Chapter 1

Team Composition and Conflict: An Introduction

Teams are a fundamental component of modern organizational structures (Devine, Clayton, Phillips, Dunford, & Melner, 1999; Mathieu, Marks, & Zaccaro, 2001). As such, understanding their dynamics is imperative for organizational performance. However, despite more than 50 years of research on teams, much still remains to be known (cf. Kozlowski & Ilgen, 2006). Two topics central to teams which have revealed some of the most contradictory findings are team composition and conflict. While researchers have long extolled the potential value for teams of diverse compositions and associated cognitive conflicts (e.g., Hoffman, 1959; Hoffman & Maier, 1961; Levine & Resnick, 1993; Triandis, Hall, & Ewan, 1965), findings on the actual effects of diversity and conflict have been decidedly mixed (for reviews, see Harrison & Klein, 2007; Jehn & Bendersky, 2003; Jehn, Greer & Rupert, 2008; Mannix & Neale, 2005; Kochan et al., 2003; Van Knippenberg & Schippers, 2007; Williams & O’Reilly, 1998). Therefore, the aim of this dissertation is to provide a more nuanced view of our understanding of these concepts – specifically, by focusing on individual differences in perceptions of team composition and conflict and by bringing more attention to the effects of traditionally understudied forms of team composition – status and power differences in teams.

In this chapter, I will provide an overview of the state of the field for both team composition and intragroup conflict and use this to lay the groundwork for the new theoretical approach to team composition and conflict research proposed in this dissertation. I will first reflect on past theories and findings in the interrelated fields of team composition and conflict. I will then use this review to move forward towards what I identify in my dissertation as
the key to understanding these two concepts – namely, the role of individual differences in teams. Teams are defined as groups of more than two members in which members recognize themselves as a group (and are recognized as such by others), have measurable tasks, and function within an organization (Hackman, 1987). In my dissertation, I investigate the effects of team composition and conflict for team and individual outcomes, such as performance and the quality of the team environment. These outcomes are in line with classic definitions of team effectiveness – team effectiveness can be defined as consisting of team-produced outputs (i.e. team performance), the consequences a team has for its members (i.e. individual performance or satisfaction), and the ability of the team to continue working together in the future (Guzzo & Dickson, 1996; Hackman, 1987). In the ensuing sections, I will provide an overview of existing theory and research on team composition and conflict and their effects on team outcomes. I will then highlight both theoretical and methodological shortcomings in these fields that may have contributed to past contradictory findings and underspecified theories. Finally, I will discuss how by viewing teams as consisting of individuals with potentially divergent cognitions and behaviors we may gain a more accurate understanding of the effects and dynamics of team composition and conflict.

The primary purpose of this chapter is to show how many inconsistencies in past theory and research on group composition and conflict can be resolved and understood through this focus on the role of individual differences within teams. I argue that by taking a more multi-level theoretical perspective in examinations of team composition and conflict, researchers may better understand the processes and outcomes associated with these constructs. I believe that by taking into account how individuals differ, we may be able to come to a better understanding of how individuals are similar, and thus how team-level constructs, such as team composition or conflict, may come to exist and shape team processes and outcome.

A Historical Perspective of Research on Team Composition and Conflict

Diversity in teams has been defined as the distribution of differences among team members on any characteristic which team members might use to describe how they and other members are different (cf. Harrison & Klein, 2007; Jehn, Greer & Rupert, 2008; Mannix & Neale, 2005; Williams &
O’Reilly, 1998). When examining diversity as a team-level construct, most past research has focused on diversity as a form of heterogeneity, or variety (cf. Harrison & Klein, 2007). In predicting the effects of team diversity, or specifically team heterogeneity, on team outcomes, scholars have drawn on two competing lines of theories. On the one hand, scholars have proposed that diversity can benefit team outcomes through increased information processing – i.e. the “value in diversity” hypothesis (Cox, Lobel, & McLeod, 1991). Scholars in this line of thought believe that diversity brings with it an associated diversity of thought and opinion that can lead to more creative and innovative solutions to group problems than possible in homogenous groups (e.g., Levine & Resnick, 1993; Triandis, Hall, & Ewan, 1965). On the other hand, another line of thought exists when explaining the effects of diversity on team outcomes. This line of thought, which draws on the similarity-attraction paradigm (Byrne, 1971), suggests that because people are attracted to similar others, diversity in a team may undermine group cohesion. When team members also perceive other members as being diverse and representative of different groups or categories than themselves, theories of self-categorization and social identity (Tajfel, 1978; Tajfel & Turner, 1979; Tajfel & Turner, 1986; Turner, 1985; for reviews, see Ellemers, Haslam, Platow, & Van Knippenberg, 2003; Ellemers, Spears, & Doosje, 2002; Haslam, 2001) suggest that diversity in teams may elicit hostilities and intergroup competition, which may detract from team performance. However, the degree to which these effects emerge is heavily contingent on the situational context.

Despite over 50 years of research on the effects of diversity on team outcomes, recent reviews of the diversity literature suggest that there are few consistent findings of the effects of diversity on team outcomes (e.g. Bell, 2007; Horwitz & Horwitz, 2007; Jackson, Joshi, & Erhardt, 2003; Van Knippenberg & Schippers, 2007; Williams & O’Reilly, 1998). Many studies have found team heterogeneity to positively affect team outcomes (e.g., Bantel & Jackson, 1989; Gruenfeld et al., 1996; Hoffman, 1959; Hoffman & Maier, 1961; Nemeth, 1986; Stasser et al., 1995; Watson et al., 1993), while many other studies have found team heterogeneity to negatively affect team functioning and outcomes (e.g., Drach-Zahavy & Freund, 2007; O’Reilly et al., 1989; Wagner, Pfeffer & O’Reilly, 1984). Indeed, several recent meta-analyses of the diversity literature show that diversity has little, if any,
consistent effect on team outcomes (Horwitz & Horwitz, 2007; Stewart, 2006; Webber & Donahue, 2001).

In an effort to better understand the effects of diversity on team outcomes, researchers suggested that the type of diversity might determine its effects on team outcomes. Scholars suggested that informational diversity, such as diversity stemming from educational background or work function, might give rise to increased work-related information processing without negative categorizations, whereas social category diversity (or ‘visible’ diversity, such as diversity in gender, race, or age) might be more likely to give rise to in-group/out-group hostilities (cf. Jehn, Northcraft, & Neale, 1999; Pelled, 1996; Pelled, Eisenhardt, & Xin, 1999). Therefore, informational diversity was expected to have positive effects on team outcomes, whereas social category diversity was expected to have negative effects on team outcomes. However, research has yet to support these predictions—results continue to be contradictory (for reviews, see Jackson, Joshi, & Erhardt, 2003; Mannix & Neale, 2005; Van Knippenberg & Schippers, 2007; Williams & O’Reilly, 1998).

In another, related, line of research which has also sought to better understand the effects of diversity on team outcomes, scholars have proposed that diversity may be best understood through its effects on different team processes—i.e. by opening the ‘black box’ (e.g., Hoffman, 1959; Jehn, Northcraft, & Neale, 1999; Lawrence, 1997; Pelled, 1996; Pelled, Eisenhardt, & Xin, 1999). One of the most commonly examined processes in teams is conflict. Conflict is defined as the process arising from perceived incompatibilities or differences between team members (Boulding, 1962; De Dreu, Harinck, & Van Vianen, 1999; Thomas, 1992; Wall & Callister, 1995). In the team context, three primary types of conflict have been identified—task, relationship, and process conflicts (Jehn, 1997). 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 conflicts, a third type of within team disagreements, are concerned with the logistical matters in teams, such as the delegation and
allocation of resources (e.g., Greer & Jehn, 2007; Jehn, 1997; Jehn et al., 1999). Theoretically, task-related conflicts have been suggested to improve team performance through an increased cognitive processing of task-related information, while process and relationship conflicts have been suggested to detract from team performance because of increased emotionality and distraction from the task at hand (e.g., Jehn, 1997; Jehn et al., 1999; Pelled et al., 1999). A meta-analysis in 2003 (De Dreu & Weingart, 2003) put a damper on this debate by showing that all forms of conflict were negative for team performance. However, in the seven years since the data collection for this meta-analysis ended, numerous studies have come out showing that task conflict may have a positive effect on team outcomes (e.g., Ensley & Hmieleski, 2005; Ensley, Pearson, & Sardeshmukh, 2007; Greer, Jehn, Thatcher, & Mannix, 2008; Leslie, 2007; Liang, Liu, Lin, & Lin, 2007; Matsuo, 2006; Olson, Parayitam & Dooley, 2007; Van der Vegt & Bunderson, 2005). Indeed, a recent meta-analysis including these new works shows that task conflicts may indeed be beneficial to team performance under certain conditions, whereas relationship and process conflicts are generally always negative for team performance (De Wit, Greer, & Jehn, 2007). The contexts conducive for positive task conflicts include highly complex tasks as well as teams who can experience task conflict without experiencing relationship conflicts. This latter finding has long been theoretically supported by a stream of literature which has suggested that the benefits of task conflict may be best gained from understanding how to de-couple relationship conflicts from task conflicts (e.g., Greer, Jehn, & Mannix, 2008; Peterson & Behfar, 2003; Simons & Peterson, 2000).

In terms of conflict’s role in explaining the effects of diversity on team outcomes, the initial findings look promising. For example, a study by Jehn et al. (1999) of 92 workgroups found that task conflict fully mediated the relationship between informational diversity and team performance. Relatedly, Pelled et al. (1999) found task conflict to mediate the relationship between functional diversity and team outcomes, while relationship conflict mediated the relationship between racial diversity and team outcomes. A recent study by Vodosek (2007) of 76 science research groups found that relationship conflict fully mediated the relationship between cultural diversity and group outcomes. However, not all studies have shown support for this relationship – some
research has not found conflict to mediate the relationship between certain types of team diversity and outcomes (e.g., O’Reilly, Williams, & Barsade, 1997), and other research has even shown theoretically unexpected effects, such as finding functional forms of diversity to be positively related to relationship conflict (e.g., Knight et al., 1999). Therefore, while there seems to be some support for the role of conflict in helping to explain the effects of team composition on team outcomes, the relationship needs to be further examined and new theoretical explanations developed. In the next section, I will discuss new pathways researchers are taking to understand the relationships between team composition, conflict, and team outcomes, and then I will conclude by focusing on the specific new pathway introduced and investigated in the present dissertation.

New Pathways in Research on Team Composition and Conflict

One promising new pathway that may help better explain the complicated relationships between team composition, conflict, and team outcomes is the concept of demographic faultlines. Demographic faultlines are hypothetical dividing lines within a team formed on the basis of the alignment of demographic characteristic(s) (Lau & Murnighan, 1998), such as in a team containing two white female employees and two black male employees. Researchers investigating demographic faultlines suggest that diversity and team composition may be best understood by looking at how differences in a team lead to subgroup formation, or coalitions, rather than by just looking at the overall level of differences in the team (Lau & Murnighan, 1998). However, in the 10 years since demographic faultlines were introduced as an explanatory concept in research on group composition, results on the effects of faultlines have been as contradictory as past research on team heterogeneity. For example, some studies have found faultlines to improve team processes and/or performance (Gibson & Vermeulen, 2003; Homan, Van Knippenberg, Van Kleef, & De Dreu, 2007a; Lau & Murnighan, 2005; Thatcher, Jehn, & Zanutto, 2003) while other studies have found faultlines to harm team processes and performance (Barkema & Shvyrkov, 2007; Hart & Van Vugt, 2006; Homan, Van Knippenberg, Van Kleef, & De Dreu, 2007b; Homan et al., 2008; Li & Hambrick, 2005; Molleman, 2005; Pearsall, Ellis, & Evans, 2008; Polzer et al., 2006; Rico, Molleman, Sanchez-Manzanares, & Van der Vegt,
2007; Sawyer, Houlette, & Yeagley, 2006). In explaining how demographic faultlines impact team dynamics and performance, social identity and self-categorization theories (Tajfel, 1978; Tajfel & Turner, 1979; Tajfel & Turner, 1986; Turner, 1985; for reviews, see Ellemers, Haslam, Platow, & Van Knippenberg, 2003; Ellemers, Spears, & Doosje, 2002; Haslam, 2001) are often employed (cf. Mannix & Neale, 2005). Social categorization theory posits that individuals classify themselves and others into social categories. This process may lead to in-group favoritism and out-group hostility (Turner, 1987), including such behaviors as out-group derogation. However, given the contradictory results thus far in faultline research, there is not yet a clear answer as to when faultlines incite negative categorizations and behaviors that detract from performance or competitive, task-oriented subgroups who improve team learning and performance.

Another promising new pathway in understanding the relationships between team composition, conflict, and team outcomes is research on the perceptions relating to team composition and conflict. As discussed, research which has looked at group-level conceptualizations of diversity and conflict has often assumed that every member in the team has the same perceptions about the team’s composition and conflict. This is in spite of the fact that many of the theories used to explain the relationship between team composition, conflict, and performance are contingent on whether individuals perceive their differences – i.e. social-identity theory and self-categorization theory (Byrne, 1971; Tajfel, 1978; Tajfel & Turner, 1979; Tajfel & Turner, 1986; Turner, 1985; for reviews, see Ellemers et al., 2003; Ellemers et al., 2002; Haslam, 2001). This lack of attention to the role of individual perceptions regarding team composition and conflict may explain past contradictory findings. For example, perhaps individuals in the team do not always perceive the form of diversity being researched in their team to be salient. Researchers may investigate the impact of the gender diversity on team outcomes; however, in actuality, differences relating to organizational tenure may be much more salient in the team and may be shaping more of the team members’ behaviors. Indeed, Lawrence (1997) was one of the first to suggest that the effects of objective demographic characteristics may be contingent on the perception of these differences as making a difference. Therefore, identifying whether the form of diversity being investigated is
salient to team members or not may provide a more reliable means of understanding the effects of team heterogeneity (Harrison, Price, & Bell, 1998; Randel, 2002) and faultlines (Jehn, Bezrukova, & Thatcher, 2007). For example, in a team containing two black engineers and two white consultants, when members perceive the differences between themselves to be stemming from job function, this may lead to fundamentally different dynamics than when the members perceive a divide in the team based on race.

These same aspects of perception may also apply to the effects of team conflicts. Research on team conflict has often assumed that all members in the team find the conflict to be equally salient and overlooked the fact that different members in the team may perceive the conflict differently (c.f. Jehn & Chatman, 2000; Jehn, Rupert, & Nauta, 2006). This is in spite of the fact that the classic study by Murnighan and Conlon (1991) noted that the more dysfunctional string quartets in their sample had divergent views about the nature of the conflict in their groups. New research on the idea of asymmetric conflict perceptions is indeed showing that understanding individual differences in perception (and associated feelings and behaviors) regarding conflict situations may shed more light on the effects of intragroup conflict on team outcomes (Jehn & Chatman, 2000; Jehn & Rispens, 2007). Therefore, better understanding how individuals in a team view the composition of the team and team conflicts may offer much insight into the effects of team composition, conflict, and performance.

Towards a New Framework for Understanding Team Composition and Conflict

In this dissertation, I propose that one of the primary reasons for past contradictory findings in the fields of team composition and conflict is that it has been too often assumed that members within the same team will have similar cognitions, experiences, and behaviors relating to team composition and conflict. For example, in research on team composition, most research has focused on objective measures of diversity – such as the proportion of females in the team – and looked at the effect of this on team outcomes, without questioning whether or not all members of the team perceive the team to be diverse on that characteristic or not (for notable exceptions, see Harrison, Price, & Bell, 1998; Hobman, Bordia, & Gallois, 2003, 2004; Randel, 2002;
Rink & Ellemers, 2007; Van der Vegt & Van de Vliert, 2005). Relatedly, research on intragroup conflict has also often ignored the possibility that not all members in the team may perceive or engage in the conflict equally. This has occurred in spite of the fact that research has shown individuals even in the same team may have very different perceptions and behaviors (e.g., Chatman & O’Reilly, 2004; Jehn & Chatman, 2000; Jehn, Rupert, & Nauta, 2006; Klein & House, 1995). Imagine, for example, a team composed of two female engineers and two male consultants. The team members are experiencing a conflict over their project; they are having trouble agreeing on which member should be responsible for which task. Past research on diversity (heterogeneity), faultlines, and conflict would view this team as being a moderately diverse team with a strong demographic faultline and high level of process conflict. However, what if all the team members are Chinese and working on a project in the United States? In such a situation, their national identity (and thus similarity) may be more salient than their functional differences, implying that their functional differences may not be affecting team functioning. Furthermore, in terms of the conflict, perhaps only a few of the members perceive their assignments as unfair or inappropriate. If only two of the members perceive a conflict, would this be a different dynamic than a team where all four members were equally embroiled in the conflict? In this dissertation, I propose that the answer to this question is, “Yes”. Differences in individual perceptions and behaviors may dramatically alter the relationships between team composition, conflict, and team outcomes.

While past research suggests that members within the same team or organization may have different perceptions of group composition (e.g., Chatman & O’Reilly, 2004; Ely, 1995; Harrison, Price, & Bell, 1998), still little research has been done to investigate the impact of these potentially divergent perceptions on team processes and performance. This is surprising, as research has shown perceived differences to have a larger effect on dyadic outcomes than actual differences (Orpen, 1984; Strauss, Barrick, & Connerley, 2001; Turban & Jones, 1988). Lawrence (1997) was one of the first in the organizational literature to suggest that the effects of objective demographic characteristics may be contingent on the perception of these differences as making a difference, but still scant attention has been paid to the idea that differences may only make a difference when they are perceived. Therefore,
one of the primary aims of this dissertation is to identify how individuals perceive team composition and conflict, how these perceptions and related behaviors may vary within the same team, and what this means for team and individual outcomes.

A second focus of this dissertation, in addition to the focus on individual differences in perceptions and behaviors, is in incorporating understudied but theoretically relevant factors affecting team composition in developing theory to explain the effects of team composition on conflict and team outcomes. I specifically focus on power structures as being important factors shaping team composition. Power in the team setting – social power – is defined as the ability to influence others through the allocation of resources and punishments (French & Raven, 1959; Keltner, Gruenfeld, & Anderson, 2003; Keltner, Van Kleef, Chen & Kraus, 2008; Lewin, 1951). A closely related construct is status, or the social value of a person or group (Boldry & Gaertner, 2006). Status is determined by the evaluation of attributes which produce differences in respect, prominence, and influence (Keltner et al., 2003; Anderson et al., 2006). Status is often a primary determinant of resource allocations in groups, and therefore power in groups (French & Raven, 1959). Indeed, past research has shown that power and status are often closely intertwined, such that those high in status are also high in power (e.g., Anderson & Berdahl, 2002; Guinote, Judd, & Brauer, 2002; Hewstone, Rubin, & Willis, 2002; Ridgeway, 1991, 1997; Sidanius & Pratto, 1999). Another closely related concept, and potential antecedent of power, is relative group size (Ebenbach & Keltner, 1998; Guinote, 2004; Ng, 1982). Groups that have numerically more members - i.e. majority groups - tend to have more power (Guinote et al., 2002). For example, in a team with five engineers and one accountant, the engineers would likely have more power within the team than the accountant because of their advantage in having more members similar to themselves. At a societal level, certain demographic characteristics are said to be associated with higher levels of power in society because there are more members with that demographic characteristic - i.e. their group is the majority group. Wolf and Latane (1985) propose that social power, status, and relative group size are closely interrelated and likely to have equivalent effects. While exceptions can be noted (i.e. an illegitimate leader who has power, but low status), in general, power, status, and group size tend to be highly correlated.
As a result, many scholars often use these concepts, especially the concepts of power and status interchangeably, as both concepts result in influence (Anderson & Spataro, 2005), especially in existing groups and hierarchies (Boldry & Gaertner, 2006) such as those examined in this dissertation. Therefore, in this dissertation, to avoid using multiple terms for the same phenomenon, I will only use the term ‘power’ to refer to the ability to influence others. In my dissertation, I will examine power as stemming from each of these potential antecedents - social power, status, and group size - and in the general discussion of this dissertation, I will discuss the implications of my findings for future research on power. A last, related concept to this discussion is influence. The ways in which those with power influence others has been investigated in the literature on influence tactics (e.g., Kipnis, Schmidt, & Wilkinson, 1980; Yukl & Falbe, 1990; Yukl & Tracey, 1992). This literature has looked at the different tactics that individuals may take when influencing others, such as tactics which rely on coercion or tactics which rely on ingratiation. In my dissertation, I will look not only at the effects of power, but at the effects of the exertion of power - i.e. the use of influence - on team composition, conflict, and team performance.

As a recent review of the team composition literature points out, the role of power differences in affecting team composition has been dramatically understudied, especially compared to the vast amount of attention which has been given to other differences in team composition such as gender or race (cf. Mannix & Neale, 2005). While Ely (1995) found that the balance of power was critical in understanding the effects of team gender composition, scant other research has incorporated power in theories of team composition and conflict. This in spite of the fact that evidence suggests that power hierarchies are inevitable – no society, organization, or team can exist over time without one (Sidanius, 1993). Indeed, classic work in social psychology suggests that power is an element of virtually all social interactions (Fiske, 1993). Therefore, understanding how power differences shape team composition and conflicts may help resolve past contradictory findings in these fields. This is line with a recent call to arms by Mannix and Sauer (2006) who propose that an understanding of power and hierarchy is critical in understanding team dynamics and performance. Therefore, when probing individual differences in perceptions and behaviors relating to team composition and conflict,
understanding the effects of power dynamics in the team is critical.

The central goal of this dissertation is thus to tie together these two key themes – the role of differences in individual perceptions and behaviors and the role of power differences in teams – to create a framework which will allow for a better understanding of the relationships between team composition, conflict, and team outcomes. I will explore these relationships using multiple methods, including field (survey, quasi-experiment, interviews, and observation), laboratory, and archival methods of research. In the following chapter, I will outline the different studies of this dissertation which each advance new theories and frameworks to incorporate the role of individual differences and the role of power in understanding team composition and conflict.