CHAPTER 1

Sharing of Affect: An Introduction
Whether you tell your best friend what feelings you experienced when your terrifying roommate revealed he has a crush on you, check the affective responses of your colleagues when your boss introduces the new secretary, or notice that you have been emotionally contaminated by the negativity of your mother-in-law, the sharing of affect (i.e., moods and emotions) occurs almost everyday, and therefore seems an inevitable aspect of social and organizational life. People may share their moods and emotions with others, and as such, may develop collectively shared moods or a group affective tone. Group affect has been defined as consistent or homogeneous affective reactions within a group (George, 1990, p. 108). Considerable evidence for the existence of shared affect within teams and work groups has been found (e.g., Barsade & Gibson, 1998; Bartel & Saavedra, 2000; George, 1990; Kelly & Barsade, 2001; Sy, Côté, & Saavedra, 2005; Totterdell, Kellett, Teuchmann, & Briner, 1998). Moreover, these studies revealed that the sharing of affect between group members has a substantial impact on group processes and outcomes related to work group functioning (Barsade, 2002; George, 1990; Mason & Griffin, 2003; Totterdell, 2000). Group affect may occur as a result of several interactive affective sharing mechanisms or as a result of dispositional or contextual factors that happen to make people feel similar (e.g., Bartel & Saavedra, 2000; George, 1996) As such, two pathways to group affect can be distinguished; the dynamic pathway that focuses explicitly on affective interactions between group members, and the static pathway that focuses on occurrences that lead group members to feel similar even when they do not interactively share their affective states.

So far, we know that shared affective states exist, and that they may be related to various significant outcome variables. Yet, several fundamental questions are still left unanswered. Do the static pathway and the dynamic pathway to group affect have different effects on group dynamics and performance? Under which conditions is affective sharing more likely to influence work group outcomes? What is the role of task characteristics in group affect research? The present dissertation takes on the challenge to answer these questions. The main goal of this dissertation is to increase our understanding of the effects of positive and negative affective sharing on individual and group outcomes in social settings. More specifically, by examining interactive effects of valence of affect and affective sharing in combination with several other intra-individual processes, intragroup processes and contextual factors (affective certainty, conflict, and future interaction expectation), we hope to come to a more refined account on the role of affective sharing in groups.

Amongst other things, the findings of this dissertation show that interactive affective sharing (the dynamic pathway to group affect) yields stronger effects on task performance (and group dynamics) than non-interactive affective sharing (the static pathway to group affect). Moreover, the findings of this dissertation suggest that affective sharing plays an
important role in explaining the mood-creativity link and the conflict-performance link. The present dissertation will also show that affective sharing has stronger effects on work group outcomes for groups who have expectations of future interaction. Finally, our findings provide evidence for differential effects of positive and negative affective sharing on analytical and creative task performance.

In the remainder of this introductory chapter, we first review previous research on (group) affect and then proceed with a discussion of the dynamic and static pathway to group affect. We end this introduction with an overview of the chapters and research models in this dissertation.

The Sharing of Affect: Definitions, Dimensions, and Consequences

Affect is considered a major determinant of human behavior (Damasio, 1994) and it is therefore not surprising that research has paid a good deal of attention to affective processes relevant to social and organizational functioning. However, most studies on affect have concentrated almost exclusively on either intrapersonal processes (how do a person’s emotions affect his or her own behaviors, attitudes, cognitions, etc.) or on dyadic interaction processes (how do a person’s emotions influence the reactions of his or her interaction partner, for instance in negotiation or leadership processes). The role of affective processes in groups or social settings has received less research attention, however, may be deemed of importance in explaining group processes and outcomes. Research that examines the existence of affective sharing processes among group members is flourishing, and several studies found that affect in (work) groups may at times be sufficiently homogeneous among group members to treat it as a collective property of the group (Barsade & Gibson, 1998; Bartel & Saavedra, 2000; George, 1990, 1995, 2002; Kelly & Barsade, 2001; Pescosolido, 2002; Sy, et al., 2005; Totterdell et al., 1998; Totterdell, Wall, Holman, Diamond, & Epitropaki, 2004). This phenomenon is labeled group affect.

Group affect may pertain to a wide variety of shared feeling states that include both shared emotions and shared moods. Emotions are generally defined as intense, relatively short-term reactions having a specific environmental cause (Frijda, 1993), whereas moods are defined as low in intensity, long in duration and diffuse by lack of a specific object, and may be evoked by relatively insignificant events (Forgas, 1992; Frijda, 1993). When people are interacting in a group or social setting, they may experience (either individually or collectively) a range of moods and emotions that may be more or less pleasant (valence of affect) and high or low in activation level (arousal of affect). The classification of affective experiences into bipolar dimensions of hedonic valence and level of arousal is often used in circumplex models of affect (e.g., Larsen & Diener, 1992). The hedonic valence dimension
reflects the extent to which people feel positive or negative, while the arousal dimension reflects the extent to which people are prepared for action (e.g., Frijda, 1986). For instance, group members working on a not very challenging and seemingly endless task may feel ‘bored’, indicating low pleasantness and low action-preparedness within the group. Other circumplex models describe a positive affect (PA)/negative affect (NA) dimensional structure of affect in which positive affective states and negative affect states fall out as two separate dimensions (e.g., Watson, Wiese, Vaidya, & Tellegen, 1999). The Positive and Negative Affect Schedule (PANAS) measures positive and negative affect that falls on the high end of the arousal scale (Watson, Clark, & Tellegen, 1988). Therefore, some researchers opt to employ a measure that is based on the affect circumplex and that assesses both high and low arousal positive and negative affect. In general, group affect research focuses mostly on moods instead of on emotions, because moods have longer lasting and more pervasive consequences on work group functioning than emotions have (Forgas & George, 2001). Also, most research on (group) affect focuses on the effects of valence of affect (positive versus negative) rather than on the effects of arousal level of affect (high versus low).

Positive affect has often been related to positive outcomes, such as extraversion, physical well-being, adaptive coping, engagement in activities, fulfilling and productive work, positive construal’s of self and other, and satisfying relationships (for a review see Lyubomirsky, King, & Diener, 2005). Moreover, ample research suggests that positive affect encourages the display of cooperative behaviors. Indeed, positive affect was found to increase prosocial organizational behavior towards customers and co-workers (George, 1991), employees’ intentions to perform specific acts of organizational citizenship behavior (Williams & Shiaw, 1999), cooperative behavior in bargaining situations (Carnevale & Isen, 1986; Forgas, 1998b), and willingness of customers to help people in their surroundings (Isen & Levin, 1972). Moreover, available research not only shows beneficial effects of positive affect at the individual level, but it also suggests that the sharing of positive affect enhances cooperativeness, (Barsade, 2002; George, 1990), decreases absenteeism (Mason & Griffin, 2003), increases (perceived) performance (Barsade, 2002; Totterdell, 2000), and decreases conflict (Barsade, 2002).

Particular interest has been devoted to the link between positive affect and creative performance. Although there is an ongoing debate in the literature whether positive or negative moods facilitate or inhibit creativity (for reviews see Baas, De Dreu, & Nijstad, 2008; Davis, 2009) ample research suggests that positive mood promotes creativity via its influence on cognitive processing. The mood-as-information hypothesis (Schwarz & Bless, 1991) posits that positive affect informs the individual that his or her current situation is non-threatening, thereby allowing the individual to rely on general knowledge structures and
to use heuristic, simple, and global processing strategies. As such, happy individuals feel relatively unconstrained and use broader and more inclusive cognitive categories, which prompt them to discard everyday behavioral scripts, and to pursue novel, creative paths of thought and action (Fredrickson, 1998, 2001). Indeed, several empirical studies show that positive mood increases cognitive flexibility which facilitates creativity (e.g., De Dreu, Baas, & Nijstad, 2008; Isen & Daubman, 1984; Isen, Daubman, & Nowicki, 1987; Murray, Sujan, Hirt, & Sujan, 1990). Importantly, positive mood has not only been found to enhance creativity in individuals but also in groups (Grawitch, Munz, Elliott, & Mathis, 2003; Grawitch, Munz, & Kramer, 2003). Hence, (shared) positive moods may benefit tasks that call for unconventional behavior and creative ideas (Fiedler, 2001).

Literature on the effects of (shared) negative affect is less abundant. In contrast to positive affect, negative affect has often been associated with negative outcomes at both the individual level (e.g., decreased self-efficacy and decreased job satisfaction; Saavedra & Early, 1991; Wegge, Van Dick, Fisher, West, & Dawson, 2006), and the group level (e.g., increased absenteeism and decreased prosocial behavior; George, 1990). However, it has also been suggested that negative affective states may have positive effects on a variety of performance-relevant outcomes including judgments, decision making, and analytical task performance through their effects on cognitive processing strategies. Whereas positive affect signals that the situation is safe, negative affect informs the individual that the situation is problematic and threatening (Schwarz & Bless, 1991). As a consequence, people may respond with increased effort or persistence when working on a task (e.g., Sy et al., 2005). Moreover, in problematic situations, individuals need to pay attention to details, engage in data-driven processing, and narrow their attention (Bless, 2000). Hence, sad individuals engage in systematic processing styles, resulting in a careful assessment of the environment and enhanced risk aversion (Schwarz, 2001; Schwarz & Bless, 1991; Schwarz & Clore, 1988). Indeed, empirical studies show that people with negative moods (as compared to positive moods) make the fundamental attribution error to a lesser extent (Forgas, 1998a), are more sensitive to the strength of arguments in persuasive messages (Bless, Bohner, Schwarz, & Strack, 1990), and show increased judgmental accuracy on numerical analytical tasks (Sinclair & Mark, 1995). Thus, (shared) negative affect may create an advantage on tasks that call for accuracy and carefulness (Fiedler, 2001).

In sum, group members may share affective states (i.e., moods and emotions) with one another that may be more positive or more negative in nature, which has pervasive consequences for both individual and group level outcomes. Yet, how do these shared affective experiences occur within a group? Several processes are responsible for producing shared emotions and moods in groups, which are discussed below.
Affective Sharing Processes: A Dynamic and Static Pathway to Group Affect

Researchers have approached the origin of group affect from different theoretical angles. Some researchers explicitly focus on interactive affective sharing processes or mechanisms among group members when explaining the development of group affect. This, so we argue, represents a dynamic path to group affect. In contrast, others do not explicitly focus on affective interactions between group members, but instead pose that group affect may occur as a result of for instance similarity in personality or similar affective reactions to shared events (e.g., George, 1996). We coin this the static path to the development of group affect. The distinction between the static and the dynamic pathway to group affect has previously been introduced by Kelly and Barsade (2001). In their theoretical paper a model of group affect is presented in which they differentiate between “bottom-up” and “top-down” processes. “Bottom-up” processes are defined as affective sharing processes through which individual-level moods are spread and shared among group members (cf., dynamic path), whereas “top-down” processes refer to the group’s affective context, such as the group’s affective history and affect norms (cf., static path).

The dynamic pathway to group affect is best illustrated by studies that focus explicitly on interactive affective sharing processes. Generally, this approach to group affect reveals three key interactive affective sharing mechanisms. First, group members may share affect through the process of affective contagion in which moods (or emotions) of other people around us influence our own affective state, leading to mood convergence (Kelly, 2004). People tend to automatically mimic and synchronize affective expressions of others, and consequently become more emotionally similar (Hatfield, Cacioppo, & Rapson, 1994; Neumann & Strack, 2000). Empirical support for the mood contagion model comes from both laboratory studies and field studies. The phenomenon that people ‘catch’ each others’ moods has been found among leaders and followers (Bono & Ilies, 2006; Lewis, 2000; Sy et al., 2005), employees and customers (Pugh, 2001; Tsai & Huang, 2002), relationship partners (Anderson, Keltner, & John, 2003), as well as in teams and (work) groups (Barsade, 2002; Bartel & Saavedra, 2000; Totterdell, 2000; Totterdell et al., 1998; Totterdell et al., 2004).

Second, affective states can be shared among group members through affective comparison processes. Expanding Festinger’s social comparison theory (1954), Schachter (1959) proposed that people are motivated to seek out and use affective information of similar others. Emotional comparison processes (e.g., Sullins, 1991) may lead people to decode moods of others and then compare them with their own experienced moods. As a consequence, people’s evaluation of whether or not their mood is appropriate in a particular situation may lead to the adjustment of one’s own mood, thereby synchronizing their affect.
with others. Hence, external mood information cues as provided by group members help people to label, recognize, and adjust their own mood (Schachter & Singer, 1962).

Last, affective sharing among group members may also occur through conscious social sharing of affect in teams. Social sharing of affect is defined as the open communication between people about emotional circumstances and their related feelings and reactions (Rimé, 1995; Rimé, Finkenauer, Luminet, Zech, & Philippot, 1998; Rimé, Mesquita, Philippot, & Boca, 1991). The topic has received considerable attention within clinical psychology, where researchers have investigated the social sharing of emotions in relation to for instance emotional recovery and mental rumination (Finkenauer & Rimé, 1998; Rimé, 1995; Zech & Rimé, 2005). Although socially sharing affect is common for people who belong in each other’s circle of intimates (such as family members or partner), communication about affective experiences also takes place in work teams (for a review see Zech, Rimé, & Nils, 2004). Surprisingly, conscious social sharing of affect has received relatively little explicit attention as an affective sharing process in the group affect literature (Rhee, 2007, as an exception). In sum, the dynamic path to group affect places emphasis on dynamic affective sharing processes among team members.

In contrast, the static pathway to group affect largely lacks the explicit focus on interactive affective sharing between group members and focuses more on dispositional or contextual factors that happen to make group members feel similar. In support of this approach, several studies have shown that dispositional or contextual factors may explain the development of group affect (Barsade, Ward, Turner, & Sonnenfeld, 2000; George, 1990, 1996; George & Brief, 1992). For example, the process of attraction-selection-attrition (Schneider, 1987) implies that people with similar personalities will be attracted to, and selected and nurtured by particular work environments. As a consequence, affective reactions of group members may become similar (George, 1990). As another example, George (1996) poses that those group members who are exposed to similar work events (shared events), such as an organizational merger, will develop homogeneous affective reactions within the group (cf., Weiss & Cropanzano, 1996). Thus, the static path to group affect places emphasis on dispositional or contextual factors that lead group members to feel similar.

In the present dissertation we will classify group affect literature into the two approaches as described in the above. In doing so, this dissertation primary focuses on whether and to what extent group interactive affective sharing affects group (member) behavior. As such, this dissertation aims to move the understanding of group affect a step to provide a more nuanced account.
Overview of the Dissertation

In an attempt to increase our understanding of the role of affective sharing in social settings several studies have been conducted. In the present dissertation we employed a wide variety of methods; computer-mediated laboratory studies, a scenario study, cross-sectional field studies (both on the individual and group level), and experimental (three-person) group studies which were conducted in the interaction laboratory, to test our hypotheses. The present dissertation is a compilation of stand-alone research articles, and, as such, each chapter can be read independently of the other chapters. As a result, there will be some overlap across chapters in terms of the theoretical development of our ideas and in some of the method sections. This dissertation will focus on (the valence of) moods instead of on (discrete) emotions because it enables a closer comparison with earlier studies on group affect that focused on shared moods (instead of shared emotions).

Chapter 2 – Dynamic versus Static Pathway to Group Affect

In Chapter 2, we explore whether the dynamic path to group affect yields different effects on task performance and group dynamics than the static path to group affect. Although earlier theoretical discussions of group affect have distinguished between interactive and non-interactive affective sharing mechanisms (Kelly & Barsade, 2001), research so far has not yet empirically differentiated between the dynamic and static pathway to group affect. The main goal of this chapter was to provide a more refined outlook on group affect and its potential effects on behavior in (work) groups. Other aims of the chapter were to consider task type in group affect research by relating affective sharing to both analytical and creative task performance, and to focus on group dynamical aspects of belongingness and information sharing.

Building on the mood-as-information hypothesis (Schwarz & Bless, 1991) and theoretical perspectives of social validation theory and shared reality theory (Hardin & Higgins, 1996) we predicted that the dynamic path to group affect yields stronger effects on task performance and group dynamics than the static path to group affect. We tested our proposition in an experimental setting using temporary work groups. We applied a multi-method approach by obtaining objective performance scores on both tasks, video observations of work group dynamics, and self-report data. The results of Chapter 2 supported our prediction and testify to the importance of affective dynamical interaction processes among group members in explaining the effects of group affect on behavior. A further exploration of the role of shared affect in social settings and when and how affective sharing influences the effects of mood on creativity was the goal of Chapter 3.
Chapter 3 – Specifying the Mood-Creativity Link

Chapter 3 seeks to enhance our understanding of the mood-creativity relationship. Recent research suggests that the mood-creativity link cannot be understood simply in terms of hedonic tone (De Dreu et al., 2008), and other factors should be taken into account. In the present chapter we focused on three key affective aspects and show that their interplay may explain the link between affect and creativity: (1) valence of affect, which compasses the hedonic tone of the mood state, (2) affective sharing, which reflects the social processes in which affect is embedded, and (3) affective certainty, which is concerned with the reflective processes associated with feelings. Therefore, our main aim in this chapter was to explain when and how mood affects individual and group creativity in social settings.

Combining insights from literatures on creativity, (group) affect, and (affective) certainty we expected that positive affect would positively influence creativity with increasing affective sharing, especially for individuals who are affectively uncertain. It was further predicted that cooperative tendencies would mediate the effects of positive affect on creativity for those who are high on affective sharing and low on certainty of affect. Four studies, including a scenario study (Study 1a), a laboratory study (Study 1b), an organizational survey of employees (Study 2a) and of work groups (Study 2b), tested the interactive effects of affective sharing and affective certainty on the relationship between mood and creativity. Results consistently supported the predictions. The results of Chapter 3 testify to the notion that affective sharing processes, in combination with intra-individual processes (affective certainty), may function as important moderators of the effects of mood on creativity. In Chapter 4, we further explore the moderating role of shared affect and its interactive effects with intragroup processes (conflict) on individual and group-level decision making.
In Chapter 4, we explore the role of affective sharing in conflict situations. Previous research has neglected the role of affective processes in conflict situations, yet, we argue that positive and negative affective sharing may bring out the potential benefits and/or mitigates the potential detriments of conflict. The major goal of this chapter is to draw more general attention to the role of affect in conflict situations because we believe, and aim to show, that a more thorough understanding of the role of affective sharing may augment to our insight in the effects of relationship and task conflict on performance.

Following work on the role of sharing of affect in work groups (e.g., Kelly, 2004), the informational value of affect (Bless, 2000), and conflict management strategies and conflict norms (Jehn, 1995, 1997), we predicted that task conflict has more beneficial effects on performance when group members share positive affect as compared to negative affect, whereas relationship conflict has less detrimental effects on performance when group members share negative affect as compared to positive affect. Our predictions were tested both in a laboratory experiment (Study 1), and an organizational survey of work groups (Study 2). Results of these two studies supported the predictions. The findings of Chapter 4 suggest that shared feelings influence perceptions and behaviors towards conflict which determines the extent to which conflict between group members has detrimental and/or beneficial effects on cognitive performance. Chapter 5 further examines the effects of shared affect on group performance and whether contextual factors, such as future interaction expectations of group members, may strengthen these effects.
Chapter 5 – When Sad Groups Expect to Meet Again

Chapter 5 explores when the relationship between affective sharing and work group performance may particularly manifest itself. So far, empirical studies that have identified conditions under which affective sharing is more likely to influence work group outcomes have been lacking. The main goal of this chapter was to identify such conditions and to draw more attention to the role of negative affect in work groups, which, until now, has been underexposed in empirical studies on group affect.

Building on literatures on mood in work groups and future interaction expectation, we predicted that the anticipation of continued interaction may lead group members to behave more in accordance with the groups’ defining characteristics and therefore may strengthen the effect of shared (as compared to non-shared) negative affect on work group analytical and creative task performance. This prediction was tested in a laboratory experiment with three-person work groups. Results supported the prediction and showed that the anticipation of future interaction with fellow group members seems to have a pervasive influence on the effects of affect in work groups. Similar to the other chapters, the results of Chapter 5 testify that affective sharing needs to be considered when examining work group functioning, and especially when groups expect prolonged group longevity.
Chapter 6 – General Discussion

Finally, in Chapter 6, we (1) summarize the main findings of the empirical chapters; (2) discuss how these findings may contribute theoretically to our understanding on the role of affective sharing in social settings; (3) address several strengths and weaknesses, and (4) provide some practical implications of these findings for a variety of social settings (such as work groups, sport teams, and circles of friends).