Research shows that middle managers can be of great importance to organizations, for example in formulating strategy and policy, enacting strategy (Balogun, 2003; Embertson, 2006; Huy, 2001), supporting change (Huy, 2002), and driving business performance (Mair, 2005). Nevertheless, theoretical and empirical knowledge on these managers’ role in organizations is still scarce. As noted in Chapter 1, a vast volume of leadership research aims to empirically examine and theoretically clarify the specific challenges for upper management or CEOs and frontline supervisors, while phenomena related to middle managers’ leadership remain under-addressed: “By far the least well empirically-understood aspect of organizational leadership happens in the middle place” (DeChurch, Hiller, Murase, Doty, & Salas, 2010, p. 1078).

The studies presented in this dissertation therefore examined this crucial group of leaders within organizations. These three empirical studies demonstrated that middle managers have a challenging role, typified by unique dependencies on different aspects of their work circumstances, including their superiors’ leadership, assigned goals, and tenure. First, middle managers lead others, but are also led. As such, their leadership behavior may depend upon the leadership style of their own superior (Caughron & Mumford, 2011; Kinicki et al., 2011; Parris et al., 2008; Yang et al., 2010). Second, middle managers are oftentimes responsible for executing a strategy and, thus, have little autonomy in setting direction themselves (Della Rocca, 1992; Rouleau & Balogun, 2011). In particular, being assigned difficult goals and translating these—via their own leadership behavior—into action is challenging. Third, middle managers’ roles are typified by dependency on both organizational human resource procedures and on external developments that can impact their career paths (Morison et al., 2006).

The main question in this dissertation, as examined in Chapters 2-4, was therefore: How do middle managers’ dependencies translate into their leadership behaviors and associated performance outcomes? In three empirical studies, this dissertation aspired to identify underlying mechanisms and boundary conditions of the challenges faced by middle managers, therewith furthering the organizational behavior and human resource management literature and contributing to the ability of organizations to effectively
leverage these managers’ contributions to organizational performance.

This conclusive chapter first reflects on these challenges for middle managers by summarizing the findings of Chapters 2, 3, and 4. These findings are based on empirical field research conducted in the years 2011, 2012, and 2013 in the same organization. Secondly, the chapter provides a theoretical synthesis of these findings and, in particular, of the overall dissertation. Thirdly, it describes possible avenues for future research based on the studies’ conclusions and limitations. Lastly, the general discussion considers key practical implications of this dissertation.

SUMMARY OF MAIN FINDINGS
Dependency on the Superior: The Dual Leadership Challenge

Chapter 2 examined middle managers’ dependency on their own superiors. In particular, it investigated whether higher-level superiors’ transformational leadership cascades or trickles down the hierarchy to middle managers, and whether it may thereby shape middle managers’ own transformational leadership behavior. Scarce empirical evidence suggests that such trickle-down mechanisms may exist (Bass et al., 1987; Waldman & Yammarino, 1999; Yang et al., 2010). For example, leaders’ behavior could cascade through role modeling or social learning mechanisms (Bandura, 1986). Yet, research examining the mechanisms and boundary conditions underlying such processes is meager. Since transformational leadership is typified by positive behavior, attitudes, and affect (e.g. Erez, Misangyi, Johnson, LePine, & Halverson, 2008), it was proposed in this chapter that superiors’ transformational leadership relates to higher positive affect among middle managers, therewith inducing the latter to show more of this leadership behavior themselves. As such, it was proposed that an affective mechanism underlies the cascading of transformational leadership (Weiss & Cropanzano, 1996). In addition, based on attribution theory (Martinko et al., 2007), it was argued that middle managers’ perceptions of organizational justice could be pivotal for this trickle-down effect to fully unfold (Dasborough & Ashkanasy, 2002). More specifically, it was suggested that personalized forms of justice (i.e., informational and
interpersonal justice; Colquitt & Rodell, 2015) strengthen the relationship between superiors’ transformational leadership and middle managers’ positive affect, as these managers may use such justice perceptions to form attributions about their superiors’ intentions. In sum, Chapter 2 hypothesized that superiors’ transformational leadership shapes middle managers’ transformational leadership behaviors via these managers’ positive affect, and argued that this cascading effect hinges on these managers’ perceptions of personalized justice.

Data gathered in 2011 from a sample of 443 middle managers and their 2,949 direct subordinates in a large food retail company in the Netherlands mostly supported these hypotheses. As expected, superiors’ transformational leadership positively related to middle managers’ positive affect, which was positively associated with middle managers’ transformational behavior. In addition, perceptions of informational (but not interpersonal) justice served as a key boundary condition that amplified this cascading relationship.

These findings have important theoretical implications. First, they show that superiors’ transformational leadership can indeed trickle down through hierarchical managerial layers. Second, they suggest an affective mechanism that underlies this trickle-down process, thus not only illustrating a cascading role of transformational leadership but also explicating how this effect unfolds. Thirdly, the fact that organizational justice perceptions moderated the role of superiors’ transformational leadership supports the notion that justice and leadership constructs are intertwined and “must be looked at in tandem, rather than separately” (De Cremer et al., 2007, p. 1809). Hence, Chapter 2 contributes to a better understanding of the antecedents of middle managers’ transformational leadership behavior.

**Dependency on Assigned Objectives: The Goal Challenge**

Chapter 3 studied the relationship between middle managers’ assigned goals and their abusive supervision. Due to their position, middle managers often have little autonomy in determining their own goals, but are required to achieve goals assigned to
them by managers in the upper echelons of the organization. Traditionally, the literature has argued that setting ambitious goals motivates people to perform better (e.g., Lee, Locke, & Latham, 1989). Yet, recent empirical evidence suggests that striving to achieve difficult goals may have negative side effects as well, potentially promoting depletion, unethical behavior, and abusive supervision (Mawritz et al., 2014; Schweitzer et al., 2004; Welsh & Ordóñez, 2014). However, the underlying mechanisms for this suggested association between assigned goals and abusive supervision have been less clear. For instance, it has been suggested that low perceived attainability of assigned goals is associated with increased emotional exhaustion. Conservation of Resources (COR) theory suggests that emotional exhaustion limits the motivation to regulate behavior (Halbesleben et al., 2013; Hobfoll, 1989) and, as such, could trigger abusive supervision (cf. Deng, Walter, Lam, & Zhao, 2016; Lam, Walter, & Huang, 2017). Hence, difficult assigned goals could, through middle managers’ emotional exhaustion, relate to abusive supervision.

Moreover, it has been suggested that ethical climate perceptions can instigate behavior in the workplace (Arnaud & Schminke, 2007b). These perceptions can influence attitudes and motivations (Barnett & Vaicys, 2000), but also relate to individuals’ behavior by providing guidelines or normative pressure on what actions are acceptable or unacceptable (Arnaud, 2010; Bulutlar & Öz, 2009; Kish-Gephart et al., 2010; Lange, 2008). Thus, the indirect relationship between middle managers’ difficult goals and abusive supervision could hinge on their ethical climate perceptions (Martin & Cullen, 2006).

Therefore, Chapter 3 investigated whether perceptions of high normative standards in the organization, as manifested in a work climate low in egoism, might provide extra motivation to withhold abusive supervision for non-exhausted middle managers, therewith diminishing the exhaustion-abusive supervision linkage. In addition, the chapter also examined the detrimental relationship of abusive supervision with business unit performance.

The empirical study in Chapter 3 used data gathered in 2012 from a sample of
370 middle managers and 2,659 direct subordinates as well as business unit performance indicators from the same organization as in Study 1. As expected, the results showed that perceived goal attainability was negatively related to middle managers’ abusive supervision through emotional exhaustion. In addition, the empirical results indicated that under conditions of a perceived climate of low egoism, non-exhausted middle managers showed less abusive supervision. Lastly, empirical evidence was found for a negative relationship of abusive supervision with one indicator of business unit performance (i.e., employee turnover), but not for customer satisfaction or financial performance.

All in all, these results indicate that middle managers’ dependency on assigned goals is not only associated with their well-being (i.e., exhaustion), but also that this well-being translates into middle managers’ leadership behavior. Moreover, the findings stress the importance of the perceived ethical climate in which middle managers operate. This climate can further shape the relationship of exhaustion with abusive behavior and, as such, is of pivotal importance in limiting the prevalence of abusive supervision in the workplace.

**Job Tenure, Age, and Leadership Behavior: The Career Challenge**

Chapter 4 investigated the relationship between middle managers’ job tenure and transformational leadership behavior. Middle managers’ careers depend on multiple developments within and outside of their organizations. In particular, technological developments such as automation (see Frey & Osborne, 2013; Millman & Hartwick, 1987; Stoker, 2006), an ageing population, and changing retirement ages all contribute to slowing down “traditional” management career paths (Morison et al., 2006). This situation may lead middle managers to experience longer job tenure (Ettington, 1998), which these managers may perceive as a palpable, detrimental sign of their lack of career progress, according to previous research (Taylor et al., 1996). Moreover, scholars have found that prolonged job tenure is negatively related to several job attitudes, such as organizational commitment and turnover intentions (Avery et al., 2003; Bedeian
et al., 1992; Taylor et al., 1996). However, the possible association of prolonged job tenure with middle managers’ leadership behavior and performance is still relatively under-examined.

Therefore, Chapter 4 investigated the relationship between middle managers’ prolonged job tenure and transformational leadership behavior. Based on social exchange theory (Blau, 1964; Robinson & Rousseau, 1994), it was hypothesized that middle managers would perceive longer job tenure as a violation of their psychological contract with the organization, and hence that prolonged time spent in a job position would relate negatively to middle managers’ job satisfaction. In addition, again based on social exchange theory, it was posited that middle managers’ job satisfaction would be negatively related to their transformational leadership. Finally, drawing on socio-emotional selectivity theory (Carstensen et al., 2000), it was argued that this indirect relationship would be more pronounced for younger than for older middle managers, because individuals’ goals and priorities shift with age (Carstensen, 2006; Carstensen et al., 1999; Lockenhoff & Carstensen, 2004; Ng & Feldman, 2010). Furthermore, this chapter also explored how middle managers’ transformational leadership relates to business unit performance.

Using the same organization as in the previous studies, in 2013 multisource data were collected from business units, 347 middle managers, and 2,198 of their direct reports to examine the relationships proposed above. The results showed that middle managers’ positional tenure was negatively related to their job satisfaction. Furthermore, their age was found to mitigate this relationship, such that job tenure was negatively associated with job satisfaction among younger middle managers, but positively associated with job satisfaction among older managers. Moreover, as expected, job satisfaction was negatively related to middle managers’ transformational leadership, but the latter was positively related to two objective performance outcomes, namely employee turnover and customer satisfaction.

These results a) illustrate that the time middle managers spend in their position is of pivotal importance in shaping their transformational leadership behavior, and
b) identify a temporal component as antecedent of leadership, addressing scholars’ recent call for studies on time-related issues in leadership research (e.g., Shamir, 2011). In addition, these results improve the understanding of the antecedents of transformational leadership by examining an attitudinal mechanism for the role of job tenure, namely middle managers’ job satisfaction. Identifying this mechanism fosters a better comprehension of the intrapersonal attitudes that shape leadership. Secondly, by combining social exchange theory (Bal et al., 2008; Bierstedt & Blau, 1965) with a socio-emotional selectivity perspective (Carstensen et al., 2003), Chapter 4 highlights the conjoint consequences of both age and tenure on middle managers’ attitudes and leadership. It illustrates that to fully understand these factors, careful consideration of their interactive roles is required. In this way, the chapter illustrates how middle managers’ dependency, in close conjunction with their individual characteristics, relates to their leadership.

THEORETICAL IMPLICATIONS

Above and beyond the individual contributions of the aforementioned empirical studies, this dissertation more broadly advances leadership research and theory in several ways. Figure 5.1 depicts an overarching framework that addresses middle managers’ unique challenges and their consequences, as derived from a combination of the present studies (i.e., Chapters 2-4). The left side of Figure 5.1 displays middle managers’ key dependencies, namely superiors’ leadership, assigned goals, and job tenure in a specific position. The middle part of Figure 5.1 then depicts the psychological mechanisms (positive affect [Chapter 2], emotional exhaustion [Chapter 3], and job satisfaction [Chapter 4]) that have been shown to be the mediating mechanisms between these dependencies and middle managers’ leadership behavior. As illustrated, this leadership behavior can take positive, inspirational forms (e.g., transformational leadership) but also negative, aggressive shapes (e.g., abusive supervision). Finally, the right side of Figure 5.1 shows the proposed relationships between these types of leadership behavior among middle managers and business unit performance (Chapters
FIGURE 5.1
The General Conceptual Model Proposed in this Dissertation

Dependencies → Psychological mechanisms → Behaviors → Outcomes

- Superior Leadership (Chapter 2)
- Assigned Goals (Chapter 3)
- Job Tenure (Chapter 4)
- Middle Managers’ Age (Chapter 4)
- Ethical Climate Perceptions (Chapter 3)
- Middle Manager
  - Positive Affect (Chapter 2)
  - Exhaustion (Chapter 3)
  - Job Satisfaction (Chapter 4)
- Middle Manager
  - Transformational Leadership
    (Chapter 2 & 4)
  - Abusive Supervision
    (Chapter 3)
- Middle Manager Performance
  (Chapter 3 & 4)
3 and 4). Considered collectively, this overall model contributes to the leadership literature by (a) underlining the pivotal role of different dependency characteristics of middle managers’ position for their leadership behaviors and outcomes, (b) identifying the underlying mechanisms associated with these relationships, and (c) examining the boundary conditions under which these relationships unfold. These theoretical contributions are addressed in more detail below.

First, the important role of dependency characteristics for middle managers specifies the emphasis in different leadership theories on the role of the environment or context in which leaders operate (Avolio, 2007; House, 1996). Johns (2006: 386) defines context as “situational opportunities and constraints that affect the occurrence and meaning of organizational behavior,” and previous research has illustrated various contextual factors as potential leadership antecedents, including hierarchical level (Bruch & Walter, 2007) as well as an organization’s reward system (Bardes, 2009) and overall structure (Walter & Bruch, 2007). The present dissertation indicates key dependencies (i.e. on superiors, goals, and position characteristics) as a specific class of contextual factors that critically shape middle managers’ leadership behaviors and outcomes. Beyond addressing scholars’ repeated calls to further examine middle managers as an important group of organizational leaders with unique characteristics and challenges (cf. DeChurch et al., 2010; Yang et al., 2010), this dissertation therefore offers novel insights into the distinct contextual characteristics that may promote or obstruct leadership success on intermediate levels of the organizational hierarchy (Hernandez et al., 2011).

Second, this dissertation identifies important psychological processes underlying the linkage between middle managers’ dependencies on the one hand, and their leadership behaviors and outcomes on the other. Hence, it not only demonstrates that different types of contextual dependencies are key input factors for middle managers’ leadership, but it also illustrates why these dependencies matter. Overall, the present findings show that affective and motivational mechanisms are critical as mediating mechanisms, including middle managers’ positive affect (Chapter 2), emotional
exhaustion (Chapter 3), and job satisfaction (Chapter 4). Therefore, it appears that the dependencies in which middle managers operate can decisively shape the way they feel and think about their jobs, with distinct consequences for how they enact their leadership roles. As such, the findings of this dissertation offer novel, theoretically relevant insights that explain how middle managers’ unique positional characteristics may shape their functioning as leaders.

Finally, this dissertation highlights critical boundary conditions that can shape the role of middle managers’ dependencies (and the resulting psychological states) for their leadership behavior and outcomes. By illustrating that these managers’ perceptions of their working environment (i.e., justice [Chapter 2] and climate perceptions [Chapter 3]) and demographic traits (i.e., age [Chapter 4]) moderate the relationships examined in this research, this dissertation provides a more specific understanding of when the dependency characteristics for middle managerial positions matter. It appears that these dependencies do not equally affect all middle managers’ psychological states, leadership behaviors, and outcomes. This dissertation thus reiterates the need for a finer-grained approach to realistically depict these linkages, taking into account key differences between individual managers and their working environments as important contingency factors.

STRENGTHS AND LIMITATIONS

Each of the three studies in this dissertation employed field data gathered among large samples of middle managers and their direct reports. All studies also drew on multisource data, therewith limiting common method concerns (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). Moreover, both superiors’ (Chapter 2) and middle managers’ (Chapter 2, 3, and 4) leadership was measured using multiple raters, for enhanced reliability of the respective assessments (cf. Rubin et al., 2005). In addition, Chapters 3 and 4 enrich the dissertation’s main focus on the antecedents of middle managers’ leadership behavior by utilizing objective, multisource performance data to depict relevant leadership outcomes as well.
Notwithstanding these strengths, this dissertation has some limitations that are relevant when interpreting the results and that offer important directions for future research. First, all three studies were conducted within a single organization in the retail industry and in a single country, the Netherlands. This may limit the findings’ generalizability to other organizational or cultural contexts. For example, the examined middle managers (i.e., store managers) had limited autonomy in setting local goals and limited upward influence, and such dependencies and constraints could differ in other organizations (Ogbonna & Wilkinson, 2003). Moreover, the Dutch culture is characterized by relatively low power distance and masculinity, and relatively high individualism (Hofstede, 1983); such cultural factors may shape leadership behaviors and outcomes (e.g., Kark, Waismel-Manor, & Shamir, 2012; Kirkman, Chen, Farh, Chen, & Lowe, 2009; Lian, Ferris, & Brown, 2012; Yang et al., 2010). Therefore, to corroborate this dissertation’s insights, examination of the proposed relationships in different organizations, industries, and cultural contexts is suggested for future research.

Further, cross-sectional field data were used to test the hypotheses, which prohibits causal claims. Hence, although the hypotheses were based on strong theoretical frameworks, further longitudinal or experimental research is required to substantiate causal conclusions. Moreover, middle managers’ or employees’ perceptions formed the bases of most of the data gathered for the studies. Therefore, despite using different measurement sources, the conclusions might still be subject to common method concerns (Podsakoff et al., 2003). In the research designs, attempts were made to account for such biases, for example through random sampling of subordinates and the use of well-validated measurement scales. In addition, complex moderated and mediated relationships between variables were examined, which are less likely to materialize in the presence of common method bias (J. M. Conway & Lance, 2010; Podsakoff et al., 2003; Siemsen, Roth, & Oliveira, 2010).

Lastly, the empirical studies in this dissertation all employed between-person research designs. Although common in the leadership literature (Day, Fleenor, Atwater,
Sturm, & McKee, 2014), this approach cannot clarify the dynamic development of the psychological processes addressed in this dissertation. The following section identifies directions for future research that extend beyond addressing these limitations.

**FUTURE RESEARCH DIRECTIONS**

To explicate the key future directions derived from this dissertation, this section draws on Figure 5.1 and first discusses (a) possible other dependency characteristics for middle managers, (b) potential additional underlying mechanisms associated with the relationships between these managers’ dependencies and their behavior, and (c) alternative boundary conditions under which these relationships may unfold. Moreover, the section discusses some research directions based on the full conceptual model.

**Exploring Additional Dependencies**

First, future research could explore additional dependencies faced by middle managers, beyond the ones examined in this dissertation. As depicted in Figure 5.1, three categories of dependencies were identified here: a middle manager’s superior, assigned goals, and positional characteristics (i.e., tenure). Building on this categorization, future research could investigate additional dependencies originating from the superior, for example addressing less positive leadership behavior such as abusive supervision. Such negative behavior has been shown to trickle down towards lower levels of management (Aryee & Chen, 2007; Mayer et al., 2009; Wayne et al., 2008). Hence, additional research identifying the effects of both positive and negative superior leadership behavior on middle managers’ attitudes could advance a more comprehensive picture of the respective dependencies and their relationships with psychological processes and subsequent behaviors.

Next, this dissertation related the difficulty of assigned goals to middle managers’ exhaustion. Besides the detrimental effects of such goals, however, goal conflict might be another specific challenge faced by middle managers (Emsley, 2003). Such conflict is defined as “the degree to which individuals feel that performance expectations (i.e.
goals) with respect to the multiple dimensions of a task, or among multiple tasks, are incompatible” (Cheng, Luckett, & Mahama, 2007, p. 222). Perceptions of goal conflict are related to lower task performance, presumably due to increased pressure or limited resources to achieve competing goals (Cheng et al., 2007; Locke, Smith, Erez, Chah, & Schaffer, 1994). It is likely that especially middle managers experience substantial goal conflict, for example due to frequent strategic changes of top management, or to the conflicting expectations that they face from their superiors on the one hand, and from subordinates on the other (Holden & Roberts, 2004). Future research could therefore examine specifically if and how middle managers experience goal conflict and how such conflict may relate to their leadership behavior.

Furthermore, this dissertation showed that middle managers’ prolonged tenure in a position is associated with their leadership behavior. Adding to this perspective, it would be interesting to examine alternative job characteristics of middle managers’ positions in this regard. To better understand middle managers’ leadership, scholars have indicated that an especially promising theoretical perspective could be multiteam system theory (MTS; DeChurch, 2006; Dechurch, Hiller, Murase, Doty, & Salas, 2010; De Vries, 2015). Increasingly, tasks in the business environment require the cooperation or coordination of multiple individuals not only within single teams, but also across multiple teams. As such, a new level of analysis arises in leadership research, together with “a complex variety of skills, knowledge, and functions” that need effective coordination (Zaccaro, Marks, & DeChurch, 2012, p. 12). It has been suggested that such novel structures shape middle managers’ leadership. Indeed, research shows that effectively aligning task and performance demands on the one hand, and managing the internal teamwork on the other requires specific leadership skills (cf. DeChurch, 2006), and scholars have explicitly suggested that middle managers might play a crucial role in such a multiteam system environment. Therefore, these novel organizational forms are likely to impose new requirements on middle managers’ leadership (Dechurch et al., 2010) and may thereby represent a new category of characteristics of the middle manager layer worth investigating.
Investigating Alternative Mechanisms

Research could further expand the present studies by identifying alternative mechanisms or processes that underlie the relationship between middle managers’ dependencies and leadership behavior. This dissertation focused on middle managers’ job satisfaction, positive affect, and emotional exhaustion. However, it is possible that other relevant psychological states and attitudes are related to the dependencies of middle management. For example, since middle managers are both followers of their superior and leaders of their team, their organizational identification (Chen, Chi, & Friedman, 2013; Cole & Bruch, 2006) or team identification (Ashforth, Harrison, & Corley, 2008; Thomas & Linstead, 2002; Van der Vegt & Bunderson, 2014) might be important as potential mediating mechanisms. Research on dual or multiple foci of identification offers promising directions for studying such psychological factors among these managers. In particular, the duality of their identification (Cuijpers, 2011; Harding et al., 2014) could be further clarified to determine why and when it relates to middle managers’ leadership behaviors. Research shows that multiple identification in management teams leads to increased inter-team conflict, and over time to lower performance (Cuijpers, 2011). It therefore seems plausible that especially middle managers who identify strongly with their teams (but not the overall organization) might face difficulties embracing and applying organizational procedures or goals that are not advantageous for their teams. As such, this aspect of dual allegiance might be a beneficial avenue for future research to better understand the processes that transform middle managers’ dependencies into leadership behavior.

Identifying Alternative Contingency Factors

Research could also identify other boundary conditions, both for the relationship between dependencies and middle managers’ psychological states, and for the relationship between the latter and middle managers’ leadership behaviors. For example, middle managers’ personality traits, such as agreeableness or neuroticism, could shape how middle managers’ dependencies translate into their psychological
states or processes. Scholars have already examined conditions under which dependencies (e.g., superior leadership) are associated with psychological states such as emotional exhaustion (Perry, Witt, Penney, & Atwater, 2010). As such, middle managers’ psychological traits are interesting boundary conditions to further examine when considering the relationship between middle managers’ dependencies and psychological states and processes.

Next, regarding the boundary conditions that moderate the relationship between middle managers’ psychological states and their (leadership) behavior, this dissertation shows that the behavioral guidelines associated with specific work climates (e.g., ethical climate) are a promising area for future research. Research on climates has suggested that “strong climates accentuate climate-relevant practices, whereas weak climates attenuate those practices” (Guarana & Hernandez, 2015, p. 63). This implies that when considering antecedents of middle managers’ leadership, shared normative behavioral guidelines within organizations could further specify the conditions under which these managers’ psychological states relate to leadership behavior and even business unit or team performance.

**Directions for Research Linking Middle Managers’ Leadership to Business Unit Performance**

Finally, a number of potentially interesting future research areas are envisaged based on the full conceptual model depicted in Figure 5.1. First, based on the current dissertation’s empirical research, drawing conclusions regarding the proposed relationships of middle managers’ leadership behavior with performance outcomes (e.g., employee turnover, customer satisfaction, and consumer sales) is complicated. This is not surprising, since scholars have previously indicated that such performance outcomes might be interrelated (Arnold et al., 2009; Gómez, McLaughlin, & Wittink, 2004). In particular, researchers have proposed that these are more complex sequential relationships, for example between (transformational) leadership behavior of middle managers, employee attitudes and behavior, customer satisfaction, and consumer
sales. Yet, research has often examined only parts of such relationships (Arnold et al., 2009; Bettencourt, 2004; Chuang et al., 2012; Duckett & Macfarlane, 2003; Emery & Barker, 2007; Gómez et al., 2004; Heskett, Sasser, & Schlesinger, 1997; Koene et al., 2002). Hence, future research on the relationships between employee attitudes and behavior, customer attitudes and behavior, and ultimately, business unit performance (e.g. Gómez et al., 2004; Harter, Schmidt, & Hayes, 2002; Netemeyer, Maxham, & Lichtenstein, 2010) could take into account middle managers’ dependencies, attitudes, and leadership behavior using a) more complex mediation analyses, and b) study designs that enable causal inferences to be made.

Second, the full model proposed in model 5.1 could therefore be further expanded with a stronger temporal or longitudinal perspective. In general, scholars have called for greater attention to be paid to time in leadership research because “it is difficult, if not impossible, to consider leadership without time playing a role…Yet, our review of the literature suggests that the formal use of temporal variables in leadership research has been scarce and scattered” (Bluedorn & Jaussi, 2008, p. 657). However, the acknowledgement of time as an important factor is growing (Mohammed & Alipour, 2014; Shamir, 2011; Thoms & Greenberger, 1995), and scholars have identified it as being of pivotal importance in truly understanding behavior in organizations and the interplay between behavior and performance (e.g. Shipp & Cole, 2015). To understand such an interplay, future research could employ longitudinal, within-person research designs that track multiple middle managers’ dependencies as well as their psychological and behavioral reactions over time. Moreover, the potential reverse impact of performance on dependencies and leadership behavior is an understudied topic in leadership research (Antonakis, Bendahan, Jacquot, & Lalive, 2014), but this type of research is crucial to understand the leadership-performance relationship.

Lastly, examining these novel relationships might be further enabled by both new theoretical perspectives and more advanced statistical techniques (see for example Boyatzis, Rochford, & Jack, 2014). A wide variety of learning methods from neuro- and computer-science might be suitable for studying organizational phenomena
(see Wenzel & Van Quaquebeke, 2017). For example, machine learning techniques or artificial neural networks now accurately predict employee turnover (Somers, 1999; Somers & Casal, 2009), health of employees (Karanika-Murray & Cox, 2010), job titles, and organizational structure based on email patterns (Straub, 2016) or workplace safety behavior in warehouses (Jitwasinkul, Hadikusumo, & Memon, 2016). Such techniques are, among others, better able to detect non-linear patterns in complex, unstructured datasets, and might offer additional possibilities to examine causality between variables over time when the research design warrants such claims (Somers & Casal, 2009). For the conceptual model depicted in Figure 5.1, and in particular for the aforementioned research suggestions, such novel statistical techniques could be beneficial. For example, when studying organizational unit (financial) performance over time, they could allow a plethora of features to be included in prediction models.

Despite a cautionary approach to the use of these statistical techniques (Sharpe, 2013), scholars in the field of organizational behavior and HR management have started to acknowledge these developments (Angrave, Charlwood, Kirkpatrick, Lawrence, & Stuart, 2016; G. George, Haas, & Pentland, 2014; Tonidandel, King, & Cortina, 2016; Wenzel & Van Quaquebeke, 2017). Some have even stated that, “[t]he advent of data science can be the next phase in this evolution, which offers opportunities not only for refining established perspectives and enhancing the accuracy of known empirical results, but also for embarking into novel research domains, raising new types of research questions, adopting more refined units of analysis, and shedding new light on the mechanisms that drive observed effects” (George, Osinga, Lavie, & Scott, 2016, p. 1515).

**PRACTICAL IMPLICATIONS**

Middle managers are important to organizations but also face unique challenges in their roles (Balogun, 2003; Huy, 2001). From a practical perspective, this dissertation presents a nuanced picture in this regard, with a strong focus on underlying mechanisms and boundary conditions. In doing so, it moves beyond
popular criticism about middle managers (see Huy, 2001) and provides practitioners with tangible recommendations to improve organizations through these managers. This section provides two specific suggestions based on the dissertation as a whole: (1) adapting HR policies to cover the specific challenges and dependencies faced by middle managers, and (2) redesigning the middle manager role and organizational structure.

First, well-aligned HR policies could mitigate the risks and leverage the opportunities of the middle manager job. For example, this dissertation shows the need to design management tools such that they result in realistic, feasible goals (Locke & Latham, 2002b; Schweitzer et al., 2004; Vriend, 2016). Performance standards and goals could consider middle managers’ dependencies by outlining how goals are perceived to be within control of these managers’ behavior. For example, macroeconomic trends or local economic conditions that might impact business unit performance could be controlled for when determining middle managers’ financial performance. Similarly, by providing middle managers with the right resources (e.g. budget, IT support), organizations could ensure that they feel adequately equipped to effectively deal with their dependencies.

Next, by identifying multiple dependencies of middle managers’ position and showing how these relate to their leadership behavior through different psychological mechanisms, this dissertation provides relevant recommendations for organizations (and in particular HR departments) on how to foster positive (and avoid negative) leadership behavior among this important group. In particular, by acknowledging middle managers’ unique challenges, talent management policies could be more appropriately geared towards selecting the right managers with the right skills to meet these challenges. These talent management practices can be defined as “an integrated set of processes, programs, and cultural norms in an organization designed and implemented to attract, develop, deploy, and retain talent to achieve strategic objectives and meet future business needs” (Silzer & Dowell, 2010, p. 18), and they are often specifically aimed at (future) leaders within organizations (Dries, 2013).
In selecting future leaders, for example, HR departments could integrate specific case studies that explicitly address the dependencies middle managers face in their forthcoming career. This could raise awareness of their role-specific challenges and future business needs. In addition, capability- or skill-building programs aimed at leadership development could constructively teach middle managers and their superiors to deal with the dependencies and boundary conditions identified in this dissertation (cf. Day, Fleenor, Atwater, Sturm, & McKee, 2014).

Furthermore, to increase middle managers’ effectiveness while taking into account dependencies and boundary conditions, organizations could further redesign the middle management role. Organizational design specialists are already experimenting with new organizational structures. As previously mentioned, for example, ING bank and Spotify have introduced cross-functional cooperation in rapidly deployable project teams (Kniberg & Ivarsson, 2012). Considering the new demands and thus the possibilities that such structures impose on leadership (cf. Dechurch et al., 2010), novel ways of working could positively redefine middle managers’ jobs.

CONCLUDING REMARKS

In the preface of this dissertation, I illustrated middle managers’ complex position within organizations. Yet, perspectives on these managers’ past, present, and future roles differ. On the one hand, middle managers have been mocked and ridiculed by popular press, and larded with negative perspectives due to technological, demographical, and organizational developments (e.g. Bhasin, 2012; Finkelstein, 2015). On the other hand, their unique value has been increasingly recognized and praised in the literature (Huy, 2001). However, research focusing explicitly on middle managers’ challenges remains meager, leaving opportunities to advance academic knowledge. I believe the insights of this dissertation address some of the unique challenges and opportunities faced by middle managers, and thereby further a nuanced picture of this important subgroup of leaders. Hence, I hope this dissertation helps practitioners to identify and acknowledge the unique nature of these jobs.