Chapter 20

Dynamic affect in team meetings: An interpersonal construct embedded in dynamic interaction processes

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Abstract

Team meetings are affect-laden environments where team members may motivate and energize, or frustrate and agitate each other. The importance of affect in teams generally and in team meetings particularly has led to a growing body of research that focuses on group affect. Existing conceptual and empirical work has contributed to our understanding of the nature of group affect and its implications for critical organizational phenomena, including emotion convergence and divergence, emotional contagion, emotional norms, and leadership. In this chapter, we review and integrate this literature and suggest directions for future research on affective dynamics during team meetings. We first briefly review contemporary research that has used a compositional approach to group affect. We highlight the need for a dynamic approach to group affect and call for more research in this area. We assess what has been learned and discuss suggestions for future theoretical development and methodological approaches for meetings researchers invested in this important interpersonal, dynamic construct.

Keywords: Group affect; dynamic emotional processes; team meeting interactions
“...when the whole group is together, each bringing out all that is best, wisest, or
funniest in all the others. Those are the golden sessions...when the whole world, and
something beyond the world, opens itself to our minds as we talk; ... all are freedmen and
equals as if we had first met an hour ago, while at the same time an affection mellowed
by the years enfolds us.” - C.S. Lewis

In team meetings, one of the salient situations at work when people come together, all of
us may have experienced some of those golden moments as described in the above quote. But we
may have also experienced team meetings where emotions expressed by other participants get
under our skin. Affect profoundly impacts teams’ behavior (Barsade & Gibson, 2012; Kelly &
Barsade, 2001) and is an essential part of the meeting experience (Lehmann-Willenbrock,
Meyers, Kauffeld, Neininger, & Henschel, 2011; Rogelberg, Allen, Shanock, Scott, & Shuffler,
2010). In fact, a rapidly growing body of conceptual and empirical research has focused on
understanding the fundamental nature of affect in teams, identifying processes that contribute to
collective affect or group affect, and examining its implications for individual and team
outcomes. Yet our knowledge regarding the complex phenomenon of team affective experiences
in general and during team meetings in particular remains limited, suggesting a terrain that has
tremendous potential to help us understand how and why people feel, think, and behave the way
they do in their meetings.

Our aim in this chapter is to leverage different streams of group affect research to
understand the concept of group affect as a dynamic process during team meetings, contributing
to the “affective revolution” of organizational behavior (Barsade, Brief, & Spataro, 2003). As a
point of departure, we review different perspectives on group affect (Barsade & Gibson, 1998) and summarize consistent findings of research on affect at a collective level into two general approaches. We first focus on approaches to group affect from an affective-compositional perspective (Barsade & Gibson, 1998), which includes both a “top-down” view (i.e., groups are thought to act on and change individual members’ affect and behavior) and a “bottom-up” view (i.e., group affect is the aggregation of individual affective traits, moods, and emotions, particularly in terms of affect convergence and emotional contagion, see Barsade, 2002; Bartel & Saavedra, 2000). Second, we highlight recent approaches centering on the processes by which affect is transferred between and shared by team members, which include affect cycles (Hareli & Rafaeli, 2008; Walter & Bruch, 2008), dynamic positivity during meeting interactions (Lehmann-Willenbrock, Chiu, & Lei, 2013), and peer affective influence in meetings (Lei & Lehmann-Willenbrock, 2014). Although much of the previous work on these affective processes refers to teams in general, we believe that this growing body of research can inform team meeting science in particular. After assessing what has been learned from this body of work and what controversies and gaps have been in the literature, we consider the dynamic, interpersonal influence of affect during team meetings as the areas in which additional research is most needed.

A process-oriented, relationship-based view of affect is both important and timely. Its importance arises from affect’s centrality to from all social events and work meetings, including interactions with colleagues (e.g., lack of respect, aggression, bullying, social support), stressful constraints (e.g., deadlines, organizational change), and leader or supervisor behavior (e.g., positive vs. negative feedback, fair vs. unfair treatment; Brief & Weiss, 2002). The timeliness of a dynamic, interpersonal view of affect in meetings arises from new scientific evidence and
recent calls for an “affective revolution” (Barsade et al., 2003). In the direction of a dynamic approach to group affect, Barsade and Knight (forthcoming) emphasize that “the understanding of how group affect develops and changes over time in groups is absolutely critical to gaining a complete and understanding of its dynamic nature and effects…(thus,) real-time, process-oriented research is needed on the ebb and flow of affect, moods, and emotions within groups and teams over time”. Team meetings provide a rich context for studying this ebb and flow of affect.

Defining affect in team meetings

We begin by clarifying some definitional issues. Various terms are used in reference to affect phenomena, such as affect, emotion and mood. Affect is often used as a general umbrella term, referring to a subjective feeling state that ranges from dispositional tendencies (positive or negative affectivity), to diffuse moods such as cheerfulness or depression, to specific and acute emotions such as happiness or anger (Barsade & Gibson, 1998). Emotion and mood are generally seen as subtypes of affect; there are distinctions between these terms (Frijda, 1986). For example, acute or discrete emotions are defined as intense, comparatively short-lived reactions to a particular environment stimulus (Barsade & Gibson, 2007; Ekman, 1994). They are often labeled with specific emotion terms such as happiness, anger, fear, sadness or joy. Moods tend to be more enduring and mild, and are not directed at any specific object, event, or cause in particular (Barsade & Gibson, 2007; Ekman, 1994). Dispositional affect refers to a person’s stable underlying affective personality that yield a fairly consistent affective perspective, which serves as a background to one’s perception, cognition and affective reactions (Waston & Clark, 1992).

We use the terms “affect”, “emotion” and “mood” interchangeably in this chapter, as we
consider them as semantically similar terms for the general constellation of individuals’ feeling responses during meetings. Drawing on the work by Barsade and her colleagues (Barsade & Gibson, 1998; 2012; Kelly & Barsade, 2001), we define group affect as an affective state arising from a combination of the group’s affective contexts (e.g., affective climate, affective norms) and its affective composition of the group members that is transferred and created through explicit and implicit affective transfer processes. What follows next is a review of past and current approaches to group affect which encompass all three of these affective types.

The compositional view of group affect

One major research stream in group affect that has implications for meeting interactions has adopted a bottom-up, compositional perspective that uses the aggregation of individual affective traits, moods, and emotions to characterize group affect (Barsade & Knight, forthcoming). Work in this compositional approach has predominantly examined how group affect manifests as convergence or divergence in group members’ individual affect, in addition to taking individual characteristics and differences into account. Such a focus on affective convergence or divergence not only represents the reality of team life and meetings, but also well corresponds to the recent emphasis on the emerging qualities of team processes (Kozlowski, Chao, Grand, Braun, & Kuljanin, 2013). Accordingly, in this section we first summarize major research findings regarding the extent to which individual group member affectively converge or divergence, followed by reviewing the studies that have examine the roles of individual personality, attitudinal and demographic differences in group members’ individual as well as collective affect.

Affective convergence

In general, the focus of group-affective-composition research has been on the collective
construction of affect as an experience that is shared by the individual members of a group or team. In a foundational study, drawing from Schneider’s (1987) attraction-selection-attrition model, George (1990) coined the term “group affective tone” to refer to consistent or homogenous affective reactions within a group. In this conceptualization, George (1990) emphasized the collective construction of affect - both positive and negative- as an experience that is shared, or held in common, by the members of a team.

To validate the theoretical model of group affective tone, George (1990) conducted a field study with employees in 26 work teams reported their moods over the past week. George (1990) found empirical support for the existence of homogeneity in positive and negative group mood. Specifically, George (1990) demonstrated that employees’ negative mood was significantly negatively related to prosocial behavior toward customers in a sales setting and significantly positively related to employee absenteeism. Similar patterns regarding the influence of positive or negative group mood can be found in other field settings. For example, Cole, Walter, and Bruch (2008) examined the influence of dysfunctional behavior on performance in a sample of work teams in a multinational corporation. They found that self-reported team negative mood was negatively related to team performance and mediated the relationship between dysfunctional team behavior and performance. Additionally, the study found that this relationship was stronger when nonverbal emotional expressivity was high than when nonverbal emotional expressivity was low. Gibson (2003) studied group efficacy (i.e., the group’s collective belief in or estimate of its ability to perform a task) with both student teams (in a realistic and complex managerial- simulation lab exercise) and nursing teams in the United States and Indonesia. In both studies, mean group positive mood, as measured by raters outside the group, was found to be associated with greater group-level efficacy.
Laboratory-based studies have also examined the influence of group-level affect on decision making in distributed-information tasks and found mixed results. For example, Bramesfeld and Gasper (2008) tested how happy moods broaden-and-build on people’s knowledge in two experiments and in fact found that introduced happy moods promoted group performance more than sad moods. Moreover, they found that the effects of positive mood on group performance were particularly strong when the critical information was uniquely, rather than commonly, distributed to group members. Kooij-de Bode, van Knippenberg, and van Ginkal (2009), however, found the opposite in their laboratory study: it was negative group affect, defined as mean trait negative affectivity, that led to better performance in the unique-information groups and this increased performance was mediated by more sharing of information. Yet in both studies, group emotion had no influence on decision-making performance in groups whose members all had the same information.

Beyond trait affectivity, a number of other factors have been posited to explain why work group members tend to share moods and emotions (Kelly & Barsade, 2001), such as common socialization experiences, shared affect events, and common social influences, similarity of tasks and high task interdependence, membership stability; and emotional contagion. Among these work group characteristics, we pay particular attention to emotional contagion (Hatfield, Cacioppo, & Rapson, 1994; Barsade, 2002) or other momentary affective transfer processes (e.g. Bartel & Saavedra, 2000) because these affective processes represent both a contemporary concern and a considerable promise regarding group affect in team meetings.

For example, based upon a study of 70 work groups, Bartel and Saavedra (2000) found convergence between observers’ reports and self-report indicators of eight distinct mood categories, which was positively associated with task and social interdependence, membership
stability, and emotion regulation norms. Barsade (2002) directly examined both positive and negative emotional contagion processes by exposing study participants to a confederate in a group negotiation experiment and found that emotions expressed by the confederate were contagious and caused emotional changes in the participants. Related evidence from the broader literature on work teams reinforces the notion of emotional contagion and convergence in teams by showing that individual members’ emotions and the collective emotions of their peers are significantly correlated over time (Ilies et al., 2007; Totterdell et al., 1998).

For team meetings in organizations, the concept of affective convergence and the above findings imply that meeting attendees will likely experience similar emotional states and show similar affect expressions over time. To date, very little research has explored affective convergence in the particular context of team meetings. One study showed that team member interactions during meetings were correlated with ratings of collective group mood (Lehmann-Willenbrock et al., 2011), but it remains to be seen how this collectively shared affect comes about in the moment-to-moment interaction dynamics that characterize team meetings. Moreover, while it is possible that teams converge on their affective experience, they may also show affective divergence from moment to moment during their meetings (Barsade & Knight, forthcoming; George & King, 2007).

Affective divergence

Whereas most previous research has examined aggregate mean measures of group affect (including both positive and negative affect), future work should move beyond an investigation of affective convergence and to take into account of affective divergence because individual members necessarily have to experience homogeneous affective states at a given time point (Barsade & Knight, forthcoming; George & King, 2007). This may be particularly true when
individual members express different opinions, engage in heated debates, or encounter conflicts during meeting interactions. Compared to theory and research on affective convergence in groups, there has been remarkably little research on affective divergence in group—that is, on the variance or heterogeneity in individual affective tendencies in groups (rather than the average of these tendencies in mean group-level affect). Next we review a few exceptions in the direction that have explicitly examined group affective divergence or heterogeneity.

As an important first step in testing affective divergence or heterogeneity, Barsade, Ward, Turner, and Sonnenfeld (2000) examined top management teams and found that greater diversity in a team’s trait positive affect was related to poorer corporate financial performance. Trait-positive-affective diversity and mean trait positive affect significantly interacted, predicting cooperativeness and task-related and emotional conflict in top management teams. This research has thus opened promising directions for theory and research on the meaning and effects of divergence in affective states and expressions in groups.

To advance theories in this direction, Tiedens, Sutton, and Fong (2004) proposed a conceptual model of the antecedents and consequences of group affective diversity, which they referred to as “emotional variation.” Consist with a top-down and bottom-up perspective of group affect (Barsade & Gibson, 1998; Kelly & Barsade, 2001), Tiedens et al. (2004) highlighted that compositional and contextual forces can yield diversity in group members’ affect in certain situations. For example, social hierarchies and differentiated role structures may make high status group members feel relatively positive during group decision-making situations, whereas low status group members feel relatively negative during the same situation. Moreover, Tiedens et al. (2004) suggested that variation in group member affect, or group affective divergence, may enhance group creativity, decision-making, and persuasion, but may impede efficient execution
of group tasks.

This idea of group affective divergence, diversity or variation, has gained additional support in recent lab-based research. For example, Magee and Tiedens (2006) manipulated the degree of affective diversity in pictures of group members in a series of studies. Their study results showed that external observers judged groups in which there was greater diversity in emotion among the group members, as sharing less of a common fate and holding less shared responsibility for group outcomes. As another example, Weisbuch and Ambady (2008) proposed that, in certain circumstances such as perceived in-group versus out-group membership, emotional contagion can lead individuals to develop divergent, rather than congruent, affective states. In a series of priming experiments, Weisbuch and Ambady (2008) found a significant difference in facial mimicry processes (i.e., emotional contagion) for perceived in-group versus out-group members’ feelings of joy and fear. Out-group members’ expressions of fear led to in-group feelings of joy, while out-group members’ expressions of joy produced in-group feelings of fear. Together, these studies support the idea that group affective divergence can serve as a meaningful indicator of the “groupiness” of a group.

**Individual personality, attitudinal and demographic differences**

In addition to documenting a tendency for the members of groups to naturally converge or diverge in affect during group interactions, researchers have also shown that individual group member attributes and attitudes affect the extent to which there is group convergence or divergence (e.g., Doherty, 1997; Eisenkraft & Elfenbein, 2010; Ilies et al., 2007; Totterdell et al., 1998; Totterdell, 2000). Several studies have focused on how individual personality and attitudinal differences shape the emergence of group affect, and a few others has examined the role of individual demographic attributes in group affect.
In the earliest days of group mood research, Doherty (1997) proposed individual differences in susceptibility to emotional contagion, arguing that individuals high in susceptibility to contagion are more likely to “catching” the emotions of others” and share affective experiences with their teammates than individuals low in susceptibility. In three experiments, Doherty (1997) developed and validated the 15-item emotional contagion (EC) scale that assesses individual differences in mimetic tendency to five basic emotions (love, happiness, fear, anger, and sadness). Later studies by Ilies et al. (2007) have also examined the role of individual differences in group affect by focusing on individual susceptibility to emotional contagion and collectivistic tendencies. Specifically, in a naturalistic team performance setting, Ilies and colleagues found that the affective linkage between an individual team member and the other team members was stronger for those individuals high in susceptibility to emotional contagion and those with collectivistic tendencies. More recently, Eisenkraft and Elfenbein (2010) found consistent individual differences both in the emotions that people tend to experience (trait affect) and in the emotions that people tend to elicit in others (trait affective presence) by tracking 48 MBA student groups. Specifically, their study results suggest that affective presence exerts as much influence over interaction partners’ negative feelings as does these interaction partners’ own trait affect. Positive affective presence correlated with greater network centrality, and negative affective presence correlated with lower agreeableness and greater extraversion.

A growing stream of research also suggests a meaningful consideration of individual attitudes towards the group and demographic attributes when examining the extent to which group members are influenced by the affective experiences of others in the group. For example, Totterdell and his colleagues (Totterdell et al., 1998; Totterdell, 2000) found that team members...
who were more committed to their team and perceived their team environment more positively had affective experiences that were most tightly linked to those of their teammates. Totterdell (2000) also replicated this finding that group members highly committed to the group are more likely to share affective experiences with other group members in a study of cricket teams during a competition. In our recent field study of team problem solving meetings, we found that those team members low in job satisfaction were more likely to be influenced by their socially proximate peers during meeting interactions than those high in job satisfaction (Lei & Lehmann-Willenbrock, 2014). Moreover, individual demographic attributes have also been found to impact group affect. In this direction, Totterdell and his colleagues’ research (Totterdell et al., 1998; Totterdell, 2000) showed that group members older group members more likely to be prone to emotional contagion from the group.

Contextual factors of group affect

Individual-level affect and emotions, emotion transferring processes, and group affective composition may all be influenced by “top down” factors or the affective context in which a team is situated. Consistent with Barsade and Gibson (2012), we define affective context as the affectively based, group-level forces that act on a team. We argue that affective contexts in which teams are embedded have powerful and confound implications for their meetings, because those affective contexts, such as affective culture, affect display norms or leader influences, not only influence – be promote or constrain- members’ actual expressions and emotional experiences both at individual or collective level, but also shape their expectations about what types of affect are most likely to emerge or should have emerged in a team meeting. Here we pay particular attention to research that focuses on affective culture, affect regulation norms, and leadership.
Affective or emotional culture has been identified as a key top-down force that drives group affect (Barsade & Gibson, 1998; 2007; 2012; Kelly & Barsade, 2001). Affective culture is often defined as emotional content of organizational culture (Barsade & O’Neill, 2014), which refers to the collection of assumptions, beliefs, norms, practices, rituals, stories, and physical arrangements that deepen team members’ understanding of the emotional patterns and subsequently guide their appropriate reactions to those emotions within their groups. Both theoretical work and broad reviews of the affect literature have highlighted the importance of affective culture in organizational settings at all levels, individual, group, and organizational (Barsade & Gibson, 1998; Barsade & Gibson, 2007; Barsade & Gibson, 2012; Kelly & Barsade, 2001). Like other dimensions of organizational culture which guide how organizational members think and act, affective culture is the set of shared norms that governs how group members experience and express affect, thus contributing to the collective affect that emerges in groups.

Despite the growing body of theoretical work, there is virtually little empirical research on the antecedents and consequences of affective culture in groups and teams. One notable exception is Barsade and O’Neill’s (2014) recent longitudinal field study examining the influence of a culture of companionate love on outcomes for employees and clients in units of a large long-term care setting. Barsade and O’Neill (2014) found that a stronger affective culture of companionate love (i.e., caring and compassion) predicted greater employee satisfaction and teamwork and less absenteeism emotional exhaustion, as well as better patient outcomes, including enhanced patient mood, quality of life, greater satisfaction, satisfaction, and fewer trips to the emergency room.

Organizational researchers have also focused on affective norms or emotional-display rules (Ekman, 1973) as the subcomponent of affective culture. Research in various settings suggests that emotional expressions can serve as a key factor in overall group development.
DYNAMIC AFFECT IN TEAM MEETINGS

When a group has norms that allow for or encourage the expression and communication of emotion, then emotional contagion between group members is more likely to occur (Asforth & Humphrey, 1995; Barsade, 2002; Hatfield et al., 1994). If individual emotional reactions are not expressed or shared within the group, then emergent leaders will not be able to influence fellow group members via the display of emotion. Moreover, the research on emotional labor suggests that normative “display rules” (Ekman, 1973), or emotion norms, can be used as a mechanism for increasing performance. For example, studies showed that salespeople comply to these rules in order to keep an upbeat, enthusiastic expression with customers to encourage purchasing behavior (Pugh, 2001; Totterdell & Holman, 2003). In the cases of lawyers, they use an aggressive, angry tone to encourage compliance in adversaries (Pierce, 1995). Or, medical professionals adopt norms of intentional affective neutrality (Smith & Kleinman, 1989).

The affect of the group leader is also a significant factor in a group’s affective context. Recent work on group affect suggests that the management of moods and emotions (both one’s own and those of others) is a critical element of effective leadership (Barsade and Knight, forthcoming). Group leaders can have a significant impact on team outcomes through both conscious and unconscious affective displays that shape group affect. Moreover, leaders can set the tone for the ways in which a group reacts emotionally to the situations it faces (George, 1995), or purposefully use emotional expressions to influence group affect and behavior. For example, a study of customer service teams, George (1995) found that the leader’s positive mood during the last week predicted supervisors’ perceptions of the groups’ performance, even after controlling for the group’s affective tone. Pescosolido’s (2002) qualitative study of collegiate
rowing crews and semiprofessional jazz music groups revealed a similar pattern. Individual group members in this study were able to assume a leadership role by making an interpretation of the emotional response that best serves the group’s needs and then modeling that response, and, in that way, helped the groups to improve their performance. Sy, Côté, and Saavedra (2005) conducted a laboratory study examining the processes underlying the influence of leaders’ emotion on group outcomes in self-managing teams. They found that leaders improved team performance by transmitting their positive moods to other group members through emotional contagion. Van Kleef, Homan, Beersma, and van Knippenberg (2010) also examined how leader emotional displays affect team performance with experimental data from 35 student teams. They found that teams composed of participants with lower average levels of agreeableness performed better when their leader expressed anger, whereas teams composed of participants with higher average levels of agreeableness performed better when their leader expressed happiness.

A dynamical view of affect as an interpersonal construct in team meetings

In light of the “affective revolution” of organizational behavior (Barsade et al., 2003), recent theorizing has emphasized the dynamics of affective emergence in groups and teams—that is, how, over time, the nature of collective affect can change over time. For example, Weiss and Cropanzano’s (1996) Affective Events Theory explicitly discusses how environmental events—broadly to include both socially and nonsocially mediated factors—can trigger emotional responses and suggests that group affect levels fluctuate over time. More broadly speaking, some researchers have argued that overall, most group phenomena are emergent, meaning that characteristics, properties, or processes of groups develop and shift as the groups and the relationships among group members evolve (Cronin, Weingart, & Todorova, 2011; Kozlowski & Bell, 2003). In this sense, affect during team meetings is an emergent, dynamic
construct corresponding to team members’ ongoing interactions and shifts in shared properties (e.g., trust or cohesion during the meeting).

Moreover, the dynamic nature of group affect suggests two implications for team meeting interactions and processes. First, researchers suggest that momentary experiences of group affect, such as group moods or group emotions, serve as input factors that subsequently affect future group interaction processes and a group’s eventual output (Hareli & Rafaeli, 2008; Kelly & Spoor, 2006; Walter & Bruch, 2008). Group processes include affect regulation, information processing, cooperation, and coordination, and important output consequences include affective states themselves, as well as performance outcomes. Second, beyond intra-psychic experiences (Frijda, 1986), emotions can at the same time be subject to observation by other people (e.g., Ekman, 1993; Elfenbein & Ambady, 2002), and serve as social signals (van Kleef, 2009) and provoke various interpersonal processes (see Parkinson, Fischer, & Manstead, 2005).

**Affect cycles**

Both the input and social influence accounts of group affect suggest the notion of spirals or cycles of affect during team meeting interactions (Hareli & Rafaeli, 2008). For example, Walter and Bruch (2008) suggested that positive affective similarity is reciprocally related to the quality of interpersonal relationships among group members. Specifically, they argued that high quality relationships facilitate emotional contagion and convergence in group positive affect, which in return further enhances the quality of interpersonal relationships. Similarly, Hareli and Rafaeli (2008) proposed the conceptualization of emotional cycles and argued that individual moods and emotions influence other members of a group, sparking emotional reactions and responses that may be consistent with either convergence (i.e., through contagion) or divergence (i.e., through reactivity) in mood. People can also draw attributions and extract meanings from
others’ emotions. Moreover, Hareli and Rafaeli (2008) posited that emotion cycles can involve both intended targets of or partners to an original emotion and third parties who were not the intended targets or partners. Given that group affect and group interactions are embedded in a virtuous cycle, a dynamic approach is needed for exploring how momentary affective experiences in shape subsequent team outputs, including affective experiences during team meetings over time.

Dynamics are however challenging to study. Despite recent advances in understanding the fundamental nature of groups and group affect, the majority of empirical research on group affect has been static rather than dynamic (Cronin et al., 2010). Several authors have investigated the role that affect may play in groups and teams interactions and development over time. Totterdell and his colleagues (1998), for example, have conducted two field studies investigating whether people’s moods are influenced by the collective mood of their work teammates over time. In the first study, 65 community nurses in 13 teams recorded their moods and hassles daily for 3 weeks. In Study 2, a team of 9 accountants rated their own moods and the moods of their teammates 3 times a day for 4 weeks using pocket computers. Pooled time-series analyses from both studies showed a significant association between a focal individual’s moods and the collective mood of their teammates. Building on these study findings, Totterdell (2000) further explored the extent to which the moods and subjective performances of professional sports players are associated with the ongoing collective moods of their teammates. Players from 2 professional cricket teams provided ratings of their moods and performances 3 times a day for 4 days during a competitive match between the teams. Pooled time-series analysis showed significant associations between the average of teammates’ happy moods and the players’ own moods and subjective performances. Although these previous studies did not explicitly focus on
team meetings, their findings suggest that collective moods—created through emotional cycles—could occur during meetings as well.

**Emergent mood and peer affective influence in meetings**

Given the affect-laden characteristics of many meetings, an increasing number of studies is beginning to focus on dynamic affective processes in the context of team meetings. In particular, scholars working with the act4teams coding scheme for analyzing meeting communication processes (e.g., Kauffeld & Lehmann-Willenbrock, 2012; see also Meinecke & Lehmann-Willenbrock, in this volume) have taken some important steps toward understanding how social interactions during meetings shape affective experiences. For example, Kauffeld and Meyers (2009) studied 33 team meetings and identified patterns of complaining behavior as well as patterns of solution behaviors, which they interpreted as expressions of a negative vs. positive collective mood in the meeting. Following up on these findings and interpretations, a different study of 52 team meetings implemented an actual measure of group mood, in addition to coding team meeting behaviors (Lehmann-Willenbrock et al., 2011). The results showed that emergent complaining patterns observed in the meetings were significantly correlated with ratings of a passive group mood (i.e., low arousal), whereas emergent patterns of proactive behavior were significantly linked to observer ratings of an active mood in the meeting (i.e., high arousal; see Bartel & Saavedra, 2000; Russell, Weiss, & Mendelsohn, 1989).

More recently, meetings research has moved to a more process-oriented approach by focusing on the moment-to-moment dynamics of affect in team meeting interactions. For example, in our own research we have explored the phenomenon of positivity expressions in meetings as a dynamic team phenomenon (Lehmann-Willenbrock et al., 2013). In a study of 43 team meetings, we used statistical discourse analysis (Chiu, 2008) to shed light on the behavioral
dynamics that lead to positivity expressions during team meetings. We found that previous positivity increased the likelihood of subsequent positivity behavior within the team interaction process, in line with the idea of emotional cycles. Moreover, positivity expressions were more likely when teams momentarily focused on solutions in their meeting, whereas a momentary focus on problems and problem analysis did not yield positivity. This second finding suggests that momentary team interaction contexts can play a critical role for the occurrence of affect behavior in meetings. And finally, we found that dynamic speaker switches within the team interaction process moderate these effects, such that more dynamic interactions involving several speakers increase the positive effects of solutions and of earlier positivity on subsequent positivity respectively.

In a different study (Lei & Lehmann-Willenbrock, 2014), we have recently examined the notion of peer affective influence, rather than collectively shared affect, during team meeting interactions. Returning to the distinction between affective convergence and divergence, we were specifically interested in the role of momentary team affective divergence, rather than convergence, in explaining when and how team meeting attendees catch their peers' moods. Given the limited research on affective diversity or divergence in field-based settings, we thus challenged the assumption of affective convergence among team members over time and shed light on how peer affect influence unfolds dynamically. In a sample of 25 team meetings held for problem-solving purposes, we focused on momentary affect (coded every two minutes) within team meeting interaction processes and examined the immediate and more delayed effects of peer affective influence on focal team members over time. We explicitly examined the moderating role of momentary team affective divergence (i.e., the variance of team members’ emotional valence at a given time point) in affecting the relationship between peers’ affective
influence and a focal team members’ emotional valence. The average length of the team meetings was 40 minutes, providing many data observations of team interactions. Pooling the observations of 170 employees nested in the 25 problem solving team meetings, we found a positive linear relationship between peer affective influence and a focal member’s affective states, as well as a non-linear (inverted U-shaped) relationship between peer affective influence and a focal member’s task performance (Lei & Lehmann-Willenbrock, 2014).

Together these research findings additionally suggest that group affect is a process through which individual and collective affect are intertwined to develop and unfold over time and in team meetings. Related to team affective divergence we discussed previously (Lei & Lehmann-Willenbrock, 2014), Figure 20.1 and Figure 20.2 illustrate how affect expressions during team meetings develop over time. Figure 20.1 depicts emotional valence (i.e., pleasantness) expressed by individual members, which was rated per 2-minute intervals of each team meeting. As can be seen in Figure 20.1, this particular team started their meeting with relatively heterogeneous states of pleasant affect. Over the course of their meeting, this team experienced micro-time periods of affective convergence (i.e., similarity in momentary group affect) as well as period of affective divergence (i.e., dissimilarity in momentary group affect). To highlight these shifts in variance, in terms of convergence versus divergence of team member affect over the course of the meeting, Figure 20.2 shows the changes in team-level variance in expressed pleasure over the course of the meeting of the same sample team as shown in Figure 20.1. Together, the Figures illustrate how team members’ displayed emotions diverge over the course of meeting interactions and how affective divergence among team members unfolded from moment to moment during the temporal meeting interactions.

**Discussion**
In this section, we reflect on the implications of our review of the group affect literature, highlighting both cumulative knowledge and opportunities for further research on affect in team meetings. In particular, we identify dominant consistent themes in empirical research, especially those that transcend different approaches (compositional or process-based), discuss limitations of the current literature, and propose directions for future research.

**Consistent themes across studies**

Our review of the current state of research reveals that affect plays a significant role in influencing teams as a whole, as well as individual team members during team meeting interactions. Evidence from empirical studies conducted in diverse research contexts (e.g., laboratory and field settings), using different measurements (e.g., self-reports or observer ratings of affect) and across multiple countries and regions (e.g., the United States, England, Germany, and Israel), has given rise to at least two key insights.

First, when a group of people work together with one another, there is a natural tendency towards the emergence of a shared form of collective-level affect—that is, team members will converge in their individual affective states. Organizational researchers have suggested several forces that may pull team members towards affective homogeneity. According to attraction-selection-attrition theory, the members of a long-standing team may have similar affective dispositions, become alike in their behavioral patterns, and share similar values, leading them to affectively react and interact in similar ways (George, 1990; Kelly & Barsade, 2001). In a very different direction, implicit affect theory suggests that affective transference or influence may be activated or processed outside of individuals’ conscious awareness that has impact on ongoing thought, behavior, and conscious affective experience in team life and team meetings. For example, during team meetings, the exposure to common events or emotional contagion
processes may pull team members’ affective states towards one another. Moreover, well-established group norms can govern how team members display and experience their moods and emotions when working with one another, leading to the emergence of a shared form of collective-level affect during the meeting. In the context of team meetings, all the forces manifest communication and emergent interaction patterns (Kauffeld & Meyers, 2009; Lehmann-Willenbrock et al., 2011), forging the affective convergence among members.

Second, there is a tight link between team outcomes and the nature and valence of group affect that emerges. With the exception of our own recent work (Lei & Lehmann-Willenbrock, 2014), shared, positively-valenced group affect seems to promote the development of positive group attitudes and emergent states, such as commitment, satisfaction, and viability (e.g., Barsade & O’Neill, 2014; Chi et al., 2011; Grawitch, Munz, & Kramer, 2003), as well as cooperative group behavior (e.g., Barsade, 2002; Barsade et al., 2000) and increased team performance (e.g., Barsade et al., 2000; Barsade, 2002; Barsade & O’Neill, 2014; Chi et al., 2014; Totterdell, 2000). In contrast, negatively-valenced group affect seems to either impair these same emergent group emergent states, processes and team performance (e.g., Barsade et al., 2000; Barsade, 2002; George, 1990), or to have no effect at all (e.g., Barsade et al., 2000; Grawitch, Munz & Kramer, 2003). The overarching pattern underlying these findings seems to suggest that group affect can play an important role in team life in general and during team meetings in particular by serving as important inputs or informational cues in teamwork and social interactions, or by influencing team processes and emergent states, or by creating particular team contexts that teams breathe in and out. This logic leads naturally to our last insight.

Third, group affect is particularly relevant for understanding social interactions and team
dynamics during team meetings—a statement that holds true in light of recent calls for explicitly unpacking group “dynamics” rather than group “statics” (Cronin et al., 2011). Researchers have emphasized the dynamics of group affect, that is, how the nature and influence of collective affect can change over time. Specifically, Kelly and Barsade (2001) posit that momentary affective experiences feed back into the group’s history. This history, in combination with bottom-up compositional forces, then acts as an additional top-down, contextual force that shapes future experiences and outcomes of group affect (Hareli & Rafaeli, 2008; Walter & Bruch, 2008). Therefore, there is a clear need to study group affect using a dynamic view. For example, how does a team’s affective trajectory compile not only over the course of one team meeting, but also across several team meetings? How do momentary affective experiences in teams shape subsequent affective experiences and interactions? Although some, though not much, empirical research has started to show promises, a consideration of affective dynamics is still largely missing from the study of teams and team meetings.

Directions for future research

While much current work is being directed to documenting the patterns and nature of affective experiences in groups and teams, additional research is needed to expand our understanding of how group affect emerges and unfolds, and influences team interactions and outcomes over time. We propose several theoretical and methodological issues that can be addressed by future research. Table 20.1 provides an overview of these suggested future research directions as well as a "to-do" list which we hope will inspire meetings researchers who aim to understand dynamic affect in meetings.

First, we emphasize that the field will benefit from pursuing a dynamic view of group affect in team (meeting) interactions. Contemporary team interactions are linked to external
contexts (e.g., workloads, deadlines) as well as internal contexts (e.g., team membership, member status) that set the pace of team performance activities, and that often must change over time. This dynamic view of work has important implications for the study of group affect. For example, consider fluid team membership (e.g., in multi-team systems), unexpected interruptions (e.g., crisis, power outage), and increasing time pressure. Each may shape how affective experiences evolve and shift at different moments, during different team meeting interactions, and in different teams. Much of the work on group affect provides relatively little insight regarding how group affect unfolds (i.e., converges or diverges), facilitates or impedes interactions, and strengthens or weakens team performance. This asymmetry of focusing more on static, but less on dynamic affect is understandable, given that the latter type of research can be methodologically challenging. Nevertheless, future research should examine the dynamic nature of group affect in team meetings. Doing so will not only help validate core theoretical predictions regarding how affective dynamics evolve over time, but also specify the causal relationships and feedback loops that are central to theories about the relationship between affect and important emergent states and outcomes, such as cooperation, creativity, and performance. The latter are at the core of organizational intentions for holding team meetings in the first place (Cohen, Rogelberg, Allen, & Luong, 2011; Sonnentag, 2001; Van Praet, 2009; see also Reiter-Palmon & Sands, in this volume).

The review work by Cronin and colleagues (2011) on dynamics in groups provides an excellent conceptual starting point to go forward. The authors integrate existing research on small groups and teams and offer some complementary suggestions for thoroughly infusing dynamics into the general study of groups. Recent technological and statistical advancements provide meeting researchers with more tools for understanding and analyzing affective dynamics
over time. In the blossoming field of affective computing, scholars from a range of disciplines, including computer science and engineering, machine learning, biology, and psychology, are collaborating to design and implement novel methods for measuring and modeling individuals’ moods and emotions over time. For example, Picard and her colleagues have developed wireless, unobtrusive sensors that measure activation of the sympathetic nervous system—a correlate of affective arousal or activation (Picard, Vyzas, & Healey, 2001; Poh, Swenson, & Picard, 2010). Solutions on the frontiers include web-based software for using web-cams to track and continuously monitor individual emotions by coding facial expressions in ways similar to Ekman and Friesen’s (1973; 2003) well-known FACS rubric. These innovations in equipment and software could particularly be used in studies of live team meetings, including in virtual team settings, during which obtrusive measures such as thorough self-reports of momentary affective assessments at multiple time points are often unfeasible or extremely difficult to obtain. Moreover, software solutions are available for coding text-based communications, such as instant messages and tweets, for affective constructs (e.g., Bollen, Mao, & Zeng, 2011). Meetings scholars could take advantage of these technologies to test predictions from dynamic, process-oriented models of group affect regarding the interdependent relationships between affect and meeting attendee interactions, and even for implicit affect that may not be captured by obtrusive measures but influences attendees’ meeting experiences nonetheless.

Second, future research should test potential boundary conditions for the transference—convergence or divergence—of group affect during meeting interactions. In the case of emotional contagion and convergence, individual variables such as one’s susceptibility to emotional contagion have been identified as contingencies that can alter the affective linkage between individuals’ own affect states and other team members (Totterdell, 2000). There are,
however, other factors that may also modify such affective linkages. A particularly noteworthy force is the affective context in which a team is operating. For example, fluid groupings of 50 or more people collaborating in shifting subgroups on a large-scale project such as rescuing Chilean miners will have different norms and affective states than will a stable small team of five with a relatively predictable task. Meetings processes and outcome may be well different between the former and latter type of teams. Similarly, the role of group affect in a homogeneous team with a high level of psychological safety may be different than that in a multinational team with little psychological safety. In a psychologically safe team, team meetings may involve a lot of open discussion and member interactions, whereas team meetings may be characterized by team member silence or a few dominant voices. Despite growing theoretical attention to affective diversity in groups and teams, empirical evidence to validate, challenge, and extend conceptual models is lagging behind. As illustrated in our own recent work (see Figures 20.1 and 20.2), there is some convincing theorizing and evidence indicating that divergence in team members’ affective states occurs and creates a micro-environment for group functioning (i.e. divergence as a contextual factor). More empirical research is needed to replicate these findings and better understand how affective diversity influences team meeting processes and outcomes.

Third, more research is needed to understand the consequences of specific discrete group affect in teams and team meetings, such as joy, positivity, excitement, fear, anger, and the like. While it is logical to initially focus on more generalized positive and negative moods typically studied in existing work, it is clear that groups also experience more nuanced and discrete emotions that can have distinct social functions (Keltner & Haidt, 1999) and can lead to a variety of attitudinal, behavioral, and performance outcomes (Frijda, 1986). Such inquiry may well spark new research on long-ignored constructs such as group emotional intelligence and emotion
interpretation, both of which could play a critical role in meetings.

Methodologically, further research is needed to enhance the rigor and generalization of current findings. Establishing agreement about the most consistent and accurate measures of affect in teams is important. While self-report survey methods for assessing affect are critical in understanding affective states and team dynamics, they do have the disadvantage that their use may disturb or interrupt the natural flow of moods and emotions in a group; therefore, it is almost unrealistic to use them multiple times to assess real-time, momentary affect states over the course of a live team meeting. In the context of taking a dynamic approach to team interactions and meetings, unobtrusive measures (e.g., video codings, sensor data), can provide researchers with an additional way to capture moods and emotions in team meetings as they naturally flow over the course of time. In other words, these unobtrusive measures can sample moods and emotions at a very fine-grained temporal level, especially with the help of emerging technologies mentioned above.

Overall, more longitudinal research will allow a better assessment of cause and effect and also permit an examination of changes in group affect. We also propose that multilevel and cross-level research is needed to systematically understand group affect. Although prior research encompasses multiple levels of analysis, studies have not attempted to understand how phenomena at different levels of analysis interact (Hackman, 2003). For example, in studying emotional contagion, Barsade (2002) simultaneously considered individual-level factors (e.g., individual-level moods in the video-coder models, and self-reported change in individual mood) as well as differences that may occur as a result of study participants being members of different groups. As another example, in our own work, we showed that that individual- and group-level contingencies (i.e., individual job satisfaction and team affective divergence respectively)
combine to influence peer affective influence on individual affective states (Lei & Lehmann-Willenbrock, 2014). Therefore, a focus on just one level is likely to provide an incomplete, or even inaccurate, understanding. Accordingly, we encourage researchers to consider how individual-level and contextual (i.e., group- or organization-level) predictors work in concert to create the conditions leading to and inhibiting group affect and outcomes in team meetings.

**Implications for practice**

Affect permeates organizations, teams, meetings and almost all dynamic social interactions. One of the most fundamental challenges organizations and teams face is how to infuse positive emotions, while mitigating the negative ones, to achieve desirable goals and outcomes. One particular takeaway from the literature on group affect for everyday meeting experiences is that while individual dispositions shape a certain amount of thinking, affect and behavior, individuals can be swayed by their momentary social environment. During meeting interactions, one of the powerful mechanisms by which individuals catch each other’s emotions and ultimately create shared or collective emotion is through emotional contagion and social influence. In the process of contagion and building collective emotions, team members need to recognize each other’s affective states, needs and expectations, and respond to them constructively. This, however, is a not trivial task in today’s fast-paced, cross-disciplinary, or even cross-border meeting situations. Some members worry about what others will think of them if they challenge their ideas or opinions. Some may fear that they will offend others if they give away what they really think. Because these vital affective and interpersonal exchanges don’t always happen smoothly, teams must facilitate meeting processes and interactions by creating a climate of psychological safety (Edmondson & Lei, 2014). In a psychologically safe team, it is expected that team members are respectful and supportive even if they display negative
DYNAMIC AFFECT IN TEAM MEETINGS

emotions, speak up their opinions, or challenge and disagree each other. A basic way to create such a climate in team meetings is to model constructive teaming behaviors such as: asking thoughtful questions, acknowledging ignorance about a topic or area of expertise, conveying awareness of one’s own fallibility, and showing sincere care and support for colleagues (i.e., positive socioemotional meeting behavior; see Kauffeld & Lehmann-Willenbrock, 2012). Meeting leaders who act this way, especially those considered as “affective leaders” (i.e., whose displayed emotions carry a lot of weight in the team), make it safer for everyone else in the meeting to do so.

While we seem to emphasize the benefits of team synchronization and shared emotional understanding and expression during team meetings, it must be pointed out that progress-thwarting conflicts are common when intensive meeting interactions occur across diverse cultures, priorities, or values. It may be frustrating not to see eye-to-eye and feel side-by-side with team members. But differences of perspective are a core reason for teamwork in the first place, and resolving them effectively gives rise to new opportunities. To move forward from meeting conflicts, all parties must be pushed to consider the degree to which their positions reflect not just facts but also personal values and biases, to explain how they have formed their views and arrived at their conclusions, and to express interest in one another’s analytic journeys. In this way, people can put conflict to good use such that teams “can have a good fight” during meetings (Eisenhardt, Kahwajy, & Bourgeois, 1997) and that teams will not risk falling into the trap of feeling great and thinking alike, a coined symptom of “groupthink” (Janis, 1972).

It is also important to realize how team leaders can help shape group affect and team meetings by displaying specific emotions that have significant consequences. For example, van Kleef and colleagues (2010) showed that team leaders’ displays of anger are more effective to
the extent that their followers have high epistemic motivation (i.e., the desire to develop a thorough understanding of a situation), whereas displays of happiness are more effective to the extent that followers have low epistemic motivation. An important implication of this finding for conducting meetings is that leaders and managers should strategically match their emotional expressions to meeting attendees’ motivation. Regarding leadership selection and training, this implication emphasizes the importance of leaders’ socioemotional skills. For example, leaders need to be aware that their emotional displays may influence individual feelings, and team interactions and processes in team meetings. Leaders should also be able to regulate their emotions during meetings (see also Allen & Thomas, in this volume) and tune their emotional expressions to the situation at hand so as to put their emotions to good use. Naturally, such training recommendations apply to regular team members as well.

Finally, managers and teams need to achieve a balance between encouraging and sharing positive emotions (e.g., positivity or hope) and suppressing negative emotions (e.g. doubt or negative feedback). The influence of group affect on meeting processes and outcomes is powerful, but more complex than expected. It is possible that shared positive emotions or high morale during team meetings might prompt more flexible decision making and wider search behavior, leading to more creative solutions. However, just as the dominant “happy workers – productive workers” hypothesis (Staw, Bell, & Clausen, 1986) may not hold true in all circumstances, positive group affect is not a panacea for reaping desirable meeting outcomes either. It is also possible that excessive positive group affect send people down a path of satisficing, being overconfident, and losing the motivation to be critical when needed. Negative emotions can signal that changes are required, which implies that they should not be ignored or suppressed in team meetings. Moreover, suppressing negative emotions in meetings may incur
negative emotions due to the emotional labor that meeting attendants may experience (see Thomas and Allen, in this volume).

To find ways to continuously improve meeting outcomes, in terms of more effectively solving problems and coming up with good solutions, teams should not only create a positive atmosphere filled with positive emotions, but also examine, challenge, build, and refine one another’s ideas. To achieve a balanced emotional repertoire, team leaders and members need to work hard and together to foster high levels of trust and psychological safety by stifling political battles, encouraging high-status members to admit and learn from mistakes, and not blaming or punishing those who come forward for speaking up or being critical. When leaders demonstrate through their own behaviors a willingness to entertain alternative points of view or ways of expressing emotions, meetings attendees can feel emboldened to display their emotions and opinions, and offer new ideas and options in meetings. Over time, desirable activities such as morale support, creative ideas, knowledge transfer, and reflective post-audits are likely to flourish in teams that manage to build such a meeting culture.

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References


Table 20.1

A to-do list for improving our understanding of dynamic affect in meetings

- Study *dynamic* rather than static group affect in meetings
  - Test theoretical models of how affective dynamics evolve over time
  - Specify causal links and feedback loops between affect and meeting outcomes (e.g., cooperation, creativity, and performance)

- Take advantage of novel technologies for measuring affective states over time
  - Study live team meetings, in face-to-face or virtual settings using unobtrusive methods
  - Test theoretical predictions regarding interdependencies between affect and meeting attendee interactions
  - Examine the role of implicit affect that may not be captured by obtrusive measures but influences attendees’ meeting experiences nonetheless

- Test potential boundary conditions for the transference of group affect during meeting interactions
  - Examine the role of individual variables, such as susceptibility to emotional contagion, in the meetings context
  - Shed light on contextual factors that can modify affective linkages in team meeting (e.g., team psychological safety)

- Study the consequences of specific discrete group affect in team meetings (e.g., joy, fear, or anger)
  - Spark new research on group emotional intelligence and emotion interpretation
  - Examine how these constructs may critically affect meeting processes and outcomes

- Consider how individual-level and contextual (team- or even organization-level) predictors work in concert
  - Examine how these multilevel factors create the conditions that promote or inhibit to and inhibiting group affect and its outcomes in team meetings
Figure 20.1. Illustration of expressed affective states (i.e., pleasantness) of individual team members over the course of meeting interactions for a sample team.

Note. The letter “A, B, C,…and F” represent individual members in this particular team respectively. 0= Neutral, 5 = extremely pleasant on the Y axis. The emotional ratings of pleasantness were coded per 2-minute interval for each team member.
Figure 20.2. Illustration of the variance of team affective states (i.e., expressed pleasantness) over the course of the meeting interaction process for a sample team.

Note. The emotional ratings of pleasantness were coded per 2-minute interval for each team member.