CHAPTER 5

GENERAL DISCUSSION
Organizations need to manage the challenges that dynamic business contexts impose on organizational career development, diversity management, and organizational change in order to ensure sustainable organizational success (Cascio, 2003). This dissertation explores how supervisors can contribute to these important processes. In this regard, I focus on supervisor behaviors, characteristics and the interplay of both, and address the implications of the alignment between these attributes and the organizational requirements. On the basis of this reasoning, I consider how supervisor behaviors operate at different levels in teams and explore boundary conditions that enhance or limit supervisors' effectiveness. Thereby, I contribute to a more detailed understanding of how supervisors connect employees to the organization.

Moreover, a guiding principle throughout my research is that organizational perceptions can operate at different levels within teams. In this regard, I will also elaborate on this additional, underlying theme of my dissertation and address the implications of emergent group-level climates for the management of modern business challenges.

In this chapter, I will summarize the main findings of the empirical studies and discuss the theoretical and practical implications. I will also consider the strengths, limitations and further research questions, which can be addressed in future research.

**Overview of the Main Findings**

Chapter 2 explored supervisors' mentoring behaviors as a tool in organizational career development. The study showed that supervisors' career and psycho-social mentoring in groups operate via different paths at different levels in teams. I distinguished differential mentoring, that is, an employees' individual mentoring experience as compared to other team members, and group-level mentoring, that is, the shared perceptions of supervisors' mentoring behaviors. At the individual level, only differentiated psycho-social mentoring was positively associated with employees' promotability via its positive influence on career
motivation. Moreover, both differentiated mentoring functions had favorable effects on employees' intentions to stay, which were mediated by job satisfaction. Furthermore, only career, but not psycho-social mentoring, had an additional group-level effect on promotability and intentions to stay beyond the individual-level mentoring perceptions. In sum, the study demonstrates that supervisor can play a crucial role in providing organizational career development support through mentoring.

Chapter 3 addresses how supervisors' cultural intelligence contributes to nationality diversity management. The results show that nationality diversity in interdependent teams is only associated with favorable diversity climate and team performance when supervisors' cultural intelligence is high. This result pattern was specific for nationality diversity and did not occur for other diversity types (e.g., gender, age). Diversity climate did not mediate the interactive effect of nationality diversity, task interdependence and supervisors' cultural intelligence. However, the lack of mediation may be due to the specific diversity climate measure used in the study, which focused primarily on the absence of discrimination rather than on potential benefits of diversity.

Finally, Chapter 4 shows that supervisors can facilitate the implementation of change through adequate leadership behavior. Supervisors who displayed contingent reward leadership attenuated employees' cynicism about organizational change and ensured employees' performance. However, this effect was neutralized when supervisors themselves were cynical about organizational change. Moreover, the interactive effect of supervisors' contingent reward leadership and cynicism about organizational change on employees' performance was mediated by employees' group-level cynicism about change while controlling for employees' individual-level cynicism about change.
Theoretical Implications and Contributions

The Role of Supervisors in Light of Modern Business Challenges

The business world of the 21st century has set the stage for many new opportunities and challenges, which arise from rapid technological progress and increasing globalization (Cascio, 2003). In order to survive in this dynamic environment, organizations strive for flexibility (Voelpel et al., 2004), which comes at the prize that employees become uncertain about what exactly the organization stands for.

This uncertainty is evident across a wide range of domains and is an overarching theme in the empirical chapters presented in this dissertation. Whereas career development used to be quite predictable in terms of vertical promotions, contemporary careers take more flexible forms including lateral and hybrid careers within and across organizations (Chudzikowski, 2012; Sullivan & Baruch, 2009). Thus, employees need to assess their career prospect regularly and stay prepared to seize unanticipated career opportunities, which may arise (Eby et al., 2003). Moreover, employees often feel insecure about the implications of increasing nationality diversity of the workforce. Minorities may doubt whether organizational attempts to manage diversity are mere lip services (Purdie-Vaughns et al., 2008) and whether the organization really strives for integration (Ely & Thomas, 2001). Moreover, majority members may suspect that increasing diversity will put them at a disadvantage because diversity management favors only minorities (Ely & Thomas, 2001; Plaut et al., 2011). Finally, change projects induce uncertainty about the new strategic goals, their implications for cooperation within the organization, and for employees' immediate job responsibility (Balogun & Johnson, 2004; Bordia et al., 2004). As such, organizational change projects oftentimes go hand in hand with resistance and negative affective responses (McKinsey & Company, 2006; Morgan & Zeffane, 2003).
These uncertainties associated with modern work settings require more than ever that supervisors facilitate sense-making and ensure that organizational objectives are realized (Balogun, 2003; Morgeson et al., 2010; Smircich & Morgan, 1982). As a main contribution, this research provides a structured approach to gain a better understanding how and/or when supervisors can constitute a link between the employee and the organization. Inspired by contingency theories of leadership (Fiedler, 1967), I propose that supervisor attributes need to be interpreted in light of the context, in which they are placed. For this purpose, I consider how supervisor behaviors, characteristics and the interplay of both can be construed in terms of alignment between these attributes and the organizational requirements.

In this regard, Chapter 2 deals with differences in supervisor behaviors, which can either be focused on the dyadic supervisor-employee relationship or be aligned with more general aspects of the organization, beyond the dyadic relationship. Psycho-social mentoring primarily focuses on the interpersonal bond between the supervisor and an employee (Allen et al., 2004; Noe, 1988) and is thus likely to represent a unique, idiosyncratic relationship between the leader and the subordinate. In contrast, career mentoring facilitates challenging developmental opportunities and assists the development of a strong organizational network (Ragins & McFarlin, 1990), such that this type of mentoring behavior directs employees' attention towards the organization and goes beyond the interpersonal relationship with the direct supervisor. As expected, I showed that psycho-social mentoring primarily operated at the individual level but did not explain additional variance in the outcomes when examined at the group level (i.e., as shared psycho-social mentoring). In contrast, career mentoring operated primarily as climate at the group-level. This finding corroborates my proposition that behaviors, which are more aligned with broader aspects of the organization, are likely to have contextual effects beyond the individual-level perception, as they bear the potential to characterize the organizational environment beyond the person of the supervisor.
Chapter 3 demonstrates that supervisors are effective when their personal characteristics are aligned with the work group's needs. Functional approaches to leadership posit that effective supervisors identify which team needs are instrumental for work group effectiveness and create an environment that meets these requirements (McGrath, 1962; Morgeson et al., 2010). In this vein, supervisors need to facilitate adequate team processes, which can determine whether nationality diversity leads to favorable or unfavorable consequences in interdependent teams (Van Knippenberg et al., 2004; Zaccaro et al., 2001). Cultural intelligence equips supervisors with the necessary skills for this task, as indicated by the positive effect of nationality diversity on diversity climate and team performance in interdependent teams. Thus, cultural intelligent supervisors succeed in preventing unfavorable team processes and in establishing positive team processes, which are necessary to foster performance (Van Knippenberg et al., 2013). In contrast, cultural intelligence can be misaligned with team needs. In this regard, team performance seemed to be lowest when culturally intelligent supervisors work with nationally homogenous teams. Moreover, other types of diversity, such as age or gender diversity, do not benefit from supervisors' cultural intelligence. In sum, while teams benefit from an alignment of team needs and supervisor characteristics, misalignment restricts supervisors' effectiveness and may even be harmful for team effectiveness.

Whereas alignment was conceptualized with regard to the characteristics of the workgroup in Chapter 3, alignment can also be conceptualized with regard to the organization. To reflect this aspect, Chapter 4 explores supervisors' organizational cynicism about organizational change as an important characteristic, which signals supervisors' alignment (i.e., low cynicism) or misalignment (i.e., high cynicism) with the organization. When there is an alignment between the supervisor and organization, favorable leadership behaviors entail positive consequences for the organizations, as reflected by decreased
employees' organizational cynicism about change and increased performance. However, when there is a misalignment between supervisors and the organization (e.g., supervisors are cynical) employees are likely to perceive both as disconnected entities (Baran, Rhoades, & Miller, 2012; Rhoades & Eisenberger, 2002). Therefore, supervisor behaviors are not assumed to be characteristic for the organization in general and, as a consequence, have no influence on employees' organizational perceptions (Eisenberger et al., 2010; Koivisto et al., 2013). Moreover, employees may be primarily motivated to reciprocate favorable supervisor behaviors in a way that will be appreciated by the supervisor, which may not necessarily coincide with benefits for the organization. Corroborating this reasoning, contingent reward by cynical supervisors did not have a favorable effect on employees' cynicism about change or their performance.

While modern work settings require more and more that supervisors facilitate employees' sense-making and ensure that organizational goals are attained, these processes are complex and cannot be taken for granted. In my dissertation, I illustrate that considering the alignment between supervisor attributes and organizational requirements can be a worthwhile approach to gain a better understanding about these processes.

As another important contribution, my dissertation provides insights in the different implications of employees' organizational perceptions at the individual and at the group level. I will elaborate on these aspects next and give an outlook about how multilevel theory can advance the field of climate research.

**The Role of Organizational Climates**

Naumann and Bennett (2000, p. 883) have coined the notion that supervisors act as "climate engineers." My research findings provide ample support for this role, as supervisor attributes can shape meaningful, shared group-level perceptions with regard to organizational career development, diversity practices, and change (Chapter 2, 3, and 4). Experiences at
work are oftentimes equivocal, so that employees can interpret the same event quite differently (Rentsch, 1990). For instance, diversity practices can unsettle both minority and majority employees, who are concerned about the underlying intentions of these practices (Ely & Thomas, 2001; Plaut et al., 2011; Purdie-Vaughns et al., 2008). Supervisors can clarify ambiguities and actively influence employees work realities. With reference to the diversity example, supervisors can encourage an inclusive work environment, in which both minority and majority members are appreciated (Shore et al., 2010). Therefore, facilitating employees' sense-making is an integral part of the leadership role (Balogun, 2003; Morgeson et al., 2010; Smircich & Morgan, 1982).

Turning to the consequences of organizational climates, I proposed that organizational climates deserve particular attention because they can have independent effect on outcomes, which are relevant for organizations. This proposition was predominantly supported across different domains. For instance, career mentoring climate increased employees' promotability and intentions to stay (Chapter 2), and employees' group-level cynicism about change was negatively related to their performance (Chapter 4). However, diversity climate was not associated with team performance (Chapter 3). Yet, our operationalization of diversity climate focused on the fair treatment of employees regardless of their demographic characteristics. In this respect, Van Knippenberg, Homan, and Van Ginkel (2013) pointed out that this approach implicitly refers to the avoidance of negative diversity effects but does not address potential benefits of diversity. Thus, an alternative operationalization of diversity climate, for instance as multiculturalism or inclusion, may reveal a positive effect on team performance.

Taken together, these findings corroborate Schneider's (1975) idea that emergent climates can concern quite specific aspects of the work environment. Moreover, my research also covered different valences of climates. Climates with positive valence, such as diversity or career mentoring climate (Chapter 2 and 3), focus on favorable workplace experiences,
such that the presence of these climates may result in favorable consequences for the organization (e.g., increased promotability intentions to stay). The fact that recent reviews on climate research have exclusively discussed climates with positive valence (Kuenzi & Schminke, 2009; Schneider, Ehrhart, & Macey, 2013) reflects that they have received most of the attention. However, climates may also have a negative valence and trigger deviant behaviors. In this vein, group-level cynicism about change prompted performance deficits (Chapter 4). Thus, my research contributes to the understudied area of climates with negative valence (DeCelles et al., 2013; Mathieu & Kohler, 1990), which might be an important avenue for further research. For instance, it is possible that the absence of a climate with positive valence might have different implications than the presence of climate with negative valence. For instance, when safety climate is at a low level, employees may not pay special attention to safety precautions; however it is unlikely that they deliberately try to endanger themselves. In contrast, climates with negative valence directly lead to aversive consequence, for instance performance losses (Chapter 4). Thus, they may require even more management attention than climates with positive valence.

**Multilevel considerations in climate research.** My dissertation illustrates the variety of different research questions regarding group-level climates that can be inspired by multilevel theory. By their very nature, climates are multilevel constructs and the field has made considerable efforts to develop a common understanding of the climate concept. Per definition, climates need to be shared by employees. In fact, sharedness is the unique characteristic that distinguishes organizational climate from individual perceptions (L. A. James & James, 1989). Thus, demonstrating agreement is a necessary condition in climate research (Chan, 1998).

Moreover, multilevel scholars have encouraged researchers to consider the implications of different composition models and adapt the item wording accordingly (Chan,
1998; Kozlowski & Klein, 2000). Chan (1998) discussed different underlying models that are used to justify higher-level constructs. The most common composition models in climate research are the direct-consensus, which is based on the immediate respondent's perception (e.g., "The organization treats me fairly"), and the referent-shift approach, which focuses on a more general, abstract referent (e.g., "The organization treats employees fairly"). While there is a trend in climate research to prefer the referent-shift approach to measure organizational climates (Schneider et al., 2013), both composition models can have unique advantages and implications.

The direct-consensus approach is appropriate to measure theoretically derived, higher-order constructs and implies that individual respondents share a similar perception of this construct. Chan (1998) explicitly acknowledges that the direct consensus approach can be an adequate operationalization of organizational climate, given sufficient agreement among group members. In this case, climate "simply refers to the shared assignment of meanings among individuals within the organization" (Chan, 1998, p. 237).

It is important to note that a referent-shift approach is only mandatory, if a higher-order construct is conceptually different from its individual-level counterpart, as, for example, in the case of self-efficacy and work group efficacy (Chan, 1998; Van Mierlo, Vermunt, & Rutte, 2009). Thus, Chan's (1998) central message is that the research question of interest needs to inform the operationalization of climates as the collective individual perceptions (i.e., direct consensus) or with direct reference to the organization (i.e., referent-shift).

Subsequent research has further relativized whether a referent-shift approach is universally superior to a direct consensus approach. For instance, Klein, Conn, Smith, and Sorra (2001) explored the influence of item referent ("I" vs. "employees") on within-group agreement about the work environment but found that the item referent was less important
than item content (evaluative items resulted in higher consensus than descriptive items). In fact, item referent did not show a consistent effect on shared perceptions. Keeping in mind that sharedness is a defining attribute of climates, referent-shift operationalizations may not be required to capture the concept of climate. However, the authors note that this approach might bring some advantages because it sharpens between-group differences, so that it might be easier to detect relationship with other variables (Klein et al., 2001). Furthermore, Van Mierlo, Vermunt, and Rutte (2009) pointed out that the differences between direct consensus and referent-shift approaches may be practically irrelevant, as long as the within- and between-level constructs do not represent independent, conceptually distinct constructs (e.g., team efficacy vs. self-efficacy). In sum, multilevel scholars have recommended that theoretical reasoning should guide the operationalization of climates because different approaches may be appropriate to answer fundamentally different research questions (Chan, 1998; Klein & Kozlowski, 2000; Klein et al., 2001; Van Mierlo et al., 2009).

In my dissertation, the operationalization of group-level climates was thus based on theoretical considerations. In Chapter 3, I followed the popular referent-shift approach to measure diversity climate. This approach was appropriate because the research focus was on antecedents of diversity climate rather than the differential effect of organizational perceptions at different levels. Moreover, it is likely that differences in item referent may measure distinct theoretical concepts. Whereas an operationalization with the individual referent may represent perceived discrimination, a more abstract referent focuses respondents' attention to the general treatment of diverse employees within the organization. For instance, it is conceivable that a majority member may agree with the item "Managers treat me fairly regardless of my nationality" but disagree with the statement "Managers treat employees fairly regardless of their nationalities." Thus, a referent-shift measurement approach provided the best operationalization for my research hypothesis.
Chapter 2 and 4 emphasized the different mechanism of employees' perceptions at the individual and at the group level. Please note that the underlying composition model for this research question corresponds to the direct-consensus model, which defines climates in terms of shared, collective perceptions (Chan, 1998).

Chapter 4 highlighted that individual-level perceptions of employees' cynicism about change where unrelated to performance, whereas group-level perceptions were negatively related to performance. This a nice illustration of the intriguing feature of climates to exert independent effects beyond employees' individual perceptions and may help to explain why previous findings on the relationship between employees' cynicism about change and performance were inconsistent (e.g., Johnson & O'Leary-Kelly, 2003; T. Kim et al., 2009). For instance, Johnson and O'Leary-Kelly (2003) suggested that the behavioral consequences of cynicism may be too weak to lead to actual performance losses. However, when all team members are cynical, these negative behavioral tendencies may reinforce each other and lead to dysfunctional team norms (DeCelles et al., 2013), which ultimately impair employees' performance. Social psychology is full of examples that illustrate that employees use social cues to verify their own attitudes and assimilate their behaviors accordingly (Asch, 1951; Festinger, 1954). As a consequence, groups are known to display more extreme tendencies than individuals on their own (Moscovici & Zavalloni, 1969). Thus, investigating the influence of organizational perceptions at several levels simultaneously may be also helpful to reveal differential mechanism of other workplace variables at multiple levels. Especially when variables are assumed to have inconsistent effects at the individual level, they may have relevant implications when they emerge as shared climates at the group level.

Finally, Chapter 2 demonstrates that the content may determine whether supervisor behaviors operate as climates at the group-level. This research complements recent endeavors to provide a multilevel approach to leadership in several ways. As noted by Klein and
Kozlowski (2000) there is no definite rule to conceptualize leadership behaviors as an individual-level or group-level phenomenon. Instead, researchers need to provide a theoretical reasoning for their respective choice. The alignment principle may provide some guidance in this regard. When supervisor behaviors have a strong focus on the dyadic relationship quality with the supervisor, they may be less likely to operate at the group-level (e.g., psycho-social mentoring). On the other hand, leadership behaviors, which go beyond the unique employee-supervisor relationship, can have influential group-level properties when they strengthen the connection with other organizational entities (e.g., career mentoring).

In this respect, it is interesting to note that recent multilevel approaches in transformational leadership have distinguished different contents of behaviors, in particular individual-focused and group-focused components of transformational leadership (X. F. Wang & Howell, 2010; Wu, Tsui, & Kinicki, 2010). However, these approaches did not incorporate both components at the individual and the group level, but considered each level separately. Therefore, it is inconclusive whether these components operate at the individual level, the group level, or both. However, investigating each component at both levels simultaneously would be advised since employees display high agreement on both components (cf., Wu et al., 2010), and Wang and Howell (2010) reported significant relationships between aggregated individual-focused leadership and outcomes as part of their primarily analysis. Moreover, although Nielsen and Daniels (2012) did not distinguish group-focused and individual-focused components of transformational leadership, they found that transformational leadership operated at both the individual and the group level in predicting employees' perceptions of the work environment. I acknowledge that it would be in line with the reasoning presented here that group-focused leadership would primarily operate at the
group level, as it reinforces the connection between employees and the work group. However, a rigorous test of this hypothesis is still warranted.

**Practical Implications**

Modern business challenges constitute a dilemma for organizations. While they are striving for flexibility, the risk to alienate their workforce, on which they in turn depend to tackle the requirements of a dynamic and competitive work environment (Cascio, 2003). My dissertations illustrates that supervisors' can be a key element to resolve this puzzling situation for the benefit of the organization. Supervisors mentoring behaviors can be an important tool for modern organizational career management, which maintains employees' career potential in terms of promotability and strengthens employees' intention to stay with the organization (Chapter 1). Likewise, supervisors have the potential to increase team performance in interdependent, nationally diverse teams, provided that they are culturally intelligent (Chapter 2), and can act as important change agents through using contingent reward behaviors, provided that they are not cynical (Chapter 3).

In this regard, supervisors' influence on group-level climates is especially interesting, since climate can have independent effects beyond the individual employees' perceptions. Thus, when supervisors shape favorable climates, the organization can expect a positive effect for the entire workforce, which might not be limited to a few employees (Chapter 2). Moreover, since climates develop into a characteristic of the organization in general (L. A. James & James, 1989), they are likely to guide employees' decision independently of the supervisor. For instance, when employees develop a strong intra-organizational network as a result of favorable career mentoring climate, their intentions to stay may not only be based on their felt obligation toward their specific supervisor but also on the various links that have been established throughout the organization (Chapter 2).
Furthermore, supervisors can prevent that unfavorable climates emerge, which may have detrimental consequences for the organizational effectiveness. For instance, adequate leadership behaviors can potentially lower the level of employees' cynicism about change. Thus, supervisors can inhibit the emergence of harmful group-level cynicism (Chapter 3). As it seems like cynical climates, rather than individual cynicism about change, leads to performances losses, it is even more important that supervisors engage as climate engineers (Naumann & Bennett, 2000).

While these potential benefits are clearly appealing, they cannot be taken for granted. In order to unlock this potential, organizations need to make sure that their supervisors' competencies and attitudes are aligned with the organizational requirements. For instance, supervisors' cultural intelligence may only be effective in shaping organizational diversity climates and team performance, when the team is diverse in terms of nationalities, but not in terms of age or gender. Moreover, supervisors' effectiveness is contingent on the given task characteristics. In this regard, task interdependence was found to be a central boundary condition, which affects whether supervisors' cultural intelligence creates an added value in nationally diverse teams (Chapter 3). That is, when the supervisors' central contribution consists in shaping favorable team processes, their potential influence will be determined by the extent to which effective team processes are necessary for the team's goal attainment.

Furthermore, organizations should make sure that their supervisors are aligned with and endorse the organizational strategy and goals. While this notion sounds trivial at first glance, organizations should not be too sure that this is always the case (Coyle-Shapiro & Shore, 2007). After all, supervisors are not immune against the burdens of changing business realities, which may leave them puzzled as well (Balogun, 2003; Hill et al., 2012). It might be a fatal error to underestimate the consequence of an estrangement between the supervisor and the organization. As illustrated in Chapter 4, organizations do not benefit from supervisors'
leadership competencies when supervisors are cynical about organizational change. This neutralizing effect on leadership effectiveness was not only limited to outcomes that were directly connected to change but also affected employees' performance. Thus, misalignment between the organization and the supervisor can pose a serious threat to general organizational effectiveness.

A popular joke about human resource management states that half of the money spent on personnel development is wasted – unfortunately, we do not know which half it is. In the case of supervisor development, the principle of alignment may help to make personnel development more efficient. In particular, my dissertation illustrates that supervisor training and selection needs to be based on a thorough assessment of relevant organizational requirements. For instance, it has become a popular management fashion to use cultural intelligence as a criterion on personnel selection and training. This trend is based on the assumption that cultural intelligence represents a meta-competence, which will be helpful across a wide range of situations (e.g., Earley & Ang, 2003). While cultural intelligence may indeed create an added value in nationally diverse, interdependent teams, it is unnecessary or maybe even detrimental in other settings (Chapter 3). Moreover, supervisors' leadership trainings should go hand in hand with winning supervisors over to support the management's vision and plans. When supervisors have reservation against the organizational strategy, the mere training of leadership skills may not lead to the intended, favorable results for the organization (Chapter 4). In summary, my research highlights the complexity and necessity of systematic and goal-oriented human resource management and offers insightful practical recommendations and guidelines.

**Strengths, Limitations, and Future Research**

The goal of this dissertation is to explore supervisors' influence in a challenging, dynamic business environment. For this purpose, I addressed a wide scope of various
applications, ranging from career development, diversity management to organizational change. As outlined above, these timely topics are of theoretical as well as practical relevance. Next to making an independent contribution to each of these fields, all studies demonstrate the importance of alignment between the supervisor and the organizational requirements, which I consider in terms of supervisors' behaviors, characteristics and the interplay of both. In this sense, I revive the original idea of contingency theories to leadership and demonstrate the validity of this approach in modern business contexts.

Moreover, the cooperation with the partner company allowed collecting comprehensive sets of field data. In order to avoid data overlap between studies, separate survey were developed and conducted for each of the studies reported here. It is especially noteworthy that I was able to collect extensive data about real-life work teams, which are quite difficult to obtain in practice (Kozlowski & Klein, 2000). As my research was greatly inspired by multilevel theory, I applied advanced multilevel modeling techniques, which enabled me to accurately test my propositions. In this regard, it is important to note that in ordinary least squares regression, the choice of mediation analysis techniques is based on practical considerations. For instance, the traditional causal step-method (Baron & Kenny, 1986) is known to have less statistical power than other approaches but, essentially, the different techniques aim to describe the same intervening effect (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). In contrast, multilevel mediation tests conceptually different models, which cannot be accurately distinguished with a causal-step approach (Z. Zhang, Zyphur, & Preacher, 2009). A conceptual between-level variable (e.g., contingent reward leadership) can only explain differences between groups but is unable to account for within-group variance. Let us consider the hypothesis that employees' cynicism about change, a conceptual individual-level variable, mediates the effect of supervisors' contingent reward leadership on employees' performance. In contrast to the causal-step approach, multilevel
mediation techniques separate group-level and within-group variation in employees' cynicism (Preacher et al., 2010; Tofghi & Thoemmes, 2014; Z. Zhang et al., 2009), such that different scenarios are possible: First, contingent reward is related to employees' group-level cynicism, which in turn is related to the outcome. This scenario would support the mediation hypothesis. An alternative scenario would be that contingent reward is related to employees' group-level cynicism but only within-level cynicism is related to performance. This scenario would not support the mediation hypothesis. Thus, the match between theoretically developed hypotheses and the statistical procedures for testing them is a particular strength of the dissertation.

Furthermore, the rigorous study designs helped to minimize the limitations of cross-sectional research. For instance, the mere measurement of variables can induce systematic error, which can pose a serious problem for the unambiguous interpretation of results. Thus, researchers need to take precautions to make sure that the observed relationships are not only a spurious result of a common measurement method. I followed the recommendations by Podsakoff, MacKenzie, Lee, and Podsakoff (2003) to avoid this problem, known as common method bias. First, in order to guarantee participants' anonymity, I and a second researcher personally collected the data, informed participants about the elaborate coding system used to match data to the respective teams, and complied with strict data protection regulations. Second, for each study, supervisors as well as employees provided questionnaire data. Moreover, I was able to integrate data from company records for the studies presented in Chapter 3 and 4. Third, at least one of the outcome variables in each study was collected after a time lag of several months. Finally, two studies explored complex moderation hypotheses (Chapter 3 and 4), which cannot result from common method bias (Siemsen, Roth, & Oliveira, 2010). On the contrary, common method bias would make it even more difficult to detect interaction effects (Siemsen et al., 2010).
Next to these strengths, the limitations of the research need to be acknowledged as well. First, I collected data at one single partner company in the branch of facility management, which raise the question whether the results can be generalized to a broader population. Although blue collar workers and samples with rather simple occupations are common in team research (Balogun, 2003; Gonzalez & Denisi, 2009; Wanous et al., 2000), the work realities are clearly different from white collar settings. This might have different implications for each of the studies. With regard to career development, our sample is somewhat unique, as studies on workplace mentoring usually address participants with academic education (e.g., Noe, 1988; Ragins & McFarlin, 1990; Sosik & Godshalk, 2000). However, the results presented in Chapter 2 are consistent with findings of research in more educated samples (e.g., R. Day & Allen, 2004; Greenhaus et al., 1990; Sturges et al., 2005). Thus, the inclusion of a blue collar sample, which represent an understudied population in career research (Hennequin, 2007), may speak to the generalizability of mentoring effectiveness beyond highly educated samples. In a similar vein, the categorization-elaboration model suggests that team performance should benefit most from positive diversity effects when teams work on complex tasks (Van Knippenberg et al., 2004). Under this condition, the integration and elaboration of different perspectives can contribute to new, innovative solutions. Thus, our sample, which worked on rather simple tasks, might represent a conservative test, such that it is especially noteworthy that I even found positive effects of nationality diversity. Alternatively, high and low educated samples may differ in what they considered to be a simple task. For instance, a task, which appears to be easy for a highly educated sample, may be perceived as more demanding by a sample with rather low education. Finally, the significant effect of the organizational divisions indicates that unique aspects of the organization can have significant influence on the experience of change (Chapter 4). However, our supplementary analyses support the possibility that these
organization-specific aspects are compatible with our initial research questions, in that they absorb true target variance instead of nuisance. Moreover, I would like to point out that data collection within one single company may restrict the variance in change-related variables, as all study participants are exposed to the same change project. Therefore, while the personal experience with change may have varied across teams and divisions (Chapter 4; see also Herold et al., 2007), it is likely that the change project had some common elements, which were similar for all organizational members who participated in the survey. Thus, results could have been more pronounced in samples including multiple organizations and different change projects.

Second, vocational job starters who do an apprenticeship represent a rather unusual sample (Chapter 2 and 4), which I would like to described in more detail. The apprenticeship is a unique German vocational training system, which emphasizes on-the-job vocational training. Although the apprenticeship system includes complementary theoretical education at special vocational schools, the main focus is on the practical work at the company, which clearly distinguishes an apprenticeship from academic training. Thus, it is appropriate to use trainee samples to investigate research questions concerning workplace experiences. However, I acknowledge that trainees represent unique organizational members, who are new at the company and have little work experience. Although the results reported here seem to be aligned with previous research on more typical employee samples, replication by future research is needed to demonstrate that my findings can be generalized.

Third, my research is based on survey data. This choice is appropriate because it speaks to the high practical validity of the findings, which is especially important since I set out to explore supervisors' influence in modern business contexts. However, this approach is correlational in nature and therefore inapt to establish causality of the relationships. Thus, experimental work, which can overcome this limitation, may meaningfully complement my
research. I would like to note that it is tricky to manipulate a complex supervisors attributes, such as leadership, in experimental research (c.f., Jung & Avolio, 2000). However, there are some good practices, which can serve as an example. For instance, rather than using an abstract description of leadership styles, Van Vugt and colleagues (Van Vugt & De Cremer, 1999; Van Vugt, Jepson, Hart, & De Cremer, 2004) use social dilemmas to create a specific context. They expose participants to messages, ostensibly provided by a leader, which illustrate how the leader behaves in this specific situation. Moreover, video sequences, which display interactions between a leader and team members, can create a more vivid representation of the leader than written scenarios in vignette studies (Sauer, 2011; Van Kleef et al., 2009).

Finally, not all aspects of supervisors' contributions in modern business settings can be completely explored within the scope of a dissertation, such that I focused my analysis on the relevance of leader attributes in this regard. However, other aspects, such as work characteristics, can constitute important boundary conditions as well as. In this vein, Chapter 2 demonstrates the moderating role of task interdependence. Virtual cooperation may present another important mode of collaboration. Virtual teams are dispersed across different locations and need to rely on computer-mediated instead of face-to-face communication, which bears notable challenges. As the possibilities for direct interactions are heavily restricted, it is difficult for a single team supervisor to shape team processes and monitor performance (Bell & Kozlowski, 2002). Under this condition, it is beneficial to spread leadership functions across team members (Pearce, Yoo, & Alavi, 2004), such that supervisors should engage in delegative leadership styles, which empower the team (Hertel, Geister, & Konradt, 2005; Kirkman, Rosen, Tesluk, & Gibson, 2004). In other words, the role of the supervisor is to set the stage for the team to manage itself. At the same time, supervisors need to keep an overview of the team's specific needs and be ready to provide
adequate leadership intervention (e.g., task planning, clarifying of work roles, fostering team identification), if necessary (Bell & Kozlowski, 2002; Pearce et al., 2004).

In this regard, it would be interesting to explore how shared leadership, which is distributed among team members, and vertical leadership, provided by the supervisor, complement each other. For instance, if team members establish cooperative team norms, supervisors may create an added value for team performance by providing task-focused leadership such as initiating structure. However, when the team is effective in planning the work, supervisors may choose leadership styles that foster a common team identity and cooperation. These ideas reflect the alignment principle in that supervisors' contributions need to be aligned with the specific team needs at hand.

Moreover, my dissertation focused on supervisors' influence on favorable behaviors and attitudes towards the organization but did not address the influence of other organizational experiences. In this regard, it would be interesting to explore how the joint perceptions of supervisor and organizational practices or policies influence employees' attitudes and behaviors.

Bowen and Ostroff (2004) suggested that the most favorable employee' reactions result from an alignment between supervisor actions and organizational practices. For instance, when employees perceive both the supervisor and the organization as fair, they show the most favorable reactions towards change (Koivisto et al., 2013). However, an intriguing question is whether favorable perceptions about one source can compensate for unfavorable perceptions about the other source. First empirical findings show that supervisors can buffer negative employee reactions as a consequence of negative perceptions about the organization. In this vein, employees' negative perceptions about the organization have less detrimental effects on extra-role performance and attitudes towards change when supervisors are perceived as fair or supportive (Koivisto et al., 2013; Neves, 2012).
Conversely, can organizations compensate for failures committed by supervisors? The literature in this regard is sparse and inconsistent. On the one hand, A. Y. Zhang, Tsui, Song, Li, and Jia (2008) found that positive appraisals of the employee-organization relationship did not improve employees' trust in the organization when direct supervisors were unsupportive. On the other hand, Maertz, Griffeth, Campbell, and Allen (2007) reported that perceived organizational support buffered the unfavorable effect of low supervisor support on employees' turnover intentions. A possible explanation for these inconsistencies could be that supervisors can partly determine whether organizational initiatives are actually put into practice. For instance, supervisors' personal attitudes influence whether they implement organizational initiatives in a thorough or half-hearted manner (Herdman & McMillan-Capehart, 2010). Moreover, supervisors have a certain level of latitude to decide which initiatives they provide to their employees (Nishii & Wright, 2008). Thus, it would be worthwhile to explore how organizational practices need to be designed in order to compensate for poor supervisor-employee relationships. For instance, structured programs or organizational networks, which are less controlled by supervisors, may be able to shape organizational perceptions independently from the immediate supervisor (Liden et al., 2004). Thus, while this dissertation took a first step towards our understanding of the supervisors' role in connecting employees to the organization, future research is needed to address further, unanswered research questions in this regard.

Concluding Remarks

A popular quote, ascribed to Peter Drucker, states: "Only three things happen naturally in organizations: Friction, confusion, and underperformance. Everything else requires leadership." In modern business contexts, which are characterized by uncertainty, this statement may be more true than ever. Thus, it is a crucial leadership task to connect employees to the organization and its goals. My research indicates that supervisors can
indeed make important contributions in managing the contemporary business challenges. Importantly, however, my dissertation also demonstrates that the mechanisms, which enable supervisors to be successful sense-makers and climate engineers, are complex, as they evolve across different levels and are contingent on boundary conditions. The multilevel reasoning presented here may thus inspire future research on leadership, employees' individual-level and group-level perceptions, and challenging work settings. Moreover, practitioners can benefit from considering the implications of supervisors alignment with the organizational requirements, in order to unlock supervisors' potential to lead successfully through the challenges of a changing business world.