of a failed experimentation with new ideas (i.e., the task dimension of group-level psychological safety) may promote an individual’s secure attachment to the team as the individual is reassured of her value and acceptance as a team member. Considering that attachment security is a fundamental psychological underpinning of almost all positive relationships (Reis & Patrick, 1996), individual members’ increased secure attachment to the team may in turn enhance the relationship dimension of group-level psychological safety (e.g., interpersonal relationships within the team). Thus, it is plausible that individual-level secure attachment to groups may mediate the association between the task dimension and the relationship dimension of group-level psychological safety.

Our paper extends organizational behavior perspectives on workgroups by forwarding a new viewpoint based on attachment theory. In doing so, we hope to stimulate a new stream of research that applies attachment theory to organizational behavior in general and to workgroups specifically. Previous research on organizational groups has emphasized group-level dynamics and experiences and has thus paid less attention to the distinctive experiences of individuals embedded in groups – especially how the quality of their affectional ties (attachments) to groups influences these experiences. Attachment theory is rooted in the notion of humans’ motivation to survive, and therefore may be used to explain a wide range of human behaviors in myriad contexts (Ainsworth, 1990; Ainsworth et al., 1978; Bowlby, 1969). As such, attachment theory has become one of the most influential theories for explaining human development across the life span

(Shaver & Hazan, 1993). As part of its general applicability to human development, the theory has great potential for predicting and explaining managerial behavior. Despite this potential, attachment theory has not, until recently (Brodtt & Korsgaard, 2003; Korsgaard, Brodtt, & Sapienza, 2003; Lee, 2005), played a significant role in research on organizational groups.

We also extend attachment theory by investigating attachment to groups as an endogenous (as opposed to exogenous) variable. Although attachment to groups may be dependent on the dispositional attachment styles of the individuals involved (Bowlby, 1969), it is not a fixed trait (Baldwin, 1992; Collins & Read, 1994; Pierce & Lydon, 2001). Recent research has shown that secure and insecure attachment co-exist within a single individual, and that regardless of dispositional attachment style, strong caregiving environments can cause either a secure or insecure attachment to be *temporarily dominant* (Collins & Read, 1994; Cozzarelli, Hoekstra, & Bylsma, 2000; Fraley, 2002; Shaver, Collins, & Clark, 1996). Although the antecedent conditions for secure attachment have been researched in the childhood or romantic attachment literature (Ainsworth et al., 1978; Crowell et al., 2002; Davila & Sargent, 2003), there is no research into the conditions that may induce individuals to feel securely attached to *workgroups* at a given moment.

Based on recent developments in attachment theory, our view is that although individuals may bring specific dispositional attachment styles to workgroups, both dispositionally secure and insecure individuals are more likely to feel securely attached to their groups *at a particular moment* when the groups clearly provide secure caregiving environments. We do not downplay the carryover effect of dispositional attachment. Nor do we claim that dispositionally insecure individuals will transform into dispositionally secure individuals under these conditions. Rather, we argue that it is *possible* to induce secure short-term attachments among individuals in the context of specific group conditions at a given point in time. Our view, then, focuses on secure-attachment-inducing conditions. We conjecture that the proposed conditions will have stronger influences on dispositionally insecure (vs. secure) individuals because dispositionally secure individuals are subject to a high “ceiling effect” (i.e., they have strong attachment security to begin with) and are also unlikely to feel *insecurely* attached under the proposed *secure* attachment conditions. Thus, we do not explore the interaction effects between dispositionally secure and insecure attachments and our proposed conditions. Instead, we focus narrowly on developing propositions related to the conditions that promote secure short-term attachment.

ATTACHMENT THEORY AND RESEARCH

Attachment Theory Overview

Attachment theory (Bowlby, 1969, 1980, 1988) is the synthesis of John Bowlby's clinical observations of homeless children. Initially interested in child psychiatry, Bowlby found that a warm and loving relationship with a caregiver was essential to a young child's mental health. Subsequently, Ainsworth et al. (1978) categorized attachment styles into three types: (a) a child with an *anxious attachment* style seeks excessive closeness to her caregiver, (b) a child with an *avoidant attachment* style prefers to keep distance from her caregiver and to maintain self-reliance, and (c) a child with a *secure attachment* style feels comfortable being *both* close to her caregiver *and* self-reliant. More so than insecure attachment styles (i.e., anxious and avoidant), secure attachment to a caregiver in early childhood is related to a child's psychological well-being and predicts many aspects of healthy functioning. For example, securely attached children are more likely to develop a prosocial orientation (Van Lange, De Bruin, Otten, & Joireman, 1997), are better at sharing and expressing emotions (Laible & Thompson, 1998), and have better communication, task engagement, persistence, and mastery motivation than children with anxious or avoidant attachment (Moss & St-Laurent, 2001).

There are two competing conceptualizations of attachment. One view is that attachment style represents a stable psychological difference. Individuals thus carry their childhood attachment styles into all subsequent social relationships. Therefore, attachment patterns and related dynamics mirroring those of the child-caregiver dyad can appear in one's relationships with peers, social groups, or relationship partners (Bowlby, 1969). Consistent with this view, Hazan and Shaver (1987) linked attachment theory to the literature on romantic relationships, re-conceptualizing romantic love as an attachment dynamic. They found that adults with secure childhood attachment styles showed greater trust, satisfaction, and commitment in their romantic relationships.

Although these findings may suggest that childhood attachment style is stable over the lifespan, scholars have debated this point (Brennan, Clark, & Shaver, 1998; Fraley, 2002; Kagan, 1996; Kobak, 1994; Lewis, 1997; Thompson, Lamb, & Estes, 1982; Waters, 1978). A recent point of view is that situational demands may temporarily induce attachment styles in conflict with disposition. This line of research conceptualizes attachment style as a network of relationship schema-based cognitive structures

(Baldwin, 1992; Baldwin, Keelan, Fehr, Enns, & Koh Rangarajoo, 1996; Collins & Read, 1994). Importantly, proponents of this view do not dispute that childhood attachment styles are carried into later life. Instead, attachment styles are seen as relatively dynamic schemas, each of which is *temporarily* more or less *dominant* based on situational demands at the time. To the extent that humans interact with various others throughout life, individuals will have both global (i.e., dispositional) and context-specific attachment styles (Pierce & Lydon, 2001). Thus, secure caregiving environments can temporarily induce a secure attachment among dispositionally insecure individuals. Once induced, psychological processes (“internal working models;” Bowlby, 1969) associated with the activated attachment style influence one’s attitudes and behaviors.

As an example, consider the following scenario. Sally may have had an insecure attachment to her mother. Thus Sally may have been predisposed to feel insecurely attached to her new project team at work. However, because Sally subsequently learned that the team, in contrast to her mother, makes her feel welcome, values her competence, and supports her, Sally has felt a secure attachment to the project team. Thus the attachment style manifested is situation-dependent: in her mother’s presence, Sally’s dispositionally insecure attachment from childhood is activated, but when she returns to her team, her secure attachment resurfaces.

In support of this dynamic view, Mikulincer and Shaver (2001) demonstrated that when secure attachment was temporarily induced by experimental priming, both dispositionally secure and insecure individuals demonstrated attitudes and behaviors consistent with dispositionally secure attachment styles. Most notably, the NICHD Early Child Care Research Network (2006) conducted longitudinal observations of more than 1,000 U.S. children during preschool, kindergarten, and first grade and examined the associations among early infant attachment styles, children’s later social competency, and behavior under stable or changing maternal parenting quality. As expected, early infant attachment styles predicted children’s later social competency and behavior; interestingly, however, this stable association disappeared when the researchers controlled for maternal parenting quality. According to the authors:

Had this research only examined early attachment classification and not looked at subsequent changes in parenting behavior, the effects of intervening parenting behavior would have been missed (NICHD Early Child Care Research Network, 2006, p. 53).

In conclusion, multiple sources of evidence suggest that childhood attachment style is stable as long as the caregiving environment is stable;

however, if caregiving quality changes significantly, the affected individual could feel attachment that is dispositionally non-dominant (Belsky & Fearon, 2002; Collins & Read, 1994; Fraley, 2002; Lamb & Bornstein, 1982; Maccoby, 1980; Mikulincer & Shaver, 2001; NICHD Early Child Care Research Network, 2006; Pierce & Lydon, 2001).

In this paper, we use the dynamic view of attachment style to examine the qualities of the workgroup (i.e., caregiving environment) that may momentarily induce secure attachments irrespective of individuals' dispositional attachment styles.

Attachment in the Workplace

Attachment theory can be extended to the workplace to explain various employee and managerial behaviors. Most research in this area is based on the dispositional attachment view (Hazan & Shaver, 1990; Kahn & Kram, 1994; Popper, Mayseless, & Castelnovo, 2000). For example, Hazan and Shaver (1990) found that dispositionally secure adults reported positive work attitudes and performance, whereas dispositionally insecure adults reported that they preferred to work alone, worried about their work performance, were easily distracted at work, and had difficulty meeting deadlines.

Dispositional attachment styles also influence how individuals interpret authority at work (Kahn & Kram, 1994). People authorize and de-authorize themselves and others based on their internal models of authority, which can include dependence, counter-dependence, or interdependence. Kahn and Kram (1994) argue that childhood (dispositional) attachment styles underlie these adult internal models of authority. Attachment styles developed in infancy are based on the pattern by which a caregiver regulates an infant's experiences of power and powerlessness. These internal models developed in childhood are carried into adulthood, such that adults authorize and de-authorize themselves in patterns similar to those experienced with their caregivers (Hirschhorn, 1990). Because dispositionally insecure, anxious individuals are uncertain about the availability or reliability of help, they prefer to work in hierarchical organizations, reflecting their dependency on the role of authority. In contrast, dispositionally avoidant individuals adopt a counter-dependent stance toward authority because their ongoing quest for emotional self-sufficiency leads them to dismiss status and withdraw from authority relations. Finally, dispositionally secure individuals view their relationship with authority as a collaborative process,

one in which they feel comfortable in *both* dependent *and* independent roles (Kahn & Kram, 1994).

Similarly, leadership styles are associated with dispositional attachment patterns. Recent research shows positive correlations between transformational leadership and dispositionally secure attachment style. In turn, such dispositionally secure leaders demonstrated secure attachment to their subordinates, investing empathetic and emotional efforts in their followers (Popper et al., 2000). For example, transformational leaders provide individualized attention, intellectual stimulation, and support of growth potential to subordinates (Bass, 1985).

Apart from dispositional attachment style, individuals in work settings can develop distinct multiple attachments to colleagues because they work in disparate hierarchies, roles, and tasks (e.g., attachments between managers and employees or between marketers and manufacturers in collaboration). Kahn (1998) conceptualizes secure attachment to a work colleague as a functional relational system, and insecure attachment to a work colleague as a dysfunctional relational system. In work relationships, insecure attachment (dysfunctional relational system) tends to be more prevalent than secure attachment (functional relational system). For example, research conducted at Project Hope revealed that most administrators showed insecure attachment behaviors, isolating their social worker colleagues by maintaining physical (e.g., separate workspaces) or emotional distance (e.g., avoiding the topic of social workers' emotional difficulties in conversation). Because the majority of social workers lacked the status or authority to influence this process, their relationships with administrators were mired in insecure attachment and dysfunction. Conversely, the few social workers who felt secure in their attachments to administrators demonstrated less burnout and more functional job-related behaviors (Kahn, 1998).

Attachment to Groups

Recently, Smith and colleagues (Smith et al., 1999, 2001) extended attachment theory to the domain of groups. The attachment to groups construct is based on the recent, dynamic view of attachment theory. The argument was that situational conditions generate attachments to groups that may depart temporarily from dispositional attachment styles established in childhood, while still reflecting these childhood attachment styles at some level. Attachment to groups is thus an individual's affect-driven

relationship to a group (Smith et al., 1999, 2001). Attachment to groups is an individual-level construct based on *both* an individual's positive or negative "working model of the self" *and* positive or negative "working model of the group (e.g., Bartholomew & Horowitz, 1991)." For example, an individual can feel securely attached to her workgroup when she has a positive working model of *the self* (i.e., her belief that she is a worthy member of the group) *as well as* a positive working model of *the group* (i.e., her belief that the group accepts her). Importantly, the combination of the two working models is critical to defining distinctive styles of attachment to groups. That is, she cannot feel securely attached to her group unless her working models of both the self and the group are positive. For example, if she has a positive working model of the self (i.e., confidence in her ability) but a negative working model of the group (i.e., devalue the group membership), she would be referred to as having an avoidant attachment to the group. Conversely, if she has a positive working model of the group (i.e., value the group membership) but a negative working model of the self (i.e., doubt regarding her ability and competence), she would be seen as having an anxious attachment to the group.

Attachment is also a target-specific construct (Bowlby, 1969). As such, attachment to groups is distinct from attachments to particular people (e.g., significant others or specific group members). In this regard, Smith et al. (1999, 2001) argue that attachment to groups has non-redundant effects over those of attachment to a significant other or another specific person. For example, an individual might carry over an attachment style from her marital relationship to her group at work. Or she might feel different qualities of attachment to her workgroup and spouse as a result of the processes that take place in each relationship. This dissociation may occur wholly within the work context, as well. For example, an individual may feel securely attached to a colleague in a university department of management. Yet she may feel insecurely attached to the management department as a whole when she is about to go up for tenure.

The points of distinction among attachment to groups, group identification, and team psychological safety have been covered earlier in this chapter. In this section we briefly discuss the differences among attachment to groups, "superordinate group identification," "social support" (or "perceived organizational support"), and "group (or organizational) commitment." First, *superordinate group identification* is one's cognitive representation of multiple groups as one common group that results from cooperative interdependence such as a common goal, shared interests, or a communal fate related to the joint effort of multiple groups (Gaertner, Mann, Dovidio,

Murrell, & Pomare, 1990). Superordinate group identification is similar to group identification: both are based on cognitive self-identity. However, as noted earlier, attachment to groups is an affect-driven relationship tie. Also, superordinate group identification by definition involves two or more groups. In contrast, attachment to groups can occur in the context of a single group. Second, while *social support* (or *perceived organizational support*) shares some features with attachment to groups (as one of our propositions in the following sections will suggest), attachment theorists argue that the social support literature has focused on one general type of support (i.e., comfort and assistance), whereas attachment theory is broader and more comprehensive in scope (Feeney, 2004). Thus attachment to groups encompasses social support within groups but goes beyond it to offer an explanation for more complex relationship dynamics, such as bonding within groups, relationship maintenance within groups, and group task performance (e.g., Shaver & Hazan, 1993). Finally, *group* (or *organizational*) *commitment* is one outcome of attachment to groups: individuals securely attached to their groups are more committed to working for the group (Smith et al., 1999, 2001). Yet group commitment is not part of the definition of the attachment to groups construct.

Attachment to groups is the most recent development in attachment theory, so the literature in this area is scarce. Nonetheless, emerging research on attachment to groups has documented functions of secure attachment to groups. For example, Brodt and Korsgaard (2003) show that attachment to groups influences trust development and cooperation in workgroups (see also Korsgaard et al., 2003). Thus research in this area is particularly important because it demonstrates the usefulness of attachment theory on predicting behaviors in workgroups.

ANTECEDENTS OF SECURE ATTACHMENT TO WORKGROUPS

The functions of secure attachment to groups, as illustrated above, attest to the importance of better delineation of this construct and its implications. Not only is there very limited research on the functions of secure attachment to groups, but there is also no existing literature on the conditions under which individuals feel secure short-term attachment to workgroups – in particular, the social and other contextual characteristics of workgroups that induce secure workgroup attachment in members. Again, our view is

that situational conditions can generate momentary attachments to groups that reflect but also depart temporarily from dispositional attachment styles. Therefore, we seek to identify the group characteristics that may temporarily induce secure attachments among individuals, irrespective of their dispositional attachment styles.

Although antecedents of secure attachments to parents or romantic partners have been presented in the developmental psychology literature (Ainsworth et al., 1978; Bowlby, 1980; Crowell et al., 2002; Davila & Sargent, 2003), we found no previous research regarding the antecedent workgroup conditions that lead to temporary induction of secure attachments among group members. Thus we draw on the existing developmental psychology literature to extrapolate antecedents of secure attachment to workgroups. However, because attachment to groups is distinct from attachment to parents or romantic partners (Smith et al., 1999, 2001), and no empirical research is yet available on secure-attachment-inducing workgroup conditions, it would be too ambitious to propose an exhaustive list of such antecedents. Indeed, the mechanisms generating attachment are complex, involving multiple psychosocial or physiological causes (Bowlby, 1969). The details of these mechanisms are still esoteric even in the developmental psychology literature. Thus, here we have the modest goal of only beginning to propose some individually necessary or sufficient conditions for inducing secure short-term attachment to workgroups, with the hope that future research will modify or supplement the insights here.

In early formulations of attachment theory, Bowlby (1969) emphasized the role of emotional exchange between a child and caregiver in the child's development of a specific attachment style. However, Bowlby did not address attachment dynamics in the context of workgroup relationships. Unlike the interpersonal relationships on which attachment theory was based – such as the mother–child dyad – workgroups by definition include a component of task performance, in addition to emotional exchange. Thus, to advance propositions on the conditions under which individuals' secure attachments to workgroups may be induced, we extend attachment theory from its original focus on social–emotional dynamics to also include task-related dynamics in groups by considering both types of conditions (i.e., social–emotional and task-related) as important in inducing secure short-term attachments to workgroups. Note that in the context of specific goals and tasks, some of the proposed social–emotional conditions might be related to how the groups perform their task. Thus social–emotional conditions may not be entirely unrelated to task conditions.

*Social–Emotional Conditions**Physical Proximity*

Bowlby (1980) suggests that physical proximity is the basic necessary condition for attachment. Thus attachment behaviors include actions that increase physical proximity between children and their caregivers. A primary function of attachment is to maintain proximity: staying near and resisting separations from caregivers. In the face of prolonged separations from their caregivers, children experience despair and detachment. Ainsworth et al. (1978) demonstrated that when subjects' mothers exited the experiment room the children began to feel anxious and detached – they felt insecurely attached to their mothers. Without physical proximity, then, individuals do not experience secure affectional bonds to relationship partners. Interestingly, Bowlby (1969) posits that individuals might feel attached to objects, such as dolls. To maintain the attachment, however, individuals must have physical proximity to the object. Also, although couples in long-distance relationships can feel attached to each other by viewing photographs of each other, this is likely based on past physical proximity (e.g., those couples had maintained physical proximity in the past). Similarly, photographs alone cannot sustain attachment in the face of prolonged separation. In sum, physical proximity is a requirement for ongoing secure attachment (Ainsworth et al., 1978).

Our view is that although physical proximity does not determine secure attachment to workgroups, it is a necessary condition for secure attachment to workgroups. Indeed, physical proximity is the feature that differentiates the attachment to groups construct from the related ones discussed here. For example, group identification can occur without actual interaction with the group (Turner et al., 1987). Conversely, one cannot feel attached to the group unless there is physical proximity. The importance of physical proximity for inducing a secure attachment to a group implies that certain types of workgroups might face heightened challenges in making individuals feel securely attached. Such groups would include virtual teams, in which members rarely or never meet face-to-face. This leads to the following proposition:

Proposition 1. When individuals work in closer physical proximity to workgroups, they are more likely to feel securely attached to the groups.

Sensitive Responses to Members' Expressed Negative Affect

The major function of attachment is protection from danger; thus, attachment is activated by anything alarming or threatening (Bowlby, 1969,

1973, 1980). The sources of such physical or psychological threats include: (1) internal conditions (fatigue, illness, hunger, pain); (2) caregivers' whereabouts (mother's general absence or inconsistent presence); (3) environmental conditions (unfamiliar situations and strangers). As such, attachment is intensely activated when there is negative affect that signals discomfort, frustration, anxiety, or fear (Bowlby, 1969). At these moments, sensitive and emotional communication between care-seekers and caregivers can make care-seekers feel securely attached. When caregivers respond and attend sensitively to care-seekers' negative affect, the care-seekers become assured of the caregivers' support and acceptance and believe that they are worthy individuals (i.e., they come to have positive working models of the self and others). That is, to activate secure attachment among care-seekers, (1) care-seekers should be able and willing to express their negative affect, and (2) caregivers should recognize and interpret care-seekers' negative affect accurately (Crowell et al., 2002).

In support of this postulation, recent longitudinal research found that even dispositionally insecure children developed secure attachments when their mothers' caregiving became more sensitive and responsive over time (NICHD Early Child Care Research Network, 2006). In contrast, when caregivers were observed to sometimes behave kindly and sometimes harshly, care-seekers came to believe that the caregivers were inconsistent and unpredictable and were thus more likely to become insecurely attached and worried about the caregivers' support and responsiveness (Ainsworth et al., 1978; Bartholomew & Horowitz, 1991; van IJzendoorn & Sagi, 1999).

By analogy, we posit that conditions related to negative affect are necessary and sufficient for inducing secure attachment to workgroups (Bowlby, 1969). Specifically, groups that encourage expression of negative affect and sensitive responses to it are likely to induce secure attachments among members. Importantly, accurate recognition of others' negative affects alone may be insufficient and even detrimental to the inducement of secure attachments. For example, whereas individuals who recognized colleagues' positive affects correctly received higher performance ratings from their teammates and supervisors, those who identified others' negative affects received lower ratings (Elfenbein & Ambady, 2002). In the workplace, employees often avoid expressing negative affects because they wish to convey an image of competence to their peers and management. This tendency may impede secure attachments to workgroups. However, when group norms encourage members to share their negative affect and respond to other members' negative affect sensitively and sympathetically, instead of ignoring or punishing, members are more likely to share their negative affect

and respond to that of others supportively, resulting in a higher likelihood of secure attachment.

These negative-affect-related group characteristics tend to be manifested in groups that have low levels of relationship conflicts (i.e., few personality clashes). Importantly, low levels of relationship conflict can appear either when members resolve negative affects harmoniously by expressing and responding sensitively (as we argue) or when members do not share negative affects at all and simply avoid relationship conflict. To the extent that sensitively expressing and responding to negative affect is the key necessary and sufficient condition for secure attachment (Bowlby, 1969), we argue that it is only when members express and respond to negative affects that the low levels of relationship conflict activate secure attachment to the groups. This feature also distinguishes the attachment construct from other related ones. For example, groups that have low levels of relationship conflict but do not share or respond sensitively to negative affect may appear to be highly cohesive groups or have positive group experiences; yet this general positivity in group dynamics is different from secure attachment to the group. Thus we propose that secure attachment to the workgroup is likely to be induced by the presence of all of the following multiple conditions:

Proposition 2. When the group has low levels of relationship conflict and individuals express negative affect and the group responds sensitively, those individuals are likely to feel securely attached to the workgroup.

Task-Related Conditions

Helping and Supporting

Related to the proposal above (i.e., regarding the expression of negative affect and responses to it), help with and the support of task-related activities are important conditions for secure attachment. Because secure individuals are confident in others' benevolence and supportiveness (Bowlby, 1969), they seek support as a habitual coping strategy, whereas anxious and avoidant individual (who doubt others' supportiveness) avoid seeking support (Birnbaum, Orr, Mikulincer, & Florian, 1997). Thus, it appears that without help and support secure attachment may not be induced. We argue that although the presence of help and support does not determine secure attachment, it is a necessary condition for secure attachment to workgroups. In secure workgroups, members who receive help may be more likely to feel that the group accepts them and that they are

worthy members of the group. Members who provide help to others in the group may, by doing so, enhance their perception that they are valuable members of the group. Thus both offering and receiving help appear to promote secure attachments to workgroups among members. If a group member feels threatened or likely to be embarrassed by a workgroup, he or she will tend to avoid communicating about difficult issues or asking for help with a problem (Argyris, 1993), but a group norm of providing mutual help and support on tasks might weaken this barrier, leading members to feel more securely attached.

In line with this, the literature about groups has documented that a cooperative orientation among members enhances team relationships and performance (Deutsch, 1968; Guzzo & Shea, 1992; Hackman, 1990). This finding is consistent with the view that coaching interventions focused specifically on team knowledge and skills facilitate team effectiveness more so than do interventions focused only on members' interpersonal relationships (Hackman & Wageman, 2005). Similarly, research on perceived organizational support reveals that support from organizations and leaders is one antecedent to team psychological safety (Edmondson, 1999), which may contribute to secure attachment to workgroups.

Proposition 3. When group members help and support one another on task-related matters, individuals are likely to feel securely attached to workgroups.

Fair Work Process

In task relationships such as workgroups, fairness is a necessary condition for the promotion of secure attachment between individuals and their workgroups. Fair division of labor signals that each member will receive equitable treatment by the group, and that his or her contribution to the group (e.g., thorough and timely handling of tasks) is respected because it facilitates the completion of higher-order tasks. The group value model (Tyler, Degoey, & Smith, 1996) stresses that such fair treatment is important because it communicates that the fairly treated member is a respected and valued member by the group. This is consistent with the positive working model of the self in attachment theory; that is, members with a positive working model believe that they are worthy members of the group. Also, fair treatment is likely to engender a positive working model of the group; that is, members receiving fair treatment will tend to believe that they may depend on the group to fulfill important needs. In turn, such perceptions of fairness promote individuals' commitment and loyalty to their groups, along

with their efforts on behalf of it (Phillips, Douthitt, & Hyland, 2001). Thus, we posit that group members are more likely to feel valued by the group and think that the group accepts them (i.e., develop a secure attachment to it) if they feel that they are treated fairly as part of it.

A fair division of roles and responsibilities is also likely to mitigate process conflict in groups, which often revolves around disagreements related specifically to the distribution of labor within them. Predictably, members of groups with high levels of process conflict are less satisfied with their groups (Jehn, 1997; Jehn, Northcraft, & Neale, 1999). Moreover, process conflict during early group interactions exacerbates later-stage conflicts (Behfar, Peterson, Mannix, & Trochim, 2002). Higher process conflict levels would impede the formation of secure attachment. However, it should be noted that a low level of process conflict does not guarantee that members perceive themselves as treated equitably; they just may not *voice* the perception of unfair treatment. Thus we believe that it is only when members feel equitably treated by the group that the low levels of process conflict within groups generate secure group-related attachment. We propose that secure attachment to workgroups is likely to be induced when all of the following conditions are present:

Proposition 4. When workgroups have low levels of process conflict and divide workload equitably among members, individuals are likely to feel securely attached to the groups.

Valuing Each Member's Contribution

The task-related competency of members and their contributions to the group's achievement of its goal are important in giving each member a sense of security with respect to his or her position within the group. Individuals appear to feel securely attached to workgroups if their task competency is acknowledged and especially if they are viewed by others experts. High-performing individuals generally feel securely attached to their groups. Conversely, those who perceive themselves as underperforming may feel insecurely attached to the group.

Unlike interactions within the personal relationships on which attachment theory was originally based – such as mother–child dyads (Ainsworth et al., 1978; Bowlby, 1969), and romantic ties (Hazan & Shaver, 1987) – involvement in workgroups can influence members' perceptions of their social status (Anderson, Srivastava, Beer, Spataro, & Chatman, in press).

Social comparisons of task performance are likely to occur between workgroup members, and the resulting inferiority some members might feel may prevent them from feeling securely attached to the group. One strategy to reduce this potential impediment to secure attachment would be to assign different responsibilities to members based on each one's distinct expertise, thus allowing members to recognize their own competence and that of others. Coordinating the interests and contributions of members in groups is extremely important (Homans, 1950).

It was previously noted that secure attachment arises when members hold positive working models of both the self and the group. Thus, if individuals believe that the group accepts them as members, but are unsure if the group values their contributions, they are likely to only have a positive working model of the group. If a group does not value a given member's talents and skills sufficiently such that the member feels like a worthy member of the group, the valence of that individual's working model of the self will remain in question. This asymmetry is likely to induce anxious attachment to the group, whereby members feel positive about the group but negative about the self. This is an important dimension, because in organizational groups low-status members may be particularly vulnerable to feelings of insecure attachment because their contributions, often relatively minor, are not respected. We conjecture, therefore, that low-status members are more likely to feel insecurely attached than securely attached. However, *if* groups value and respect even the minor contribution of low-status members, such members might believe not only that their membership in the group is unquestionable (i.e., positive working model of the group) but also that they are worthy members of the group (i.e., positive working model of the self), leading to secure attachment. We are aware that this pattern may be rare in organizations where minor contributions tend to be unappreciated, implying that secure workgroups in such organizations may be few, given the likely dearth of secure attachment to work colleagues (Kahn, 1998). Nonetheless, we propose that both accepting members' expertise and clearly valuing each member's expected contribution (regardless of its size) are critical to inducing secure attachment to workgroups.

Proposition 5. When workgroups match the expertise and competence of each member with that person's role and responsibility and value that member's contribution (whether it is major or minor), individuals are likely to feel securely attached to the groups.

SUGGESTIVE DATA

We developed the propositions here with the guidance of the existing attachment theory literature and the literature about groups. In this section, we detail some preliminary evidence for our proposals, for illustrative purposes only. It should be noted that this study is qualitative in nature and, as such, we present no control data or comparison groups. Thus our data-related conclusions must be viewed with caution. Nonetheless, our data suggest meaningful potential relationships in line with our propositions: the themes proposed here arose repeatedly in individuals' descriptions of their secure workgroups. Due to the lack of controls, we cannot assert that these data reveal unique antecedents of secure workgroup attachment or attest to the effects of specific behaviors and beliefs on attachment quality. Nonetheless, our findings suggest potential support for our hypotheses.

The participants in this study were 70 undergraduate students (mean age = 19.7 years) enrolled in an introductory business and management course at a northeastern University. Each participant received a bonus course credit and entry in a lottery for a \$50 gift certificate.

We used a priming method for the construct of secure attachment to groups (Lee, 2005). For our priming method we adapted material from previous research on adult developmental attachment (Baldwin, 1992; Baldwin et al., 1996; Hazan & Shaver, 1987; Mikulincer & Arad, 1999; Mikulincer & Shaver, 2001) to a workgroup setting. Participants were brought to a laboratory and asked to think about their past experiences in study groups, without regard for group size, group composition (homogeneity or heterogeneity), how the groups were formed, or how long the groups existed. Participants were explicitly instructed to recall a task group (rather than a social group) experience where the group had a clear goal of completing a task (e.g., preparing for a test or working on a project). Based on the attachment literature, we asked participants to recall a very specific incident related to secure attachment (vs. generally positive group experiences). Specifically, we asked them to reflect on instances when their team members had helped them solve problems that they could not solve individually, and they felt secure, accepted, supported, and comfortable depending on the team. In accordance with previous research on adult developmental attachment, participants were asked to close their eyes and visualize this type of team experience. Next they were invited to characterize this interaction with brief open-ended responses, detailing when it occurred (one blank line) and a sample of specific episodes from it (three blank lines).

Proposition 1 suggested that physical proximity is an antecedent condition for secure attachment to workgroups. Participants described spending significant time getting to know each other personally outside of their task-related work. Typical comments included: “My team would work late and then hang out after, which brought us closer together;” “We all ordered in food to pull an all-nighter;” “We spent many Saturdays working together;” “The team was very close – we hung out together;” “We went out to eat lunch after discussing the ideas;” “[I received] calls a week after the group project was over to get together and party;” “Before a test, we got together to do some last-minute studying, then played a game of kickball to de-stress.” These comments all relate to social interactions that occur when members are in close physical proximity.

Proposition 2 asserted that low levels of relationship conflict and sensitive responses to members’ expressed negative affect induce secure attachment to workgroups. Reflecting this, members of secure workgroups described minimal levels of *negativity* in their groups. Our participants’ statements implied that team members in secure workgroups did not demonstrate impatience, condescension, or anger. Rather, they appeared to use potential sources of negativity to enhance positive elements of the group. For example, members of secure workgroups often shared their personal problems, but there were no negative relationship conflicts. Examples of comments embodying these trends included: “I was late one time because of an incident, but nobody got mad;” “In moments of stress, they were extremely helpful;” “We all talked about the problem we were having with the course;” “I was mad that I didn’t do well on a part of a project, so my team comforted me;” “I got news [that] my mother was ill and my group took me out for ice cream;” “I had a track meet. Instead of being mad at me for having to miss our meeting, they said ‘Good luck;’” “There were no big problems within the group – but when there were [smaller problems], everybody discussed them efficiently;” “When I felt down about an upcoming test, they tried to assure me that I would do fine;” “When I was down the group leader made me feel respectable.”

With respect to task-related conditions, group members’ contribution and competence levels are important factors in inducing their secure attachments to workgroups, and the formation of secure attachment is abetted when individuals in tight-knit groups help fellow members who are not succeeding at work, as revealed by the comments of several of our participants: more competent members frequently helped less capable members, and, in doing so, the more capable members found personal enjoyment, often increasing their efforts in this regard. Typical comments included: “I missed a day of

my class and they backed me up by getting the assignments for me;" "I was overloaded with work in other classes, so someone took my responsibilities for a while;" "They knew that I didn't understand something, and [they] refused to move on;" "I felt comfortable depending on the team because I knew I could go to them [for the answers I needed];" "They knew that I need visuals to help me study, so they [assisted] me with pictures;" "[They] always welcomed me and offered to study together – even when I was confused;" "I wanted to give up, but the team motivated me and helped me through;" "No matter how long it took... to explain a concept to me, they were always willing to do it;" "When there was a group member less capable, I received satisfaction in helping them."

Another task-related condition of secure attachment we proposed involved fair work processes and low levels of process conflict (**Proposition 4**). Secure workgroups divide and perform administrative and task-related components of the workload equitably, such that all group members contribute significantly to group tasks and generally meet their assignment deadlines. Typical comments included: "We divided up the work, and everyone did their part;" "We shared goals and split responsibilities;" "Team members completed work early so the others could double-check it and make suggestions;" "I work well on a [task] as long as everyone is doing what they should be doing;" "Team members volunteered to do specific parts of the assignment without having to be asked;" "Teammates always were fair and honest about the task;" "[We made] an acceptable time for all to meet;" "[We divided] the work up equally among members;" "[We found a] time and place to meet that all were happy with;" "[Our] group could be counted on to be on time for meetings;" "There were agreements between all members about where we would meet and at what time."

Finally, we proposed that valuing each member's contribution is another task-related antecedent of secure attachment to workgroups (**Proposition 5**). Several examples from participants' descriptions illustrate behaviors consistent with the proposition. Typical comments included: "They told me I did a good job on my part of the presentation;" "My part of the work assignment was received well;" "Fellow students had faith in my work;" "[The] group commented on my ability to do a difficult problem;" "When I proposed an idea, everyone complimented me;" "I made a smart suggestion and everyone congratulated me on it;" "[The] group complimented my part of the speech;" "I feel accepted when my inputs are used in the group's task;" "When contributing a good idea, people would praise

me for it;" "Team members distributed the work so that everybody did the part of the work that he [or she] is best at."

DISCUSSION

By extending developmental psychology's attachment theory (Ainsworth et al., 1978; Bowlby, 1969) to the groups literature in organizational behavior, we have developed an attachment-theoretical perspective on workgroups. We presuppose that just as children's secure attachment to caregivers serves multiple positive functions (Ainsworth et al., 1978; Bowlby, 1969), individuals' secure attachment to workgroups enhances group processes and performance. Thus, we explored the conditions under which individuals are more likely to feel securely attached to workgroups. Attachment theory places great weight on the influence of caregiving environment (Bowlby, 1969; Fraley, 2002). Recent longitudinal research demonstrates that early childhood attachment style can vary with caregiving quality over time (NICHD Early Child Care Research Network, 2006). In accordance with this view, we explored how the caregiving environment (i.e., group characteristics) can induce secure attachment to groups regardless of individuals' dispositional attachment. We also presented some suggestive data that illustrate that workgroups are likely to induce secure attachment under specific social-emotional (i.e., physical proximity; sensitive responses to members' expressed negative affect) and task-related conditions (i.e., helping and supporting; fair work process; valuing each member's contribution).

Theoretical Contributions

Our view builds on the groups literature by suggesting a mechanism potentially underlying high-performing group outcomes. Our focus is on identifying antecedent conditions (non-exhaustive) that induce secure short-term attachment to workgroups. The existing literature shows that the conditions proposed in this paper are also positively related to high-performing group outcomes. For example, groups that have low levels of relationship conflict outperform those with higher levels (De Dreu & Weingart, 2003). High-performing and relationally satisfying teams divide work assignments based on member expertise and skills and demonstrate low levels of process conflict (Behfar et al., 2002). High-performing groups

demonstrate a culture of respect toward members (Jehn & Mannix, 2001). A plausible conjecture is that these beneficial factors enhance team performance independently and also through members' secure attachments to the group. If such mediation does occur, the connection between attachment theory and the groups literature reveals why these well-known group characteristics enhance group performance: because they promote the universally important and valuable secure attachment.

This paper extends attachment theory, originally applied to the child–parent dyadic relationship (Ainsworth et al., 1978; Bowlby, 1969), by investigating how the theory relates to task-focused relationships in groups. We proposed that beyond the social–emotional interactions in which attachment theory was initially rooted, task-related interactions also contribute to the inducement of secure affectional ties to workgroups. Although attachments to groups appear to be social–emotional in nature, we formulated propositions and presented preliminary data suggesting that task-related interactions contributed to inducing such attachments. However, it is also plausible that task-related interactions share a correlational relationship, rather than a causal one, with social–emotional interactions at work. To illustrate, in work relationships it is often difficult to distinguish task-related from social–emotional components. How task instruction is communicated and how individuals interpret communicated messages (e.g., as having either encouraging or attacking tones) can provoke social–emotional *interpretations* of task-related matters. Thus, regardless of whether a given interaction is truly social–emotional or task-related, it may have the potential to create affectional ties to the group – secure or insecure – depending on the social meaning it is assigned. So it may be the individuals' subjective perception of interactions or tasks, rather than the inherent qualities of these, that generate affectional ties to groups (Davila & Sargent, 2003). Another possibility is that the influence of task and social–emotional interactions on attachment may be circular. For example, task (in)competence might induce (in)secure attachment, which can lead to an upward (downward) spiral of positive (negative) social–emotional personal interactions and, in turn, enhance (degrade) task competence.

Managerial Implications

This chapter draws the attention of management to the importance of creating a positive and supportive workgroup environment. Attachment theory suggests an intuitive but fundamental managerial takeaway: human

beings perform at their best when they are securely attached in relationships with others (Bowlby, 1969). We began this chapter by noting that although creating a positive group environment is important for group process and performance, this has been a persistent challenge for most groups. In line with this, the propositions explored here may not appear all that surprising; what *is* surprising is that the secure-attachment-related behaviors we discuss are not well implemented in organizations. For example, Kahn's (1998) study with social workers demonstrated that most work relationships in organizations tend to mirror insecure attachment (and are thus dysfunctional). Thus we suggest that management avoid taking the proposed positive and supportive behaviors for granted, actively cultivating them within workgroups whenever possible. If teams and organizations are to realize the benefits that can accrue from teamwork, the group should function as a supportive and caring environment to which its members will be more likely to feel securely attached.

Recent theories on attachment research reveal that if caregiving environments change, dispositionally insecure individuals can develop secure attachment (Collins & Read, 1994; Fraley, 2002; Mikulincer & Shaver, 2001; NICHD Early Child Care Research Network, 2006; Pierce & Lydon, 2001). That is, regardless of an individual's dispositional attachment style, his or her group environment has an important influence on situational attachment. The process mechanisms we proposed in this chapter suggest non-exhaustive conditions under which workgroups can be environments where members feel secure affectional ties to their groups. Promoting tactics that create these conditions should enable groups to enhance working relationships and performance on multiple levels.

Although based on our current research we cannot firmly conclude that the conditions we propose enable secure attachments to groups over the course of the group's life, we suggest that the best time to intervene in regard to group processes may be very early. Recent research shows that teams that did not resolve process issues during initial interactions were more likely to develop dysfunctional routines at a later stage (Behfar et al., 2002). Thus we argue that to prevent dysfunctional processes from arising at a later stage, teams should establish secure workgroups early on by facilitating the conditions we proposed. Although establishing such conditions may sound out of reach given the routine conflicts of everyday interactions, norms established very quickly can have powerful effects on subsequent behaviors in groups (Bettenhausen & Murnighan, 1985). Even if groups fail in establishing such norms in the beginning, they may induce more secure attachments among members by subsequently shifting their norms. Recent

research shows that children who moved from insecure to secure attachment styles responded not to absolute levels of parenting quality but rather to often gradual changes in relative levels over time (NICHD Early Child Care Research Network, 2006). Altering group characteristics toward those associated with secure environments may thus induce secure attachments among individual members.

Future Research

We suggest three areas of future research on secure attachment to workgroups: (1) further exploration of its antecedents, (2) associated performance outcomes, and (3) possible downsides. Each area is explored below.

In this chapter we focused on the conditions under which secure attachment to workgroups may be temporarily induced. Future research should investigate how the conditions we propose influence one another in inducing secure attachments over the course of a group's life. For example, groups working more proximally are better able to perceive non-verbal and verbal cues that signal negative affect. To the extent that proximity enhances communication, members may be more motivated to share their negative affect and respond more sensitively to the display of it by others. The data this chapter presented are only preliminary and illustrative (without control data or comparison groups). Thus our data-related conclusions must be viewed with caution, and future work should undertake a more systematic research. For example, future longitudinal research could track how and when each condition we have proposed has a stronger or weaker main effect or interacts with another condition. In this research we focused on secure-attachment-inducing conditions; thus we presuppose that because a ceiling effect may limit positive shifts in the beliefs of dispositionally secure individuals (i.e., because they already have attachment security), dispositionally insecure individuals would be more influenced by these conditions to feel securely attached to workgroups. This assumption should also be tested in future research. Observational methods may also be useful for identifying the secure-attachment-inducing conditions of which individuals are less consciously aware (e.g., mimicry).

Future research related to antecedents of secure attachment could also examine how team leaders influence the emergence of secure attachments to workgroups. Popper et al. (2000) found that dispositionally secure attachment style was positively correlated with transformational leadership. Such securely attached transformational leaders may in turn establish

themselves as caregivers in teams and thus induce secure attachments for dispositionally insecure members. For dispositionally anxious members who de-authorize themselves in task performance (Kahn & Kram, 1994), the transformational leader may emphasize the role of authority by setting challenging goals. For dispositionally avoidant members who adopt the counter-dependent role of authority (Kahn & Kram, 1994), leaders may choose to de-authorize themselves to improve collaboration. To the extent that transformational leaders have dispositionally secure attachment (Popper et al., 2000) and construe authority as a collaborative process (Kahn & Kram, 1994), they may create team environments where members feel comfortable simultaneously depending on and remaining independent of hierarchical relationships within the team, which is the hallmark of secure attachment style. Future studies could investigate these links.

Another extension of our model would be an examination of how culturally or demographically diverse teams develop secure attachments. This question is particularly important because of the elevated frequency of cross-cultural teams in an increasingly global economy (Brett, 2001; Von Glinow, Shapiro, & Brett, 2004). Attachment is viewed as a basic human motive (Bowlby, 1969); yet each culture has its own norms and practices associated with caregiving behaviors, which may be reflected in distinctive patterns of attachment development. We speculate, then, that although the underlying motivation for attachment may be pan-cultural, the paths through which secure attachments develop may be distinctive across cultures. Thus, individuals' cultural backgrounds may serve to moderate some or all of the proposed antecedents of secure attachment. To the extent that affective experience, expression, and recognition vary subtly by culture (Elfenbein & Ambady, 2002; Oishi, Diener, Scollon, & Biswas-Diener, 2004; Soto, Levenson, & Ebling, 2005), developing secure attachments to culturally diverse groups appears to be a significant challenge.

The effects of secure workgroup attachment on performance are another area for future research. An important phenomenon that may be an outcome rather than an antecedent of secure workgroup attachments is positive group affect. The groups literature shows that positive affect in groups engenders cooperation, reduces conflict, and improves perceptions of task performance (Barsade, 2002). Experimental studies on attachment have found that secure attachment prime generates positive affective reactions to neutral stimuli rather than vice versa (Mikulincer, Hirschberger, Nachmias, & Gillath, 2001). Secure individuals express positive emotions frequently (Feeney & Cassidy, 2003; Fraley, Garner, & Shaver, 2000); similarly, secure children showed relaxed and mutually enjoyable interactions with

parents (Main & Cassidy, 1988). In contrast, insecure individuals showed emotionally neutral or low-level affective expressiveness in interpersonal communications (Ainsworth et al., 1978; Belsky, Rovine, & Taylor, 1984). Insecure individuals also engaged in more conflicts with caregivers (Main & Cassidy, 1988). Thus, positive group affect may be an outcome of secure attachment to workgroups; if so, secure-attachment-induced positive affect may, in turn, enhance group performance.

Task conflict is another important outcome of secure attachment to workgroups. The groups literature demonstrates that groups that encourage and utilize dissenting opinions reach higher-quality group decisions (Phillips, 2003; Phillips et al., 2004; Wittenbaum & Stasser, 1996). Importantly, research by Phillips (2003, 2004) has shown that members who belong to the same group respond to one another favorably when the ingroup members share conforming views and unfavorably when the ingroup members share dissenting views. The group conflict literature also shows that individuals often interpret task conflict personally (Simons & Peterson, 2000) and task conflict is negatively related to members' levels of satisfaction with the group (De Dreu & Weingart, 2003). Thus, in the early phase of group interactions, sharing dissenting views and having high levels of task conflicts may inhibit the inducement of secure attachment to the workgroup (i.e., the ingroup). After feeling securely attached to the group, however, members are assured of the group's support and responsiveness to them, such that they may feel more comfortable respecting the different views and opinions of others and feel secure enough to share their own dissenting views while constructively challenging other members' ideas. This would help the group reach satisfactory solutions to task problems. In contrast, members insecurely attached to the group may still be more disposed to voice conforming views in the group to receive acceptance, thereby generating suboptimal performance.

Although we believe that secure group attachments among members are crucial to healthy group functioning, we recommend a balanced view of the construct, one that considers both its upsides and disadvantages. Substantial developmental psychology research has documented the positive functions of secure attachment. However, attachment to an individual (i.e., that of the developmental psychology literature) and attachment to a group may differ on critical psychological dimensions. Social psychological research shows that interindividual relations differ from intergroup relations, the latter being more competitive (Insko, Schopler, Hoyle, Dardis, & Graetz, 1990). Thus, our speculation is that secure attachment to workgroups, consistent with the

findings of developmental psychology, may have multiple positive functions in regard to *intragroup* process and performance; however, it may not always serve intergroup relations positively. For example, Lee (2005) found that when members with secure attachment to a workgroup experience a threat to their task performance relative to a member of another group, members in the secure-attachment condition showed more unfavorable attitudes toward the other group than members in the neutral condition. This research suggests the presence of specific conditions under which the positive effects of secure attachment to workgroups might be limited.

Also, one might conjecture that those who receive help and support from fellow members in secure groups (as considered by Proposition 3) may ultimately demonstrate suboptimal performance because they might not fully develop adequate skill levels sufficient to perform on their own. We speculate that this pattern is plausible when the help hinders the work process – for instance, when intervening members take a micro-management approach. Given that dependency in work relationships is associated with anxious attachment (Kahn & Kram, 1994), micro-managing help may ultimately promote anxious (vs. secure) attachment to the group. In contrast, a coaching-based approach by which intervening members not only provide low-performing members with necessary skills and knowledge but also encourage them to develop related competencies (Hackman & Wageman, 2005) may engender secure (vs. anxious) attachment. Developmental psychology research has consistently demonstrated that securely attached individuals tend to be higher-performing than their insecurely attached counterparts (Shaver & Hazan, 1993). In light of this considerable evidence, we posit that *if* attachment security is successfully generated among specific low-performing members (i.e., those who have received help and support), these individuals should become higher-performing. Future research should explore the specific help-related conditions that generate attachment security or attachment anxiety, along with associated performance outcomes.

As these areas for future inquiry suggest, additional research can only enhance our understanding of the complex interplay among secure attachment to workgroups, group process, and performance.

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CHAPTER 10

MANAGERS' AFFECTIVE EXPRESSIONS AS DETERMINANTS OF EMPLOYEE RESPONSES TO CHANGE

Rachael E. Wells and Joel Brockner

ABSTRACT

Building upon the psychological literature on responses to potentially traumatic events (e.g., Bonanno, 2004; Tugade & Fredrickson, 2004), this chapter explores the potential impact of managers' affective expressions during tumultuous times at work. We propose that managerial displays of positive emotions that are also socially appropriate and authentically experienced will enhance employee and team change-related outcomes. We also explain why emotional suppression on the part of managers may be detrimental to healthy employee responses to change. Finally, we discuss theoretical and practical implications of this model.

Frequent change has become a vital means of sustaining, improving, and signaling firm performance in the face of dynamic market and customer demands. Anticipating cheers from shareholders and customers, CEOs tend to make related announcements proudly, forecasting better returns and

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improved product value. The work team members whose day-to-day lives are fundamentally affected may react less positively, however. In fact, many employees wince ever so (or not so) slightly in the face of announcements of change. Such common discomfort, and even fear and anxiety, has propelled popular books such as *Who Moved My Cheese?* (Johnson, 1998) onto *The New York Times* bestseller list (Paperback Bestsellers, 2002). It seems that employees are aching for greater insight into how to react effectively to unexpected shifts in their work lives. Meanwhile, their team leaders and organizations depend on such resilience to ensure effective implementation of change-related efforts. Whereas many important contributions have been made to our understanding of this area, much of the existing literature has centered on *cognitive* predictors of positive outcomes in the context of change, e.g., perceptions of managerial fairness (Brockner et al., 1994; Kernan & Hanges, 2002) or of control and self-efficacy (Brockner et al., 2004; Wanberg & Banas, 2000). This chapter focuses on some hitherto unexplored managerial influences on employee responses to marked workplace system shock, concentrating on characteristics of managers' emotional expressions.

Consider one of the first things that employees do upon hearing startling organizational news: survey the emotional reactions of their immediate managers. Some employees may engage in this activity consciously, but many others may do this instinctively, without even realizing it. While doing so, some will see faces beaming with unbridled optimism despite the obstacles; others will sense twinges of fear and anxiety. Some employees will perceive genuine displays of emotion, and others will encounter only the masks that their managers have fashioned for the occasion, be they intentionally neutral or painted in the sentiment they deem appropriate. In scanning their bosses' expressions, employees seek clues as to how to make sense of it all, what they should think about the situation they collectively face, how they themselves ought to feel, and how to behave. Indeed, following an organizational shock, the emotional displays of middle managers may be quite influential. In the pages that follow, we will present detailed arguments regarding such effects of three dimensions of managers' affective expressions (*valence*, *appropriateness*, and *authenticity*) on employee and team responses to change. More specifically, we will argue that managers who more frequently display positive emotions, that are also socially appropriate and authentic, may help to sustain employee and team functioning during tumultuous times at work. We will explain why this is expected to be the case. Before doing so, we describe the types of employee reactions to change to which our analysis is directed.

CHANGE-RELATED EMPLOYEE OUTCOMES OF INTEREST

We aim to predict the maintenance of employees' psychological *and* behavioral functioning in the face of marked workplace system shock, including change, crisis, challenge, or other sources of stress (e.g., layoffs, reorganizations, process re-engineering, mergers and acquisitions, major strategic, technological, or policy changes). Drawing on the psychological literature on resilience in response to loss, trauma, and other stressors (e.g., Bonanno, 2004, 2005; Tugade & Fredrickson, 2004), we seek to identify factors that influence employees' tendencies to continue to function well in the face of workplace change. Bonanno (2004) uses the aforementioned term resilience to denote:

The ability to maintain a stable equilibrium ... the ability of adults in otherwise normal circumstances who are exposed to an isolated and potentially highly disruptive event, such as the death of a close relation or a violent or life-threatening situation, to maintain relatively stable, healthy levels of psychological and physical functioning. (p. 20)

Our own outcomes of interest are quite similar to those described by Bonanno, with minor adaptations made to fit the organizational context. While we do not conceive of weathering a downsizing (as one example of organizational change) as entirely analogous to the experience of losing a loved one (Bonanno, Moskowitz, Papa, & Folkman, 2005) or surviving war (Bonanno, Papa, Lalande, Westphal, & Coifman, 2004) or the September 11 attacks (Bonanno, Rennie, & Dekel, 2005), we find the latter research highly relevant to studies of organizational change. This is because, psychologically speaking, organizational changes are often experienced as potentially traumatic events in many workers' lives. Based on this assumption, in choosing outcomes of interest, we consider it worthwhile to employ the more holistic approach to human functioning that we found in the clinical literatures. As organizational behavior researchers, we are of course interested in measures that have become standard markers of individual functioning within organizations, and in the context of change specifically, such as organizational commitment (Brockner et al., 2004; Herscovitch & Meyer, 2002; Judge, Thoresen, Pucik, & Welbourne, 1999; Kernan & Hanges, 2002), job satisfaction (Judge et al., 1999; Kernan & Hanges, 2002; Rafferty & Griffin, 2006; Wanberg & Banas, 2000), turnover (Brockner et al., 2004; Judge et al., 1999), turnover intentions (Kernan & Hanges, 2002; Rafferty & Griffin, 2006; Wanberg & Banas, 2000), person–environment fit (Caldwell, Herold, & Fedor, 2004), and job performance

(Brockner et al., 2004; Judge et al., 1999). Yet, given our conceptualization of employees facing organizational change as people experiencing a potentially traumatic life event, we are also interested in measures that have been more common to clinical studies than to organizational ones, including subjective well-being (SWB) and physical health indicators such as insomnia and illness (see, for example, Bonanno et al., 2005). For simplification purposes, we have isolated five outcome categories of interest from the measures discussed above, which are conceptually distinct, and yet interrelated:

- physical health (e.g., insomnia, illness/absences);
- overall SWB (general SWB, reported stress/anxiety levels, depression);
- quality of social relationships (with boss, coworkers, family/friends);
- organizationally relevant subjective outcomes (job satisfaction, organizational commitment, perceived person–environment fit); and
- organizationally relevant behavioral outcomes: turnover and performance.

PREDICTORS OF MAXIMAL EMPLOYEE FUNCTIONING IN THE FACE OF CHANGE

Positive Valence of Managers' Emotional Displays

One relevant dimension of managers' emotional displays is *valence*, in particular, the relative degrees to which they express positive and negative emotions. Many important fine-grained distinctions may be made here, e.g., between acute emotional states, mood, and dispositional affect, between negative affect and the more specific individual emotions of fear, sadness, anger, etc. To start, we introduce the current model with a relatively broad brush of affect valence, following the lead provided by the related literature on trauma and other significant stressors (Bonanno, 2004; Tugade & Fredrickson, 2004).

Indeed, psychological studies of potentially traumatic contexts conducted in nonwork settings have repeatedly featured the experience of positive affect (in addition to, not instead of, negative affect) as a main determinant of resilience (e.g., Bonanno, 2004; Bonanno et al., 2005; Tugade & Fredrickson, 2004). This finding may seem counterintuitive. Research does not consistently indicate that people who respond best experience fewer *negative* emotions while under stress. Rather, these employees have the capacity to experience more *positive* emotions in the midst of dealing with stress or

trauma; they report feeling happier, more eager, interested, and excited and are able to make more jokes and to laugh to a greater extent (Bonanno, 2004; Tugade & Fredrickson, 2004).

From where does this capacity for positive emotions, and by extension, the associated improved response trajectory come? Most of the existing literature casts this tendency as driven by individual differences – sometimes suggesting the tendency may even be innate (Bonanno, 2005). We aim to extend current thinking on the subject by theorizing that, at least within organizational settings, a relationship between positive affect and good change-related outcomes can occur *inter*-personally, as well as *intra*-personally. Although the potential for a buoyant response to potentially traumatic events may reside within persons, it is also possible that the behavioral expression of such ability may involve environmental factors, such as natural social processes within work teams. To begin, we make the following proposition:

Proposition 1. Team managers' expressions of positive affect will be related to enhanced team members' outcomes in the face of significant workplace change.

There are at least three theoretical pathways that may account for the relationship set forth in Proposition 1. As depicted in Fig. 1, these three types include those routed through: (1) emotional contagion processes and the associated transfer of positive emotions from manager to employee, (2) the direct influence of observing managerial positive affect on employee judgments (independent of employees' own affective experiences), and (3) the effects of managers' positive affect on their own job performance.

EFFECTS OF MANAGERS' POSITIVE EMOTIONAL VALENCE RESULTING FROM EMOTIONAL CONTAGION

We first discuss the pathways operating through emotional contagion processes (Barsade, 2002; Hatfield, Cacioppo, & Rapson, 1994). Employees will often *catch* their managers' emotional expressions in the course of interpersonal exchanges. Through the contagiousness of their own positive emotional expressions, managers may therefore be able to stimulate their employees' abilities to respond adaptively to potentially traumatic events, enabling better outcomes. Let us further explain how such emotional contagion processes unfold.

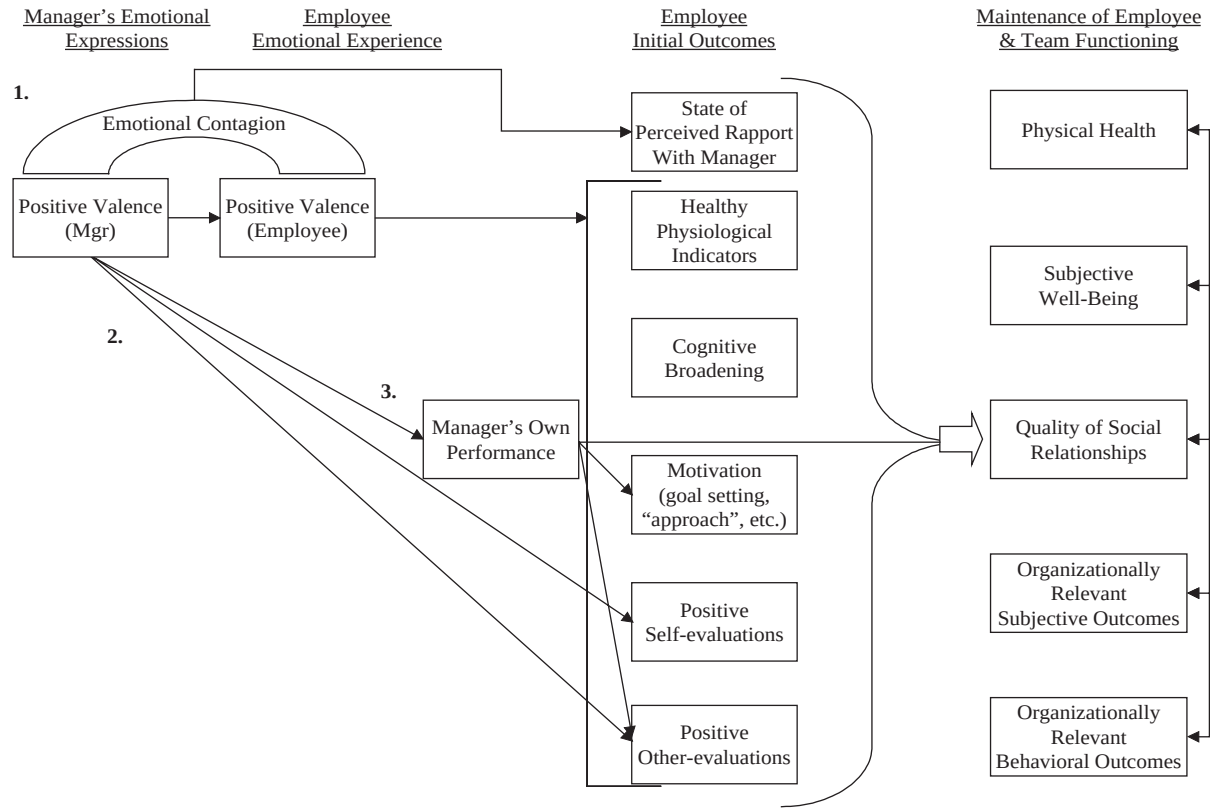


Fig. 1. Visual Depiction of the Three Causal Pathways Associated with Proposition 1.

When two people engage in face-to-face conversation, they tend to mimic each other's nonverbal behaviors in the service of establishing rapport, either unconsciously (Chartrand, Maddux, & Lakin, 2005; Hess, Philippot, & Blairy, 1999; Lakin & Chartrand, 2003; Levenson & Ruef, 1997) or consciously (through social comparison processes; Barsade, 2002). As one conversation partner mimics the nonverbal behaviors of another, the emotions underpinning those contagious nonverbal behaviors tend to spread to the other person as well (Barsade, 2002; Hatfield et al., 1994). Moreover, there is evidence that those with greater power may be more likely to pass on their own emotions to others, rather than the other way around (Anderson, Keltner, & John, 2003; Sy, Côté, & Saavedra, 2005). This emotional transfer may be especially likely to occur in the context of organizational change, which often involves a sense of threat, thereby leading people to be more attentive to and influenced by others' reactions (Gump & Kulik, 1997).

Given the current context, there are two chains of beneficial consequences that we expect to result from managers' passing their positive emotions on to their employees. First, successful emotional contagion processes will produce increases in rapport that, in turn, will help drive further maintenance of employee functioning. Second, once employees catch their managers' emotions and are feeling more positive themselves, their own felt positive emotional experiences may elicit a host of mechanisms underlying maximally effective responses to change.

Rapport

Most obviously, boosts in rapport derived from nonverbal mimicry will help preserve the overall quality of the social relationship between the manager and the employee, during a time when trust is often shaken. In addition to being an important positive outcome in its own right, a sustained quality relationship between the employee and the manager may also facilitate other positive change-related outcomes. The experience of achieving nonverbal synchrony and the resulting rapport are also associated with increased liking between interaction partners (Chartrand et al., 2005). Given that positive people are generally more likable (for a review, see Lyubomirsky, King, & Diener, 2005), increased rapport resulting from nonverbal mimicry would supplement any direct effects of the manager's positive emotions on employee liking of the manager. Employees who like their managers are apt to value pleasing them and consequently will be motivated to work hard

to maintain levels of performance, even in tough times. In the terms of Vroom's (1964) expectancy-valence theory of motivation, the experience of rapport with the manager will influence the extent to which employees value the rewards of performing well and having the associated experience of gaining the social approval of their managers. Indeed, previous research suggests that employees' affective attachments to their managers are directly related to their job performance, as well as inversely related to another behavioral outcome of interest: turnover (Gerstner & Day, 1997; Vandenberghe, Bentein, & Stinglhamber, 2004).

Experiencing One's Own Positive Emotions

Moreover, once employees are experiencing positive emotions, their own emotional experiences will influence several additional drivers of good change-related outcomes. Positive emotions are not mere by-products of effective modes of thinking and behaving during potentially stressful or traumatic circumstances; studies have implicated them as playing an active role in how people respond to stressors (e.g., Tugade & Fredrickson, 2004). Specifically, the experience of positive emotions may affect employees': (1) physiological states, (2) cognitive styles and processes, (3) motivational systems, (4) self-evaluations, and (5) evaluations of the situation at hand (e.g., judgments regarding the efficacy of the manager and the team, the degree of threat the system shock presents, etc.).

We start by describing the effects of positive emotions on physiology. Fredrickson and colleagues (Fredrickson, Mancuso, Branigan, & Tugade, 2000; Tugade & Fredrickson, 2004) have demonstrated that positive emotions have a beneficial physical effect on the body, undoing the cardiovascular stress reactions to negative emotional experience and enabling individuals to quickly return to baseline physiological levels. As organisms under physiological stress are more likely to become sick due to weakened immune systems (Cacioppo, 1994), such effects of positive emotions will help maintain physical health, through reducing incidence of illness and thereby limiting employee absences from work. In addition, increased cardiovascular activity (e.g., elevated heart rate) has been associated with insomnia (Adam, Tomeny, & Oswald, 1986; Bonnet & Arand, 1998). Thus, the latter is likely to be reduced as well, enabling the sleep essential to ensuring an employee's cognitive ability to perform effectively on the job (Dinges et al., 1997; Philibert, 2005).

Next, we highlight the favorable effects of felt positive emotions on cognition. Positive emotions have been associated with broader scopes of

attention and thought–action repertoires (Fredrickson & Branigan, 2005) and with greater creativity (Ashby, Isen, & Turken, 1999; Isen, Daubman, & Nowicki, 1987), even in organizational samples (Amabile, Barsade, Mueller, & Staw, 2005; Fredrickson & Losada, 2005). During stressful organizational circumstances in which employees' help may be critical to figuring out how to get work done with fewer people or resources, or developing a new strategy or technology, this widened focus and consideration of ideas and actions may be particularly useful, both at the individual and the team levels.

Moreover, previously observed relationships between positive affect and cognition may be heightened in the face of stressors. This is because such a context may introduce a moderator that has not yet been explored in this literature, to our knowledge: the level of negative affectivity experienced prior to or alongside the elicitation of positive affectivity. Negative affectivity has been associated with *narrowed* thought–action repertoires (Fredrickson & Branigan, 2005). As organizational change processes may often trigger negative emotions such as fear, anxiety, and anger, without positive affect intervening to undo the effects of negative affect, we may expect that employees in change situations will work in an even more rigid frame of mind than subjects in previous *neutral affect* conditions have displayed. Levels of creativity essential to maintaining performance may therefore be *reduced* rather than enhanced. As a result, within a context of organizational change in which negative affect is likely to be experienced, the differences in creativity observed between employees with low and high levels of positive affect may be amplified since the *low positive affect* group may be more precisely labeled as *low positive affect, high negative affect* rather than the neutral affect (*low positive affect, low negative affect*) comparison condition observed in previous studies.

Cognitive changes may not only influence objective performance but also may drive effective coping behaviors. The active open-mindedness associated with positive affect is needed to successfully engage in thinking-based coping tactics, such as reappraisal. In fact, Tugade and Fredrickson (2004) found that people experiencing positive emotions were more likely to assess a stressor as a *challenge* as opposed to a *threat*, and to find positive meaning in the experience with the stressor. These factors, in turn, fueled effective regulation of negative emotions and associated cardiovascular recovery. Such effective emotional regulation and speedy physiological quieting can help prevent significant lapses in SWB, and in objective performance.

Positive affect has also been previously associated with enhanced job motivation, including goal-setting behaviors (Erez & Isen, 2002; George & Brief, 1996; Seo, Barrett, & Bartunek, 2004). Being in a state of positive

affect can enhance individuals' expectations and their subjective valuation of the benefits of achieving their goals, which in turn leads to setting higher targets and being more committed to those targets. Boosts in motivation and goal setting, in turn, may make the difference between giving up and persisting. As such, they may be even more crucial to performance in this context than they are in more routine circumstances where giving up is a less likely occurrence. Furthermore, the regulatory focus theory of motivation (Higgins, 1997, 1998) has associated a promotion focus with traditional positive emotions (i.e., high positive valence, high arousal emotions), and research has demonstrated a relationship between a promotion focus and creative cognition (Friedman & Forster, 2001). Although positive emotions such as cheerfulness have typically been framed as outcomes of a promotion focus, the reverse may also be true. That is, a positive emotional state may also activate a promotion focus, facilitating the explorative processing style that may be particularly needed for effective coping skills useful for maintaining SWB and performance under shifting environmental conditions.

Additionally, once goals are achieved, the promotion state will produce even *more* positive emotions that may be reflected in measures of SWB. Along similar lines, a promotion focus has been associated with a greater sense of intrinsic motivation as well (Brockner & Higgins, 2001), which in turn produces creative performance (Amabile, 1988) and job satisfaction (Hackman & Oldham, 1976). Positive mood at work also helps produce what George and Brief (1992) have called "organizational spontaneity," including voluntary behaviors such as helping coworkers and making constructive suggestions. As noted earlier, these behaviors might be especially necessary to foster the maintenance of team performance in times of change or crisis. Such helping driven by positive emotions is also likely to sustain supervisors' and coworkers' affinity for the employee and otherwise support the maintenance of good relationships at work.

Finally, positive affect may also influence employees' evaluations of themselves and of others. Particularly when other information on which to base a particular judgment is ambiguous and when the cause of experienced emotions is uncertain, individuals have been shown to use their feelings as information or input into their judgments (Schwarz & Clore, 1983). Most organizational system shocks will create the requisite uncertainty to propel people to look to their feelings to help determine their attitudes. When those emotions being consulted are positive, in general, employees will conclude that all must be all right. Additionally, we expect that in employees who experience mixed emotions, or negative emotions immediately followed by

positive emotions, the positive affect experienced will mitigate any effects of negative affect on judgments.

With regard to judgments about the self, positive affect may lead employees to sustain a greater level of self-efficacy and sense of personal control (Lyubomirsky et al., 2005). This may be because they infer that they could not be feeling positively if they were *not* capable of achieving their goals or were not in control. Both self-efficacy and perceived control have been empirically linked to relevant outcome variables in the context of downsizing (e.g., performance, organizational commitment, and indicators of SWB (Brockner et al., 2004; Wanberg & Banas, 2000; Wiesenfeld, Brockner, & Martin, 1999; Wiesenfeld, Brockner, Petzall, Wolf, & Bailey, 2001)). Within the clinical and health psychology literatures, self-efficacy (and even more precisely, self-enhancement) has been highlighted as a central pathway to numerous measures of effective responses to potentially traumatic events (Bauer & Bonanno, 2001; Bonanno, 2004; Bonanno et al., 2005; Taylor & Armor, 1996; Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000). Of course, many studies outside of the context of traumatic events also have suggested basic linkages between self-efficacy and each of task performance (Bandura & Locke, 2003; Stajkovic & Luthans, 1998), mental health (Bandura, Pastorelli, Barbaranelli, & Caprara, 1999), and physical health (Bandura, 2004).

Particularly in situations mired by ambiguity, and via the same “mood as information” mechanism (Schwarz & Clore, 1983, 2003), positive affect has even been associated with perceptions of greater procedural fairness at work (van den Bos, 2003) and with increased trust (Dunn & Schweitzer, 2005). In studies of downsizings and organizational change, procedural justice and trust (in management) have in turn been shown to produce greater job satisfaction, organizational commitment and performance, and decreased turnover intentions (e.g., Brockner et al., 2004; Brockner & Wiesenfeld, 1996; Kernan & Hanges, 2002; Spreitzer & Mishra, 2002). Having trust in management and a sense that management is treating employees fairly may also reflect or lead to a higher quality relationship with the manager.

DIRECT EFFECTS OF MANAGERIAL POSITIVE EMOTIONAL VALENCE ON EMPLOYEE JUDGMENTS

Independent of emotional contagion processes, a manager's positive emotions may also influence employees' reactions to change. Given such a scenario,

employees may still use mood as information, in this instance utilizing their *managers'* moods as inputs into their judgments instead of their own moods. Change at work often creates ambiguity and uncertainty, particularly for those more distant from the decision-making processes that give rise to such events. Research has shown that people in both change contexts specifically, and uncertain or novel contexts more generally, seek more feedback for informational and goal-seeking purposes (Ashford, 1988; Rafferty & Griffin, 2006). When employees feel starved for reliable information to help them evaluate the situation, they may try to glean information by monitoring their bosses' affective expressions. Thus, they may use their managers' expressions of positive affect as "social information" (Salancik & Pfeffer, 1978) bases for self-efficacy and team-efficacy judgments, for example, reasoning that their managers would not be able to feel positively if they did not believe that their groups were able to meet the current challenges. As discussed above, those higher expectancies will help ensure greater levels of performance and foster enhanced SWB.

EFFECTS OF MANAGERS' POSITIVE EMOTIONS ON THEIR OWN JOB PERFORMANCE

Managers' positive emotions may have other beneficial consequences for the maintenance of employee and team change-related outcomes, by driving them to perform their own jobs better. The positive affect of managers may lead them to engage in more effective goal setting for their teams, which will increase both individual and team-level performances. The managers' positive affect also may enable the broadened thinking and scope of attention necessary for creativity, and they may, on their own, come up with the creative solutions to whatever problems the system shock has presented. In doing so, they themselves may enable more positive outcomes for everyone on their teams.

Managers experiencing more positive affect may engage in more effective change management practices. They may be less prone to hide in their offices and more likely to communicate fully and transparently, provide employees with "voice" (Folger, 1977), i.e., the opportunity to participate in change-related decision processes through expressing opinions. Such actual improvements in management practices may yield desired benefits in employees' sense of control and assessments of managerial

fairness and trustworthiness, leading in turn to more positive change-related outcomes.

Finally, managers who express positive affect are bound to be liked more – by their employees, as explained earlier, but also by other important groups (e.g., customers, superiors, outside resource providers). If managers are liked more by these other groups, they may be likely to convince those other groups to furnish their teams with more resources. Those resources provided by outsiders may lead to preserved results in the face of challenge.

APPROPRIATENESS OF MANAGERS' EMOTIONAL DISPLAYS

Appropriateness is a second important dimension of managers' affect. Positions of power can decrease managers' inhibitions (Anderson & Berdahl, 2002; Keltner, Gruenfeld, & Anderson, 2003), leading to more automatic and effusive emotional reactions, and, at times, more socially inappropriate behavior. Evidence suggests that positions of power bestow managers with more social leeway in expressing certain emotions, such as anger (Hess, Adams, Reginald, & Kleck, 2005). Yet, strong social expectations for the emotions that people are allowed to internally experience in a particular situation ("feeling rules," (Hochschild, 1979), or at least externally express ("display rules," (Ekman & Friesen, 1969; Rafaeli & Sutton, 1989), may apply to managers as well. Tiedens' (2001) work, for example, suggests that managers' expressions of sadness may result in a loss of power as construed by their employees. To be maximally influential and effective, then, managers may need to express emotions that meet the expectations of what their social environments deem appropriate for a given situation. Therefore, despite our proposition concerning the beneficial effects of managers expressing more positive emotions, we recognize that positive emotions may not be appropriate in every situation. For example, laughing while telling layoff survivors about the dismissal of their former colleagues would likely be disastrous. Accordingly we propose:

Proposition 2. The appropriateness of managers' affective expressions will moderate the relationship set forth in Proposition 1, such that increases in team managers' expressions of positive affect will lead to more positive team members' outcomes when team members perceive managers' affective expressions to be more appropriate.

AUTHENTICITY OF MANAGERS' EMOTIONAL DISPLAYS

A third dimension of managers' emotions that may influence positive change-related employee outcomes is their perceived *authenticity*. Specifically, we distinguish three cases: expressed emotions that are perceived to be genuinely experienced (*authentic emotional expression*), expressed emotions that are perceived to be faked externally and not actually felt by the manager (*inauthentic emotional expression*), and a lack of expressed emotions that conceals genuine feelings experienced by the manager (*emotional suppression*).

The first role for authenticity in this model is as a moderator of the valence effects set forth in Proposition 1. Managers' positive affective expressions that are perceived to be genuine will be more likely to help sustain employee and team functioning than those that are perceived to be inauthentic. Ekman and colleagues (Ekman, 1992; Ekman, Davidson, & Friesen, 1990; Ekman & Friesen, 1982; Frank, Ekman, & Friesen, 1993) have demonstrated that genuine (i.e., Duchenne) smiles, classic means of expressing positive affect, predictably feature certain facial characteristics that faked smiles lack. Moreover, evidence from both basic (Frank et al., 1993) and applied research in the context of customer service encounters (Grandey, Fisk, Mattila, Jansen, & Sideman, 2005; Hennig-Thurau, Groth, Paul, & Gremler, 2006) suggests that lay social perceivers react more positively to authentic smiles than to inauthentic ones. Such findings imply that perceivers distinguish between the two and are affected differently by each. In fact, Hennig-Thurau et al. (2006) demonstrated a significant influence of authenticity on the contagiousness of positive emotional displays. More specifically, customers who interacted with service employees expressing more authentic positive emotions reported feeling greater positive affect than did those exposed to less authentic positive emotional displays on the part of service employees. Thus, nonverbal behaviors that are not naturally produced by the manager's felt emotions are less likely to lead to the intended emotional experience in the employee, and by extension, are less apt to elicit the downstream benefits of successful emotional contagion discussed previously.

Authenticity may also influence the way in which managers' affective expressions serve as informational inputs into employee evaluations about the environment. If employees sense phoniness in their managers' positive emotional displays, not only will those displays fail to engender more positive employee evaluations, but they may also actually incite more *negative* employee reactions to the change, by producing employee distrust.

As noted previously, past research suggests that such distrust of management would be associated with worsened change-related outcomes (Spreitzer & Mishra, 2002).

Finally, managers who are faking or surface-acting their positive emotions are unlikely to muster the personal resources associated with genuine positive affect that may otherwise help drive positive change-related outcomes for the team overall (e.g., broadened cognition, improved employee and team goal-setting activities, more comfort in approaching employees and engaging in effective communication, etc.). Indeed, research has shown that workers in other positions who, in order to express organizationally desired emotions, engage in such surface acting end up actually experiencing *fewer* positive emotions and finding the emotional display activity more difficult (Beal, Trougakos, Weiss, & Green, 2006; Grandey, 2003), leading to higher rates of emotional exhaustion and burnout (Montgomery, Panagopolou, de Wildt, & Meenks, 2006; Zammunier & Galli, 2005). Consequently, regardless of whether the manager's positive affect yields its effects through processes of emotional contagion, influence on employee evaluations of the situation, or other distinct management efforts associated with positive affect, we propose the following:

Proposition 3. Authenticity will moderate the relationship set forth in Proposition 1, such that increases in team managers' expressions of positive affect will lead to more positive team members' outcomes when team members perceive managers' affective expressions to be more authentic.

Managerial suppression of emotions, as a distinct form of inauthenticity, may have its own specific detrimental consequences for employee change-related outcomes as well. Influenced by the Protestant ideology of the founders of our country (Weber, 1947, 1904/1958), many American managers subscribe to the belief that expressing emotion in the workplace is a barrier to productivity and makes one "unprofessional" (Sanchez-Burks, 2002, 2005). Yet, in times of crisis, when managers may be desperately trying to hide and ultimately rid themselves of intense emotions, attempting to suppress emotion may backfire. Studies show that when people are highly motivated to deceive others about the content of their actual emotions they are in fact *less* likely to succeed in deception (Depaulo & Friedman, 1998).

Moreover, research has identified several unintended consequences of emotional suppression that may have detrimental effects on employees' functioning in the face of change. First, individuals have not been found to be

able to suppress certain emotions while maintaining the expression of others (Gross & John, 2003). Accordingly, as a manager attempts to suppress negative emotions, any positive emotions experienced are likely to be suppressed as well, eliminating the benefits of such expression detailed above. Second, suppression has been associated with worsened interpersonal functioning (Butler & Egloff, 2003; Gross & John, 2003). People who report chronically engaging in emotional suppression report increased social withdrawal and avoidance (Gross & John, 2003). In the laboratory, suppression has also been linked to worsened communication with conversation partners and to decreased rapport (Butler & Egloff, 2003). Suppressors in the aforementioned experiment were liked less by their partners as well. Applied to the current context, such social consequences could have negative effects. Managers who try to suppress their emotions are likely to develop less rapport with employees. With the experience of decreased rapport and liking, employees are unlikely to value pleasing such managers much and as a result may be less motivated to perform, particularly when given a justification for slacking off, such as an organizational shock. Beyond not being especially liked, managers who suppress may actually end up being disliked, and perhaps more importantly, as in the case of inauthentic managers, mistrusted. Sensing the attempts to deceive them in this regard, employees may begin to doubt their managers' procedural fairness. They may also wonder what other information the manager may be hiding from them, and this increased uncertainty may lead to a decreased sense of personal control. Emotional suppression has also been shown to cause physiological arousal (increased blood pressure) in the suppressors' conversation partners (Butler & Egloff, 2003), which, as discussed above, may worsen employee change-related outcomes. As described above, rapport with the manager, healthy physiological functioning, liking and trust of the manager, perceived procedural fairness, and perceived control may help to foster more positive change-related responses in employees. Hence, employees who perceive their managers to be suppressing emotions may only suffer more in the face of challenge, rather than less.

Of course, suppression on the part of managers may actually inhibit their abilities to directly foster positive change-related outcomes through their own efforts as well. Suppression has been found to be an ineffective means of emotional regulation; indeed, when one suppresses the external display of emotions, she or he actually ends up experiencing *more* rather than less negative emotions (Butler & Egloff, 2003; Gross & John, 2003). Because negative emotions may lead to narrowed thought-action repertoires (Fredrickson & Branigan, 2005), managers engaging in suppression may

be less likely to generate creative solutions to team problems. Being liked less (Butler & Egloff, 2003) and having weaker social networks (Gross & John, 2003), they also may be less able to muster the outside support (e.g., from superiors or customers) to facilitate strong responses from employees and teams. Perhaps most problematically, managers attempting to suppress their emotions may be those most likely to withdraw from their teams, retreating to closed-door offices. Such avoidant behavior would likely entail inadequate communication with employees, which, in turn, may lead employees to feel unfairly treated. As a result of all the above factors, we propose that:

Proposition 4. Emotional suppression on the part of team managers will be related to worsened team members' outcomes in the face of significant workplace change.

DISCUSSION

The proposed model may make several contributions to both theory and practice. First, this work may advance the study of employee and team responses to workplace change by shifting scholarly focus toward the crucial role of *emotions*. Evidence is mounting that emotions may exert influence and exist independently of the type of conscious cognitions accessible via our field's common empirical methods. Contrary to previous theories about the relationships between cognition, emotion, and behavior, emotion has been shown to have the power to both inform conscious judgments and actually produce behavioral responses before any cognition consciously occurs (LeDoux, 1996, 2003; Zajonc, 1980). Thus, through focusing more on emotions, we may be able to more fully predict and understand positive change-related outcomes both directly and indirectly, through predicting associated cognitions and behaviors. Indeed, in doing so, we contribute to recently expanding literature highlighting the influence of affect across a wide swath of organizational phenomena (see, for example, Brief & Weiss, 2002; George & Brief, 1996; Seo et al., 2004; Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003).

The dimensions and implications of the perceived appropriateness and authenticity of managers' emotional expressions are also still unexplored in the literature, both theoretically and empirically. The emotional labor literature has examined both explicit and implicit rules for the emotional expressions of workers such as flight attendants (Hochschild, 1983), bill

collectors (Sutton, 1991), and customer service representatives (Wilk & Moynihan, 2005), as examples. Yet, managers' job performance may also be affected by how appropriate their emotional expressions are perceived to be. Meanwhile, the concept of *authentic leadership* has been introduced recently in the popular press by former Medtronic CEO Bill George, as well as in several theoretical models published in a recent issue of *Leadership Quarterly* (for the introduction to this special issue, see Avolio & Gardner, 2005). These theories tend to focus on authenticity in terms of a leader's values, though. This chapter suggests that managers' emotional expressions may be another important facet of authenticity.

In considering the broader contributions of our framework, we also note that one of the major current debates in the trauma literature is whether a resilient response trajectory can be cultivated (Bonanno, 2005). In much of the literature, including at least one article within management circles (Judge et al., 1999), predictors of positive outcomes in this domain have been construed as stable individual differences. The current paper presents a more interpersonal theory than has been previously advanced, suggesting that in addition to being driven by a trait, positive individual change-related outcomes may result from natural social processes within work teams.

Our framework also has practical implications. Given the frequency of organizational change and the vested interest that company stakeholders have in seeing those efforts reap their intended benefits, top managers may be tempted to conclude that the ability to effectively respond to workplace shocks lies only or primarily in people's nature. If so, they may incorporate related trait assessments into their selection processes for employees at all levels. We do not think that this is necessarily the only (or the most) advisable approach. As per our model, the most efficient and effective way to produce better change-related workforce outcomes may be to prioritize selecting *managers* for related individual differences and then to rely on interpersonal processes between managers and their team members to do the rest of the work.

One of the main foci of managers leading change is to secure their employees' commitment. Our model, with its emphasis on the lever of emotions, suggests a new path to convincing employees of the need for change. Employees immediately realize the persuasive intent of traditional influence vehicles more typically directed toward cognitions, such as premeditated e-mails or memos announcing or explaining change. Fearing these to be strategic attempts at employee exploitation, employees may instinctively react by being suspicious of the validity of that type of information. States of suspicion may threaten three drivers of positive

responses to change already identified by previous research: employees' senses of control, their trust in management, and their evaluations of the fairness of the change process. At the very least, experiencing suspicion about such communications may make already potentially weakened control, trust, and fairness assessments more salient and, by extension, more influential.

By contrast, the mimicry that produces emotional contagion often happens unconsciously. As employees may be less aware of, and therefore less resistant to, being affected by a leader's emotions and associated nonverbal behaviors, crucial judgments of perceived control, trust, and fairness may be less likely to inhibit their responses to change. Thus, the prospect of influencing employees without their awareness, and associated suspicions about being manipulated, seems particularly promising. This type of influence may prove to be even more effective than efforts aimed squarely at cognitions.

Are we advocating leadership training to teach managers how to use positive affective expressions to their benefit in times of crisis? Not necessarily. We suspect that such attempts at *strategic* use of emotion may not be as effective as letting naturally occurring interpersonal processes and social modeling work their magic. Indeed, the beauty of our model is that it involves influencing employees *without their feeling manipulated*. As soon as the transference of emotions is made more explicit, it seems more calculated and potentially more dangerous to employees. This is one of the reasons why we stress the importance of perceived authenticity in the emotions expressed by managers. When managers are seen as faking their emotions, it is likely to draw suspicion and create resistance to mechanisms that would drive positive change-related response trajectories. In terms of leadership training, a more fruitful program might be to teach managers the powerful emotional regulation tool of reappraisal, so that they would be able to authentically feel more positively and optimistically when faced with tough circumstances, and let the positive downstream effects on employee and team functioning come naturally as a result.

CONCLUSION

Exploring the influences of managers' affective expressions holds significant promise for deepening our understanding of employee and team positive response trajectories to both workplace changes specifically and other potentially traumatic life events more broadly. The ability to maintain functioning in such circumstances may certainly be rooted in individual differences, as current theory and research in psychology emphasize.

Cognitions are important drivers of such positive responses, as related studies within the organizational literature underscore. Yet the current model encourages us to consider the possibility of alternate routes to positive change-related outcomes. We may not have to rely solely on intraindividual processes; social environments, and especially key figures within those environments, may be able to subtly prod individuals and groups into effective responses to change. What is more, that subtle influence may come from a focus not just on cognitions, but on emotions as well. Despite the aforementioned slant on *professionalism* provided by America's cultural roots in Protestantism, expressing emotions may be a necessary and consequential part of the work that managers do, particularly when organizations are tackling change. The more positive, socially appropriate, and genuine those expressed emotions are, the more likely their employees and teams may be to persevere through tough times successfully.

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CHAPTER 11

THE SOCIAL CONSEQUENCES OF EXPRESSING EMOTIONAL AMBIVALENCE IN GROUPS AND TEAMS

Naomi B. Rothman and Batia M. Wiesenfeld

ABSTRACT

Past research exploring the influence of affect on group outcomes has primarily considered how the experience of single emotions and mood vary and converge across group members, but does not address the fact that a single group member may express multiple, conflicting emotions simultaneously (e.g., emotional ambivalence). Such complex expressions may drastically alter the way other group members perceive and respond to one another, and in turn, drastically alter the group-level dynamics. We address this gap in the literature by modeling the social consequences of expressing emotional ambivalence, thereby expanding our understanding of emotional ambivalence in group contexts. Implications for research on emotional ambivalence and research on emotions in groups are discussed.

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INTRODUCTION

Organizational groups are socially complex, serving as the nexus of individual motivations and aspirations, dyadic interactions and relationships, and group-level processes such as status tournaments and norm development. Moreover, groups are frequently formed in organizations to confront complex and challenging tasks, such as promoting innovation by bridging established boundaries or managing interdependence and coordination within an organization. Groups are also motivationally complex, with group members experiencing the tension between simultaneous needs to belong, and to be special and unique (Smith & Berg, 1987). There is good reason to believe that the emotions experienced and expressed in organizational groups are as complex as the social, practical and motivational complexities that group members confront. In fact, group members are likely to often respond to the complexities, trade-offs and conflicts associated with group life by experiencing and expressing emotional ambivalence – defined as simultaneous inconsistent emotions about an object, event or idea. And yet, most of the previous research on emotions in groups has devoted attention to the experience and expression of simple and consistent emotions (e.g., anger, happiness), neglecting the role of complex emotions such as ambivalence.

What little research has been conducted on emotional ambivalence has focused on the *experience* of emotional ambivalence (e.g., Fong, 2006; Fong & Tiedens, 2002; Larsen, McGraw, & Cacioppo, 2001; Pratt & Rosa, 2003), and has yet to explore the expression of emotional ambivalence. Moreover, whereas research on the experience of emotional ambivalence has considered intrapersonal implications, the social implications of emotional ambivalence for relationships and groups have not been considered. The goal of this chapter is to address this gap in the literature by offering a conceptual model regarding the social effects of expressions of emotional ambivalence. Based on the idea that emotions serve social functions (Frijda & Mesquita, 1994; Keltner & Gross, 1999; Keltner & Haidt, 1999; Oatley & Jenkins, 1992), we propose in this chapter that expressions of emotional ambivalence will shape interpersonal relationships by influencing the emotions, thoughts and behaviors of one's interaction partners, and, in turn, will influence the social dynamic of groups and teams.

Interpreting Emotions in Others

Prior work has acknowledged that emotional expressions are both common and socially interpretable. For example, they are often expressed on one's

face (Ekman & Keltner, 1997; Keltner, Ekman, Gonzaga, & Beer, 2003), in one's tone of voice (Scherer, Johnstone, & Klasmeyer, 2003), in one's posture (Riskind, 1984) and frequently in one's verbalizations (Reilly & Seibert, 2003). Prior work has also acknowledged that such emotional expressions may repel individuals from others, or they may join them to others (Frijda & Mesquita, 1994), promoting strong social bonds and helping to maintain cooperative relationships (Keltner & Gross, 1999). This is because emotional expressions can affect others judgments, emotions, thoughts and behaviors.

Emotional expressions communicate to others how one feels at the moment (Ekman, 1993; Scherer, 1986), in addition to information about one's character (Knutson, 1996) and one's social intentions (Fridlund, 1992). In fact, a growing body of research suggests that emotional expressions can influence the character inferences that others make about the expresser (Clark, Pataki, & Carver, 1996; Gallois, 1993; Karasawa, 2001; Knutson, 1996; Sinaceur & Tiedens, 2006; Tiedens, 2001; Tiedens, Ellsworth, & Mesquita, 2000). Emotional expressions also "evoke complementary and reciprocal emotions in others that help individuals respond to significant social events" (Keltner & Haidt, 1999, p. 511) and they can evoke complementary and reciprocal attitudes and cognitions in others (Van Kleef, De Dreu, & Manstead, 2004a). Furthermore, emotional expressions can "serve as incentives or deterrents for other people's behavior" (Barry, Fulmer, & Van Kleef, 2004, p. 84; Frijda & Mesquita, 1994; Keltner & Haidt, 1999; Keltner & Kring, 1998; Morris & Keltner, 2000; Van Kleef et al., 2004a; Van Kleef, De Dreu, & Manstead, 2004b, 2006) and can regulate social interaction (Cacioppo & Gardner, 1999). For instance, expressions of happiness encourage others to pursue their course of action, and expressions of anger may signal that some standard of acceptable behavior is violated and thus push others to alter their behavior (Averill, 1982; Van Kleef et al., 2004a). In sum, there is strong evidence that the expression of emotion by an individual influences how others react.

Whereas the research cited above has focused on single discrete emotions or broader classes, such as positive and negative affect, we suggest that emotional ambivalence is also likely to have social effects, ultimately influencing individuals' ability to coordinate their actions. Building on the framework we just outlined, we will argue in this chapter that expressions of emotional ambivalence will influence the inferences that interaction partners make about expressers (e.g., character inferences), the emotions they feel when interacting with ambivalent expressers and the perceived quality of the relationship between ambivalent expressers and their partners.

Furthermore, we will propose that through these social effects, expressions of emotional ambivalence will also shape group-level dynamics. In particular, we argue that the expression of ambivalence in groups is likely to increase conflict, reduce social cohesion and conformity, alter decision processes and shape patterns of social influence and leadership. In the sections that follow, we elaborate on the theoretical basis for these hypotheses and discuss their implications for group performance (Fig. 1 depicts our model of the social consequences of expressing emotional ambivalence in groups).

To date, the empirical research on the effects of affect on group outcomes has primarily considered how the experience of single emotions and mood vary and converge across group members (Barsade, 2002; Barsade, Ward, Turner, & Sonnenfeld, 2000; Bartel & Saavedra, 2000; Duffy & Shaw, 2000; George, 1990, 1995). This research does not address the fact that a single group member may express multiple, conflicting emotions simultaneously, and that such complex expressions may drastically alter the way other group members perceive and respond to him or her. Group members are likely to respond quite differently to a fellow group member who expresses anxiety about being part of an important project group than to a fellow group member who expresses anxiety that is also accompanied by an expression of excitement and pride. They are also likely to respond quite differently to a fellow group member who expresses anger that the group project is being delayed than to a fellow group member whose expression of anger is also accompanied by the expression of sadness.

Experience of Ambivalence

What do we already know about ambivalence? Whereas emotional ambivalence has received relatively little research attention, psychological research on attitudinal ambivalence has experienced a recent surge of interest (Armitage & Conner, 2000; Cacioppo & Berntson, 1994; Conner, Povey, Sparks, James, & Shepherd, 2003; Hanze, 2001; Jonas, Diehl, & Bromer, 1997; Maio, Bell, & Esses, 1996; Maio, Greenland, Bernard, & Esses, 2001; Nordgren, van Harreveld, & van der Pligt, 2006; Priester & Petty, 1996; Sparks, Harris, & Lockwood, 2004; Thompson & Zanna, 1995; Thompson, Zanna, & Griffin, 1995). Some research on attitude ambivalence suggests that its effects may be detrimental, leading to more one-sided thinking and less consistent relationships between attitudes and behavioral intentions (Armitage & Conner, 2000; Bargh, Chaiken, Govender, & Pratto, 1992; Moore, 1973; Nordgren et al., 2006). Other research has explored the

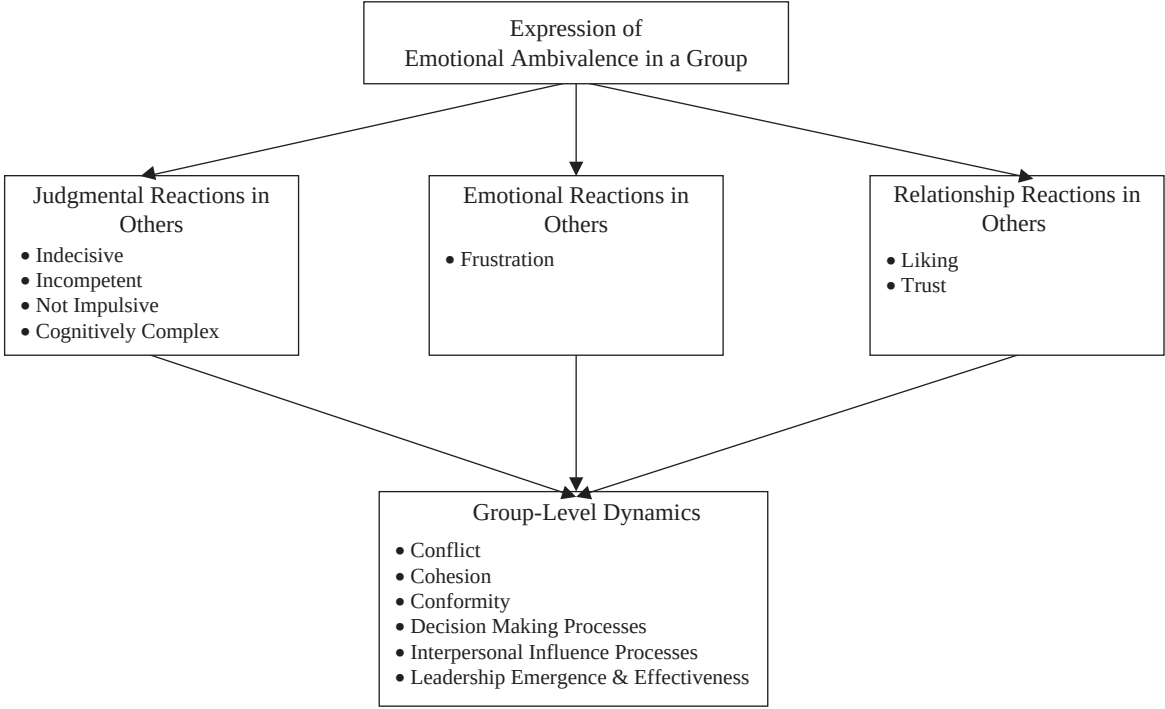


Fig. 1. Social Consequences of Expressions of Emotional Ambivalence.

potential benefits of ambivalence. For instance, research has shown that having ambivalent attitudes (relative to no ambivalence) may be associated with a reduced readiness for action, but also with greater systematic processing of information before making a decision (Hanze, 2001; Jonas et al., 1997; Maio et al., 1996, 2001). Because ambivalent attitudes may be held with less confidence than resolute attitudes (Jonas et al., 1997), people experiencing ambivalent attitudes are likely to be motivated to closely attend to information, ultimately gaining a more solid basis for their attitudes but also reducing their readiness for action (Hanze, 2001).

In comparison to research on attitudinal ambivalence, work on emotional ambivalence is in a more nascent stage. Recent research in the area of emotions has suggested that emotionally complex events may elicit the experience of not only negative emotions, but also perhaps more commonly both positive and negative emotions simultaneously (Fong & Tiedens, 2002; Larsen et al., 2001; Williams & Aaker, 2002), which has been termed emotional ambivalence. More specifically, previous research has defined emotional ambivalence as “the simultaneous experience of positive and negative emotions regarding an object, event or idea” (Fong, 2003, p. 2). Similarly, Pratt and Doucet (2000, p. 205) define emotional ambivalence as the association of both strong positive and negative emotions with some target.¹

Ambivalence generally refers to opposing forces existing simultaneously within a person (Meyerson & Scully, 1995; Pratt & Doucet, 2000).² Thus, ambivalence may be defined by tension between two emotions of different valence, but it may also be defined by tensions along other dimensions as well. For instance, there may be tension in the level of arousal between two emotions experienced simultaneously (i.e., anger, which is high arousal, versus depression, which is low arousal) or the cognitive appraisal and action tendencies associated with two emotions experienced simultaneously (i.e., fear triggering avoidance tendencies and excitement triggering approach tendencies). Ambivalent emotions may therefore be inconsistent with respect to valence, arousal level, and/or appraisal and action tendency; they are of high strength and are experienced simultaneously.³

Following from this definition, it is clear that the experience of emotional ambivalence may involve a wide variety of emotions. For instance, ambivalence may involve a combination of positive and negative feelings, such as when a person experiences intense happiness, anxiety, fear and pride about a new promotion. Alternatively, emotional ambivalence may take the form of a combination of high and low activation emotions in response to a situation or decision, such as excitement (high activation) and contentment

(low activation). In both of these cases, a person experiences the tension between emotions that encourage the actor to engage and approach his/her environment (positive or high activation emotions) and others that encourage the person to disengage and avoid his/her environment (negative or low activation emotions).

A growing number of empirical studies have identified situations in which group members can and do feel both positive and negative emotions simultaneously. For instance, Fong (2003) demonstrated that people could experience happiness and sadness at the same time in both laboratory and natural settings. Diener and Iran-Nejad (1986) found that positive and negative emotions could co-occur at moderate levels of emotional intensity in daily mood reports. Amabile, Barsade, Mueller, and Staw (2005) found that in daily narratives, adult employees could experience both positive and negative affects on the same day. Larsen et al. (2001) also identified three exemplar occasions in which people report a co-occurrence of happiness and sadness: graduation day, dormitory move-out day or after watching the film *Life is Beautiful* (which depicts a father's often-comic attempts to shelter his son from the evils surrounding them during their detention in a World War II concentration camp).

In the work arena, Pratt's (2000) research has shown that people experience multiple forms of emotional conflict at work. Pratt and colleagues' research with Amway, managed care organizations and bank call centers has demonstrated that employees can hold ambivalent feelings toward their organization and their co-workers. For instance, they report that call center workers expressed ambivalence toward authority because managers place conflicting demands on workers but are also sources of emotional support (Pratt, 2000; Pratt & Doucet, 2000). Pratt's case studies of employees in several organizations have demonstrated that employees can hold ambivalent feelings toward their organization, which can influence recruitment, identification and commitment. Fong and Tiedens' (2002) research also suggests that role or position may increase the incidence of emotional ambivalence. In their study, being a woman in a high-status position was shown to bring about both happy and sad emotions. Happiness was thought to result from achieving an important goal of high status, and sadness was thought to result from holding a non-stereotypic gender role.

In addition to uncovering the situations that bring about emotional ambivalence within individuals, a few studies have examined the individual-level consequences of experiencing emotional ambivalence. Specifically, Fong's (2006) research in a laboratory setting suggests that the experience

of emotional ambivalence enhances creativity. In contrast, field research measuring emotional ambivalence with respect to experiencing both negative and positive affect on the same day did not show any significant relationship to daily creative thought (Amabile et al., 2005). In sum, while a handful of studies have begun to investigate the individual-level effects of experiencing emotional ambivalence, very little research has considered the *social* effects of the expression of emotional ambivalence, which is the central focus of this chapter.

SOCIAL CONSEQUENCES OF EXPRESSING EMOTIONAL AMBIVALENCE

Before we consider its social consequences, it is important to be clear about what we mean by the expression of emotional ambivalence. Differentiating experienced emotion and expressed emotion rests on the assumption that emotional expression can occur independently from emotional experience (Sinaceur & Tiedens, 2006). The relationship between the experience of emotions and the facial expression of emotions has been hotly debated. On the one hand, it has been argued that the facial expression of emotion constitutes a coherent emotional response to intense emotions. On the other hand, some claim that the facial expression of emotion may be entirely independent from one's feelings (Fernandez-Dols & Ruiz-Belda, 1995). For the purpose of this chapter, when we refer to the expression of emotional ambivalence, we are referring to situations in which behavioral expressions are perceived to be genuine; that is, they are perceived to be a response to the internal experience of emotional ambivalence (as opposed to so-called strategic displays).

In expressing emotional ambivalence, people can either display their ambivalence through a single channel, such as the face (LaPlante & Ambady, 2000), or they can display their ambivalence through multiple channels, such as on the face, in their posture and in their tone of voice. For instance, a group member may express happiness with a smile, but simultaneously express anxiety by constricting his or her shoulders. Research on facial expressions suggests that expressions of emotional ambivalence may be quite common, especially among adults (Hiatt, Campos, & Emde, 1979), who may be more likely to display complex emotional expressions than single emotional expressions on the face (Malatesta & Izard, 1984). Correspondingly, adults have been shown to be quite effective in recognizing mixed

emotions on the face, sometimes even more accurately than they recognize single emotions (Ekman, Friesan, & Ellsworth, 1972; LaPlante & Ambady, 2000; Nummenmaa, 1988). This is thought to occur because complex emotional expressions on the face occur more often than singular expressions. In sum, evidence suggests that people are capable of easily and effectively interpreting various types of expressions of emotional ambivalence, making it possible for expressions of emotional ambivalence to have social effects.

The Expression of Emotional Ambivalence and Reactions in Others

How do individuals react to expressions of emotional ambivalence? It has become well accepted that emotional displays have social consequences (Frijda & Mesquita, 1994; Keltner & Gross, 1999; Keltner & Haidt, 1999; Keltner & Kring, 1998). Given, as we have suggested in the previous sections, that individuals can experience, express as well as identify complex emotions such as emotional ambivalence in others, there should also be social consequences that stem from expressing emotional ambivalence. Working from this framework, we propose that ambivalent expression will affect group-level dynamics because it will provoke a variety of reactions among group members, including: character inferences, emotional reactions and relationship-oriented reactions toward the ambivalent expresser. In turn, such effects will shape group-level dynamics.

Ambivalent Expressions and Character Inferences by Others

In the early stages of group formation, people are likely to spend some time judging the character and competence of their fellow group members. Therefore, when an individual expresses emotional ambivalence in a newly formed group, other members of the group are likely to use this information to form an impression of him or her. People form impressions of others in their social environment by interpreting information gathered from observation and interpersonal interaction (Snyder & Swann, 1978). Expressions of emotion are one such piece of information.

Indeed, observers infer more than felt affect from expressive cues; they also infer characteristics of the expresser. For instance, people believe that someone expressing anger is dominant, strong, tough, competent, smart, aggressive and assertive, but also less warm, friendly and nice (e.g., Clark et al., 1996; Gallois, 1993; Karasawa, 2001; Knutson, 1996; Sinaceur & Tiedens, 2006; Tiedens, 2001; Tiedens et al., 2000). People believe that

someone expressing sadness is in need of help, weak, submissive and incompetent, but also likable, warm and nice (Tiedens, 2001). This evidence suggests that negative emotional expressions create social impressions that are both positive and negative, and that they depend on the specific type of negative emotion that is expressed.

If expressing a particular emotion leads others to formulate specific character inferences, how will people expressing multiple and ambivalent emotions in a group or team be perceived? Two broad types of character inferences have been the focus of person-perception research in the past and seem particularly relevant to understanding reactions to emotionally ambivalent expressers in organization-based groups and teams: (a) inferences regarding competence and (b) liking sentiments (cf., Forgas, 1985; Rosenberg & Sedlak, 1972). In general, impressions focus on information that is relevant to the perceiver (Kelley, 1967). In the workplace, information that is associated with competence is especially relevant and thus may serve as the basis for impression formation. For example, group members may assess on meeting one another the degree to which their fellow members seem decisive, thoughtful and/or impulsive. Because individuals expressing ambivalence are by definition expressing inconsistent and conflicted emotions, they are giving off cues that indicate confusion, uncertainty and being unsettled in their decisions. Thus, these individuals are particularly likely to elicit judgments having to do with their competence in making decisions.

Though previous research has not addressed how ambivalent emotions expressed by group members affect the character inferences made about them, it seems likely that people will believe that someone expressing torn and conflicted emotions is (a) less decisive and (b) less competent, but at the same time, (c) less impulsive and (d) more cognitively complex than individuals who express more consistent emotions.⁴

First, ambivalent expressers may be perceived as less *decisive* than those who express consistent positive (i.e., happiness) or negative emotions (i.e., anger or sadness). Decisiveness is characterized by resoluteness: the quality of being final or definitely settled in a judgment or choice (Wally & Baum, 1994; American Heritage Dictionary of the English Language, 2006). As Haraburda (1998) states, “although some decisions are hard for anyone to make, indecisive people have a hard time making almost any kind of decision” (p. 17). But what makes an individual appear decisive? Behaviors such as taking the plunge and not postponing decisions unnecessarily, or taking action and making explicit decisions and taking positions (Van Hooft, Van der Flier, & Minne, 2006, p. 70), are likely to elicit

character inferences that an individual is more decisive than not. On the other hand, behaviors indicating that an individual has reservations or is confused, uncertain and is having difficulty making a decision are likely to result in the inference that the person is indecisive. The expression of certain types of emotions may elicit such inferences. In fact, ambivalent expressers are likely to be perceived as less decisive than those who express more consistent happiness, sadness or anger because they appear more inconsistent, hesitant and vacillating in their expressive cues (i.e., facial expressions, voice intonation and behavior), and thus more confused and uncertain.

Second, ambivalent expressers may be perceived as less *competent* than those who express consistent positive (i.e., happiness) or negative emotions (i.e., angry or sad). Judgments of fellow group members' competence are especially relevant in organizational teams, particularly when people first meet their fellow group members (Fiske, Cuddy, Glicke, & Xu, 2002). The expression of certain types of emotion has been previously shown to elicit such inferences. In particular, two discrete emotions have been found to be positively (i.e., anger) and negatively (i.e., sadness) associated with perceived competence (Tiedens, 2001). We suggest that because actors who express ambivalence may be perceived as highly uncertain, others will judge them as less well-informed and capable (in other words, less competent) than consistently happy, angry and even sad expressers.

Third, whereas ambivalent expressers may be perceived as less decisive and competent than more consistent expressers, they may also be perceived as less *impulsive* than those who express consistent positive or negative emotions. Impulsivity is defined as the "tendency to deliberate less than most people of equal ability before taking action" (Dickman, 1990, p. 95). It involves qualities such as swiftly putting thoughts into words, making up one's mind rapidly and thinking quickly (Dickman, 1990). Because people who express ambivalence are giving off mixed cues that are inconsistent, and that represent two sides of an emotional experience, they are likely to be perceived as less impulsive. That is, they will be perceived as people who take more time to make decisions and who are unhurried, less hasty and more delaying, potentially because they are weighing both sides of the situation and may not appear ready to give a swift and spontaneous response.

Fourth, ambivalent expressers may also be perceived as being more *cognitively complex* than those who express consistent positive (i.e., happiness) or negative emotions (i.e., anger or sadness). Cognitive complexity is formally defined by two components of cognitive style: differentiation, which refers to recognition of multiple perspectives on or dimensions of an issue, and

integration, which refers to recognition of conceptual relations among differentiated dimensions (Gruenfeld, 1995; Tetlock, Peterson, & Berry, 1993). Actors at the high end of the complexity continuum interpret events in multidimensional terms and base their decisions on evidence from multiple perspectives. Cognitively complex people are more thoughtful, contemplative and reflective. The mixed and inconsistent emotional cues given off by an ambivalent expresser are likely to suggest to others that the expresser has not yet arrived at a conclusion, and that he/she is experiencing and possibly exploring multiple sides of a situation and their conceptual relations. Therefore, individuals expressing emotional ambivalence are likely to be perceived as more cognitively complex than more consistently happy and angry expressers.

Consistent with these arguments, Morris, Larrick, and Su (1999) suggest that “waffling” in the limits that one sets in a negotiation and in one’s justifications for these limits is interpreted by perceivers in terms of personality traits such as inconsistency or insincerity and emotional instability. They found that recruits placed in a situation that induced waffling were judged as emotionally unstable persons. Beyond these judgments of emotional instability, expressing emotional ambivalence may manifest as waffling behavior that, in turn, leads to additional character inferences such as the perception that the individual is indecisive and incompetent, but less impulsive and more cognitively complex.

In summary, the expression of ambivalent emotions is likely to create complex social impressions. Whereas people may make positive character inferences based on expressions of emotional ambivalence (i.e., less impulsive, more cognitively complex), we believe that the negative character inferences (i.e., less decisive and less competent) are likely to carry more weight in overall evaluations, at least in the United States. In American society, an individual’s ability to gain status and respect is often based on his or her level of decisiveness and competence (Staw, 1981; Tiedens, 2001) rather than on his or her level of impulsivity or cognitive complexity. Consequently, we expect the former characteristics to loom larger than the latter when individuals evaluate ambivalent expressers. Importantly, being perceived as less decisive and less competent, but at the same time less impulsive and more cognitively complex may have implications for the group-level dynamics that exist among group members – a link we investigate later in this chapter.

Ambivalent Expressions and Emotional Reactions in Others

In addition to the judgments of character they make about an individual who expresses emotional ambivalence, group members are also likely to

experience an emotional response to this individual. Studies of emotional expression suggest that emotions can evoke both similar and complementary emotions in others (Keltner & Kring, 1998). Theorists have long been interested in the tendency of humans to respond to others' emotions with *similar* emotions (for a review, see Hatfield, Cacioppo, & Rapson, 1994). This phenomenon has been labeled *emotional mimicry* (e.g., Davis, 1985), *empathy* (e.g., Batson, 1991), *vicarious emotional response* (e.g., Miller, 1987) and *contagion* (e.g., Barsade, 2002). In this vein, evidence suggests that expressions of embarrassment lead interaction partners to feel embarrassed as well (Miller, 1987). Expressions of anger or happiness in a computer-mediated negotiation have been shown to elicit similar emotions in one's opponent (Van Kleef et al., 2004a). Barsade (2002) has also found that the expression of a pleasant mood by a confederate can elicit positive moods in a negotiation partner. These studies suggest that the expression of discrete emotions as well as moods can evoke similar emotions and moods in others.

Other research suggests that emotional expressions can consistently evoke *complementary* but different emotions in others. For instance, expressions of distress elicit sympathy-related responses in observers (Eisenberg et al., 1989) and expressions of anger have been shown to elicit fear responses in observers (reviewed in Dimberg & Ohman, 1996).

Prior research has generally focused on perceivers' reactions to unambiguous emotional cues from individuals with whom they observe or interact. Less well understood is how people respond emotionally to unclear and inconsistent emotional cues from others, such as how they respond to the expression of emotional ambivalence. We maintain that because ambivalent expressions are difficult to interpret, the emotional response they are likely to elicit in others is frustration. Group members are motivated to know and understand their interaction partners (Berscheid, Graziano, Monson, & Dermer, 1976). When this goal is thwarted, for instance, by ambivalent expressions that are ambiguous and complex, individuals are likely to experience negative feelings such as frustration in response (Carver, 2004).⁵

Ambivalent Expressions and Interpersonal Relationships

To this point, we have reviewed the ways that expressions of emotional ambivalence are likely to influence other group members as individuals. However, emotional displays also provide social information that may be used by people to make sense of their relationship with the expresser. In this section, we consider the implications of ambivalent expressions for interpersonal relationships between members of a group.

Two of the most important attributes of interpersonal relationships within groups are affinity and trust. Interpersonal affinity, or *liking*, serves as the basis for group cohesion and is an important influence on group members' reactions to one another. When group members like one another, they have more positive interpretations of each other's intentions, thus lubricating social interactions. Interpersonal trust is also critical for interpersonal relationships within groups, in particular, for interdependent task-oriented groups in which it is difficult to identify individual contributions and individual accountability is low. In these situations, it is crucial that group members trust one another because trust gives group members the confidence that they can rely on one another. Such confidence is required for group members to feel comfortable sharing information and knowledge and for taking action on behalf of the group.

As individuals get to know one another, they acquire information, form images and arrive at conclusions about how much they like one another (Asch, 1946). Emotional expressions are one such piece of information that informs these interpersonal reactions. For instance, expressions of happiness lead to increased liking for the expresser (Gross & John, 1998; Tiedens, 2001) and expressions of anger lead to decreased liking and increased rejection of the expresser (Karasawa, 2001). Not all negative emotions lead to decreased liking of the expresser, however. Previous research has shown that individuals who express sadness are rated as more likable than individuals who express anger (Tiedens, 2001), perhaps because sadness signals submission.

Because ambivalent expressions may be hard for others to interpret (Gallois, 1993) and may be rather frustrating to deal with in comparison to more consistent emotional expressions, they may impede the development of liking among group members (Drolet & Morris, 2000). Thus, ambivalent expressions may diminish liking through a different mechanism than expressions of other more consistent emotions. Specifically, whereas other emotions *provide* information to interaction partners that may influence liking (e.g., anger conveys dislike which interaction partners may reciprocate), ambivalent expressions may decrease liking because they *deprive* interaction partners of clear information. This lack of clear information will make group members feel uncomfortable interacting with one another which, in turn, will create dislike.

Distrust may also emerge among group members interacting with those who express emotional ambivalence. Predictability of another's behavior has been theorized as a key dimension of cognitive trust in relationships (Lewicki, McAllister, & Bies, 1998; McAllister, 1995; Rempel, Holmes, & Zanna, 1985).

The more consistent an individual's behavior, the more predictable it is, and thus, the greater trust developed in the relationship. Even if a person is predictably negative, interaction partners may be more certain of where that person stands and more confident in their own ability to predict that person's behavior than they will be with an individual who expresses emotional ambivalence. Emotionally ambivalent expressers are expressing inconsistent behaviors, reducing the predictability of their behavior and, consequently, the amount of trust that is developed in the relationship.

The Expression of Emotional Ambivalence and Group-Level Dynamics

We have argued that the expression of emotional ambivalence by a group member can shape the judgmental and emotional reactions of other group members, as well as influence the quality of interpersonal relationships within the group. In this section, we argue that through these individual and interpersonal effects, the expression of emotional ambivalence by an individual will shape group-level dynamics. In particular, we will argue that it is likely to increase conflict, reduce social cohesion and conformity, and alter decision-making processes and patterns of influence and leadership within the group. We now elaborate on the theoretical basis for these proposed group-level effects.

Ambivalent Expressions and Conflict

Two types of conflict are predominantly studied in organizational contexts. Relationship-focused conflict refers to conflict in interpersonal relations, such as when group members have problems with each other's personalities and dispositions (Jehn, 1997). Task-focused conflict refers to conflict involving the group's task (Jehn, 1997), such as how to interpret information related to the task. We suggest that expressions of emotional ambivalence will increase relationship conflict in groups in particular.

The expression of emotional ambivalence by group members is likely to increase relationship conflict for several reasons. To begin with, we have argued that an individual who expresses emotional ambivalence in a group context is likely to be judged as indecisive and incompetent by fellow group members. Such judgments, in turn, may elicit greater relationship conflict within the group, with group members increasingly focusing their attention on the ambivalent expresser's unsatisfactory character. We have also argued that expressions of emotional ambivalence will shape interpersonal relationships in the group. In particular, it will reduce the extent to which these

relationships are characterized by high liking and trust. Reduced liking and trust may, in turn, also elicit greater relationship conflict within the group, for similar reasons.

Ambivalent Expressions and Cohesion

Cohesion is defined as the group members' positive attraction to the group, or "their liking of the group" (Hogg, 1992; Mullen & Copper, 1994). In general, cohesion contributes to effective group performance (see Mullen & Copper, 1994, for a review), although the size of the effect varies across types of groups and definitions of cohesion. For instance, this relationship is particularly strong when cohesion is defined as task commitment rather than interpersonal affective ties (Mullen & Copper, 1994). Other research has found that members of interpersonally cohesive groups are less likely to loaf and may actually compensate for the poorer performance of other group members (Karau & Williams, 1997). In addition, groups that have a high mean level of cohesion have been shown to have more satisfied group members (Hackman, 1992; Hogg, 1992). This presumably influences whether group members will remain with the group.

We argue here that not only will the expression of emotional ambivalence by a group member make other group members react negatively to the ambivalent expresser, but it will also make other group members react negatively to the group as a whole, thus affecting the level of cohesion within the group. We know that people self-regulate to prolong positive moods, and that exposure to negative stimuli minimizes positive mood (Baumeister, Leith, Muraven, & Bratslavsky, 1998). Thus, to the extent that group members who express emotional ambivalence lead others to make negative character inferences about them (e.g., indecisive, incompetent), feel negative emotions (e.g., frustration) and diminish liking and trust, their fellow group members will want to reduce exposure to them. There is no previous research on the effects of expressing ambivalent emotions on the level of cohesion within a group. We propose that inconsistent expressions from a group member with whom one is closely reliant will limit the extent to which one will want to interact with this individual, and potentially, with the group as a whole.

What happens to levels of cohesion when all members of a group share ambivalent expressions? At first, it may seem that when ambivalence is expressed by all group members (i.e., it is shared), cohesion within the group will be enhanced. Research suggests that when individuals feel similar emotions, they feel validated (Anderson & Keltner, 2004; Barsade et al., 2000; Locke & Horowitz, 1990; Rosenblatt & Greenberg, 1991), and

understood by the other person(s) (Hatfield et al., 1994; Locke & Horowitz, 1990). Such feelings of validation can facilitate cohesion within groups (Anderson & Keltner, 2004). However, other research suggests the expression of emotional ambivalence is interpreted more like negative emotions than it is like positive emotions (Rothman, unpublished data), and that shared negative emotion within groups does not increase cohesion. Barsade et al. (2000) have actually found that the contagion of unpleasant emotions led to reduced cooperation, increased conflict and reduced perceptions of task performance within a group. Thus, because ambivalence is unpleasant, it is likely that its spread within a group will undermine rather than enhance group cohesion.

Ambivalent Expressions and Conformity

Conformity is the process by which people change their attitudes or behaviors to be consistent with other people or with social norms. It is associated with the inability of a group to adequately consider the alternatives, and may be characterized by a group that reaches consensus without having explored important arguments. Research by Nemeth and colleagues suggests that exposure to minority viewpoints is associated with less conformity, as it leads individuals to think divergently and to consider problems from a variety of viewpoints (Nemeth, 1986; Nemeth & Kwan, 1987). Tiedens and colleagues have also suggested that the expression of diverse emotions within a group may also attenuate group-level biases such as conformity. They argue that “varied emotional reactions could remind group members that there are many ways to see any issue, which could punctuate any illusion that the group sees the one true objective reality” (Tiedens, Sutton, & Fong, 2004, p. 177).

The expression of emotional ambivalence by one individual within a group may have similar effects. This is because the expression of emotional ambivalence by one actor introduces doubt and uncertainty into the group’s decision-making process. In fact, the expression of ambivalence is likely to suggest to others that the ambivalent expresser is uncertain and requires more information before making a decision or taking action. Feelings serve informative functions (Schwarz & Clore, 1996), and help individuals to make sense of their environments and their own preferences. Noticing feelings in others also helps individuals to make sense of their environment. The expression of ambivalence, which signals doubt and uncertainty, may suggest to other group members that the problem at hand deserves greater deliberation. As a result, the expression of ambivalence may reduce the group’s tendency to close its mind prematurely on a decision, and

instead, it may lead the group to explore a greater number of alternatives and to deliberate more extensively before making a group decision. In turn, such decision-making processes are likely to reduce the level of conformity within the group.

Ambivalent Expressions and Group Decision-Making Processes

Beyond its influence on conflict, cohesion and conformity within groups and teams, the expression of emotional ambivalence is also likely to influence the actual decision-making processes that occur within these groups. In particular, expressions of emotional ambivalence will shape the processes groups use to make decisions by: (a) increasing the cognitive complexity within the group's decision-making process; (b) increasing information search and group discussion; and (c) influencing the interpersonal influence process.

First, ambivalent expressers may increase cognitive complexity within the group's decision-making process. Previous research suggests that the experience of emotional ambivalence arises in emotionally complex situations (Larsen et al., 2001). Emotional ambivalence is also likely when decisions involve multiple decision criteria and implicit or explicit trade-offs across these criteria. For example, organizational decisions often involve trade-offs between personal benefits and organizational benefits, role obligations and individual desires, long-term and short-term outcomes. Such trade-offs are likely to bring about ambivalent feelings because of the experience of both gains (eliciting positive or approach emotions) and losses (eliciting negative or avoidance emotions).

Because of an implicit understanding of the triggers of ambivalence, observing a group member express ambivalent emotions may alert fellow group members to the complexity of the decision task at hand and, therefore, to the need to thoroughly consider the different decision criteria and alternatives. Thus, noticing the expression of emotional ambivalence by a fellow group member may lead other group members to examine and explore the relationships between multiple decision criteria in a deeper and more complex fashion. In sum, expressions of *emotional ambivalence will be associated with higher levels of cognitive complexity in the group's decision-making process.*

Second, ambivalent expressers may increase information search and group discussion. We have argued that the expression of ambivalence signals to others that the expresser is uncertain and that he or she may need more information before being ready to make a decision or take action. Uncertainty is uncomfortable whether it is experienced by the self or as part

of the social context (e.g., when one perceives that interaction partners are uncertain). Therefore, when emotional ambivalence is expressed in group settings, members will be motivated to take steps to reduce the uncertainty. Through experience, people learn that additional information can often reduce uncertainty. For instance, new information can recast currently accepted information in a new light, altering how it is interpreted or helping people to weight decision criteria appropriately. Based on these ideas, we expect expressions of emotional ambivalence to influence decision processes within groups by increasing the likelihood that the group will search for more information.

Expressions of emotional ambivalence may promote two different types of information search. First, expressions of emotional ambivalence will motivate members to obtain more information *prior* to making a decision in order to facilitate making the decision. Specifically, they may search for more information in the hope that such information will alleviate the uncertainty they have about what decision to make. Second, expressions of emotional ambivalence may also increase the likelihood that group members will continue to search for information and perhaps continue to discuss and deliberate about a decision *after* it has been made. Because expressions of ambivalence may be interpreted as a lack of confidence in the decision, when decisions are made but expressions of ambivalence about that decision persist, group members may be motivated to continue to search for information and deliberate in order to increase the level of group confidence and commitment to the decision. In sum, we expect that *expressions of emotional ambivalence in groups will be associated with greater information search during and after the decision process, and with greater group discussion.*

Third, ambivalent expressers will influence the interpersonal influence process. Because information is often incomplete, ambiguous and ripe for interpretation, persuasion and influence are critical to the group's decision-making process. Much research has explored the role of persuasion and influence in groups, and some research provides evidence that links expressions of emotion to influence. For example, research suggests that individuals who express anger are perceived to have greater power and presumably greater influence, because anger communicates toughness (Sinaceur & Tiedens, 2006) and thus presumably an unwillingness to change one's position. While this research clarifies who is likely to be more influential, little research has addressed how group members may identify those who are more *influenceable*. We suggest that patterns of influence in groups may be shaped by expressions of emotional ambivalence.

We have argued above that people who express greater emotional ambivalence will be perceived as more uncertain. They are also likely to be perceived as vacillating, wavering, faltering and indecisive. Because of this, *people who express emotional ambivalence are more likely to be the target of interpersonal persuasion and influence attempts than those who express strong and consistent negative emotions such as anger.*

Ambivalent Expressions and Group Leadership

We have proposed that the expression of emotional ambivalence by an individual may shape group-level dynamics by increasing conflict, reducing social cohesion and conformity and shaping decision-making and interpersonal influence processes. Another critical group issue is the establishment and maintenance of group leadership. Previous research suggests that the expression of simple, consistent emotion affects the likelihood that the expresser will gain status. We argue that expressions of emotional ambivalence may also influence the emergence of leadership in groups as well as the effectiveness of such leadership.

Most people prefer their leaders to be competent, confident and self-assured. Research suggests that individuals are rated as having higher leadership potential when they have higher levels of self-reported leadership efficacy and optimism (Chemers, Watson, & May, 2000). Furthermore, senatorial and presidential candidates have been shown to have a greater chance of success when they speak more optimistically (e.g., attribute negative events to external, specific and transient causes) in campaign speeches (Seligman, 1990; Zullow, Oettingen, Peterson, & Seligman, 1988). A leader who projects a sense of confidence in his or her own capability and who seems optimistic about the outcomes of his or her actions gives followers and other observers a strong impression of competency, and therefore, they may be more likely to gain followers' support. In contrast, a leader who projects a sense of uncertainty and doubt about his or her actions is likely to give followers and other observers an impression of indecision and incompetence, and therefore may be less likely to gain their support.

One source of information that signals competence of a potential leader is his or her emotional expressions. Competence, in turn, influences status conferral decisions. For instance, Tiedens (2001) has shown that people confer more status on targets who express anger than on targets who express sadness. Specifically, people were more likely to vote for a presidential candidate or make a favorable promotion decision for targets who expressed anger than for targets who expressed sadness. The reason for this effect

was that anger expressions elicited inferences that the expresser was more competent (although less likable) than sad expressions, and status was conferred on the basis of perceived competence.

Potential leaders, like others, often express more complex emotions than anger and sadness alone. For instance, John Kerry was perceived to have expressed conflicted and ambivalent emotions while running for office, which contrasted with the more simple and consistent emotions expressed by his opponent, George W. Bush. But how does the expression of emotional ambivalence affect these individuals' ability to gain status and leadership positions? Rather than appearing competent, confident and self-assured, we have argued that people who express emotional ambivalence are likely to be judged as less competent and less decisive in addition to being less likable and trustworthy than individuals who express more consistent emotions. As a result, we expect persons who express emotional ambivalence to be particularly unlikely to gain status within a group. People look to leaders to make sense of the world, to provide clarity and purpose. The expression of emotional ambivalence projects a sense of uncertainty and doubt that is unlikely to instill a sense of confidence and ease in followers.

Although the expression of emotional ambivalence is unlikely to instill confidence and to help individuals gain status within a group, it is obviously appropriate in some instances. For example, for a group member who already holds a leadership position and is faced with a situation that is not only difficult but also important, the expression of emotional ambivalence may be considered appropriate. The notion of "appropriateness" is not new, as Ekman and Friesan (1969) argued that display rules, or the "overlearned habits about who can show what emotion to whom and when they can show it" (Ekman, 1984, p. 320), dictate appropriate emotional expressions in different situations.

The extent to which leaders adhere to or violate such rules is likely to influence the type of reactions that followers and other observers have. For instance, a leader who expresses ambivalence about a difficult and important decision may be perceived as less incompetent than a leader who expresses ambivalence about an easy and minor decision. This is because the expression of emotional ambivalence may be considered more appropriate in the former rather than in the latter situation. In turn, leaders who express emotional ambivalence in situations where it is considered appropriate may be better liked, and thus more effective than leaders who express emotional ambivalence in situations where it is considered inappropriate (Glaser & Salovey, 1998).⁶ What this suggests is that as with other emotions, the ability to appraise and regulate one's own emotional ambivalence in

accordance with display rules is likely to be particularly important among individuals in leadership positions. Furthermore, it suggests that the expression of emotional ambivalence will not be equally detrimental to a leader in all circumstances.

In summary, the expression of emotional ambivalence is unlikely to help individuals gain status within a group. This is because the expression of emotional ambivalence projects a sense of uncertainty and doubt rather than confidence and self-assuredness, and, as a result, does not evoke an image of competence, which previous research suggests is the basis of status conferral (Tiedens, 2001). The expression of emotional ambivalence may not be equally detrimental to leaders in all situations, however. While lay theories suggest that leaders who are consistent in their actions are better leaders than those who switch from one line of behavior to another (Staw, 1981), this relationship will be weaker for leaders who express inconsistent emotions in situations where inconsistency is appropriate.

DISCUSSION

In this chapter, we have drawn attention to the possibility that complex emotions such as feelings of ambivalence may be one of the most commonly evoked emotions in group contexts and social relationships more generally. Our model suggests that not only is the experience and expression of emotional ambivalence quite common within group contexts, but it also has meaningful social implications for interpersonal relationships and group dynamics.

Implications for Research on Emotions in Groups

At the group level, we have argued that the expression of emotional ambivalence by an individual will shape group-level dynamics, such as increasing relationship-focused conflict and reducing social cohesion and conformity within the group. We have also argued that the expression of emotional ambivalence will influence the decision-making processes that occur within groups. Specifically, when a person expresses emotional ambivalence, we argue that it will increase the cognitive complexity within the group's decision-making process because it alerts fellow group members to the complexity of the decision task at hand and, therefore, to the need to thoroughly consider the different decision criteria and alternatives.

When group members express emotional ambivalence, we have argued that this will increase the extent of information search and group discussion that occurs during the decision-making process. Such increased information search and group discussion is aimed at reducing the uncertainty that expressions of ambivalence bring into groups. Finally, we have argued that individuals who express emotional ambivalence will be the target of interpersonal persuasion and influence attempts in group's decision-making processes, because they are perceived as more indecisive and thus more open to influence than individuals who express strong, consistent emotions. Group members expressing ambivalence will also have a harder time gaining status and leadership roles within their groups because expressions of ambivalence project a sense of uncertainty and doubt rather than confidence, self-assuredness and thus competence.

Our model contributes to research on group emotion in several respects. Previous research on emotion in groups has explored the effects of homogeneity of affect within a group (Anderson & Keltner, 2004; Barsade & Gibson, 1998; Bartel & Saavedra, 2000; Hatfield et al., 1994; Hatfield & Rapson, 2004) as well as the effects of affective diversity *across* group members (Barsade et al., 2000; Tiedens et al., 2004). The present chapter suggests that there are important group consequences that flow from a single group member who expresses multiple inconsistent emotions simultaneously.

Furthermore, whereas research on emotion in groups has focused a good deal of attention on the affective composition of groups (Kelly & Barsade, 2001), this research has focused primarily on dispositional affect and mood, and has neglected to examine other types of affect. While theory on affective composition of groups has defined affect broadly as "subjective feeling states" that can range from diffused moods to intense emotions, most of the research has focused only on the trait end of this continuum. Yet, in addition to the importance of *trait*-positive affectivity for group processes and outcomes (Barsade et al., 2000), positive, negative and ambivalent affective *states* are also likely to be important, especially in groups that have just recently been formed. For instance, affective states have been shown to be very important in the process of forming impressions of other individuals (Asch, 1946). Therefore, there is reason to believe that affective states, such as emotional ambivalence, are influential in shaping the interpersonal and group dynamics that develop within new groups.

Focusing research attention on ambivalent affective states may not only be beneficial for understanding how interpersonal and group dynamics unfold, but also for understanding how other organizational situations play out. For instance, ambivalence may be a common but less well understood

reaction to justice decisions. When a positive outcome results from a procedure that is biased in the individual's favor, she or he is likely not only to experience happiness, but also to experience guilt at the same time (Weiss, Suckow, & Cropanzano, 1999). Group members will be happy because they got what they wanted, but also feel guilty because someone else was harmed. The consequences of such ambivalent emotions have yet to become a central focus of justice research. However, our model suggests that the expression of ambivalence is likely to have a wide range of interpersonal and group consequences that may explain justice-related reactions in both the emotional expresser and others.

Implications for Research on Emotional Ambivalence

Our model also contributes to research on emotional ambivalence as it focuses on the expression rather than the experience of emotional ambivalence, thus extending theory on the implications of emotional ambivalence from intrapersonal to social outcomes. What limited research has been conducted on emotional ambivalence has focused exclusively on the experience of emotional ambivalence, the situations that bring it about and its individual-level consequences, such as creativity (Fong, 2006; Amabile et al., 2005). These studies have contributed a great deal to the understanding of emotions by pushing the field beyond the study of single discrete emotions. However, research has yet to examine the effects of expressing emotional ambivalence and its social impact on others. As we have suggested in this chapter, studying the expression of emotional ambivalence raises a host of important questions about how others feel, think and behave in reaction to ambivalent expressions by a group member.

At the interpersonal level we have argued that the expression of emotional ambivalence will elicit competence-related character inferences about the expresser. Specifically, people will believe that someone expressing ambivalence is less decisive and less competent but also less impulsive and more cognitively complex than individuals who express more consistent emotions. We have also argued that the expression of emotional ambivalence will elicit emotional reactions in others. Because ambivalent expressions are ambiguous and complex, they hinder others' ability to know where the expresser stands on an issue, and thus provoke frustration in others. Finally, we have argued that the expression of emotional ambivalence will elicit relationship-oriented reactions in others. Specifically, people will dislike group members who express emotional ambivalence as well as distrust them.

Because ambivalent expressions are hard to interpret, and therefore make others feel uncomfortable, they are likely to impede the development of liking between group members. Similarly, because individuals expressing emotional ambivalence are expressing inconsistent and therefore less predictable behaviors, they are likely to impede the development of trust between group members.

Studying the expression of emotional ambivalence also opens up questions about the effects of strategically using emotional ambivalence in group contexts, when that emotion is not actually experienced. We have focused in this chapter on situations in which behavioral expressions of emotional ambivalence are perceived to be genuine, i.e., they are perceived to be a response to the internal experience of emotional ambivalence. There are other occasions, however, when such an expression does *not* stem from any internal experience of emotional ambivalence. For instance, it may occur when a group member deceptively expresses ambivalence to his or her group in order to prevent having to share his or her true feelings about an issue. Thus, in some circumstances, the expression of emotional ambivalence may be strategic. Exploring the expression, rather than the experience, of emotional ambivalence enables us to consider when and under what conditions this type of strategic display of emotional ambivalence may be used, and when and under what conditions it will be effective.

Much of what we have predicted in this chapter may depend on the target of the ambivalence. We have focused on situations in which the target of the ambivalence is the group activity (i.e., “I am ambivalent about this task”), but when ambivalence is targeted at another individual (i.e., “I am ambivalent about you”), some of its effects may differ. For example, while an individual is likely to feel frustrated when another group member expresses ambivalence about a task, he/she may feel hurt, rejected or angry when another group member expresses ambivalence about him/her personally. The target of the ambivalence has not been explicitly considered by previous research on ambivalence, but future research should more explicitly address this question.

Our predictions in this chapter may also depend on the type of relationship that exists between the ambivalent expresser and those who observe him or her. For instance, there are some relationships in which expressing ambivalence about a decision may be more acceptable than others. People may respond quite compassionately to friends who express ambivalence about a decision they are making, but much less compassionately to a business partner who expresses ambivalence about a decision. Related to this, there may also be social roles in which expressing

ambivalence about a decision may be more acceptable than in others. Or, there may also be particular times and ways of expressing ambivalence that are more acceptable than others. Future research should explicitly address these questions.

Practical Implications

We have argued that factors that play an important role in the effectiveness of work groups (i.e., interpersonal reactions, conflict, cohesion, conformity, decision-making processes, influence processes, leadership processes) are affected by the expression of emotional ambivalence by an individual. Our model suggests that some of the social implications of expressed ambivalence are negative, such as negative interpersonal reactions, increased relationship conflict and reduced cohesion. Other implications are positive, such as reduced conformity and the facilitation of cognitive complexity, information search and group discussion in decision-making processes. Learning about the benefits and liabilities of expressions of ambivalence in groups will help managers take advantage of the positive implications and avoid the negative implications.

One way that managers can take advantage of the positive implications is by promoting the expression of emotional ambivalence in situations in which it is advantageous. For instance, when groups are making difficult and complex decisions, they are likely to benefit from reduced conformity, increased cognitive complexity, information search and group discussion. In such contexts, managers may take proactive steps to promote the expression of emotional ambivalence. Managers can promote expressions of emotional ambivalence by role modeling this behavior, publicly evaluating it in positive ways and helping to establish norms that encourage expressions of emotional ambivalence.

At the same time, managers may take steps to limit the negative implications of ambivalent expressions such as the negative interpersonal reactions, increased relationship conflict and reduced group cohesion. These negative reactions are based largely on the fact that ambivalent expressions, because they are inconsistent cues, are likely to elicit uncertainty and therefore discomfort in others. Savvy managers may help their work groups to view uncertainty as an opportunity rather than a threat, thus diminishing the discomfort they may feel and alleviating many of the negative repercussions of ambivalent expressions. Related to this, managers can train employees to express their emotional ambivalence in ways that are better received by others. For instance, helping employees articulate their

feelings and the causes of their feelings (i.e., “I’m feeling ambivalent because this is a complex issue with the following tradeoffs: ...”) is likely to reduce the negative implications of expressing such complex emotions, and it may even help the group address the source of the ambivalence and refocus their attention on the task at hand. Thus, individuals and groups may benefit from group members learning to manage their ambivalent expressions but also learning to be less uncomfortable with inconsistency.

CONCLUSION

Emotions researchers have long acknowledged that emotional expressions may repel individuals from others, or they may join them to others. Thus, emotional expressions can be considered an important impetus for the development or dissolution of relationships and for effective collaboration in groups and teams. Toward this end, we have argued that expressions of emotional ambivalence may be particularly important. And yet, an understanding of the social consequences of expressions of emotional ambivalence has been neglected in research to date. We know virtually nothing about how these expressions shape social perception, interpersonal relationships and group dynamics. Our theory suggests that in many ways, the expression of multiple inconsistent emotions simultaneously yields social effects that can be distinguished from those elicited by simpler emotions. The model we present in this chapter provides an agenda to guide future research on the social consequences of expressions of emotional ambivalence.

NOTES

1. Emotions are intense, relatively short-term affective reactions to specific environmental stimuli. Unlike moods, which are longer lasting but more diffuse, emotions have a clear cause or target and are more focused and intense (Frijda & Mesquita, 1994). The causes of moods are less distinct than those of emotions, and individuals do not always realize that they are experiencing them or that their moods are influencing their behaviors (Forgas, 1992; Barsade, Brief, & Spataro, 2003). Trait affect does not need a specific target, and is a generalized tendency toward having a particular level of positivity and negativity that permeates all of an individual’s experiences (Lazarus, 1991). Because we are concerned with feelings about group activities, we focus on conflicting *emotions*.

2. Thus, ambivalence is not the same as indifference, which may be more accurately thought of as the absence of strong emotional reactions, rather than the presence of strong but opposing reactions.

3. Ambivalence is theoretically characterized by the simultaneous experience of inconsistent emotions rather than the sequential experience of inconsistent emotions, such as the vacillation between positive and negative feelings. Only one study, to our knowledge, has explored this empirically. Research by [Larsen, McGraw, Mellers, and Cacioppo \(2004\)](#) reported evidence showing that disappointing wins and relieving losses elicit mixed emotions that are characterized by the simultaneous experience of positive and negative affects, rather than by their alternation.

4. Of course, this is not a comprehensive list of the character inferences that may be developed about ambivalent expressers, but it represents an initial grouping of competence-related inferences that are likely to be important in the work context, and that are also likely to be linked with the expression of ambivalence.

5. The expression of emotional ambivalence may be shared among group members, but we do not expect this to occur through non-conscious contagion, but rather through cognitive mediation. In other words, we believe individuals are less likely to non-consciously mimic, and therefore “catch” the complex and inconsistent emotions of ambivalent others than to consciously notice the expression of inconsistent emotions, and search for the trade-offs and conflicts that could have triggered such an expression. This more deliberate and thorough cognitive processing, in turn, may lead to the experience and expression of ambivalence. Note that in this case, the emotional response is cognitively mediated.

6. Exactly what situations are considered appropriate and inappropriate for expressions of emotional ambivalence should be a focus of future research.

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CHAPTER 12

GROUP EMOTIONAL INTELLIGENCE AND GROUP PERFORMANCE ☆

Stéphane Côté

ABSTRACT

This chapter examines how emotional intelligence may influence the performance of groups. I first address relevant issues concerning emotional intelligence at the individual level of analysis. I then describe the range of composition models by which group emotional intelligence constructs can be created, from the emotional intelligence of the members of the group, articulate mechanisms by which each construct may be related to performance, and use Steiner's (1972) typology of group tasks to identify when each construct may best predict performance. I also use the mechanisms of multiplication and compensation to consider how group emotional intelligence may combine with other group constructs to predict performance. I end this chapter with a discussion of research implications.

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Why do some groups perform better than others? One approach to explaining differences in performance across groups involves aggregating individual-level phenomena to form group-level constructs and examining the associations between these group-level constructs and group performance. Researchers have used this approach to aggregate the affect, personality traits, and cognitive intelligence of individuals to form group-level constructs and then link them to performance (e.g., Barry & Stewart, 1997; George, 1990; Neuman & Wright, 1999; Terborg, Castore, & DeNinno, 1976).

This research was recently extended to consider aggregating the emotional intelligence of individuals to form group-level constructs and linking them to group performance. Researchers have provided some theoretical arguments for conceptualizing emotional intelligence at the group level of analysis (Druskat & Wolff, 2001; Elfenbein, 2005; Kelly & Barsade, 2001) and for linking group emotional intelligence to performance. So far, however, researchers have mostly focused on a single way of composing group emotional intelligence and a single way of linking it to performance. The goal of this chapter is to create opportunities for additional research by describing the range of approaches to compose group emotional intelligence and examining the conditions in which each of these approaches may best predict performance.

To maintain adequate scope, the theoretical developments described in this chapter have particular boundaries. First, they focus on the performance of self-managing groups that lack a formally appointed leader (Taggar, Hackett, & Saha, 1999). The leadership process is fraught with emotions (Rubin, Munz, & Bommer, 2005; Sy, Côté, & Saavedra, 2005) and thus, the hierarchical nature of groups with a formally appointed leader provides complexity that is beyond the scope of this chapter. I leave the examination of how group emotional intelligence is associated with performance in groups that have a formally appointed leader for future research. Second, the theoretical developments in this chapter focus on how group emotional intelligence may influence performance via mechanisms concerned with internal team dynamics – how group members' emotional intelligence influences the nature of the exchanges that they have with each other, as opposed to external team dynamics that involve individuals outside the team.

Emotional intelligence is typically conceptualized as a characteristic of individuals. I first address issues pertaining to emotional intelligence at the individual level of analysis. I then cover the range of group emotional intelligence constructs available for research by describing the various

models by which they can be composed from the emotional intelligence of the individuals in the group. I use Steiner's (1972) taxonomy of group tasks to propose when each group emotional intelligence construct may best predict performance. I then describe multiplication and compensation models by which group emotional intelligence may combine with other constructs to predict group performance. I conclude this chapter by discussing the research implications of these models.

EMOTIONAL INTELLIGENCE AT THE INDIVIDUAL LEVEL OF ANALYSIS

Emotional intelligence is a set of abilities pertaining to emotions (Salovey & Mayer, 1990). It is conceptualized as a true intelligence that is separate from cognitive intelligence (Mayer, Caruso, & Salovey, 2000). In addition, it is treated as a multidimensional construct (Wong & Law, 2002). For instance, Mayer and Salovey (1997) identified four branches of emotional intelligence pertaining to perceiving emotions: using emotions to facilitate performance, understanding emotions and emotional knowledge, and regulating emotions. Researchers must decide whether to focus on emotional intelligence as a whole, or on the branches of emotional intelligence, or on both. They can use the typology of multidimensional constructs proposed by Law, Wong, and Mobley (1998) to guide that decision. Some researchers have argued that emotional intelligence should be treated as a latent multidimensional construct because it represents the commonality among specific emotional abilities, and its true variance corresponds to the common variance among those abilities (Côté & Miners, 2006; Wong & Law, 2002). In this chapter, I adopt this approach and focus on emotional intelligence as a whole rather than on each of its branches.

Two controversies that currently surround the concept of emotional intelligence and that are relevant to this chapter are its status as a true intelligence and its distinctiveness from extant concepts. Several researchers have argued that emotional intelligence is a true intelligence (Côté & Miners, 2006; George, 2000; Law, Wong, & Song, 2004). Their arguments are based, in part, on the definition of intelligence as the "ability to grasp and reason correctly with abstractions (concepts) and solve problems" (Schmidt & Hunter, 2000, p. 3). Accordingly, emotional intelligence can be conceptualized as the ability to grasp and reason correctly with emotional abstractions (emotional concepts) and solve emotional problems (Côté & Miners, 2006). Researchers have also argued that emotional intelligence is a true

intelligence because it meets the criteria for a type of intelligence as described by Mayer et al. (2000) following their literature review. More specifically, (a) emotional intelligence reflects abilities rather than tendencies to act in certain ways, (b) emotional intelligence correlates with yet is different from other intelligences, and (c) emotional intelligence has the potential to improve over time. Unlike ability models of emotional intelligence like the one proposed by Mayer and Salovey (1997), mixed models of emotional intelligence that combine ability and personality trait constructs (Bar-On, 2001; Tett, Fox, & Wang, 2005) do not meet the criteria of intelligence because they include concepts that do not fit the definition of abilities. Therefore, mixed models are not useful for research on group emotional intelligence and performance.

A second controversy concerns the distinctiveness of emotional intelligence from extant concepts such as cognitive intelligence and personality traits (Locke, 2005; Schulte, Ree, & Carretta, 2004). Emotional intelligence can be distinguished from cognitive intelligence within the three-stratum theory of intelligence (Carroll, 1993; McGrew, 2005). This theory structures abilities hierarchically. General intelligence (g) is at the apex and includes several sets of abilities that represent its specializations into broad content or process areas. Emotional intelligence represents the specialization of general intelligence in the area of emotions in ways that predominantly reflect experience and learning about emotions, whereas cognitive intelligence represents the specialization of general intelligence in the domain of cognition in ways that predominantly reflect experience and learning about cognitive processes such as memory (Côté & Miners, 2006). In addition, emotional intelligence can be distinguished from personality traits because there is a fundamental distinction between ability and trait constructs. Abilities reflect “the possible variations over individuals in the liminal [threshold] levels of task difficulty... at which, on any given occasion in which all conditions appear to be favorable, individuals perform successfully on a defined class of tasks” (Carroll, 1993, p. 8). As such, abilities represent what a person *can do* in specific situations. By contrast, personality traits represent what a person *typically does* across situations and over time (McCrae & John, 1992). There is compelling empirical support for the distinctiveness of emotional intelligence from extant constructs (Côté & Miners, 2006; Mayer, Salovey, & Caruso, 2004).

Emotional intelligence is related to criteria such as high job performance (Côté & Miners, 2006), close social relationships (Lopes, Salovey, Côté, & Beers, 2005), and infrequent social deviance (Brackett & Mayer, 2003). These findings have contributed to a growing acceptance of the role of

emotional intelligence at the individual level of analysis that, in turn, has led researchers to ponder its existence at the group level of analysis (e.g., Druskat & Kayes, 1999; Kelly & Barsade, 2001). In the following section, I examine the various approaches to aggregate the emotional intelligence of individuals to form a property of the group.

EMOTIONAL INTELLIGENCE AT THE GROUP LEVEL OF ANALYSIS

In this chapter, I focus on the elemental composition of group emotional intelligence. In elemental composition, data from a lower level of analysis are used to compose a higher-level construct, so that the lower- and higher-level constructs reference essentially the same content (Chan, 1998). I describe how the emotional intelligence scores of individuals can be used to compose group-level constructs that reference essentially the same emotional abilities.

The predominant approach to composing group emotional intelligence consists of averaging the emotional intelligence of the individuals in the group. This approach has considerable merit, but researchers' almost exclusive focus on this approach may be limiting progress. Considering other ways to compose group emotional intelligence could develop richer theories. Researchers can use several composition models to develop group-level constructs (e.g., Chan, 1998; LePine, Hollenbeck, Ilgen, & Hedlund, 1997; Rousseau, 1985). These models allow researchers to construe group emotional intelligence as some combination of the emotional intelligence of the individuals in the group. Elfenbein (2005) applied several of these models to the domain of emotional intelligence. I extend her contribution by articulating additional mechanisms by which different group emotional intelligence constructs may be associated with performance, and by using Steiner's (1972) typology of tasks to identify when each of these constructs may best predict performance.

Steiner (1972) proposed that unitary group tasks – tasks that cannot be clearly separated into sub-tasks performed by different individuals – can be divided into three categories. In additive tasks, group performance is disproportionately based on the sum or the average of the performance of the individuals in the group. For example, the performance of a group on a brainstorming session is often predominantly determined by the sum of the ideas contributed by each member of the group. In conjunctive tasks, group performance is disproportionately based on the performance of the weakest member of the group. For instance, the performance of a group on an

assembly line is predominantly determined by the slowest worker, because the performance of all workers who follow the slowest member on the assembly line are affected by that slowest member. In disjunctive tasks, group performance is disproportionately based on the performance of the strongest member of the group. For instance, the performance of a group of computer programmers that are looking for an error in programming code is predominantly determined by the performance of the best programmer, because all of the programmers can stop searching once the best programmer has found the error. The different group emotional intelligence constructs composed via different models may best predict performance on certain types of tasks.

*Additive and Direct Consensus Composition Models of Group
Emotional Intelligence*

In additive composition models, the higher-level unit construct is an average or a summation of the lower-level unit constructs (Chan, 1998). The variance in the lower-level units – that is, whether the members of the group are similar or different – is not theoretically important. This composition model considers group emotional intelligence as the average level of emotional intelligence or the sum of emotional intelligence levels in the group. This model has been used in past research (e.g., Feyerherm & Rice, 2002), but arguments justifying its choice are typically absent. This represents a serious omission because any choice of composition model must be theoretically justified (Chan, 1998). To address this omission, Elfenbein (2005) proposed that emotional intelligence is a resource that group members combine to share and draw upon when needed. Different groups accumulate different amounts of this resource, and groups with large amounts of emotional intelligence may outperform their competitors.

A variant of the additive composition model is the direct consensus model. This model uses similarity among the units at the lower level of analysis to compose the higher-level construct (Chan, 1998). The group construct is formed by averaging or summing the lower-level scores, but only if these scores are sufficiently similar. Accordingly, group emotional intelligence can be treated as the average level of emotional intelligence or the sum of the emotional intelligence levels of the individuals in the group, but only if these scores are sufficiently similar. Research on group emotion suggests that the direct consensus composition model may be useful to create group emotional intelligence. George (1990, 2002) argued that group

affective tone and group emotion regulation develop, in part, from attraction, selection, and attrition mechanisms that produce similarity among group members (Schneider, 1987). Group emotional intelligence may also develop through attraction, selection, and attrition mechanisms. Individuals may be attracted to groups whose members have emotional intelligence levels similar to their own. Groups of emotionally intelligent individuals may select other similar individuals to join them. In addition, emotionally intelligent individuals may be more motivated to remain in groups with many rather than few other emotionally intelligent individuals.

The mechanisms that link group emotional intelligence to performance may be similar for additive and direct consensus composition models, because both models represent the sum or the average of the emotional intelligence levels in the group. The first mechanism concerns the understanding and management of stress. Increases in stress from low to moderate levels often enhance group performance, but group performance declines once stress exceeds a threshold level (Kerr & Tindale, 2004). Groups with large amounts of emotional intelligence may know that overly high and overly low levels of stress reduce performance. The group can utilize large amounts of emotional intelligence to optimize the level of stress for maximal performance.

Groups with large amounts of emotional intelligence may also achieve high performance by adjusting their emotions to match the cognitive and interpersonal demands of the work. Moods influence how individuals think and act by providing them with information that guides their judgments (Brief & Weiss, 2002; Clore, Schwarz, & Conway, 1994). Moods can also be conceptualized at the group level of analysis. Group affective tone is an aggregate of the moods of the members of the group when the moods are highly similar (George, 1990). Research has identified links between group affective tone and several aspects of performance (George, 1996). Importantly, either a positive or a negative affective tone may enhance performance depending on the demands of the work. Positive affective tone is related to coordination – synergistic interactions that avoid slippage and wasted effort – presumably because positive affective states improve social interaction (Sy et al., 2005). Conversely, a negative affective tone is related to effort, presumably because negative affective states act as signals that the environment is threatening and steps must be taken to counter the threat (Sy et al., 2005). Groups with large amounts of emotional intelligence may know the links between affective tone and performance and aptly generate the affective tone that is most conducive to meeting the demands of the work (George, 2002).

Past research provides some support for using group emotional intelligence constructs composed via an additive or a direct consensus

model. Jordan, Ashkanasy, Härtel, and Hooper (2002) examined the association between the emotional intelligence and the performance of 44 groups of undergraduate students. They composed group emotional intelligence with an additive model by averaging the scores of the individual members of each group. They measured two aspects of group performance – process effectiveness and goal focus – during nine consecutive weeks. The analyses revealed that group emotional intelligence predicted the change in performance from the first to the last week. Emotionally intelligent groups maintained a high level of performance over time, but groups with low emotional intelligence increased their performance from the first to the last week. The authors argued that emotionally intelligent groups can function effectively as a group at the initial stages of a project, but groups with low emotional intelligence need time to develop effective ways to perform. Likewise, Feyerherm and Rice (2002) tested the association between the emotional intelligence and the performance of 26 groups of employees in a financial services center. They also used an additive composition model. Managers ranked the groups in terms of their performance and also rated each group on five dimensions of performance: customer service, accuracy of work, productivity, team leader performance, and commitment to continuous improvement. Group emotional intelligence positively predicted the rankings but not the ratings of performance.

These studies provide some evidence that group emotional intelligence composed via an additive model is associated with group performance, but they do not explicitly consider the nature of the task that the group performs. The nature of the task may be important. For instance, group emotional intelligence composed via an additive model may not necessarily have influenced performance on the types of tasks that the groups performed in Feyerherm and Rice's (2002) study. Because group emotional intelligence composed via additive or direct consensus models reflects the emotional intelligence of the different members equally, they may garner the most explanatory power when all of the members of the group are equally important and no single individual is disproportionately influential. They may therefore be more useful to predict performance on additive tasks that represent the sum or the average of the performance of each member of the group.

For example, an additive composition model of group emotional intelligence may be particularly useful to predict performance during a brainstorming session, which is an additive task. The number of ideas generated by each member of the group should be high if each member is generally emotionally intelligent. This is because, in theory, emotional intelligence may be used to guide emotions toward creative thinking

(Salovey & Mayer, 1990). Each group member should provide a generally high number of ideas. When these ideas are summed, the group should be considered to have performed strongly because the total number of ideas is high. Additive or direct consensus models may therefore predict performance on brainstorming tasks that represent the sum of the ideas contributed by each member of the group.

The preceding discussion suggests that group emotional intelligence composed via an additive or a direct consensus model may predict performance on additive tasks to a greater extent than on other types of tasks on which the average amount of emotional intelligence in the group may be less important:

Proposition 1. Group emotional intelligence composed via an additive or a direct consensus model is positively related to the performance of groups working on additive tasks.

Maximum-Score Composition Model of Group Emotional Intelligence

Researchers have argued for the importance of group-level constructs formed by identifying the person with the highest level of a given characteristic in a group (Barsade & Gibson, 1998; Elfenbein, 2005). The average and the variance of that characteristic in the group are irrelevant. Different groups receive the same score if their highest scoring member is the same, even if the other members of these groups vary considerably. With a maximum-score model, group emotional intelligence is conceptualized as the highest emotional intelligence score in the group, regardless of the scores of all of the other group members.

There is no research on a maximum-score composition model of group emotional intelligence and performance, but it is possible to theorize that this model may best predict performance on disjunctive tasks that disproportionately depend on the strongest member of the group. It may be important for a group confronted with a disjunctive task to have a person with a considerably high level of emotional intelligence to ensure high performance. When the performance of the group on a disjunctive task is evaluated, the performance of the strongest member of the group is disproportionately considered. The level of emotional intelligence of all of the other members of the group should be relatively unimportant.

For instance, many groups and organizations face demands to express certain emotions and hide others to build and maintain relationships. It is often difficult to meet at least some of these demands (Hochschild, 1983;

van Vegchel, de Jonge, Söderfeldt, Dormann, & Schaufeli, 2004) and individuals regulate their emotions to meet these demands (Côté & Morgan, 2002; Grandey, 2003). When a group works on an emotionally demanding task, having a highly emotionally intelligent person to address the emotional demands might be particularly important. This person may possess the needed emotional knowledge and ability to meet the demands of the task, such as handling difficult interpersonal encounters. Groups that do not include anyone with spectacular abilities may be outperformed. An analogy concerns the association between mathematical ability and performance on a disjunctive mathematical task. A group composed of one person with considerable ability in advanced calculus and several who have none at all can solve more difficult mathematical problems than a group composed of individuals who are very knowledgeable, but not advanced, at mathematics. Similarly, a group composed of one person with considerable emotional ability and several who have none at all can solve more difficult emotional problems than a group composed solely of individuals who are very knowledgeable, but not advanced, at emotions. This reasoning suggests the following proposition:

Proposition 2. Group emotional intelligence composed via a maximum-score model is positively related to the performance of groups working on disjunctive tasks.

Minimum-score Composition Model of Group Emotional Intelligence

In minimum-score composition, the group level construct is formed by identifying the lowest individual score on the characteristic of interest (Barsade & Gibson, 1998; Elfenbein, 2005). The average and variance of that characteristic are irrelevant. The lowest score may be accompanied by several high scores, several average scores, or other low scores. The group emotional intelligence construct is formed by identifying the lowest emotional intelligence score in the group, regardless of the scores of all of the other group members.

There is no research on a minimum-score model of group emotional intelligence and performance, but it is possible to theorize that this model may best predict performance on conjunctive tasks that are disproportionately based on the weakest member of the group. It may be important for groups that perform a conjunctive task to avoid having a person with low emotional intelligence. The performance of the group should strongly depend on the level of emotional intelligence of the weakest member of the

group. The level of emotional intelligence of all of the other members should be of little consequence for group performance.

For instance, the performance of a musical trio in front of a large audience may be disproportionately influenced by the musician with the lowest level of emotional intelligence. Only one member of the trio needs to play poorly for the entire performance to be poor. In front of a large audience, a musician with low emotional intelligence may feel overly stressed and fail to cope with the situation. This musician may thus play poorly and worsen the performance of the trio. This musician may also cause emotional disruption and cause the other two members of the trio to play poorly. The musician with low emotional intelligence may consume the attention of the other members that they could otherwise devote to performance.

Taken together, these arguments suggest that group emotional intelligence composed via a minimum-score model may have considerable utility in predicting performance on conjunctive tasks, so that the lower the minimum level of emotional intelligence in the group, the lower the performance of the group on this type of task.

Proposition 3. Group emotional intelligence composed via a minimum-score model is positively related to the performance of groups working on conjunctive tasks.

Dispersion Composition Model of Group Emotional Intelligence

In dispersion composition models, the group construct is created from the variance of the scores of the individuals in the group (Chan, 1998). The higher-level construct represents the variance in the scores on the lower-level units. This model may be used to form group emotional intelligence constructs that represent the variance in the emotional intelligence scores of the members of the group.

The literature on group diversity provides conceptual meaning to group emotional intelligence constructs composed via a dispersion model. Researchers are increasingly interested in the importance of diversity in deep characteristics that cannot readily be observed to complement research on diversity in surface characteristics such as gender and race. Emotional intelligence may represent a deep characteristic that affects group diversity dynamics. In particular, diversity in emotional intelligence may contribute to group performance via the enhanced elaboration of task-relevant information and material (Van Knippenberg, De Dreu, & Homan, 2004). Diversity within a group often produces different assumptions and opinions

about group tasks. It may therefore enhance performance via the reconciliation of different assumptions and opinions by triggering the exchange, discussion, and integration of ideas, knowledge, and insights relevant to the task. In the absence of diversity, the group's information elaboration is less, and as a result performance suffers.

These arguments can be focused more directly on emotional intelligence. Groups composed of individuals with varying levels of emotional intelligence may be forced to reconcile different approaches to group tasks. The members of these groups may experience different emotional states that are associated with different cognitive approaches to process task-relevant information. By discussing and reconciling these different approaches, group members may enhance their performance by adopting the most appropriate approach or developing a new approach that combines the best features of the different approaches. In contrast, groups composed of individuals with similar levels of emotional intelligence may develop a shared understanding of the emotional aspects of tasks. They should be emotionally "in tune" in several ways. They may experience similar emotional states that are associated with similar cognitive approaches to processing information. These groups may not avail themselves of the opportunity to choose the best of several approaches or create novel approaches.

The performance benefits of emotional intelligence diversity should be important for additive group tasks that disproportionately depend on the sum or the average of the performance of the individual group members. When the performance of the different group members is summed, each component of that sum will have benefited from emotional intelligence diversity, resulting in considerable influence of emotional intelligence diversity on the final outcome.

For example, a group performing a brainstorming task may benefit from emotional intelligence diversity by reconciling the different emotional states experienced by the members as they initiate the task. The group may consider the different cognitive approaches to creating novel ideas that are associated with these different emotional states. It may converge on an optimal emotional state and, in turn, an optimal cognitive approach to produce creative ideas. Each member of the group may produce a relatively high number of creative ideas. When these ideas are summed, the group should perform relatively well. This reasoning suggests the following proposition:

Proposition 4. Group emotional intelligence composed via a dispersion model is positively related to the performance of groups working on additive tasks.

There may also be performance benefits of emotional intelligence diversity for conjunctive and disjunctive tasks. These benefits, however, should be smaller than those for additive tasks. When the group performs a conjunctive or a disjunctive task, emotional intelligence diversity mostly assists the performance of a single person because performance disproportionately depends on the performance of a single person. The effects of emotional intelligence diversity should therefore be more limited than on additive tasks.

Do the Proposed Associations Depend on the Emotional Nature of Tasks?

The propositions described above distinguished tasks using Steiner's (1972) typology, but the emotional nature of tasks was not considered. The emotional demands of the task may moderate the associations between group emotional intelligence and performance so that they become stronger as the emotional demands increase. Emotional intelligence, however, may play a role in a larger proportion of tasks than it may initially appear. For instance, emotional abilities may help avoid anxiety that may impede performance on job interviews by increasing cognitive load (McCarthy & Goffin, 2004). They may also help avoid happiness that may impede performance on complex mathematical problems by increasing reliance on heuristic processing (Schwarz & Clore, 1996). Consistent with these arguments, Côté and Miners (2006) found that the individual-level association between emotional intelligence and job performance did not depend on the emotional demands of the job. The role of the emotional demands of the task in the associations proposed here should be explored in future research.

GROUP EMOTIONAL INTELLIGENCE AND GROUP PERFORMANCE: BEYOND MAIN EFFECT MODELS

The preceding discussion reveals that group emotional intelligence constructs formed through additive, direct consensus, maximum-score, minimum-score, and dispersion models may be useful to predict performance, and that each model may be most useful to predict performance on a certain type of group tasks. An important question is whether all groups need emotional intelligence to enhance their performance in the ways described in the previous section, or whether emotional intelligence is only

useful to certain groups. Past research has predominantly tested main effect models that propose associations between group emotional intelligence and performance that are independent of other factors. It is possible, however, that some groups need emotional intelligence more than others.

I use process composition models to develop more complex and potentially more accurate models of group emotional intelligence and performance. With process composition, mechanisms at the individual level of analysis are composed to the group level of analysis by identifying group-level constructs that are analogues of the individual-level constructs, and describing associations among the group-level constructs that are homologous to the individual-level associations (Chan, 1998). In the models I describe below, group emotional intelligence interacts with other predictors via multiplication or compensation mechanisms.

Multiplicative Processes Linking Group Emotional Intelligence and Group Performance

In multiplication, a construct predicts performance more strongly if it is accompanied by another factor than if the other factor is missing. The effect of the construct is not fully activated when it operates in isolation. The effect becomes fully activated when it operates in conjunction with the other factor. A classic multiplicative model is the cognitive intelligence by motivation model of job performance (Campbell, 1976; O'Reilly & Chatman, 1994; Vroom, 1964). The effect of cognitive intelligence on job performance is limited in the absence of motivation. Cognitive intelligence only has an important impact when it is accompanied by motivation because motivation allows people to use their cognitive intelligence. Because the interaction is symmetric, the converse is also true. Motivation only has an important impact on job performance when it is accompanied by cognitive intelligence.

There is evidence for a multiplicative process of emotional intelligence and performance at the individual level of analysis. In one study, the personality trait of extraversion moderated the association between one of the main components of emotional intelligence, the ability to identify emotional expressions, and transformational leadership (Rubin et al., 2005). The positive association between the ability to identify emotional expressions and transformational leadership became stronger as extraversion increased, presumably because extraverted leaders have more frequent social interactions that provide opportunities to use the ability to identify

emotions and, in turn, lead more effectively. Introverted leaders have less frequent social interactions and, therefore, lack opportunities to use their emotional abilities. Their degree of ability to identify emotional expressions is therefore less useful to predict their effectiveness as leaders.

A process composition model can be employed to build group-level multiplicative models of emotional intelligence and performance. Group emotional intelligence may have a stronger influence on performance when it is accompanied by key factors that allow groups to utilize their emotional abilities frequently and effectively. The effect of group emotional intelligence may be limited in the absence of these other key factors. The form of the interaction appears in Fig. 1. In this figure, the other key factor is motivation, building on the ability by motivation model described earlier. The association between group emotional intelligence and group performance becomes stronger as the collective level of motivation increases. Groups with high levels of both emotional intelligence and collective

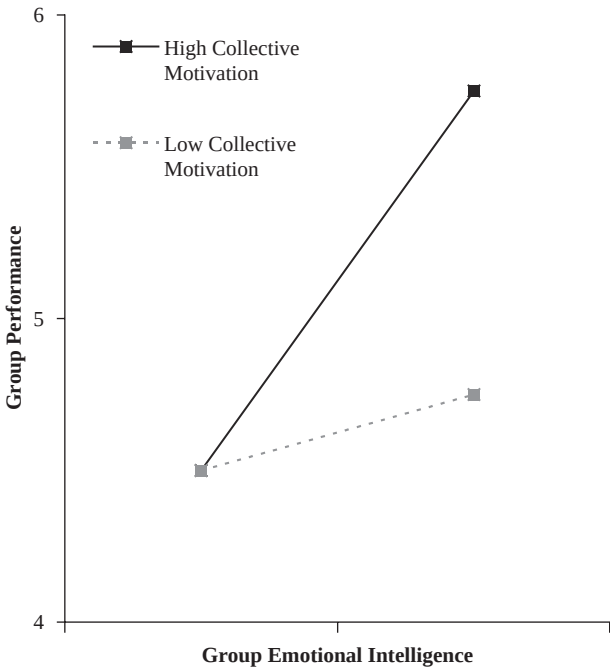


Fig. 1. Example of Multiplicative Model of Group Emotional Intelligence and Collective Motivation.

motivation achieve the best performance. High emotional intelligence, by itself, produces only moderate performance. Groups that have low levels of both emotional intelligence and collective motivation achieve the worst performance.

*Compensation Processes Linking Group Emotional Intelligence
and Group Performance*

Compensation occurs when “the same, or a superior, level of proficiency on some criterion activity is achieved, despite deficiencies in one or more behavioural constituents of that activity” (Salthouse, 1995, p. 21). A limitation or impairment is an important contributor to performance that does not necessarily preclude high performance. A group that lacks a key contributor to effective performance can turn to a second factor to compensate for that lack (Bäckman & Dixon, 1992; Salthouse, 1995). Studies of transcription typing performance that found that older people perform as well as younger people illustrate compensation (Salthouse, 1984; Bosman, 1993). Compared to younger people, older people read the text to be typed farther ahead of the current keystroke to compensate for lower processing speed.

There is evidence for a compensatory process involving emotional intelligence at the individual level of analysis. Côté and Miners (2006) found that high emotional intelligence compensates for low cognitive intelligence. Emotional intelligence was positively associated with the job performance of organization members with low cognitive intelligence. This association weakened as cognitive intelligence increased, presumably because people with high cognitive intelligence have little room for improvement in their performance. Thus, any advantage provided by high emotional intelligence contributed little to their job performance.

A process composition model can be employed to build group-level compensation models of emotional intelligence and performance. Compensatory processes are expressed as an interaction between group emotional intelligence and another factor to predict performance, as illustrated in Fig. 2. In Fig. 2, groups with a deficiency on group cognitive intelligence benefit more from emotional intelligence than groups with no deficiency on group cognitive intelligence. The association between group emotional intelligence and group performance becomes stronger as the group cognitive intelligence decreases. Groups that have a high level of group emotional intelligence, group cognitive intelligence, or both achieve the best

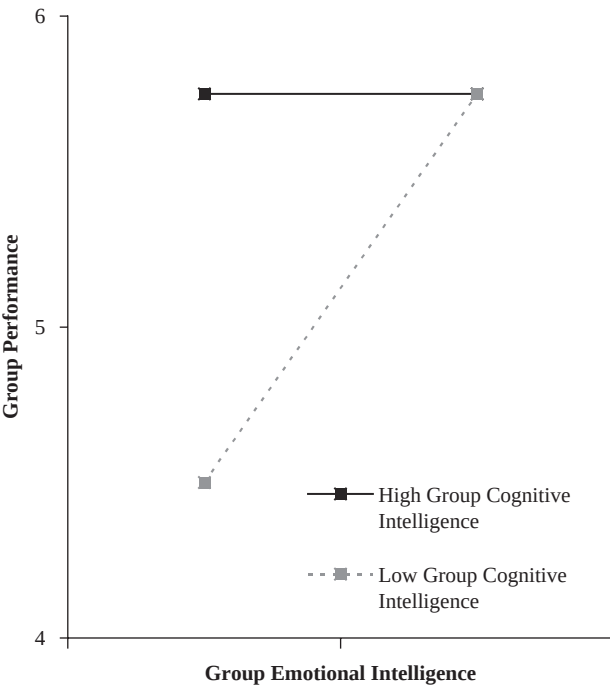


Fig. 2. Example of a Compensatory Model of Group Emotional Intelligence and Group Cognitive Intelligence.

performance. In compensation models, only the groups that lack both factors exhibit low performance.

Multiplication or Compensation?

The preceding discussion reveals that group emotional intelligence may interact with other contributing factors to predict performance. Multiplicative and compensatory mechanisms may be used to explain how group emotional intelligence formed via the composition models described above predicts performance. Researchers should also aim to identify the conditions when group emotional intelligence combines with other factors to predict performance in compensatory versus multiplicative ways. Examining the characteristics that, in past research, predicted group performance may identify characteristics for which group emotional intelligence compensates.

Group emotional intelligence may compensate for deficiencies in these factors. For instance, research has found links between group conscientiousness and group performance (Neuman & Wright, 1999). Group emotional intelligence may thus compensate for low group conscientiousness.

Group emotional intelligence may multiply with characteristics that permit a group to use emotional intelligence effectively. For instance, emotional intelligence is often used in social interactions. Emotional intelligence may therefore more strongly predict performance in groups whose members interact frequently than in groups whose members interact infrequently. The frequency of social interaction among group members may multiply with group emotional intelligence to predict performance. Other factors that permit groups to use their emotional intelligence may operate in the same way.

Fig. 3 illustrates the opportunities for research about group emotional intelligence and performance. The columns illustrate the composition models that can be used to form group emotional intelligence constructs from the emotional intelligence scores of the individuals in the group. The rows illustrate the ways in which group emotional intelligence may combine (or not combine) with other constructs to predict performance. This figure presents 12 possibilities. The current research activity is located in one of the cells. Many more possibilities exist.

IMPLICATIONS FOR RESEARCH

The approach that I adopted suggests that researchers first need to measure emotional intelligence at the individual level and create group-level constructs via some aggregation operation to test models of group emotional intelligence. Accordingly, below, I discuss issues concerning (1) the measurement of individuals' emotional intelligence and (2) the aggregation of individual-level scores.

Measurement of Emotional Intelligence

A major impediment to the accumulation of knowledge of emotional intelligence is its measurement. There are currently two major approaches to measuring emotional intelligence. The ability-test approach presents respondents with emotional problems and asks them to choose the best answer among a set of options. Respondents' answers are compared to those

	Additive or direct consensus composition model	Maximum-score composition model	Minimum-score composition model	Dispersion composition model
Main Effect Mechanism: Group emotional intelligence has a direct effect on performance	Current research activity			
Compensation Mechanism: Group emotional intelligence predicts performance by compensating for deficiencies				
Multiplication Mechanism: The effect of group emotional intelligence becomes fully activated when other key factors are present				

Fig. 3. Potential Opportunities to Study Group Emotional Intelligence and Performance.

provided by expert researchers on emotion, the target of the emotional stimuli (e.g., the person whose expression is identified), or the general population. The self-report approach presents respondents with descriptive items and asks them to evaluate themselves using Likert-type scales. Emotional intelligence scores reflect respondents' evaluations of their abilities.

Research on the measurement of cognitive intelligence informs decisions about the viability of the ability-test and self-report approaches. The ability-test approach is considered valid in cognitive intelligence research. Ability tests such as the Wonderlic Personnel Test and the Wechsler Adult Intelligence Scale are believed to adequately capture a person's cognitive intelligence. The self-report approach, in contrast, is not considered valid in cognitive intelligence research. A recent review of the literature on self-evaluations concluded "the views people hold of themselves are often flawed. The correlation between those views and their objective behavior is often meager to modest, and people often claim to have valuable skills and desirable attributes to a degree that they do not" (Dunning, Heath, & Suls, 2004, p. 98).

There are at least two reasons why the self-report approach to measuring intelligence is flawed. First, people tend to fake responses and report having higher abilities than they believe they have (Donovan, Dwight, & Hurtz, 2003). They should have considerable motivation to fake their responses on emotional intelligence tests. Van Rooy, Viswesvaran, and Alonso (2005) demonstrated that individuals instructed to increase or decrease their scores succeeded. A second flaw of the self-report approach is that people tend to have inflated views of their abilities. For example, narcissism explains approximately 20% of the variance in self-reported abilities (Gabriel, Critelli, & Ee, 1994). Therefore, respondents' reports of their abilities fail to correspond to their actual abilities even when they do not fake their answers. These arguments suggest that variations in self-report measures of emotional intelligence fail to adequately reflect variations in the construct of emotional intelligence. The construct validity of the self-report approach to measuring emotional intelligence is thus highly suspect, and it should be abandoned.

The ability-test approach to measuring emotional intelligence addresses some of these limitations. Respondents cannot pretend to know the answers to test problems that they lack the ability to solve, thereby negating the biasing roles of inflated self-evaluations and the tendency to fake responses. Although the ability-test approach has limitations that I describe below, it may be useful for research on group emotional intelligence and performance.

There are few ability tests of emotional intelligence. The most extensively researched ability test is the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, & Caruso, 2002). The MSCEIT contains tasks that ask respondents to identify emotions in photographs of faces and in images and landscapes, compare different emotions to different sensations such as colors, indicate how emotions influence thinking and reasoning, assemble emotions into complex feelings, identify how emotions transition from one to another, and rate the effectiveness of different emotion regulation strategies in both intrapersonal and interpersonal contexts. Respondents receive credit when their answers match those provided by expert emotion researchers or a large normative sample of lay people from around the world.

The MSCEIT has several desirable psychometric properties. It exhibits high test-retest (0.86; Brackett & Mayer, 2003) and internal consistency reliability (above 0.90; Brackett & Mayer, 2003; Mayer, Salovey, Caruso, & Sitarenios, 2003). There is also evidence for its validity. The factor structure of the responses corresponds to the conceptual model (Mayer et al., 2003), and the test shows appropriate discriminant validity with personality traits and cognitive intelligence (Brackett & Mayer, 2003; Côté & Miners, 2006) and criterion validity with the quality of social interaction (Lopes et al., 2005) and job performance (Côté & Miners, 2006).

There are some logistical difficulties, however, in using the MSCEIT for research purposes. First, the test is relatively long – the manual indicates that respondents should block off 45 min to complete it (Mayer et al., 2002). Opportunities for data collection are sometimes lost because respondents cannot answer questions for 45 min. Abilities are inherently more difficult to measure than other psychological characteristics such as personality traits. It took several decades to develop short measures of cognitive intelligence such as the Wonderlic Personnel Test and, therefore, it is reasonable to expect that it will take some time before similarly efficient tests of emotional intelligence can be developed. A second logistical difficulty with using the MSCEIT is its cost. It is not free, and even a reduced cost is prohibitive for researchers – including students – who lack research funding. Finally, the answer key for the MSCEIT is copyrighted, and researchers do not have access to a document that links each answer to a specific score. Even so, the test publisher provides researchers with a spreadsheet that includes the answer that each respondent selected on each question and the credit received for each answer. This information allows researchers to examine psychometric properties such as internal consistency reliability and share their data.

In addition to these logistical difficulties, the MSCEIT has limitations that should be examined in future research. The MSCEIT assesses emotional abilities in a testing environment that is largely unemotional. A test administered in a more emotional environment may be more valid. A scoring system that is more elaborate than the current reliance on expert and consensus norms might also enhance the validity of the MSCEIT. In particular, the arguments supporting the use of consensus norms need to be more convincingly articulated. In addition, we currently know little about the validity of the MSCEIT across cultures (Wong, Law, & Wong, 2004). The MSCEIT manual shows minor differences between people of different ethnic backgrounds, but the respondents in the validation study reported in the manual were from Western cultures. The correct answer to some of the MSCEIT problems may differ across cultures and, therefore, the scoring system may need to be modified in different cultural contexts.

In part to address potential ability to generalize cross-cultural issues, researchers constructed a new ability test in Asia, the Wong and Law Emotional Intelligence Scale (WLEIS; Wong et al., 2004). The WLEIS contains two types of tasks. Respondents are first asked to choose the best way to deal with 20 emotional situations described in scenarios. They are then presented with 20 pairs of abilities that each includes an emotional and an unemotional ability, and they are asked to indicate which one is highest in them. The test is scored by counting the number of answers that match those chosen by experienced managers. This approach may be limited, however, because experienced managers may not necessarily know the answers to emotional problems, especially if their success is due to other strengths such as high cognitive intelligence (Côté & Miners, 2006).

There is evidence that the test exhibits appropriate internal consistency reliability and discriminant validity with personality traits and cognitive intelligence (Wong et al., 2004). There is also evidence, however, that the WLEIS may not be valid in different cultures. My experience with the WLEIS reveals low internal consistency reliability in North American samples. This may be because North American managers would choose different correct answers to the test items than Asian managers and, hence, the scoring key may need to be adapted for use in North America. The MSCEIT, and perhaps any emotional intelligence ability test, may exhibit the same problem. Expert researchers on emotion and the lay population in different cultures may choose different correct answers to the MSCEIT problems. Another limitation of the WLEIS is the self-evaluation component of the second part of the test. For each pair of ability, respondents must evaluate their levels of the emotional and the non-emotional ability and

compare the two. This component of the test therefore falls prey to the limitations of self-report approaches described above.

Ability tests of some of the dimensions of emotional intelligence exist. For example, the Diagnostic Analysis of Nonverbal Accuracy Test assesses the ability to identify other people's emotional expressions (Nowicki, 2000). Because these tests are only available for some of the dimensions of emotional intelligence, researchers cannot yet combine them to create a complete emotional intelligence assessment.

Aggregation of Emotional Intelligence Scores

The choice of model to compose group emotional intelligence has implications for the aggregation of emotional intelligence scores within the group. In additive composition models, only an average or a sum of emotional intelligence scores is required. In maximum- and minimum-score composition models, the highest and lowest emotional intelligence score in the group must be identified. Dispersion composition models often rely on the standard deviation of the scores of the members of the group. Compelling models must be articulated to provide meaning to the average, the sum, the maximum-score, the minimum-score, or the standard deviation (Chan, 1998).

In direct consensus composition models, members' scores are averaged or summed. Sufficient similarity among the group members must be demonstrated to justify aggregation. The direct consensus composition model must be abandoned if the group members are too dissimilar. The r_{wg} coefficient assesses the degree of agreement among group members by testing the proportion of systematic variance in group member ratings in comparison to the total variance (George & James, 1993; James, Demaree, & Wolf, 1984). High values of r_{wg} suggest that there is substantial clustering of emotional intelligence within groups to justify aggregation.

CONCLUSION

Organizational researchers have accumulated considerable knowledge about what predicts the performance of individuals. Less is known about what predicts the performance of groups. In this chapter, I have described the different ways in which group emotional intelligence constructs can be formed and linked to group performance. I have also proposed that

Steiner's (1972) typology of group tasks may help determine when different group emotional intelligence constructs best predict performance. The research has so far focused on a fraction of the various ways to study group emotional intelligence and performance. Group emotional intelligence may have myriad effects on performance, and researchers should explore all of them to fully understand why some groups outperform others.

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CHAPTER 13

THE FUNCTIONS OF AFFECT IN GROUPS

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ABSTRACT

This chapter adopts a functional perspective of affect to organize, discuss, and synthesize the chapters of this volume. According to functional accounts of affect, emotions and moods help groups to solve their most important problems – problems such as maintaining cohesion, allocating roles and responsibilities among group members, facilitating clear intragroup communication, motivating selflessness, and coordinating collective action. The chapters of this volume are diverse in focus, yet they all extend our understanding of how and when affective phenomena help groups to solve these problems, and when they fail to do so. At the same time, they point to new and exciting directions for future research on the functions and dysfunctions of affect in groups.

Affective phenomena such as emotions and moods have traditionally been characterized as disruptive and disorganizing. Laymen and scholars alike have long thought that emotions and moods interrupt and interfere with healthy functioning by getting in the way of reason and rational thought. These beliefs were and are especially prevalent in the workplace; workplace attitudes typically imply that emotions and moods should be controlled, repressed, feigned, or channeled into “more appropriate” lines of thought and action.

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More recently, however, a social-functional account of affect has gained prominence in the field of emotion, which views affective phenomena in a completely different light (e.g., Ekman & Davidson, 1994; Frijda & Mesquita, 1994; Keltner & Gross, 1999; Oatley & Jenkins, 1992). This social-functional account argues that emotions and moods are by and large adaptive in helping people deal with their most difficult problems. For example, the experience and expression of emotion and moods help people form and maintain interpersonal bonds, negotiate social roles, detect cheating behavior, communicate their intentions and motivations, and better understand others' mental states, motivations, and emotions. Although emotion theorists who have adopted this social-functional perspective often focus on the individual-level of analysis, discussing the ways in which emotions and moods help individuals meet the demands of everyday life, a social-functional approach can also be applied to the group and even cultural level, to help us understand the way affective phenomena help groups or cultures solve their most important problems (Keltner & Gross, 1999).

The research and theory presented in the chapters of this volume are a diverse collection of ideas related to affect and groups, ranging from emotional intelligence, to inter-group emotions, to affective attachments of individuals to their groups, to the role of emotional experience and expression in promoting group performance. However, the ideas can be organized into a coherent framework using a social-functional perspective. I will therefore adopt such a perspective to organize, discuss, and integrate the work in this volume, as well as point out new directions for future research. I will first flesh out some of the main tenets of the social-functional perspective of emotions, which will entail outlining some of the most important problems groups face as they work together in pursuing their collective goals, and describe how affective processes such as emotions and moods help groups solve these problems. (The list of problems I discuss will not be exhaustive but will merely cover some more important problems.) Within this discussion, I will outline how the research and theory in this volume fills gaps in, extends, and elaborates on the ideas inherent in the social-functional analysis. Finally, I will discuss remaining gaps in our knowledge regarding the functions of emotions in groups and suggest new avenues for groups' researchers.

The term "affect" represents a broad category of affective processes, including emotional experiences, moods, and trait or dispositional affect (Thompson, 1998). Emotions are brief states that involve cognitive, physiological, and behavioral processes that help individuals quickly

respond to threats or opportunities; they are relatively short in duration and are directed at specific events or stimuli (Ekman, 1973; Frijda, 1994; Keltner & Haidt, 2001). Moods, in contrast, have a longer duration, lasting hours or days, and are less directly focused on anything specific (Ekman, 1994; Frijda, 1994). Trait or dispositional affect reflects stable individual differences in the tendency to experience and express certain emotions and moods (Watson & Clark, 1997 ; Watson, Clark, & Tellegen, 1988). Although the chapters in this volume focus on all three levels of affect, for convenience, I will primarily use the term “emotion,” as most of the ideas in this volume apply to moods and even to emotional dispositions.

THE PROBLEMS GROUPS CONFRONT AND HOW EMOTIONS HELP SOLVE THEM

The Problem of Cohesion

When groups work together it is important that they maintain high levels of cohesion so that the members form a tightly knit unit, as opposed to a disparate and disjointed collection of individuals. Groups are only beneficial (compared to individuals working separately) when individuals work together in a coordinated fashion, feel a sense of unity and loyalty to the group, and are committed to the group’s success. However, maintaining cohesion is not always easy, as individuals often have opportunities to exit the group, their motives or goals may not always align with the group’s, and they might simply conflict with fellow group members. How do emotions help groups solve the problem of group cohesion?

First, the experience and expression of *positive emotion* can help promote cohesion in a number of ways. The experience of positive emotion evokes a more pro-social and cooperative orientation toward others in general (Baron, 1990; Forgas, 1998; Isen & Levin, 1972; Levin & Isen, 1975). Thus, when individuals feel positive emotion, they are drawn toward a cooperative mind-set in which they seek to maximize the good of the collective. Further, the display of positive emotion communicates one’s cooperativeness to others (Frank, 1988; Fridlund, 1994; Knutson, 1996). When individuals display positive affect, they signal that they are trustworthy and are ready to cooperate – a signal that should lead other group members to trust them more. Researchers have found the experience and expression of positive-affective states such as excitement, enthusiasm, and happiness help stimulate

cooperative behaviors even in competitive contexts (Allred, Mallozzi, Matsui, & Raia, 1997; Baron, 1990; Carnevale & Isen, 1986; Forgas, 1998; Kramer, Newton, & Pommerenke, 1993). And group researchers have also found direct evidence of the benefits of positive emotion in groups more specifically (e.g., George, 1990; Kelly & Barsade, 2001).

In the current volume, Lawler discusses how positive emotional ties to one's group can be stronger than ties based simply on instrumental or normative exchange. He argues that people who attribute positive emotions to their group feel more attached to it; affective attachments people have to their groups stem primarily from the brief, transitory emotions they experience in their everyday interaction with other group members. The more individuals experience positive emotions in their interactions with fellow group members, and the more they attribute their positive feelings to the group, the more they will be attached to it. Thus, he highlights one important condition underlying positive attachment toward the group: when individuals attribute their positive emotions to the group rather than to other factors (e.g., themselves, external circumstance, luck), their commitment to the group will be extremely high.

Second, group cohesion can be fostered through *emotional similarity* among its members (Barsade, Ward, Turner, & Sonnenfeld, 2000; Bartel & Saavedra, 2000). Emotional similarity is reinforcing to individuals. When people feel similar emotions as others, their own feelings and appraisals are validated (LaFrance & Ickes, 1981; Locke & Horowitz, 1990; Rosenblatt & Greenberg, 1991; Schachter, 1951). When individuals feel similar emotions, they communicate to each other that they share a common stance and shared interests (LaFrance & Ickes, 1981). Because it is more difficult to feign emotions than it is to deceive with words (Ekman, 1993), emotional similarity can even be construed as a "true test" of individuals' solidarity with each other. Individuals can be more confident of their bond when others share their emotions than when others communicate their solidarity verbally. Therefore, emotions can help keep individuals committed to the group by providing them with validation and a sense of belongingness.

Garcia-Prieto, Mackie, Tran, and Smith in this volume outline some of the conditions under which individual group members will experience similar, rather than different, emotions in response to events. They build from the theory of intergroup emotions (Mackie, Devos, & Smith, 2000; Smith, 1993, 1999), which argues that individuals who identify themselves as members of a social group will appraise and interpret events as relevant not

to the self but to their group membership. Further, when individuals who are highly identified with their group make emotion-relevant appraisals, they will feel more emotions that are directed toward both the ingroup and relevant outgroups, which will in turn motivate conditions for in-group directed or outgroup directed behaviors. For example, individual group members will collectively feel anger when they are identified with their work group, and when they perceive that their work group's proposal was unjustly rejected for political reasons.

Third, *group-directed emotions*, such as pride for one's own group and anger for other groups, can bolster group cohesion by identifying and reinforcing group boundaries. For example, when individuals feel identified with their group and the group serves as a source of pride, they will be that much more committed to it. Anger, disdain, or even disgust toward outgroups can also bolster cohesion by creating a "common enemy."

Lee and Ling focus on attachment to groups, which they define specifically as individuals' beliefs about how valuable they are as group members and how much the group accepts (vs. rejects) them. They argue that secure attachments to groups (i.e., when individuals have positive beliefs about themselves as worthy members of a group and view the group as accepting of them) are critical for high-performing groups, because they foster an open atmosphere in which members trust and respect one another and feel comfortable sharing different views. Thus, feelings of security and attachment can promote group functioning. They then discuss the antecedents of secure attachments, which include physical proximity, elevated sensitivity and responsiveness of other group members to individuals' negative emotion, and high levels of support for individual work, among other factors. Therefore, they lay out the necessary conditions for fostering secure attachments among group members.

Similarly, Garcia-Prieto and co-authors argue that emotions directed at the group such as pride and joy can promote a number of positive group outcomes such as cohesion and citizenship behavior. Pittinsky, Montoya, Tropp, and Chen in this volume examine the flip-side of the coin: feelings about out-groups. They examined the conditions that foster negative feelings about outgroups, focusing specifically on outgroup leader behavior. They found that liking for a leader's followers was reduced when the leader acted negatively and the followers approved of the leader's behavior. Therefore, they highlight one factor that might generate negative feelings about out-groups, namely out-group leader behavior.

The Problem of Locomotion

Groups must not only be cohesive and unified, but must also make progress toward their collective goals, a problem sometimes referred to as “group locomotion.” After all, a group can be very close and tight-knit but still accomplish very little (e.g., the average college fraternity). How can groups motivate their members to contribute toward collective success? One way is through *collective emotion* – for example, the collective experience of anger, fear, anxiety, or positive emotion. Because emotions are modes of relating to the environment (Frijda & Mesquita, 1994), collective emotion coordinates group members’ thoughts and behaviors and helps them respond to potential opportunities or threats in concert (Festinger, 1951; Hatfield, Cacioppo, & Rapson, 1984; Kemper, 1991; Preston & de Waal, 2002; Schachter, 1951; Sherif, 1936). For example, the collective experience of anger helps groups respond to injustices in a more effective and powerful manner. George and King in this volume discuss this point, although they also discuss the benefits of emotional dissimilarity (more on this point below).

Rhee, as well as Inesi and Neale, describe how the *collective experience of positive emotion* fosters specific types of interactions among group members that help facilitate group creativity. For example, positive emotions increases the rate at which group members communicate openly, build on each other’s ideas and communicate morale-building information, and affirm each other’s ideas. In turn, these types of interactions increase group creativity. This group-level analysis builds from research on the individual level that shows positive emotion increases creativity and innovative thinking; even mild levels of positive emotion lead people to think about information more flexibly, and can generate more innovative ideas than non-emotional people (e.g., Ashby, Isen, & Turken, 1999; Carnevale & Isen, 1986; Isen, Daubman, & Nowicki, 1987). Inesi and Neale go further to discuss how the positive affect felt by powerful group members can lead to the collective experience of positive emotion, in part because other group members are likely to “catch” their positive emotion.

Phillips and Lount, Rhee, and Inesi and Neale also discuss how *collective negative emotion* can help groups make better decisions. These three chapters discuss how negative emotion tends to elicit critical, analytical thinking and cautious, systematic information processing strategies. When people experience greater uncertainty and negative affect, they use their feelings as information, or as a signal that there is a problem to be solved. They should then engage in greater systematic processing in an effort to

reduce any threat to the achievement of goals (e.g., coming to consensus on a decision).

Phillips and Lount also discuss a critical factor that can elicit collective negative emotion: surface-level diversity (e.g., racial, ethnic, or gender diversity) in groups. They argue that diversity in groups can facilitate better decision-making precisely because it leads to negative emotion and uncertainty. Group members, when confronted with the diversity of their membership, are less certain of how the group will work together and perform and are anxious about their group interactions, which helps facilitate effortful processing. Inesi and Neale also discuss how less powerful group members, because they are more likely to feel negative emotions such as suspicion, are particularly likely to carry the burden of processing complex information and help the group utilize the information it possesses to make good decisions.

Rothman and Wiesenfeld address how *emotional ambivalence* in groups – that is, the simultaneous experience and expression of inconsistent emotions about an object, event or idea – can also facilitate group decision-making. Specifically, they argue that expression of emotional ambivalence will increase the cognitive complexity within the group's decision-making process and increase information search and group discussion. Group members who express ambivalent emotions will alert others that the decision-making task is complex, which should spur them to consider different decision criteria and alternatives and search for more information that may help them make the right decision.

Finally, Cote's chapter focuses on how *emotional intelligence* can allow groups to leverage the effects of emotion outlined above. He defines emotional intelligence as a set of abilities related to emotions, including the ability to perceiving emotions, use emotions to facilitate performance, understand emotions and emotional knowledge, and regulate emotions. He notes that collective positive and negative emotion both have benefits, depending on the group's task; positive affective tone is related to synergistic interactions that avoid slippage and wasted effort, and negative affective tone is related to effort. He argues that groups with high emotional intelligence may better understand the effects of positive and negative affective tone and tailor their group's affect so that it is most productive in meeting their demands. For example, when working on a particularly difficult and complex decision-making task, emotionally intelligent groups might induce more anxiety and negative affect among group members so that the group processes information in a more systematic and effortful fashion.

The Problem of Organization

Another major challenge groups face is the division of influence among its members. All too often, too many group members want to make decisions for the group, give out commands to others, and dominate group discussions, which can create chaos and conflict (i.e., having “too many cooks in the kitchen”). Status hierarchies are thought to be a primary way groups solve this problem; they help facilitate an orderly division of influence among group members by allowing or denying different individuals the rights to perform certain behaviors (Bales, 1950; Berger, Cohen, & Zelditch, 1972). For example, high-status individuals are allowed to control group interactions, make decisions for the group, and give verbal directives to others, whereas low-status individuals are expected to defer to others, speak less in social interactions, and generally keep their opinions to themselves (Berger, Rosenholtz, & Zelditch, 1980; Keltner, Gruenfeld, & Anderson, 2003; Homans, 1951; Roethlisberger & Dickson, 1938).

Emotional displays may assist in the process of status organization through *dominant or submissive emotions*. Individuals’ beliefs about their current standing get communicated through these emotions, as does the standing they wish to achieve. For example, high status individuals can communicate their relative high status by displaying pride (Tiedens, Ellsworth, & Mesquita, 2000), or may communicate others’ relative low status by displaying contempt or disgust. Individuals low in status can communicate that they defer to high status others (and thus avoid receiving any punishments) by displaying embarrassment, fear (Ohman, 1986), guilt, and shame (Kemper, 1984). In the negotiation of status, displays of anger can communicate that the individual is willing to fight for his relative status position, or fight for a higher position (Ohman, 1986). Displays of fear might communicate that the individual is deferring, which avoid a costly status contest.

The Problem of Communication

In stressful work conditions when groups are under tight deadlines and individuals feel there is little time to communicate clearly to one another, miscommunication and misunderstanding can run rampant. Communication is a major, if underappreciated (Gilovich & Savitsky, 1999), challenge in groups. *Emotional* expressions, as many theorists have argued, can communicate individuals’ thought, feelings, and motivations more quickly and effectively than words (Ekman & Davidson, 1994). The literature on

emotional communication reveals the building blocks for how emotional communication occurs. People express emotion through facial, vocal, and postural behavior (Ekman, 1993; Scherer, 1986), and quickly and automatically detect and interpret the emotional expressions of others (Keltner & Kring, 1999). Therefore, emotions are an effective, quick, and often efficient way to transmit information.

For example, Rothman and Wiesenfeld in this volume discuss how *emotional ambivalence* – that is, the experience and expression of two different emotions at the same time – can signal to others that the task at hand is complex and requires more effortful and systematic processing. Wells and Brockner discuss how during times of change and tumult in organizations (e.g., following a merger or acquisition), *positive affect* expressed by managers can provide information about the situation to employees, which helps them cope with the changes occurring. They argue that in ambiguous situations, positive affect can signal to employees that decisions and judgments that are being made fairly and in trustworthy ways. This in turn can produce greater job satisfaction, organizational commitment and performance, and decreased turnover intentions. Having trust in management and a sense that management is treating employees fairly may also reflect or lead to a higher quality relationship with the manager as well. And Inesi and Neale discuss how positive affect, in particular when expressed by powerful group members, can signal an openness to new and contradictory ideas. Positive affect signals the desire to hear others' points of view, it conveys to others the expresser's willingness to listen and possibly adopt opinions than contradict his or her own.

Even the expression of *anger*, under the right circumstances, can promote communication and understanding. Anger may communicate that the issue under consideration is very important to the expresser and that the expresser is not going to yield in his or her position (Frank, 1988; Fridlund, 1991, 1994; Keltner & Haidt, 2001; Morris & Keltner, 2000). Thus, recipients of anger may concede at times, giving in to the expresser's demands, or they may choose not to reciprocate but to redirect a dispute toward resolution (Gottman & Levenson, 1992). Consistent with this notion, recent research in negotiations (Friedman et al., 2004) has shown that the expression of anger can cause opponents to concessions. This suggests that anger might allow groups to confront its more difficult issues head-on rather than sweep them under the rug.

Moreover, in emotional communication processes, people are quite susceptible to the social transmission of emotion, which can in turn facilitate

mutual understanding. Research on emotional contagion has shown that people automatically mimic facial expressions, vocalizations, and postures when they interact with another person, which leads both individuals to experience similar emotions (Barsade, 2002; Dimberg & Ohman, 1996; Hatfield et al., 1984). Studies of empathy find that people take the perspective of others and vicariously feel the emotions that the other person feels (Eisenberg, Fabes, Schaller, & Miller, 1989; Feshbach, 1975; Stotland, Matthews, Sherman, Hansson, & Richardson, 1978). When two individuals feel similar emotions they are better able to understand each other, to take each other's perspective, and thus are more likely to accurately perceive each other's perceptions, intentions, and motivations (Keltner & Kring, 1999; Levenson & Ruef, 1994). This increases the predictability of others' behavior, a foundation of cooperative bonds (Anderson, Keltner, & John, 2003; Frank, 1988).

The Problem of Self-Interest

Finally, in order to succeed as a collective, groups must motivate members to act selflessly, or to behave in ways that benefit the group, even when such behavior requires personal investment and sacrifice. Groups must reward individuals who help the group succeed and punish those who act selfishly. How do emotions help groups accomplish this goal? First, *moral anger, contempt, and disgust* can help deter cheating behavior by motivating the punishment of individuals who behave selfishly, and by increasing group's sensitivity to issues of justice and fairness (e.g., Keltner, Ellsworth, & Edwards, 1993). In other words, once individual group members have behaved in selfish, manipulative, or deceitful ways, reactions of anger or contempt increase the chances of that behavior being punished by the group, which in turn can help deter others from engaging in similar behavior in the future. Further, once these emotions are aroused, groups tend to be more vigilant toward other acts of selfishness or deceit.

Groups can also use emotional rewards to promote selflessness. An individual's expression of emotion may reinforce another individuals' social behavior within ongoing interactions (e.g., Keltner & Haidt, 2001). When group members behave in ways that facilitate group success, especially when those behaviors involve personal effort and sacrifice, other group members can afford them appreciative and deferential emotions, which are intrinsically rewarding to our psychology (Leary, Cottrell, & Phillips, 2001). For example, the display of positive emotions such as *gratitude*,

respect, or awe rewards desired behaviors, which helps promote the frequency of those behaviors in others (Tronick, 1989).

DIRECTIONS FOR FUTURE RESEARCH

The social-functional perspective of emotions has great promise as a unifying and integrative framework in helping us understand the antecedents, correlates, and organizational outcomes of emotion. It highlights that emotions should not be simply be suppressed, ignored, or regulated, but that individuals and work groups would be wise to harvest the power and utility of emotional experiences and expression by allowing emotions to “do their work,” so to speak – to help groups develop and maintain cohesion and progress toward their goals, organize group member roles and duties, facilitate communication between group members, and deter cheating and promote selfless behavior. The chapters in this volume highlight the many ways in which emotions can help groups accomplish their goals, and also identify many of the conditions that facilitate or impede emotions from doing so.

Of course, this perspective of emotions does not imply that affective processes are always functional, and that they help groups accomplish their goals in all cases. In fact, many of the chapters of this volume discussed maladaptive and dysfunctional outcomes of emotions. To take just a few examples, George and King discussed how emotional similarity in teams can lead them feel a false sense of certainty about their task, even when the task is complex and equivocal. In such situations, individual members’ diverse perspectives are undervalued, and conformity in members’ views and opinions is emphasized. Thus, groups might fail to leverage the diversity in members’ backgrounds, areas of expertise, and opinions, because they focus on sharing one single perspective of their problem. Rothman and Wiesenfeld discuss how expressing emotional ambivalence can elicit attributions of incompetence and indecisiveness among others, and reduce liking and trust among group members. And Greer and Jehn discuss how feelings of negative affect such as frustration are responsible for the process deficits in teams that engage in high levels of process conflict. These are only a few examples from the current volume of when affective processes can have negative effects.

If emotions are sometimes adaptive and functional and other times maladaptive and destructive, this generates a number of interesting issues future research needs to address. For example, *when* are emotions going to

foster group performance and when will they impede it? How are managers to know when emotions should be experienced and expressed and when they should be suppressed? How should managers be trained to deal with emotional processes in the workplace? Recent work on the expression of anger (Friedman et al., 2004), for example, has begun to outline the contexts in which anger can have positive, as opposed to negative, outcomes for the individual. Along similar lines, group researchers should begin to address the contextual, personal, or behavioral factors that moderate the effectiveness of emotional experience and expression.

Another related promising avenue for group researchers would be to show the unique ways in which emotional processes, above and beyond cognitive or behavioral processes, help groups perform at optimal levels. For example, is eliciting collective emotion in groups a more effective way to motivate members to work together than simply explaining to them the value of collaborative work and the importance of their task, and allocating their respective duties? Intuitively, leaders who are able to elicit collective hope, enthusiasm, and determination through emotion-relevant speeches and actions are much more effective at “firing up the troops” than leaders who simply lay out a logical and detailed set of arguments regarding the group’s charge. Yet little work has examined the relative effectiveness of emotional vs. cognitive persuasion techniques in groups. Similarly, is the possibility of receiving the group’s appreciation and respect motivate group members to work hard more effectively than do promotions and raises? Does collective anger directed at a specific group member who has behaved selfishly and unethically more effective in deterring other group members from behaving similarly in the future than does formal sanctions such as the threat of probation or termination?

Finally, group researchers should examine emotion regulation processes in groups. Hochschild’s (1983) influential work on emotion regulation has led to a perhaps overly simplistic idea, even if unintended by the author, that emotion regulation is necessarily a bad thing. However, recent work by Gross and colleagues (e.g., Gross & John, 1998; Richards & Gross, 1999) on emotion regulation paints a much more nuanced picture. They have outlined at least five distinct ways in which individuals can regulate their emotions: situation selection, situation modification, focusing and redirection of attention, change in one’s cognitions, and modulation of the experiential, behavioral, or physiological responses. Change in one’s cognitions, for example, can involve cognitive reappraisal; this is construing a potentially emotion-eliciting situation in a way that changes its emotional effect.

For example, during a potentially contentious group meeting, individuals might view the process as healthy and productive in hashing out diverse perspectives, which would lead them to feel enthusiasm and interest, or see it as unhealthy and destructive, which would lead them to become frustrated with their fellow members. Another regulation technique, expressive suppression, involves inhibiting ongoing emotion-expressive behavior. For example, one might keep a poker face while listening to their group's discussion, even if they are frustrated by it.

As Gross and colleagues have demonstrated, cognitive reappraisal is often more productive than expressive suppression, leading to lower levels of negative affect, better cognitive functioning, and better interpersonal interactions. Further, the ways in which emotions are addressed and dealt with has an enormous impact on individual and group-level outcomes, and thus deserves much more attention by group researchers.

CONCLUDING THOUGHTS

This discussion was by no means meant to be a thorough review of all the ideas included in the chapters of this volume; the chapters are too rich and involve too many ideas, hypotheses, and findings to cover in a brief summary. Thus this chapter was meant to highlight the utility of the social-functional perspective as a framework that helps integrate and organize the diverse research on groups and affect, and use that framework to point to new avenues for group researchers.

Emotion researchers for too long neglected the social nature of emotions, and similarly groups researchers for too long neglected the inherently emotional nature of groups. Only recently have these two fields intersected. Thus the work on groups and affect is still somewhat embryonic. There are so many questions, issues, and puzzles to be addressed that the chapters in this volume have only touched the surface. I hope this volume inspires a new generation of research on this critical area of inquiry.

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