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## A Faultine-Based Model of Team Leadership

#### Abstract

Modern work teams operate in environments where increasingly salient member differences lead to the emergence of subgroups. Building on findings from the faultline literature, we propose that team members typically organize into three types of subgroups—*cliques, coalitions,* and *cohorts,* and that different leader orientations are mandated by each subgroup type.

#### Keywords

leadership, teams in the workplace, work environment, individual differences, management science, organizational structure

#### Disciplines

Business Administration, Management, and Operations | Business Intelligence | Human Resources Management | Labor Relations | Management Sciences and Quantitative Methods | Organizational Behavior and Theory

#### A FAULTLINE-BASED MODEL OF TEAM LEADERSHIP

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#### ABSTRACT

Modern work teams operate in environments where increasingly salient member differences lead to the emergence subgroups. Building on findings from the faultline literature, we propose that team members typically organize into three types of subgroups—*cliques*, *coalitions*, and *cohorts*, and that different leader orientations are mandated by each subgroup type.

#### **INTRODUCTION**

While roughly four decades of accumulated research led to uncertainty regarding the impact of diversity on work teams (Williams & O'Reilly, 1998; Mannix & Neale, 2005), the past decade has seen an enthusiastic resurgence in the study of diversity, largely as a result of the advent and widespread testing of a novel conceptualization: *faultlines*. Lau and Murnighan (1998) introduced the notion of faultlines as an alternative conceptualization of diversity by suggesting that teams with a *moderate* level of diversity, as opposed to complete homogeneity or complete heterogeneity, have the strongest effect on teams because they are most likely to foster the creation of subgroups. A burgeoning genre of empirical literature has now provided increasing support for the construct of faultlines in a variety of contexts (e.g., Bezrukova, Jehn, Zanutto, & Thatcher, 2008; Gibson & Vermeulen, 2003; Lau & Murnighan, 2005; Li & Hambrick, 2005; Molleman, 2005; Thatcher, Jehn, & Zanutto, 2003).

Despite the collective embrace of the faultline model by diversity scholars, research on faultlines has suffered from a limitation which has prohibited the emergence of precise theory on how faultlines can be managed: the under-specification of *subgroups*, the factors that mediate faultlines and outcomes (Lau & Murnighan, 2005). In their seminal work, Lau and Murnighan (1998) frequently reinforced the notion that subgroups mediate the relationship between faultlines and team outcomes—an assertion that has been unequivocally embraced in all subsequent theoretical and empirical instantiations of the model. Despite the purported criticality of subgroups, all research on faultlines has studied the phenomenon strictly at the *team* level. While team level measures are critical for understanding the role of faultlines, the exclusive focus on this level of analysis has impeded the systematic development of theory regarding how faultlines if they are unaware of the nature of the subgroups that faultlines create as well as the ways that subgroups influence team outcomes.

In order to redeem this limitation in a fashion that adds value to literature on both faultlines team leadership, we engage in a two-stage analysis. First, we merge the supposition that diversity is three things instead of one (Harrison & Klein, 2007) with research on the predominant informal groups in organizations (Tichy, Tushman, & Fombrun, 1979) to suggest that there are three fundamental types of subgroups caused by faultlines: cliques, coalitions, and

cohorts. We argue that a different type of intergroup behavior characterizes each type of subgroup—cliques are formed by processes related to identity, coalitions by resources, and cohorts by information processing. In the second stage of our analysis, we use the insights gained from the first stage of our analysis to argue that the three types of inter-subgroup behavior mandate three markedly different leader orientations in order to promote team effectiveness: identity-based leadership, resource-based leadership, and information-based leadership.

#### THE PREVALENCE AND IMPORTANCE OF SUBGROUPS

Evidence suggests that individuals prefer smaller group sizes (Levine & Moreland, 1998). Smaller groups offer more tractable dynamics (James, 1951), have strong, evolutionbased advantages related to cooperation (Van Vugt, Hogan, & Kaiser, 2008), and promote better communication (Bray, Kerr, & Atkin, 1978). Despite this overriding preference for small groups, recent research suggests that large teams, frequently ranging from 7 to 15 members, are alive and well (e.g. Cady & Valentine, 1999; Cummings, 2004; De Dreu, 2007; Farrell, Schmitt, & Heinemann, 2001; Politis, 2003; Rentsch & Klimoski, 2001; Stewart & Barrick, 2000). This suggests that there is an incentive for members to align into subgroups.

Among extant research, the *faultline* model is the most relevant, well-investigated, and well-supported construct related to work team subgroups (Homan, van Knippenberg, Van Kleef, & De Dreu, 2007; Lau & Murnighan, 2005; Li & Hambrick, 2005). Faultlines exist when there is alignment of some members (and not others) on any number of any member traits. Researchers have studied faultlines that were formed from many combinations of factors, such as surfacelevel demographic traits, functions, and personality characteristics (e.g., for a comparison, see Bezrukova et al., 2008; Gibson & Vermeulen, 2003; Lau & Murnighan, 2005; Molleman, 2005; Polzer et al., 2006; Thatcher et al., 2003). Therefore, any combination of any traits can lead to a hypothetical subgroup. Largely due to the lack of guidance for filtering the limitless number of possible faultlines, the nature of the subgroups that mediate the relationship between faultlines and outcomes has remained largely unknown. While we believe that it is worthwhile for faultline researchers to continue to explore various types of faultlines, the lack of systematic theoretical guidance regarding which faultlines are most consequential poses a problem for models of team leadership because leaders have neither the time nor the cognitive resources to attend to every possible type of subgroup. Thus, a model that delineates which faultlines (and, in turn, which subgroups) are most relevant for team effectiveness would be highly desirable.

#### A Taxonomy of Subgroups

As noted, a central argument of the faultline model is that faultlines yield subgroups, and it is these subgroups that directly impact team outcomes (Lau & Murnighan, 1998). In order to develop a taxonomy of subgroups (that matter for team functioning), we sought to identify which traits most readily align to yield *small* and *informal* groups in any organizational context. We are interested in informal groups because the faultline model relates to when members *voluntarily* break into subgroups. In order to maintain sufficient theoretical grounds for identifying these groups, we use two complementary approaches in our analysis—one based on a review of literature on small groups and another based on a consideration of the underpinnings of diversity.

*Evidence for subgroups from research on small groups.* We reviewed literature relevant to small, informal groups in organizations in order to identify which subgroups are likely to take

precedence over others. Based on a definition of groups that involves interdependence and mutual influence (e.g. Katzenbach & Smith, 1993; Levi, 2001; McGrath, 1984; Thibaut & Kelley, 1959), we reviewed several key organizational literatures that have groups as a central concept. These literatures included social cognition, social networks, diversity, negotiations, group decision making, innovation, knowledge sharing, virtual teams, and mergers and acquisitions. Our review led us to conclude the dominance of three types of small, informal groups: cliques, coalitions, and cohorts. *Cliques* involve "permanent informal associations" that "exist for a broader range of purposes" than other groups (Tichy, 1979: 507), *coalitions* involve a "temporary alliance of actors who come together for a limited purpose," (Tichy et al., 1979: 507), and *cohorts* are groups in which members "share a similar background and perspective on things" (Gibson & Vermuelen, 2003: 203).

*Evidence for subgroups from research on diversity*. Our second approach was to examine how the three types of diversity—separation, disparity, and variety (Harrison & Klein, 2007)— might influence the formation of faultlines differentially. Harrison and Klein (2007) argued that the traditional assumption that diversity is only one construct is inaccurate. Instead, members can be diverse on "horizontal" traits related to identity (labeled *separation*), "vertical" traits related to resources (labeled *disparity*), or categorically unique traits related to distinct informational inputs (labeled *variety*). Unlike Lau and Murnighan and subsequent researchers of faultlines, we do not argue that moderately diverse teams always lead to the greatest likelihood of subgroup formation. Instead, we argue that faultlines become increasingly likely to break a team into homogenous subgroups at very different points along each of the three continua of diversity. Most notably, the three types of diversity correspond neatly to cliques, coalitions, and cohorts.

First, as *separation* increases, a team is more likely to split up into balanced identitybased subgroups (similar to cliques). This is a linear function—increasing separation signifies the increasing alignment of traits related to social categorization, such as age. Second, as *disparity* increases, a team is continually more likely to split up into uneven subgroups based on the unequal concentration of resources (similar to coalitions) until disparity reaches its absolute maximum—at which point disparity is actually less likely to split a team into subgroups because one person (which is not a subgroup) has a hold on all of the resources. This is both a linear and a curvilinear function. As *variety* increases, a team is more likely to split up into multiple information-based subgroups (similar to cohorts) until the team is moderately diverse, after which point the team becomes less likely to break into multiple cohorts. This is strictly an inverse-U shaped curvilinear function, with no linear function. Thus, moderate amounts of diversity lead to the greatest likelihood of categorical alignment on traits such as functional area.

Proposition Ia: There is a positive linear relationship between separation and subgroup formation. The formation of cliques is most likely to occur when separation is maximal. Proposition 1b: There is both a positive linear and negative curvilinear relationship between disparity and subgroup formation. The formation of coalitions is most likely to occur when disparity is near maximum.

Proposition 1c: There is a negative curvilinear relationship between variety and subgroup formation. The formation of cohorts is most likely to occur when variety is moderate.

In short, the findings from our literature review on informal small groups dovetail with Harrison's and Klein's tripartite framework, indicating strong support for our tripartite model of subgroups.

#### **INTER-SUBGROUP BEHAVIOR AND SUBGROUP STRENGTH**

Our distinction between cliques, coalitions, and cohorts is further reinforced as we consider (1) the highly distinct types of inter-subgroup behavior that drive the emergence of each type of subgroup, and (2) the conditions that represent maximal subgroup strength for each subgroup type. Regarding the issue of subgroup strength, while Lau and Murnighan (1998) and subsequent faultline researchers have suggested that a *moderate* level of diversity creates the ripest conditions for the strongest subgroups, a deeper examination of the assumptions of the faultline model's conceptualization of diversity suggests that this is assumption is false. In line with our earlier analysis regarding the relationship between diversity and the likelihood of subgroup formation (linear, curvilinear, or both), we argue that the distribution of member traits that will lead to maximal subgroup strength may be due to moderate diversity (as in the case of variety), moderately strong diversity (as in the case of disparity), or maximal diversity (as in the case of separation). We now consider inter-subgroup behavior as well as subgroup strength.

*Cliques and social identity.* Relations between cliques are driven by social identity, a theory of intergroup relations commonly invoked by faultline scholars (Tajfel & Turner, 1986). For teams divided by social identity into cliques, in which conflict is "horizontal" in nature, maximal subgroup strength involves two groups aligned on traits that occupy the furthest ends of lateral continua—a bimodal distribution.

*Proposition 2a: Teams with cliques will be characterized by intergroup behavior related to social identity.* 

*Proposition 2b: Maximal clique strength is characterized by a* bimodal *distribution of traits.* 

*Coalitions and social dominance.* Coalitions are divided over desired outcomes that are finite in number, as opposed to cliques that are divided over issues of personhood and belief systems. In this way, the dynamic of a team with coalitions involves the subjugation of one subgroup by another—a pattern indicative of social dominance (Pratto, Sidanius, Stallworth, & Malle, 1994). For teams divided by social dominance into coalitions, in which conflict is "vertical" in nature, maximal subgroup strength is defined by one small group with a concentration of resources and one large group with few resources. Maximal subgroup distance is therefore a function of a skewed distribution.

*Proposition 3a: Teams with coalitions will be characterized by intergroup behavior related to social dominance.* 

*Proposition 3b: Maximal coalition strength is characterized by a* skewed *distribution of traits.* 

Cohorts and information processing. Drawing from evolutionary, ecological, and cognitive resource perspectives, the behavior between cohort boundaries is best defined by a third theory of intergroup relations, information processing, which concerns schisms that are formed when different group members simply think in different ways (Dougherty, 1992). For teams of size *n* divided by information processing into cohorts— in which intergroup behavior is characterized by incompatible cognitive resources—maximal subgroup strength is defined by members being evenly distributed into the largest number of possible subgroups, or n/2 subgroups. Maximal cohort strength is thus a function of a multimodal distribution of n/2 modes. For example, a six member team would characterized by maximal cohort strength if it is divided into three two-person cohorts based on functional expertise.

Proposition 4a: Teams with cohorts will be characterized by intergroup behavior related to information processing. Proposition 4b: Maximal cohort strength is characterized by a multimodal distribution of traits, with n/2 modes.

#### CONNECTING THE SUBGROUP TAXONOMY TO TEAM LEADERSHIP

As the world of work has increasingly turned to work teams to accomplish organizational objectives, team leadership has attracted widespread attention from organizational scholars (Kozlowski, Gully, Salas, & Cannon-Bowers, 1996; Zaccaro, Rittman, & Marks, 2001). Arguably the most influential perspective on team leadership in the past two decades has been Hackman's (1987; 2002) normative model of team design and management. Many of its initial tenets have implicitly and explicitly driven other predominant treatments of team leadership and effectiveness (e.g., Carson, Tesluk, & Marrone, 2007; Cohen & Bailey, 1997; Day, Gronn, & Salas, 2004; Hoegl & Gemuenden, 2001). Although Hackman's model was conceived only slightly over twenty years ago, the nature of diversity in work teams has morphed considerably since then. We argue that revisiting his normative framework with a "faultline lens" would be fruitful. Hackman's model broke team management into four stages: pre-work, creating performance conditions, formation, and maintenance. We focus on the last three stages, as they are especially relevant for the formation of subgroups. We suggest that effective team leaders adopt different orientations depending upon whether cliques, coalitions, or cohorts are predominant.

#### Leadership in Teams with Cliques: An Identity-based Leader Orientation

Team leaders who effectively manage cliques assume an *identity-based leader orientation*.

*Creating performance conditions.* Leaders can inhibit the formation of malignant subgroups very early-on. Marcus-Newhall, Miller, Holtz, and Brewer (1993) endorsed the *cross-cutting* of identities so that social membership is independent from team role responsibilities. That is, knowing one's social membership does not indicate the role that he or she plays on the team.

*Formation*. As Hogg and Terry (2001) argue, clique-like subgroups are unlikely to relinquish their distinct identities, even if they are encouraged to identify with the team. Thus, they suggest that a norm of *multi-group identification* be established. This can work effectively in organizations because team members can maintain optimal distinctiveness (Brewer, 1991) by feeling a sense of belonging to both the team and their respective cliques.

*Maintenance*. Team research suggests that groups are more innovative, better aligned with the external environment, and less self-protective when they are not insulated (Kane, Argote, & Levine, 2005; Katz, 1982). Given that insulation is likely to occur with close-knit cliques, effective team leaders actively encourage members of different cliques to interact.

Proposition 5: In the context of teams with cliques, team leaders who exhibit an identitybased orientation yield more effective teams by assigning task responsibilities that do not clearly diagnose member identities, establishing norms that balance clique and team identification, and maintaining interaction across clique boundaries.

#### Leadership in Teams with Coalitions: A Resource-based Leader Orientation

Team leaders who effectively manage coalitions assume a *resource-based leader orientation*.

*Creating performance conditions.* As one of the key antecedents to effort and appropriately applied knowledge and skills, Hackman (1987) argued extensively for a supportive organizational context. In particular, the procurement of resources for each coalition is critical.

*Formation*. In situations with disparate outcomes between coalitions, coalitions are more likely to accept an unfavorable distribution of resources if they believe that the process through which those outcomes were attained was fair (Lind & Tyler, 1988).

*Maintenance*. Team leaders must act to preserve team synergy by intervening in an ongoing basis to mediate conflict over resources. One way to do this is by negotiating integratively between coalitions (de Dreu, Koole, & Steinel, 2000).

Proposition 6: In the context of teams with coalitions, team leaders who exhibit a resource-based orientation will yield more effective teams by attuning to differences in resource needs, allocating resources fairly when forming the team, and providing opportunities for coalitions to renegotiate their existing resource allocations.

#### Leadership in Teams with Cohorts: An Information-based Leader Orientation

Team leaders who effectively manage cohorts assume an *information-based leader orientation*.

*Creating performance conditions.* Different cohorts have inherently divergent backgrounds, perspectives, and approaches to solving problems (Bunderson & Sutcliffe, 2002; Dougherty, 1992). Common training can be used to establish modes of interaction, establish transactive memory between subgroups, develop consensus on a problem space, and build a common technical language.

*Formation*. Hackman (1987) suggested that the task assignment and redefinition process remains a crucial driver of team motivation and coordination. Team level project coordination is enhanced when subgroup members are aware that task subcomponents have been assigned along subgroup boundaries because it clearly signals the distinct domains of expertise that reside within the work team—a form of subgroup-demarcated transactive memory (Austin, 2003).

*Maintenance*. Given that modern teams are often diverse with respect to knowledge, some degree of boundary spanning is necessary. Given that boundary spanners must be able to competently communicate with actors on either side of a boundary (Tushman & Scanlan, 1981), leaders are likely to be well-equipped to fulfill this role in the team context (Edmondson, 2003).

Proposition 7: In the context of teams with cohorts, team leaders who exhibit an information-based orientation will yield more effective teams by creating a common ground for defining and approaching a problem space, optimally matching the team's task to the skills and strengths of its cohorts, and spanning informational boundaries.

#### **REFERENCES AVAILABLE FROM THE AUTHORS**

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