



**Leadership Needs Time: The Role of Temporal Cognitions for Leadership
Processes and Outcomes**

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To Jonah and Alex

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Chapter 1: General Introduction

Time is generally considered one of the most precious resources of modern organizations. Companies aim to develop and deliver new products on time, speed up time-to-market, and place a strong emphasis on just-in-time procedures (Ancona, Okhuysen, & Perlow, 2001; Sonnentag, 2012). Accordingly, management scholars and practitioners have an "obsession with time", such that the central goal of many organizational procedures is to effectively manage time and increase the speed of work processes (Orlikowski & Yates, 2002, p. 685). This ubiquitous nature of temporal concerns in organizations is also reflected by the fact that companies' key goals and tasks are often directly related to one or several time frames. For example, organizations are expected to remember and value their organizational history and learn from past failures and success stories (O'Sullivan & Graham, 2010; Rowlinson, Hassard, & Decker, 2014), they need to address existing present issues, such as deadlines and time pressure (Lim & Murnighan, 1994; Waller, Zellmer-Bruhn, & Giambatista, 2002), and plan ahead for the company's future (Collins & Porras, 1991; Hart, 1992). Hence, successfully managing time represents a key challenge for organizations and their members.

Typically, the task of effectively addressing such temporal issues in organizations falls to leaders (Mohammed & Nadkarni, 2011). In fact, navigating an organization through issues related to different time frames, ensuring a sufficient tempo, and synchronizing the timing between different organizational members or units are integral parts of the leadership role (Halbesleben, Novicevic, Harvey, & Buckley, 2003; Van der Erve, 2004). As such, leaders' success often hinges on whether or not they are able to adequately allocate temporal resources, adhere to deadlines and temporal milestones, and operate under pronounced time pressure (Mohammed & Nadkarni, 2011; Outlaw, Colquitt, Baer, & Sessions, 2019). Consequently, it is not surprising that scholars have examined how leaders manage their own time (Tengblad, 2006),

how they structure their followers' time (Mohammed & Nadkarni, 2011), and how they can effectively envision the company's future (Kirkpatrick & Locke, 1996). This stream of research has led to an increased "temporal lens" in the leadership literature, meaning that studies examining key leadership phenomena, such as leader emergence, leadership behavior, or leader-follower relations, now more often include temporal variables or time-related theorizing (Ancona, Goodman, Lawrence, & Tushman, 2001, p. 645; Castillo & Trinh, 2018). On this basis, leadership researchers have repeatedly echoed Bluedorn and Jaussi's (2008, p. 657) observation that "it is difficult, if not impossible, to consider leadership without time playing a role" (Alipour, Mohammed, & Martinez, 2017; Shamir, 2011).

This existing time-focused leadership research has often examined leadership processes and outcomes related to *objective time*, thus treating time as a physical property that can be measured by clocks. From such a perspective, time is "(a) unidirectional—progressing from past to present to future, (b) homogeneous—each second is the same as any other second, and (c) absolute—time is the same across all situations and individuals" (Shipp & Cole, 2015, p. 239). This "clock time" perspective is so deeply ingrained in Western cultures that alternative conceptualizations of time may appear uncommon at first glance (Bluedorn & Denhardt, 1988, p. 302). In this regard, scholars have investigated how the organizational culture leaders experienced when they were followers shapes their future behavior as a leader (Kim & Toh, in press), how leader performance changes over time (Day, Sin, & Chen, 2004), and how leader-member exchange evolves over the course of time (Nahrgang, Morgeson, & Ilies, 2009).

Importantly, however, leadership scholars have emphasized the theoretical relevance of also considering time from a subjective (or psychological) perspective (Alipour et al., 2017; Bluedorn, 2002). Such an approach conceptualizes time as "(a) cognitively cyclical—thoughts may move between past, present, and future..., (b) heterogeneous—some moments pass more

quickly than others, and (c) interpretive—experiences can only be understood in context” (Shipp & Cole, 2015, p. 239). From this perspective, individuals’ thoughts about and perceptions of time depend on their “temporal personality” or idiosyncratic characteristics of the situation or task at hand (Ancona, Okhuysen et al., 2001, p. 518; Mohammed & Harrison, 2013). In a leadership context, in particular, leaders (and followers) may spend more or less of their hours thinking about different time frames (i.e., the past, present, or future), may feel that they more or less pressed for time, or may pay attention to time and deadlines to different degrees (Alipour et al., 2017). Although scholars have started to examine how such *temporal cognitions* may affect leadership processes and outcomes (Chen & Nadkarni, 2017; Thoms & Greenberger, 1998), reviewing the state of leadership research suggests that research on the role of temporal cognitions in leadership is “scarce and scattered” (Bluedorn & Jaussi, 2008, p. 657). Although such cognitions seem to play a potentially critical role for leadership phenomena, many open questions to the exact nature of these relationships remain unanswered (Alipour et al., 2017).

In order to address this issue, this dissertation examines the potential roles of three specific types of temporal cognitions for processes of leadership, namely time urgency (i.e., one’s chronic hurriedness and impatience; Landy, Rastegary, Thayer, & Colvin, 1991), temporal focus (i.e., the degree to which an individual devotes attention to the past, present, and/or future; Shipp, Edwards, & Lambert, 2009), and time pressure (i.e., the situational perception of insufficient temporal resources to complete one’s task; Ross & Wieland, 1996).¹ These constructs may offer unique insights into leadership phenomena, with leaders’ respective time-based traits and perceptions potentially shaping their leadership behavior (Zhang, Wang, & Pearce, 2014), for

¹ Over the last decades, scholars have introduced many different concepts with regard to individuals’ temporal cognitions (see e.g., Mohammed & Harrison, 2013; Schriber & Gutek, 1987). Although I concentrated on leaders’ and followers’ time urgency, temporal focus, and time pressure in this dissertation, I will discuss the possible relevance of other temporal cognitions in Chapter 5.

example, and followers' respective cognitions influencing their reactions to leaders' actions (Cojuharenco, Patient, & Bashshur, 2011). It is important to note, in this regard, that I follow Rauch and Behling's (1984, p. 46; see also Yukl, 2013) general definition of leadership as "the process of influencing the activities of an organized group toward goal achievement." As such, I will investigate leadership processes in both formal supervisor-subordinate settings as well as in informal leadership contexts, where employees in non-hierarchical relationships engage in interpersonal influence behaviors toward each other.² I begin with a selective literature review on the role of time urgency, temporal focus, and time pressure for leadership. After that, I will highlight important oversights in leadership research on temporal cognitions and I will explain how this dissertation aims to address these issues.

Literature Review

Time Urgency and Leadership

Time urgency is defined as a stable, trait-like tendency to be hurried and constantly concerned with time (Landy et al., 1991). This characteristic was first introduced to the academic literature as a subcomponent of the Type A behavior pattern (Friedman & Rosenman, 1974). Time-urgent individuals are "obsessed with time" (Menon, Narayanan, & Spector, 1996, p. 139), such that they value time as the most precious resource they possess and, by consequence, they are often overly punctual and impatient (Conte, Landy, & Mathieu, 1995). These individuals are highly preoccupied with deadlines and the passage of time, constantly checking how much time they spent on activities (Price, 1982). By contrast, individuals low in time urgency easily forget about the passage of time and, thus, often lose track of time. They take their time for task

² The term 'leader' is generally referring to situations of both formal and informal leadership. I will use the term supervisor in this dissertation when referring to individuals holding formal authority positions.

accomplishment, approaching their everyday life in a relaxed fashion and often showing up late for appointments or meetings (Landy et al., 1991; Conte et al., 1995).

With regard to work-related activities and outcomes, research has demonstrated that highly time-urgent individuals tend to experience pronounced exhaustion and have impaired well-being, but also to exhibit high work engagement and performance. In particular, employees scoring high on time urgency often experience high job stress (Conte, Schwenneker, Dew, & Romano, 2001), frequently have work accidents (Magnavita et al., 1997), and, in general, suffer from a variety of psychological and physiological health issues (Conte, Mathieu, & Landy, 1998). Moreover, they tend to feel chronically delayed and frustrated by less time-urgent coworkers, leading them to nudge their coworkers toward a faster work pace (Glass, Snyder, & Hollis, 1974; Waller, Giambatista, & Zellmer-Bruhn, 1999). On the positive side, however, individuals with a pronounced sense of urgency have been shown to exhibit an above-average working pace (Yarnold & Grimm, 1982) and high levels of job engagement (Jamal & Baba, 1991), and they often finish more tasks during a specific period than their less time-urgent counterparts (Conte, Schwenneker, et al., 2001). Furthermore, research has demonstrated that highly time-urgent employees are often very competitive, trying to outperform their coworkers, setting ambitious work-related goals, and putting in long working hours (Conte, Ringenbach, Moran, & Landy, 2001).

On this basis, it does not surprise that scholars have repeatedly linked time urgency to the attainment of leadership roles (Francis-Smythe & Robertson, 1999; Leroy, Shipp, Blount, & Licht, 2015; Sanders & Malkis, 1982). Given their superior job engagement and work speed, higher-level supervisors often view time-urgent individuals as dedicated, hard-working employees (Conte, Ringenbach et al., 2001; Streufert, Streufert, & Gorson, 1981), making it more likely that such individuals will be selected for (formal) leadership positions. Accordingly,

empirical research has demonstrated that highly time urgent individuals are often promoted into managerial roles (Howard, Cunningham, & Rechnitzer, 1976; Stewart-Belle & Lust, 1999) and a recent review suggests that chronically hurried individuals often attain positions of high status in organizations and societies (Keinan, Bellezza, & Paharia, 2019).

Interestingly, however, much less remains known about how time-urgent individuals lead their followers once they these individuals attained a leadership position. In this regard, scholars have typically assumed that highly time-urgent leaders are particularly likely to demonstrate proactive and structuring leadership behavior, which, in turn, may increase team and organizational performance (Chen & Nadkarni, 2017; Mohammed & Alipour, 2014). In doing so, the existing literature has largely neglected the possibility that leaders' time urgency may also have possible downsides, such that chronically hurried leaders may also exhibit negative or even destructive leadership behavior. This omission seems highly relevant considering possibly detrimental consequences of time urgency discussed before (Conte, Schwenneker et al., 2001; Magnavita et al., 1997) and given the fact that time-urgent individuals are known to be easily irritated and frustrated by other (less time-urgent) individuals (Glass et al., 1974; Waller et al., 1999).

Temporal Focus and Leadership

Dating back to the seminal work of Lewin (1943), the construct of temporal focus describes the attention individuals characteristically devote toward the past, present, and/or future (Shipp et al., 2009).³ Research has suggested that these temporal foci develop through early

³ Previous research has used terminology such as "time perspective" (e.g., Zimbardo & Boyd, 1999, p. 1271) or "temporal orientation" (e.g., Holman & Silver, 1998, p. 1146) to describe how individuals think about various time frames. As noted by Shipp (in press), however, these concepts have been used to conceptualize slightly different constructs as compared to temporal focus. Following Bluedorn (2002) and Shipp et al. (2009), I therefore use the term "temporal focus" to describe how individuals characteristically pay attention to different time periods.

childhood, cultural, and social experiences (Zimbardo & Boyd, 1999). Hence, despite slight situational variations or changes through critical events, individuals develop a stable, trait-like pattern of focusing on the past, present, and/or future early in their lives (Shipp, in press; Shipp & Aeon, 2019). Individuals with a pronounced focus on the past spend much of their time remembering and re-evaluating events, actions, and experiences that previously happened in their lives. Such highly past-focused people often think nostalgically about the ‘good old days’ (Zimbardo & Boyd, 2008) and ruminate about past failures and mistakes (Holman & Silver, 1998). Strongly present-focused individuals, by contrast, possess a ‘here and now’ mentality, such that they often contemplate their current life situation and spend much of their efforts on creating immediate positive experiences (Shipp & Aeon, 2019). They are motivated to seize existing opportunities, but they can also be characterized as impulsive hedonists with a “devil may care” attitude toward life (Zimbardo & Boyd, 1999, p. 1275). Finally, highly future-focused individuals vividly picture prospective outcomes and weigh much of their decisions with regard to their long-term consequences (Kooij, Kanfer, Betts, & Rudolph, 2018). They are usually disciplined, cautious individuals, who invest current efforts with the goal of achieving positive experiences at a later stage. However, the constant burden to ensure a better future leads these individuals to also frequently experience pressure and stress (Zimbardo & Boyd, 1999). It is important to note that scholars have demonstrated past, present, and future temporal focus to represent independent constructs, such that individuals may simultaneously score high (or low) on multiple of these foci (Shipp, in press; Shipp et al., 2009).

Organizational research has demonstrated that an individual’s temporal focus can critically shape his or her attention, decision-making, and behavior in the workplace. In particular, individuals with a strong focus toward the past set avoidance- rather than approach-oriented goals (Peeters, Schreurs, & Damen, 2014), often feel powerless, and have higher

turnover intentions when past job characteristics were better than their current work circumstances (Shipp et al., 2009). In general, however, the empirical literature on past temporal focus at work has been relatively scarce. With regard to present temporal focus, research has demonstrated that individuals with a pronounced focus on the present tend to procrastinate (Ferrari & Díaz-Morales, 2007) and often make risky decisions (Shipp et al., 2009), but they also place strong emphasis on interactional justice at their workplace (Cojuharenco et al., 2011). Finally, with regard to future temporal focus, scholars have linked this construct to many favorable work outcomes (Shipp, in press; Andre, van Vianen, Peetsma, & Oort, 2018). A strong future temporal focus is, for example, positively related with individuals' job performance, organizational citizenship behavior, and career adaptability (Kooij et al., 2018; Strobel, Tumasjan, Spörrle, & Welp, 2013; Zacher, 2014). Going beyond the individual level, organizational scholars have started to investigate the effects of group-level diversity in members' (present and future) temporal focus, demonstrating that such differences may impair team processes and outcomes (Mohammed & Harrison, 2013; Mohammed & Nadkarni, 2011).

Given these pervasive effects on work-related attitudes and behaviors, it seems not surprising that researchers have also investigated the linkages between temporal focus and leadership behaviors and outcomes. In line with a general negligence of past temporal focus in the organizational literature, studies on how this construct affects leaders' (or followers') behaviors have been scarce. An exception is a study by Nadkarni and Chen (2014), which demonstrated that highly past-focused CEOs introduced less (more) new products when they operated in dynamic (stable) industries. In the same study, a strong present temporal focus was linked to more new product introductions, especially in dynamic environments. Moreover, scholars have shown that highly present-focused leaders develop sustainable organizational strategies (Kim, Bansal, & Haugh, 2019) and, within top management teams, individuals with a

pronounced focus on the present perform best when they collaborate with strongly future-focused colleagues (West & Meyer, 1997). Finally, a pronounced focus on the future has been linked to positive and effective leadership behaviors. In particular, highly future-focused leaders often engage in deliberate, long-term planning (Das, 1987) and demonstrate visionary (Thoms & Greenberger, 1998) and transformational styles of leadership (Zhang et al., 2014).

Although this stream of research has yielded informative insights, many important questions on the role of temporal focus for leadership processes remain open. In particular, the existing empirical research has mostly examined leaders' present and future temporal focus, with a relative neglect of leaders' attention toward the past. Interestingly, theorists have largely assumed that a strong focus on the past leads to passive and ineffective leadership (Bluedorn, 2002; Thoms, 2004) – but this assertion has not been empirically tested. Moreover, empirical examinations of leaders' temporal focus have mostly adopted a leader-centered view, such that they investigated the consequences associated with individuals in managerial positions focusing on the past, present, or future (Nadkarni & Chen, 2014; Zhang et al., 2014). Importantly, however, followers' temporal focus may also shape leadership processes and outcomes (Alipour et al., 2017), and the existing empirical literature has largely ignored this aspect.

Time Pressure and Leadership

Around the world, national surveys have demonstrated that employees regularly operate under pronounced time pressure at work (Eurofund, 2017; International Labour Organization, 2016). Such perceived time pressure⁴ is defined as the feeling of not having enough time to

⁴ In line with Maruping, Venkatesh, Thatcher, and Patel (2015), I use the terms 'perceived time pressure' and 'time pressure' interchangeably. It is important to note, in this regard, that perceived time pressure refers to a situational experience (Kinicki & Vecchio, 1994). By contrast, time urgency is defined as a stable, trait-like individual difference variable characterized by feelings of being hurried and thoughts about time as an important resource (Landy et al., 1991). As such, these constructs constitute separate variables with different work-related consequences (see e.g., Alison, Doran, Long, Power, & Humphrey, 2013).

complete a given task or set of tasks (Kelly & McGrath, 1985; Kinicki & Vecchio, 1994). On the one hand, scholars have conceptualized time pressure as an activating challenge stressor, such that time-pressed individuals increase their efforts and work speed to ensure timely and successful goal attainment (Baer & Oldham, 2006; Waller et al., 2002). On the other hand, insufficient temporal resources may result in highly stressful experiences accompanied by negative affect, exhaustion, and anxiety (Maule, Hockey, & Bdzola, 2000; Teuchmann, Totterdell, & Parker, 1999). As such, time pressure seems to be a ubiquitous and relevant – albeit somewhat ambivalent – factor for understanding individuals’ experiences and behaviors.

During the last decades, a large body of empirical research has developed on the work-related consequences of time pressure (e.g., Payne, Bettman, & Luce, 1996; Stuhlmacher, Gillespie, & Champagne, 1998). For example, some studies have suggested an inverted U-shaped relationship between time pressure and individual job performance (Baer & Oldham, 2006; Sheng, Wang, Hong, Zhu, & Zhang, 2019). Moreover, scholars have repeatedly demonstrated the role of shared, collective time pressure for group processes and performance (Isenberg, 1981; Kelly & Loving, 2004), with studies also demonstrating an inverted U-shaped linkage between these variables (e.g., Maruping et al., 2015). Besides these performance effects, time pressure has been linked with employees’ relationship-oriented behavior toward each other (i.e., being friendly, supportive, and cooperative; Stogdill, 1963), although results in this regard have been inconsistent. Some studies suggest that under time pressure, employees tend to behave more aggressively, pushy, and uncooperatively toward their peers (De Dreu, 2003; Ross & Wieland, 1996). Other researchers, however, demonstrated that time pressure can fuel cooperation, collaboration, and social exchange (Cone & Rand, 2014; Kinicki & Vecchio, 1994; Stuhlmacher et al., 1998).

Given that individuals in managerial positions are especially prone to experiences of time scarcity (Mintzberg, 1973; Rudd, 2019), it is not surprising that scholars have long acknowledged the role of time pressure for leadership processes and outcomes (Bittel, 1991; Hunter, Tate, Dziweczynski, & Bedell-Avers, 2011). And in fact, empirical work has repeatedly shown that time pressure can impede leadership effectiveness, such that time-pressed leaders are less creative, proactive, and engage in less long-term planning, as compared to their counterparts under lower time pressure (e.g., Barrett, Vessey, & Mumford, 2011; Zhou, Wang, & Vancouver, 2019). Furthermore, researchers have started to investigate the role of time pressure for informal leadership processes. Individuals have been shown to engage in different forms of interpersonal influence behavior, in particular, depending on whether they experience time scarcity or not, such that collective time pressure within a group leads to the emergence of dominant and centralized forms of informal leadership (Isenberg, 1981; Kruglanski, Pierro, Mannetti, & Grada, 2006; Pierro, Mannetti, Grada, Livi, & Kruglanski, 2003).

In sum, leadership research points to time pressure as a critical force for both formal and informal leadership processes, behaviors, and outcomes. Nevertheless, there remains ambiguity regarding several relevant facets in this regard. In particular, research on the linkage between time pressure and relationship-oriented behavior has yielded inconsistent results, and it is unclear whether time pressure may inhibit or amplify such informal leadership behavior. Furthermore, scholars have typically treated time pressure either as a completely individual (Baer & Oldham, 2006) or collective, shared phenomenon (i.e., joint higher-unit perception of not having enough available time; Maruping et al., 2015). As mentioned before, however, the recent literature on temporal diversity suggests that differences in temporal preferences and perceptions are a prevalent feature of work environments and may play a unique role in determining individuals' behavior toward each other (e.g., Mohammed & Harrison, 2013). Hence, the (informal)

leadership consequences associated with perceptions of time pressure remain somewhat ambiguous and clearly call for further research in this regard.

Overall Approach of this Dissertation

All in all, the above literature review indicates that different aspects of temporal cognitions play an important role for leadership processes and outcomes. Importantly, however, several relevant research gaps seem to limit our current understanding of these relationships. This dissertation aims to address these oversights and amend the existing leadership literature on temporal cognitions. First, with regard to time urgency, research has largely ignored whether and when time-urgent leaders may engage in counterproductive leadership behavior and, thus, may negatively affect their followers, even though there are good theoretical reasons to expect such linkages. **Chapter 2** addresses this issue by examining the role of leaders' time urgency in a field study of formal supervisors and subordinates from different industries across Germany. Drawing from cognitive perspectives on time urgency (Kruglanski et al., 2006), in particular, it develops a multilevel moderated mediation model linking supervisors' time urgency to their autocratic leadership behavior which, in turn, is suggested to increase individual subordinates' perceptions of work stress and time pressure. Moreover, Chapter 2 integrates these notions with the idiosyncrasy credit model (Hollander, 1958) to cast supervisors' self-perceived status as a critical boundary condition for these linkages. By doing so, this chapter aims to provide a more critical and context-specific view toward the leadership consequences associated with supervisors' time urgency.

With regard to leaders' temporal focus, the previous literature review suggests that leaders' attention toward the past is broadly assumed to result in passive and, thus, relatively ineffective leadership behavior, although this linkage has never been empirically tested. Moreover, leadership research has largely neglected the role of followers' attention to different

time frames for leadership processes. Drawing from leader-team fit theory (Cole, Carter, & Zhang, 2013) and functional leadership theory (Zaccaro, Rittman, & Marks, 2001), **Chapter 3** examines these issues by developing a leader-team fit model. In particular, it suggests that alignment between leaders and their team of followers with regard to their past temporal focus is associated with leaders' task-oriented, relationship-oriented, and laissez-faire leadership. Chapter 3 tests these theoretical notions among formal supervisors and their direct team of subordinates working in a variety of industries throughout Germany, using polynomial regression techniques and response surface analyses (Edwards & Parry, 1993). By doing so, it moves beyond the leader-centered perspective prevalent in most previous leadership studies on temporal focus to develop a multiple-stakeholder view (Carter & Mossholder, 2015; Cole et al., 2013) that casts all leadership parties' attention toward the past as determinants of important leadership behaviors.

Finally, **Chapter 4** extends the research on temporal perceptions and leadership toward informal leadership contexts. As indicated in the literature review, there is considerable ambiguity with regard to the role of time pressure for informal leadership behavior. Moreover, the existing research has largely neglected the role of differing time pressure perceptions between the parties involved in an informal leadership situation. Chapter 4 addresses these issues by adopting an actor-partner interdependence view (Kenny, Kashy, & Cook, 2006). Drawing from time, interaction, and performance theory (TIP; McGrath, 1991), in particular, it examines how differences in dyadic interaction parties' time pressure perceptions affect individuals' time-oriented behavior and relationship-oriented behavior (i.e., two specific types of informal influence attempts) toward each other. Chapter 4 empirically tests its predictions using two experimental studies, including an online scenario study conducted in the United States and a laboratory study run in Germany. By doing so, this chapter advances a new, finer-grained perspective toward the interpersonal consequences of time pressure perceptions.

Taken together, this dissertation aims to contribute to the leadership literature by developing a new, more context-specific view toward the implications of leaders' and followers' temporal cognitions for leadership behaviors and outcomes. In particular, I conceptualize these time-related constructs as inherently social phenomena (McGrath & Tschan, 2004), that both affect and are affected by different parties involved in a leadership context. Chapter 2, in particular, casts supervisors' perceptions of their social standing (i.e., self-perceived status among subordinates) as a critical moderator for the leadership consequences associated with time urgency. Similarly, Chapter 3 integrates both supervisors' and their team's past temporal focus as joint predictors of supervisors' leadership behavior toward their team. Finally, Chapter 4 moves beyond Chapter 2 and 3 to examine the role of time pressure perceptions in informal leadership contexts, and it investigates the interplay between a focal employees' and his or her interaction partners' time pressure perceptions for these interpersonal influence processes. Figure 1.1 summarizes the overall approach of this dissertation, including a short overview of the empirical chapters, their underlying theoretical backgrounds, and utilized methodologies.

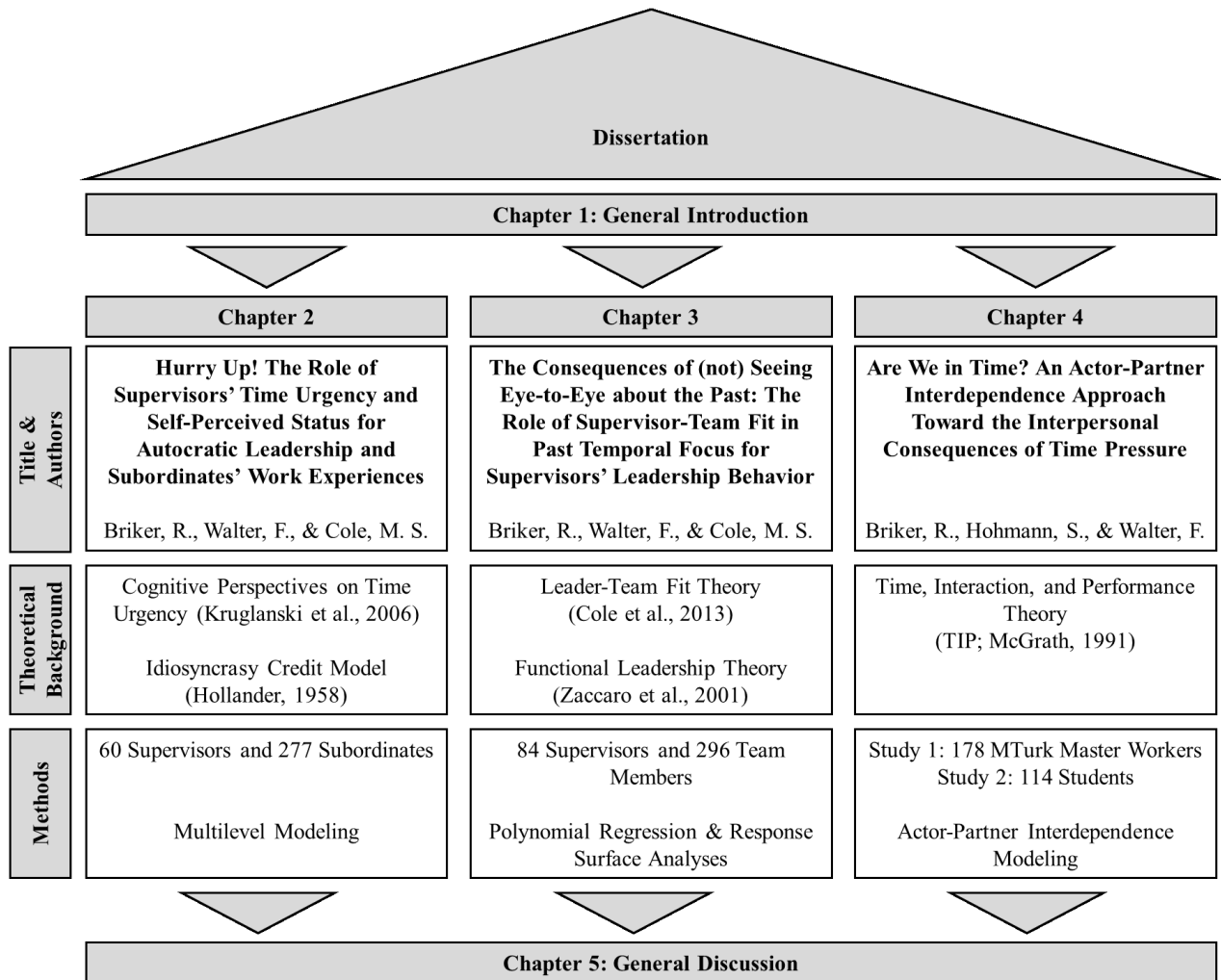


Figure 1.1. Overview of doctoral dissertation.

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Chapter 2: Hurry Up! The Role of Supervisors' Time Urgency and Self-Perceived Status for Autocratic Leadership and Subordinates' Work Experiences

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Abstract

This study examines the theoretical connections between supervisors' time urgency, their leadership behavior, and subordinate outcomes. Integrating cognitive perspectives on time urgency with insights from research on idiosyncrasy credit, we argue that supervisors' time-urgent personality is positively associated with their autocratic leadership behavior, and we cast supervisors' self-perceived status as a situational moderator of the time urgency–autocratic leadership linkage. In turn, autocratic leadership is anticipated to positively associate with subordinates' experiences of stress and time pressure at work. We tested our hypotheses using a field sample of 60 supervisors and 277 of their direct subordinates. Results indicate that (a) supervisors with higher time urgency are more likely to exhibit autocratic leadership behavior when they perceive themselves as having relatively high status among their subordinates, but not when perceiving relatively low status, and (b) autocratic leadership is positively related with subordinates' experiences of work stress and time pressure. Hence, this study's findings emphasize the role of supervisors' time-based personality characteristics for leadership behaviors and outcomes and highlight status considerations as a critical boundary condition in this regard.

Keywords: time urgency, autocratic leadership, authoritarian leadership, status, time pressure

Individuals differ markedly in their subjective perceptions of and orientations toward time (Mohammed & Harrison, 2013), and scholars have suggested such time-based personality characteristics to critically influence individuals' behavior in organizations (Schriber & Gutek, 1987; Shipp & Cole, 2015). In particular, research has found that employees scoring high on time urgency (defined as the chronic, trait-like tendency to feel hurried and short on time; Landy, Rastegary, Thayer, & Colvin, 1991) are often highly engaged at work, exhibiting superior job involvement, work speed, and job performance (e.g., Conte, Schwenneker, Dew, & Romano, 2001; Lee, Ashford, & Bobko, 1990). Clearly, these characteristics are beneficial from an organizational perspective, and it is therefore not surprising that highly time-urgent individuals are frequently selected for formal supervisory positions (Leroy, Shipp, Blount, & Licht, 2015; Sanders & Malkis, 1982). And indeed, time-urgent supervisors are generally perceived as acting in an energetic, forceful, and proactive manner, thus delivering timely results and effectively synchronizing their subordinates' efforts (Chen & Nadkarni, 2017; Mohammed & Alipour, 2014).

Importantly, however, cognitive perspectives on time urgency (Kahneman, 2011; Kruglanski, 1989) suggest that supervisors' time-urgent personality may also have a different, more negative side. This stream of research holds that high time urgency may evoke an "autocracy bias" (Pierro, Mannetti, De Grada, Livi, & Kruglanski, 2003, p. 405), such that time-urgent individuals tend to favor fast solutions, ignore divergent ideas, and discount alternative points of view to accommodate their need for quick and efficient task accomplishment (Waller, Giambatista, & Zellmer-Bruhn, 1999). On this basis, it seems possible that highly time-urgent supervisors lean towards an autocratic style of leadership, which, in turn, may undermine subordinates' well-being. To meet their desire for efficiency and fast-paced work, these supervisors may centralize decision-making, and they may pressure subordinates toward

increased effort and higher working speed through dominant and authoritarian behavior (cf. Harms, Wood, Landay, Lester, & Vogelgesang-Lester, 2018; Lewin, Lippitt, & White, 1939).⁵ The present research aims to shed new light on these potentially undesirable consequences of supervisors' time urgency. Hence, we examine how this time-oriented personality trait may promote supervisors' autocratic leadership behavior and, thus, may create intense experiences of work stress and time pressure among subordinates.

On first glance, the anticipated linkage between supervisors' time urgency and autocratic leadership may seem rather straightforward. Importantly, however, the literature on individuals' time-based personality suggests that the behavioral consequences associated with such characteristics often hinge on contextual boundary conditions (e.g., Greenberg, 2002; Zhang, Wang, & Pearce, 2014). Indeed, this caveat seems particularly important when considering the role of time urgency for autocratic leadership. After all, autocratic supervisors' bossy, domineering, and sometimes even dictatorial behaviors (De Hoogh et al., 2015; Harms et al., 2018) are inconsistent with the norms for civility, empowerment, and participation prevalent in many modern organizations (Parker, Morgeson, & Johns, 2017). For time urgency to translate into autocratic leadership, it is therefore necessary that a supervisor defies common social and organizational norms – and it seems unlikely that all time-urgent supervisors are equally willing and able to do so. Hence, it remains an open question *when* a supervisor's time-urgent personality traits will trigger his or her autocratic behavior toward subordinates.

We draw from theory and research on the idiosyncrasy credit model (Hollander, 1958; Hollander & Julian, 1970) to address this question. This conceptual perspective suggests that

⁵ In the available literature, the terms “autocratic leadership” and “authoritarian leadership” are used interchangeably to denote this type of leadership behavior (Schaubroeck, Chen, & Shong, 2017). Following Harms et al. (2018), we use the term “autocratic leadership” throughout the present paper (see also De Hoogh, Greer, & Den Hartog, 2015).

perceptions of high status (i.e., one's self-perceived prestige, respect, and esteem within a relevant group; Anderson, Srivastava, Beer, Spataro, & Chatman, 2006) increase supervisors' behavioral discretion and legitimate them to more freely express their personality, even if the respective actions violate prevalent norms (Abrams, de Moura, Marques, & Hutchison, 2008; Hollander et al., 1958). Directly pertaining to the present study's focus, scholars have argued that "with status, comes the control of time" (Chen, Blount, & Sanchez-Burks, 2004, p. 129), such that high-status individuals are more likely to follow their own temporal preferences (Blount & Janicik, 2002) despite countervailing norms and social expectations. We thus cast a supervisor's self-perceived status among his or her subordinates as a key boundary condition on the relationship between time urgency and autocratic leadership behavior and, consequently, for subordinates' resulting experiences of work stress and time pressure.

Taken together, we propose a conditional indirect effects model (see Figure 2.1), such that the indirect relationship between a supervisor's time urgency and individual subordinates' work stress and time pressure experiences, via the supervisor's autocratic leadership, hinges on a supervisor's self-perceived status. By empirically testing this model, we aim to make several contributions to the existing literature. Although theorists have emphasized that supervisors' time-based personality characteristics may critically influence their leadership behavior (e.g., Alipour, Mohammed, & Martinez, 2017; Thoms, 2004), empirical examinations of this notion have been "scarce and scattered" (Bluedorn & Jaussi, 2008, p. 657; see also Shipp & Cole, 2015). Hence, the present investigation provides us with an opportunity to develop and test new theory that illustrates the important role of supervisors' temporal personality. In doing so, we strive to challenge the prevalent notion that time urgency is beneficial for individuals in formal supervisory positions (Chen & Nadkarni, 2017; Sanders & Malkis, 1982), providing a more critical perspective that links supervisors' time urgency with undesirable leadership behaviors

and outcomes. In addition, we offer new insights on an important boundary condition that may enhance or curtail these detrimental consequences. Extending previous theory on the autocracy bias associated with individuals' time urgency (e.g., Streufert, Streufert, & Gorson, 1981; Kruglanski, Pierro, Mannetti, & De Grada, 2006), we illustrate status perceptions as a key contextual contingency factor that may qualify this association.

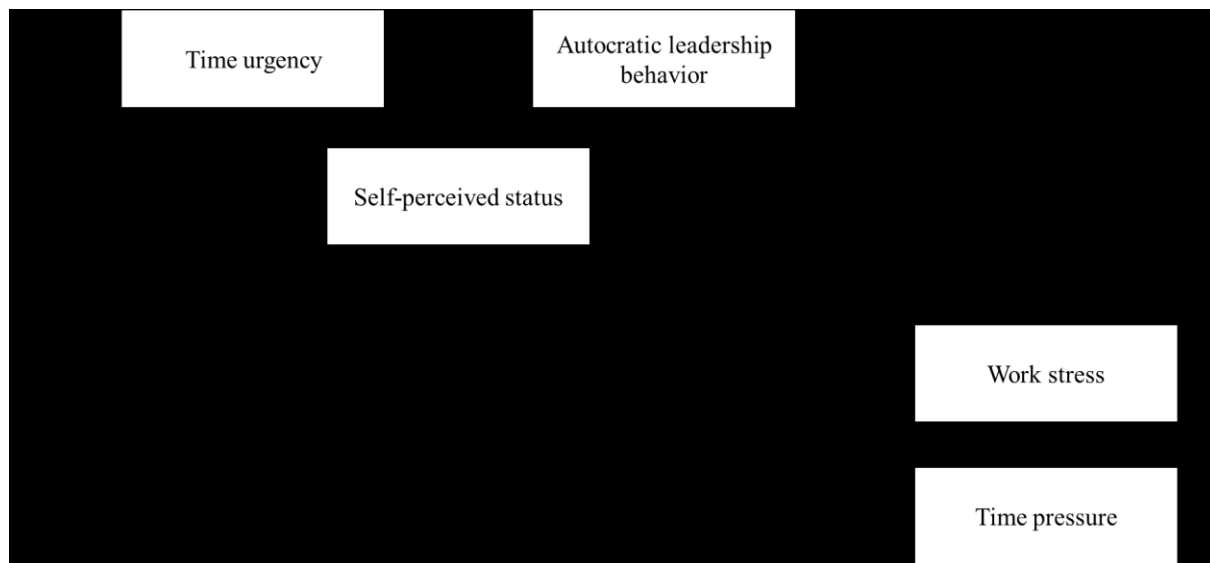


Figure 2.1. Conceptual model of Chapter 2.

Theory and Hypotheses Development

Supervisors' Time Urgency and Autocratic Leadership

We draw from theory and research on the cognitive and psychological consequences of time urgency (Kahneman, 2011; Kruglanski et al., 2006) to explain why supervisors with higher (rather than lower) time urgency may lean towards autocratic leadership to a greater extent. Time urgency is a dispositional trait that forms an important part of the Type A personality pattern (Friedman & Rosenman, 1974) and shapes an individual's cognitions, decision-making, and actions (Waller, Conte, Gibson, & Carpenter, 2001). Highly time-urgent individuals are preoccupied with the passage of time and consider time to be a precious resource (Landy et al.,

1991). Accordingly, they feel chronically hurried, strive for timely and efficient task completion, and emphasize punctuality (Dishon-Berkovits & Koslowsky, 2002). These individuals prefer to act quickly, without much pause for deliberation, and they impose strict deadlines on themselves (Rastegary & Landy, 1993). Individuals with relatively low time urgency, by contrast, pay less attention to time or deadlines (Waller et al., 2001). They tend to be more relaxed, often underestimating the passage of time and acting in a slow, unhurried manner (Conte, Landy, & Mathieu, 1995).

With the above in mind, we expect that supervisors with relatively high time urgency will frequently adopt autocratic leadership behaviors. Because time-urgent individuals experience a chronic sense of hurriedness, they often eschew slow, deliberate thinking, instead basing their decisions on fast, intuitive insights (Ben-Zur & Wardi, 1994; De Dreu, 2003). Consequently, supervisors with relatively pronounced time urgency may be reluctant to process deviant information, and they may exhibit a rather rigid and narrow thinking style that focuses on initial ideas and solutions as opposed to a careful consideration of alternatives (Streufert et al., 1981). Based on this logic, it seems reasonable to assume that highly time-urgent supervisors will perceive subordinates' inputs as time-consuming distractions without much value and, thus, will disregard subordinates' perspectives, ideas, and needs. Rather than accepting (or even soliciting) subordinates' contributions, we argue that these supervisors are likely to dictate task assignments and push subordinates toward uniformity and compliance, setting aggressive targets and deadlines and closely monitoring subordinates' progress in this regard.

Supervisors with relatively low time urgency, by contrast, are less likely to exhibit autocratic leadership behavior. These supervisors should be less concerned with temporal demands and schedules than their more time-urgent counterparts and, thus, they may prefer more elaborate and careful decision-making procedures (Chen & Nadkarni, 2017; Kunisch, Bartunek,

Mueller, & Huy, 2017). Hence, supervisors with lower time urgency are more likely to mull over available alternatives before committing to a specific course of action (Streufert et al., 1981) and, in doing so, to consider their subordinates' opinions as valuable inputs (De Grada, Kruglanski, Mannetti, & Pierro, 1999). We therefore expect that supervisors with relatively low time urgency will be more open to their subordinates' contributions. Rather than using autocratic behaviors to push subordinates toward quick task accomplishment, these supervisors may be willing to discuss alternative views with their subordinates and integrate relevant ideas into their decisions. We therefore propose:

Hypothesis 1: Supervisors' time urgency is positively related with their autocratic leadership behavior.

The Moderating Role of Supervisors' Self-Perceived Status

Although the above rationale suggests that highly time-urgent supervisors will exhibit autocratic leadership behavior more frequently than supervisors with lower time urgency, we believe it is crucial to consider relevant contextual boundary conditions for this relationship. As noted before, research on time-based personality characteristics has long established that situational constraints shape the extent to which individuals openly display their temporal preferences and inclinations (Greenberg, 2002; Blount & Leroy, 2007). Regarding the role of time urgency for autocratic leadership, in particular, one should keep in mind that this leadership style includes behaviors that are likely to be considered counternormative (or even destructive) in many groups and organizations (Schaubroeck et al., 2017; Van Vugt, Jepson, Hart, & De Cremer, 2004). This is because autocratic leadership entails ordering subordinates around in a bossy manner, neglecting subordinates' needs, and rejecting subordinates' participation in decisions that affect themselves (Harms et al., 2018). Hence, it is important to examine situational contingency factors that may allow a supervisor's time urgency to translate into autocratic

leadership despite the undesirable features of such behavior, or that may attenuate this association. As detailed below, we contend that supervisors' self-perceived status among their subordinates plays a crucial role in this regard.

We draw on the idiosyncrasy credit model (Hollander, 1958, 2012) to argue that a supervisor's status among his or her subordinates will critically determine the supervisor's behavioral discretion. With relatively high status, on the one hand, supervisors enjoy considerable respect, esteem, and influence (Hollander, 1964). In this situation, it is likely that subordinates will, in general, view their supervisor's actions, decisions, and ideas in a positive light (Stone & Cooper, 2009). By consequence, it is reasonable to assume that high-status supervisors have considerable idiosyncrasy credit, meaning that their behaviors are "readily accepted, even though they may represent deviations from group patterns" (Hollander & Julian, 1970, p. 36). In other words, high-status supervisors can afford to behave in ways that are inconsistent with group and organizational norms and expectations, without evoking strong disapproval or even resistance from subordinates (Abrams, de Moura, & Travaglino, 2013). Consequently, we propose that highly time-urgent supervisors can openly express their "autocracy bias" (Pierro et al., 2003, p. 405) when they perceive themselves in a high-status position, freely enacting their preferences for a forceful, overbearing, and non-participative style of leadership. The positive association between time urgency and autocratic leadership should, therefore, be particularly pronounced among high-status supervisors.

For supervisors with relatively low status perceptions, by contrast, we anticipate the time urgency–autocratic leadership linkage to be attenuated. In this situation, subordinates have less respect for their supervisor, hold him or her in lower esteem, and regard the supervisor's decisions and actions with suspicion (Abrams et al., 2013; Hollander & Julian, 1970). It follows that low-status supervisors possess little idiosyncrasy credit, such that they are unlikely to find

acceptance for behaviors that contradict social norms and expectations (Abrams et al., 2008; Hollander, 1964). These supervisors may be reluctant, therefore, to openly express the autocratic, potentially counternormative action tendencies that accompany higher time urgency. To avoid subordinates' rejection and resistance, even a highly time-urgent supervisor may, then, exhibit fewer dominant and assertive acts aimed at pressuring subordinates to work harder. Taken together, we therefore propose:

Hypothesis 2: Supervisors' self-perceived status moderates the relationship between supervisors' time urgency and autocratic leadership behavior, such that this positive relationship is more pronounced among supervisors with higher rather than lower self-perceived status.

Autocratic Leadership and Individual Subordinates' Work Experiences

We further propose that a supervisor's autocratic style of leadership will positively relate with individual subordinates' unfavorable work experiences, including their perceptions of work stress (i.e., job demands exceeding one's subjective capabilities; McGrath, 1976) and time pressure (i.e., insufficient time to complete one's tasks; Kinicki & Vecchio, 1994). As noted before, autocratic supervisors generally act in a bossy and forceful manner, pushing subordinates toward quick and efficient task accomplishment and, in doing so, imposing substantial work demands upon subordinates (De Cremer, 2006; Harms et al., 2018). Moreover, autocratic leadership limits subordinates' opportunities for participation and involvement, thus diminishing subordinates' feelings of work autonomy and control (De Hoogh & Den Hartog, 2009; Van Vugt et al., 2004).

Research has shown that such a combination of high work demands and low autonomy can be particularly stressful (e.g., Häusser, Mojzisch, Niesel, & Schulz-Hardt, 2010; Karasek, 1979). In these situations, subordinates face substantial requirements and obligations at work,

while simultaneously lacking important resources to effectively address these requirements. Hence, subordinates are likely to feel overwhelmed by their excessive work demands and limited coping opportunities (Harms et al., 2018). In support of this reasoning, research has demonstrated that subordinates working for autocratic supervisors more frequently suffer from burnout (De Hoogh & Den Hartog, 2009) and negative emotionality on the job (De Cremer, 2007). Hence, we predict:

Hypothesis 3a: Autocratic leadership behavior is positively related with individual subordinates' experiences of work stress.

Furthermore, we propose that a supervisor's autocratic leadership will increase his or her subordinates' time pressure perceptions. Lewin et al. (1939, p. 284) have described autocratic supervisors as individuals who want their subordinates to get things "done in a hurry" (see also Bass & Bass, 2008). For example, autocratic supervisors impose strict deadlines, insist that subordinates adopt a fast-paced working style, and place a strong emphasis on efficient and timely goal achievement (Huang, Xu, Chiu, Lam, & Farh, 2015; Muczyk & Reimann, 1987). As such, we expect that subordinates will experience a supervisor's autocratic behavior as setting a relentless and ambitious pace. Consistent with research that casts leadership behavior as a key predictor of subordinates' time pressure experiences (e.g., Dietz & Scheel, 2017), we therefore hypothesize:

Hypothesis 3b: Autocratic leadership behavior is positively related with individual subordinates' experiences of time pressure.

The Mediating Role of Autocratic Leadership

The above theorizing has cast supervisors' time urgency and self-perceived status as jointly influencing their autocratic leadership, with such leadership, in turn, shaping individual subordinates' unfavorable work experiences. Taken together, this pattern of relationships is

consistent with common “personality–leadership behavior–outcome” frameworks that position leadership behaviors as transmitting the consequences of supervisors’ dispositional characteristics (Chen & Nadkarni, 2017, p. 33; see also DeRue, Nahrgang, Wellmann, & Humphrey, 2011). In the present case, our reasoning suggests that time-urgent supervisors’ chronic sense of hurriedness may indirectly (through a supervisor’s autocratic leadership behavior) associate with a subordinate’s experiences of work stress and time pressure (i.e., Hypotheses 1 and 3). Moreover, with supervisors’ self-perceived status predicted to moderate the time urgency-autocratic leadership linkage (i.e., Hypothesis 2), we argue that the overall indirect relationship will be contingent on a supervisor’s self-perceived status as well. In sum, we expect a pattern of first-stage moderated mediation (Edwards & Lambert, 2007), such that the indirect association between supervisors’ time urgency and individual subordinates’ work experiences, through autocratic leadership, should be more (less) pronounced for supervisors with higher (lower) status perceptions.

Hypothesis 4: Supervisors’ self-perceived status moderates the positive and indirect relationships between supervisors’ time urgency and individual subordinates’ experiences of work stress (H4a) and time pressure (H4b), through autocratic leadership behavior. These indirect relationships are more pronounced among supervisors with higher rather than lower self-perceived status.

Method

Sample and Procedure

We collected data from a heterogeneous sample of supervisors and their subordinates from various organizations and industries to increase the generalizability of our findings, approaching the potential participants through personal and university contacts (for similar procedures, see Breevaart & de Vries, 2017; Bunderson, van der Vegt, Cantimur, & Rink, 2016).

Potential participants received general information about the study (without revealing our hypotheses) and, depending on organizational constraints, they received either web-based or (otherwise identical) paper-and-pencil surveys for data collection. We used separate survey versions for supervisors and subordinates to help alleviate same source concerns (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The survey version distributed to supervisors assessed their time urgency and self-perceived status, whereas the subordinate survey requested participants to rate their immediate supervisor's autocratic leadership behavior and to provide self-ratings of perceived work stress and time pressure. Participation was voluntary for both supervisors and subordinates, and all participants were assured confidentiality. The online surveys were hosted on a third-party provider's secured servers, and the paper-and-pencil surveys were returned directly to the researchers. Altogether, we collected data from supervisors and their direct subordinates from 43 organizations located across Germany, representing a variety of industry sectors (i.e., manufacturing – 37%, services – 23%, health care – 20%, finance – 8%, sales – 7%, and public service – 5%).⁶

To be included in the present study, a supervisor was required to (a) complete his or her own survey and (b) have at least two subordinates provide ratings of his or her autocratic leadership (cf. Rubin, Munz, & Bommer, 2005). Moreover, to help ensure that subordinates could reliably assess their supervisor's leadership behavior, inclusion in the subordinate sample required that a subordinate had worked for his or her supervisor on a regular basis (i.e., at least one day a week) for a minimum of three months. Based on these criteria, we excluded one

⁶ Because the participants were nested within 43 organizations, we followed procedures outlined by Bickel (2007) to determine whether it was necessary to estimate our hypotheses using a three-level model (i.e., representing the individual subordinate, supervisor, and organizational levels). Importantly, however, participants' membership within a particular organization did not explain significant variance in any of the focal outcome variables (i.e., supervisors' autocratic leadership as well as subordinates' work stress and time pressure perceptions). Hence, the following hypotheses tests are based on a two-level model (i.e., subordinates nested within supervisors).

supervisor and 15 subordinates. Our final sample therefore comprised 60 supervisors and 277 of their direct subordinates. The number of subordinate responses per supervisor ranged from 2 to 12 ($M = 4.62$, $SD = 2.29$). Supervisors were 47 years old ($SD = 9.94$), on average, and 68% were male. Their average organizational tenure was 13.75 years ($SD = 9.35$). Subordinates were 39 years old ($SD = 11.98$), on average, and 52% were male. Subordinates' average organizational tenure was 9.33 years ($SD = 9.21$).

Measures

We translated all measurement instruments to German following a back-translation procedure (Brislin, 1980). Unless otherwise indicated, all measures were assessed using a 5-point response scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Time urgency. Following recent empirical work on time urgency in organizations (Mohammed & Nadkarni, 2011; Chen & Nadkarni, 2017), our supervisor-survey used a six-item measure derived from Landy et al.'s (1991) general and task-related hurry subscales to capture this construct. Consistent with our definition of time urgency, these items assess the extent to which individuals feel chronically hurried and rushed. Example items are, "I find myself hurrying to get to places even when there is plenty of time," "I often work slowly and leisurely" (reverse coded), and "People that know me well agree that I tend to do most things in a hurry."

Cronbach's alpha was .68.

Self-perceived status. Supervisors assessed their perceived status among their subordinates using four items from Hays and Bendersky (2015) and Bunderson, van der Vegt, and Sparrowe (2014). We slightly modified these items to allow for self-ratings rather than peer-ratings. The specific items were, "I have much respect among my subordinates," "I have much esteem among my subordinates", "I have much prestige among my subordinates", and "I have much work-related knowledge." Cronbach's alpha was .70.

Autocratic leadership. Subordinates rated their direct supervisor's autocratic leadership behavior using De Hoogh, Den Hartog, and Koopman's (2004) five-item measure. Example items are, "My supervisor believes that, in reality, only person can be the leader", "My supervisor is bossy and orders subordinates around," and "My supervisor is very critical of new ideas." We averaged multiple subordinate ratings of the same supervisor's behavior. Intraclass correlation coefficients ($ICC[1] = .29$, $F[59, 217] = 2.84$, $p < .001$, $ICC[2] = .65$) as well as interrater agreement statistics (median $r_{wg(j)} = .91$, using a uniform expected variance distribution) justified this aggregation decision (Bliese, 2000). Cronbach's alpha was .74.

Work stress. Subordinates rated their perceived stress at work by completing Motowidlo, Packard, and Manning's (1986) four-item measure. Example items include, "I feel a great deal of stress because of my job" and "I almost never feel stressed at work" (reverse coded). Cronbach's alpha was .81.

Time pressure. Subordinates assessed their perceived time pressure at work using a four-item measure (Maruping, Venkatesh, Thatcher, & Patel, 2015), slightly adapted to allow for self-ratings rather than using the original items' team-level referent. Sample items are, "I am often under a lot of pressure to complete my tasks on time" and "I am not afforded much time to complete my tasks." Cronbach's alpha was .90.

Control variables. When examining the relationship of supervisors' time urgency and self-perceived status with autocratic leadership (Hypotheses 1 and 2), we considered supervisors' gender (0 = female; 1 = male) and age (in years) as potential covariates. Prior research suggests that autocratic behavior may be more congruent with stereotypical role expectations toward males rather than females (Eagly & Johnson, 1990) and toward older rather than younger individuals (Buengeler, Homan, Voelpel, 2016). Hence, it seems possible that these demographic factors will bias the time urgency-autocratic leadership linkage.

Additionally, we considered supervisors' gender and age, subordinates' time urgency, and subordinates' average weekly working hours as potential covariates for the predicted relationships between autocratic leadership and individual subordinates' work stress and time pressure experiences (Hypotheses 3a and 3b). Scholars have suggested that female (rather than male) and younger (rather than older) supervisors' autocratic leadership may trigger more adverse reactions, as this type of behavior contradicts stereotypes toward women and younger individuals (Buengeler et al., 2016; Eagly, Makhijani, & Klonsky, 1992). Furthermore, subordinates' own time-urgent personality may confound our proposed relationships. Research has shown that highly time-urgent individuals are more prone toward experiences of stress and time pressure (Rastegary & Landy, 1993) and, as such, it seems possible that more time-urgent subordinates may react more strongly toward their supervisors' autocratic behavior. We therefore captured subordinates' time urgency in the subordinate survey, using the same measure as for supervisors' time urgency (Mohammed & Nadkarni, 2011; $\alpha = .62$). Finally, subordinates' number of working hours per week might constitute an important control variable because long working hours may impose considerable demands (Jex & Bliese, 1999). With autocratic leadership diminishing subordinates' sense of control and autonomy on the job (Van Vugt et al., 2004), such leadership might therefore be perceived as particularly stressful among subordinates with longer (rather than shorter) working hours.

Data Analysis

Our focal variables are located at two levels of analysis. Supervisors' time urgency, self-perceived status, and autocratic leadership are located at the supervisor level (Level-2), whereas subordinates' work stress and time pressure perceptions are located at the individual subordinate level (Level-1). Hypotheses 1 and 2 therefore reflect a single level of theory and analysis (i.e., Level-2), and we used (moderated) ordinary least squares regression to test these hypotheses.

Moreover, Hypotheses 3a and 3b specify cross-level relationships, requiring the use of multilevel methods (Snijders & Bosker, 2012). We employed random intercept models to test these hypotheses, using the mixed model procedure in SPSS (Bickel, 2007).

Finally, Hypotheses 4a and 4b specify cross-level moderated mediation models. We built on procedures outlined by Krull and MacKinnon (2001) to test these hypotheses (for similar approaches see, e.g., Schaubroeck et al., 2017; Walter, Lam, van der Vegt, Huang, & Miao, 2015). Specifically, we first calculated simple slopes for the (Level-2) relationship between supervisors' time urgency and autocratic leadership at higher (+1 *SD* above the mean) and lower (-1 *SD* below the mean) values of self-perceived status, and we drew from the cross-level estimates for the hypothesized relationships between autocratic leadership and subordinates' perceptions of work stress and time pressure. We then used these values as inputs for Selig and Preacher's (2008) Monte Carlo procedure to derive 95% confidence intervals (based on 20,000 resamples) for the conditional indirect relationships between supervisors' time urgency and subordinates' work experiences, through autocratic leadership, at higher and lower levels of supervisors' self-perceived status. This procedure is considered superior to traditional approaches (e.g., the Sobel [1982] test) when examining (conditional) indirect relationships, for example because it avoids normality assumptions regarding an indirect effect's distribution (MacKinnon, Lockwood, & Williams, 2004). We standardized all continuous predictor variables before hypotheses testing.

Results

Descriptive Statistics and Bivariate Correlations

Table 2.1 presents means, standard deviations, and correlations for all study variables at both the supervisor (Level-2) and the subordinate level of analysis (Level-1). In terms of Level-2 control variables, male supervisors were rated as exhibiting more autocratic leadership behavior

Table 2.1

Means, Standard Deviations, and Correlations of Chapter 2 Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Subordinates' working hours/week	34.31	9.20		-.06	.18	.21	-.02	-.13	.03	.37**	.32*
2. Supervisor age	47.20	9.94	-.03		.22 [#]	-.09	-.08	.03	.02	-.04	-.06
3. Supervisor gender	0.68	0.47	.16*	.20**		.01	.06	-.06	.22 [#]	-.11	-.07
4. Subordinate time urgency	3.30	0.56	.12 [#]	-.08	-.01	(.62)	-.13	.10	.11	.50***	.22 [#]
5. Supervisor time urgency	3.36	0.62	-.05	-.05	.11 [#]	-.02	(.68)	-.07	.26*	.11	.26*
6. Supervisor self-perceived status	3.90	0.43	-.01	-.01	-.07	.08	-.06	(.70)	.05	.11	.05
7. Autocratic leadership behavior	2.53	0.46	-.01	-.05	.20**	.03	.25***	-.04	(.74)	.24 [#]	.28*
8. Subordinate work stress	2.95	0.81	.24***	-.08	-.10	.36***	.10 [#]	.10 [#]	.14*	(.81)	.77***
9. Subordinate time pressure	2.88	0.86	.21**	-.07	-.06	.23***	.14*	.05	.13*	.65***	(.90)

Note. Subordinate-level correlations are below the diagonal ($N = 260-277$); supervisor-level correlations are above the diagonal

($N = 59-60$). For gender, 0 = female and 1 = male. [#] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed).

than female supervisors, although this relationship was only marginally significant ($r = .22, p < .10$). Moreover, at Level-1, subordinates' time urgency was significantly associated with their perceptions of work stress ($r = .36, p < .001$) and time pressure ($r = .23, p < .001$), and subordinates' weekly working hours were also correlated with both work stress ($r = .24, p < .001$) and time pressure ($r = .21, p < .01$). By contrast, supervisors' age was unrelated with the focal outcome variables; we therefore excluded supervisors' age when testing study hypotheses (cf. Becker et al., 2016; Bernerth & Aguinis, 2016). Hence, we controlled for supervisors' gender when autocratic leadership was the dependent variable (Hypotheses 1 and 2), and we controlled for supervisors' gender as well as subordinates' time urgency and weekly working hours when examining subordinates' experiences of work stress and time pressure as dependent variables (Hypotheses 3a, 3b, and 4).

Hypotheses Tests

Hypothesis 1 predicted that supervisors' time urgency positively relates with their autocratic leadership behavior. As shown in Table 2.2 (Model 2), results yielded a marginally significant, positive association between supervisors' time urgency and autocratic leadership ($B = .12, SE = .06, p = .06$), after controlling for supervisor gender and self-perceived status. Hence, this finding does not unequivocally support Hypothesis 1.

Hypothesis 2 predicted that supervisors' self-perceived status moderates the relationship between supervisors' time urgency and autocratic leadership behavior. As shown in Table 2.2 (Model 3), the time urgency \times self-perceived status cross-product term significantly predicted autocratic leadership ($B = .13, SE = .06, p < .05$), after considering control variables and main effects. Depicted in Figure 2.2, simple slope analyses revealed that the relationship between time urgency and autocratic leadership was significant and positive for supervisors with relatively high

Table 2.2

Results for Hierarchical Regression Analyses on Autocratic Leadership Behavior

	Model 1		Model 2		Model 3	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
<i>Control Variables</i>						
Supervisor gender	.21 [#]	.13	.20	.13	.23 [#]	.12
<i>Main Effects</i>						
Supervisor time urgency			.12 [#]	.06	.07	.06
Supervisor self-perceived status			.04	.06	.04	.06
<i>Interaction</i>						
Time urgency x self-perceived status					.13 [*]	.06
R ²	.05 [#]		.11 [#]		.18 [*]	
Adjusted R ²	.03		.06		.12	
ΔR ²	.05 [#]		.06		.07 [*]	

Note. $N = 60$. Unstandardized coefficients are reported. [#] $p < .10$, ^{*} $p < .05$ (two-tailed).

self-perceived status (+1 *SD*; $B = .20$, $SE = .07$, $p < .01$), whereas this relationship was not significant when self-perceived status was lower (-1 *SD*; $B = -.07$, $SE = .10$, $p = .53$). Further analyses based on the Johnson-Neyman technique (Preacher, Curran, & Bauer, 2006; Hayes, 2018) revealed that the moderated relationship between supervisors' time urgency and autocratic leadership was positive and significant at any value of self-perceived status greater than .35 *SD*

above the mean, whereas this relationship was non-significant at lower levels of self-perceived status (within the sample's data range). Thus, Hypothesis 2 was supported.

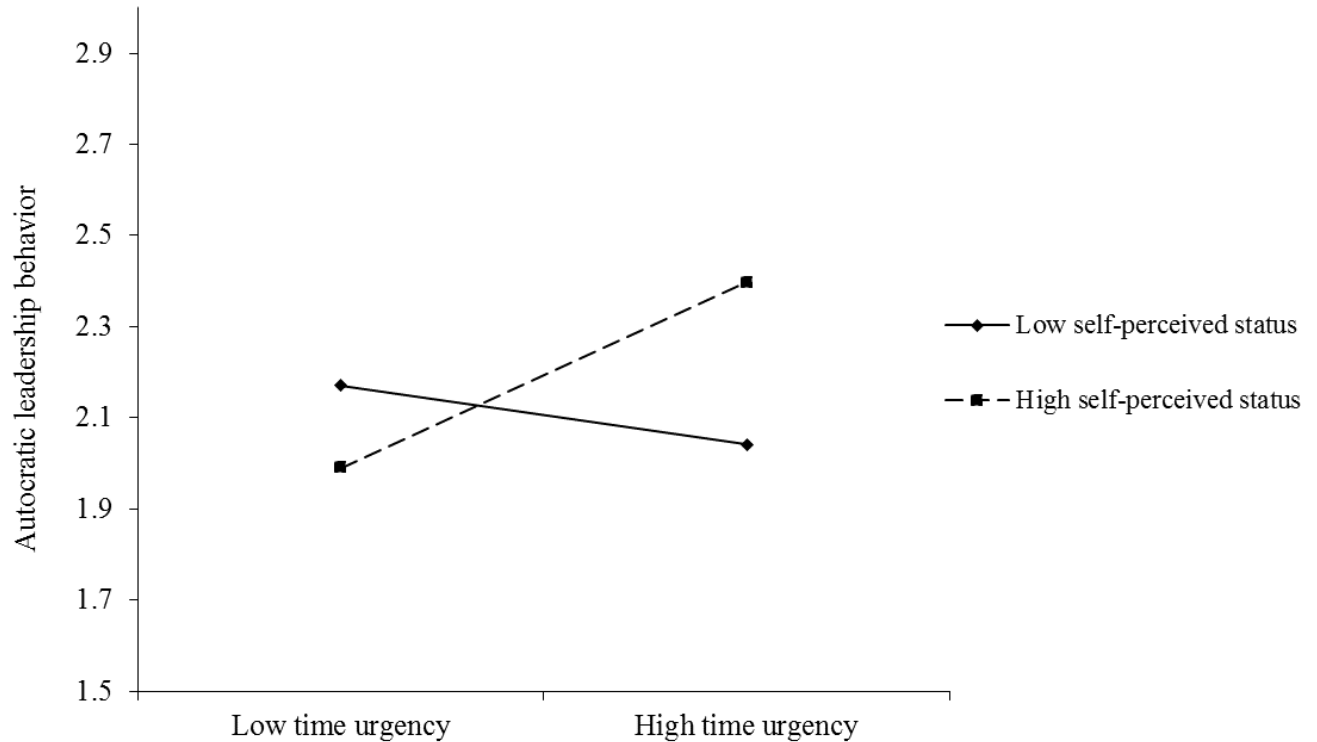


Figure 2.2. Interactive relation of supervisors' time urgency and self-perceived status with autocratic leadership behavior.

Hypothesis 3 predicted that autocratic leadership behavior positively relates with individual subordinates' experiences of work stress (H3a) and time pressure (H3b). As shown in Table 2.3, autocratic leadership was positively associated with both of these outcomes (work stress: $B = .15$, $SE = .06$, $p < .05$; time pressure: $B = .12$, $SE = .06$, $p < .05$), after considering controls as well as supervisors' time urgency and self-perceived status. Hypotheses 3a and 3b were therefore supported.

Table 2.3

Random Coefficient Results for Subordinates' Work Stress and Time Pressure

	Outcome Variables			
	Work Stress		Time Pressure	
	γ	<i>SE</i>	γ	<i>SE</i>
Subordinate working hours/week	.16**	.05	.17**	.05
Subordinate time urgency	.23***	.04	.16**	.05
Supervisor gender	-.27*	.13	-.21#	.12
Supervisor time urgency	.07	.06	.12*	.06
Supervisor self-perceived status	.06	.06	.03	.05
Autocratic leadership behavior	.15*	.06	.12*	.06
$\Delta\chi^2$ (from adding autocratic leadership)		6.12*		4.93*
Pseudo- ΔR^2 (from adding autocratic leadership)		.03		.02

Note. $N = 277$. Unstandardized coefficients are reported. * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed).

Finally, Hypothesis 4 predicted a pattern of conditional indirect associations. We expected the positive and indirect relationships between supervisors' time urgency and individual subordinates' experiences of work stress (H4a) and time pressure (H4b), as transferred by autocratic leadership, to be more pronounced for supervisors with higher (rather than lower) self-perceived status. In support of H4a, the indirect linkage between supervisors' time urgency and individual subordinates' work stress (through autocratic leadership) was positive and significant

for supervisors with relatively high status perceptions (+1 *SD*; estimate = .03, 95% CI = .004, .067), whereas this indirect relationship was not significant for supervisors with lower self-perceived status (-1 *SD*; estimate = -.01, 95% CI = -.047, .021). Similarly, the indirect relationship between supervisors' time urgency and individual subordinates' perceived time pressure (through autocratic leadership) was positive and significant for supervisors with relatively high status perceptions (+1 *SD*; estimate = .03, 95% CI = .001, .060), but not for supervisors with lower self-perceived status (-1 *SD*; estimate = -.01, 95% CI = -.040, .018). Hence, Hypothesis 4b was also supported.

Supplementary Analyses

We conducted supplementary analyses to rule out a number of possible alternative explanations for our findings. For example, Fischer, Dietz, and Antonakis (2017) have suggested that it is important to examine additional mediating processes to provide some supporting evidence that one's hypothesized channel of influence is not specious. Thus, we identified supervisors' task-oriented leadership (i.e., behavior aimed at promoting task execution; Fleishman, 1973) and temporal leadership (i.e., behavior aimed at synchronizing team members' efforts and building in time for contingencies; Mohammed & Nadkarni, 2011) as possible alternative leadership styles that might serve as mediating mechanisms.⁷ We selected these leadership styles because (a) they are conceptually similar to (yet distinct from) autocratic leadership and (b) it seems plausible that they might be affected by time urgency and/or self-perceived status (Chen & Nadkarni, 2017; Waller et al., 2001).

⁷ Measures for both task-oriented leadership (5 items, $\alpha = .80$; Stogdill, 1963) and temporal leadership (7 items, $\alpha = .89$; Mohammed & Nadkarni, 2011) were included in the subordinate survey. We again aggregated individual subordinates' responses to the supervisor level (task-oriented leadership: ICC[1] = .17, $F[59, 217] = 1.95$, $p < .001$, ICC[2] = .49, median $r_{wg(j)} = .93$; temporal leadership: (ICC[1] = .23, $F[59, 217] = 2.43$, $p < .001$, ICC[2] = .59; median $r_{wg(j)} = .94$).

In a first step, we re-estimated our hypothesized relationships but included task-oriented leadership and temporal leadership as additional control variables. The pattern and significance of the results remained virtually unchanged in these post-hoc analyses. Next, we consecutively replaced autocratic leadership with task-oriented leadership and temporal leadership as the focal mediating mechanism and re-estimated our model. Neither the main effect of supervisors' time urgency nor the time urgency \times self-perceived status interaction significantly predicted the two alternative leadership styles. Overall, these supplementary results support our reasoning that autocratic leadership (rather than other types of leadership) is a transferring mechanism linking (high-status) supervisors' time urgency with individual subordinates' experiences of stress and time pressure at work.

Moreover, following Cortina (1993) and Edwards (2008), we retested our hypotheses but added the squared (i.e., quadratic) terms for both supervisors' time urgency and self-perceived status along with these variables' main effects and their predicted two-way interaction. This post-hoc analysis explores whether our primary findings for the time urgency \times self-perceived status interaction might be spurious, resulting from curvilinear relationships between one (or both) of the predictor variables and autocratic leadership (see also Lubinski & Humphreys, 1990). The squared terms for supervisors' time urgency and self-perceived status were not significantly related with autocratic leadership, and the time urgency \times self-perceived status interaction remained statistically significant. These results underscore our model's robustness, rendering it unlikely that the observed interaction is attributable to unobserved curvilinear associations. Detailed results for all supplementary analyses are available from the first author.

Discussion

It has long been acknowledged that perceptions of and orientations towards time play a distinct role in how individuals navigate the organizational landscape (Ancona, Goodman,

Lawrence, & Tushman, 2001; Bluedorn & Jaussi, 2008). With few exceptions (e.g., Chen & Nadkarni, 2017; Zhang et al., 2014), however, the empirical leadership research has neglected such temporal dispositions, making it difficult to understand the extent to which supervisors' time-based personality characteristics may shape their leadership behaviors and associated outcomes. To address this issue, the present study examined the role of supervisors' time urgency for their autocratic leadership behavior as well as subordinates' work experiences. Our results supported a conditional indirect effects model. Among supervisors with relatively high (but not low) self-perceived status, time urgency was positively associated with autocratic leadership and, consequently, was positively and indirectly related with subordinates' work stress and time pressure experiences. As outlined in the following, these findings offer several important contributions to the leadership literature.

Theoretical Implications

The present investigation expands our knowledge on the consequences associated with a supervisor's time urgency and, in doing so, it responds to scholars' repeated calls for empirical research on supervisors' time-based personality characteristics (Alipour et al., 2017; Bluedorn & Jaussi, 2008). Although relatively scarce, prior work on this issue has typically emphasized the potential benefits that may go along with time urgency among supervisors (e.g., Chen & Nadkarni, 2017; Mohammed & Alipour, 2014). In contrast, the present study demonstrates that supervisors' time urgency may also relate with undesirable leadership behaviors (i.e., autocratic leadership) and, by consequence, with detrimental subordinate outcomes (i.e., perceptions of work stress and time pressure). These findings reiterate the relevance of integrating subjective time considerations into the study of leadership, echoing Bluedorn and Jaussi's observation that "it is difficult, if not impossible, to consider leadership without time playing a role" (p. 657; see also Alipour et al., 2017). More specifically, our results draw attention to a potential 'dark side'

of time-based personality characteristics in a leadership context, promoting a more balanced theoretical perspective on supervisors' time urgency by highlighting potential risks and drawbacks that previous research has largely neglected.

Furthermore, our results highlight an important contextual boundary condition for the role of supervisors' time urgency. Drawing from theory and research on the idiosyncrasy credit model (Stone & Cooper, 2009; Hollander, 1958), we found that time-urgent supervisors are more likely to showcase their preferences for dominance, control, and authority when they perceive themselves as highly respected, valued, and influential among their subordinates. As such, this study breaks new conceptual ground for the literature on subjective time and leadership, anchoring the behavioral consequences of supervisors' time urgency within the specific context in which the respective relationships unfold. To fully understand the role of time-based personality characteristics in hierarchical relations, it appears crucial to consider relevant actors' perceived status as a key contingency factor.

Another theoretical contribution relates to the downstream consequences of supervisors' time urgency. Our findings illustrate that the implications of this temporal personality trait may extend beyond supervisors themselves, creating adverse working conditions for subordinates (i.e., increased stress and time pressure experiences) by triggering supervisors' autocratic leadership behavior (at least among high-status supervisors). With prior research suggesting that highly time-urgent individuals are particularly likely to attain supervisory positions (e.g., Leroy et al., 2015; Sanders & Malkis, 1982), this finding offers a new explanation for the prevalence of stress symptoms (and associated problems, such as burnout and emotional exhaustion) in many organizations and occupations (Ganster & Rosen, 2013). Moreover, our results suggest that supervisors' time-based personality characteristics may have contagious qualities, with subordinates' *situational* experiences of time pressure at work mirroring their supervisors'

chronic sense of hurriedness. This finding is consistent with the literature on temporal entrainment (Ancona & Chong, 1996). Previous research has shown, for example, that team members tend to develop shared orientations toward time (e.g., Harrison, Mohammed, McGrath, Florey, & Vanderstoep, 2003). Adding to this line of inquiry, our study shows that such temporal entrainment may also take place between formally appointed supervisors and their subordinates, and it highlights supervisors' autocratic leadership behavior as a generative mechanism underlying this process.

Limitations

Despite some strengths (e.g., multiple data sources, multiple raters of supervisors' leadership behavior), our study has potential limitations that should be considered when interpreting its findings. The internal consistency estimate for the measure of supervisors' time urgency ($\alpha = .68$) was relatively low, for example, and our supervisor-level sample size may be perceived as being less than optimal (supervisor $n = 60$). We note, however, that our supervisor-level sample size is comparable with other recent leadership studies (Chen et al., 2015; Schaubroeck et al., 2017), and each supervisors' autocratic leadership was assessed by multiple subordinates (subordinate $n = 277$).

Another potential limitation is that the study sample was drawn from a single country (i.e., Germany), which raises possible generalizability concerns. Research has shown, for example, that autocratic leadership may be more consistent with prevalent cultural norms in some other countries (e.g., China; Pellegrini & Scandura, 2008), such that even low-status supervisors' time urgency may more readily translate into autocratic leadership in such contexts. In a similar vein, autocratic behavior may be more common in organizations with a strong emphasis on behavioral discipline (e.g., police and military organizations; Bass & Bass, 2008), which were not represented in the present sample. Hence, although a recent review by Harms and colleagues

(2018) suggests that employees generally prefer non-autocratic types of leadership even in such contexts, constructive replication of our study in alternative cultural and/or organizational settings could provide further insights into the present findings' generalizability and robustness.

We further acknowledge the possibility of self-selection bias, such that individuals with extreme time urgency may not have invested the time necessary to complete our questionnaire (Harber, Zimbardo, & Boyd, 2003; Landy et al., 1991). Notably, however, Table 2.1 shows that average time urgency scores were above the scale mid-point and exhibited considerable variability ($M = 3.36$; $SD = 0.62$). These values are comparable to those reported in prior studies on time urgency in organizations (Chen & Nadkarni, 2017; Mohammed & Nadkarni, 2011) and, thus, we believe our results are unlikely to suffer from undue biases related to self-selection or range restriction.

Finally, the correlational study design does not warrant causal inference. Although our conceptual model is based on a strong theoretical foundation (Hollander, 1958; Kruglanski et al., 2006), experimental and/or longitudinal research is required to address this issue. Whereas experimental approaches could be used to examine cause-and-effect relationships, longitudinal field designs that repeatedly measure all focal variables could represent an important extension of the present investigation. Such research may contribute to the development of a “completely temporal view” (Shipp & Cole, 2015, p. 251) that integrates subjective time perceptions and personality characteristics with objective time (i.e., clock time), thereby advancing a deeper understanding of how subjective and objective temporal factors may jointly shape leadership processes and outcomes.

Future Research Directions

The current findings suggest a number of interesting directions for future research. Apart from time urgency, it would be worthwhile to investigate other time-based personality

characteristics and cognitions when studying leadership phenomena. Individuals with a strong past temporal focus (i.e., the tendency to direct attention to and be preoccupied with the past; Shipp, Edwards, & Lambert, 2009), for example, are often reluctant to accept new ideas and tend to hold pessimistic attitudes and negative emotions (Zimbardo & Boyd, 1999), and individuals with low synchrony preference (i.e., the willingness to adapt one's own pace to others' pace) tend to impose their own rhythm upon others (Leroy et al., 2015). It would be interesting, therefore, to examine the role of supervisors' respective time-based personality traits for their autocratic leadership. Of particular relevance, future research could investigate the complex interplay between different subjective time constructs among supervisors. For example, a supervisor's time urgency might interact with his or her temporal focus (Waller et al., 2001) and/or synchrony preference (Leroy et al., 2015) to influence important leadership behaviors. Empirically investigating such notions could advance a more comprehensive understanding of how and when subjective temporal factors affect leadership behaviors, processes, and outcomes.

Additionally, future research may extend the present model by integrating subordinates' time-based personality characteristics (Alipour et al., 2017; Bluedorn & Jaussi, 2008). Subordinates high in synchrony preference, for example, may be more willing to accept a time-urgent supervisor's autocratic and pressuring tendencies to retain a sense of synchrony in supervisor-subordinate interactions. Subordinates lower in synchrony preference, by contrast, may attempt to maintain their own working pace and, thus, may resist an autocratic supervisor's focus on quick and hurried task accomplishment. In a similar vein, subordinates with relatively high future temporal focus (i.e., a tendency to be preoccupied with future events; Shipp et al., 2009) may assign greater relevance to carefully planned, long-term goals, and they might therefore react more negatively (as compared with less future-focused subordinates) when a time-urgent supervisor requests swift and immediate action.

Finally, it would be interesting to examine self-perceived status as a potential boundary condition for the linkage between supervisors' time-based personality characteristics and alternative forms of leadership (i.e., beyond autocratic leadership behavior and the task-oriented and temporal leadership styles examined in our supplementary analyses). For example, supervisors low in time urgency might live out their preference for non-hurried behavior by exhibiting passive types of leadership (e.g., laissez-faire; DeRue et al., 2011), particularly when perceptions of high status grant them with the freedom and autonomy to follow such inclinations. Similarly, supervisors' status perceptions might strengthen the relationship between future temporal focus and visionary leadership prior research has observed (Thoms & Greenberger, 1998; Zhang et al., 2014), with high self-perceived status further encouraging supervisors to translate their future-oriented cognitions into observable visionary behavior. Research investigating these notions could more broadly establish self-perceived status as a key contingency factor and, thus, could provide further insights into the contextual boundary conditions that influence the role of subjective time in leadership processes.

Practical Implications

Our results provide important insights for organizational practice. Although autocratic leadership may yield performance benefits in some contexts (e.g., during crises; Huang et al., 2015), our findings suggest that this style of leadership comes at the cost of diminished subordinate well-being (i.e., higher stress and time pressure experiences at work). Indeed, there exists a considerable body of research that emphasizes the adverse psychosocial consequences and performance ramifications of supervisors' autocratic behavior (Harms et al., 2018). Hence, organizations and HR professionals are generally well-advised to consider ways of reducing instances of autocratic leadership among their supervisors. It would appear premature, however, to disregard highly time-urgent individuals for leadership selection and promotion opportunities.

After all, these individuals are deadline-oriented and strive to stay on schedule – characteristics that are often sought for supervisory positions (especially in fast-paced and dynamic environments; Conte, Mathieu, & Landy, 1998; Greenberg, 2002).

Rather than altogether avoiding high time urgency among supervisors, organizations may find it worthwhile to address the potentially undesirable side effects of such chronic hurriedness. Our findings show that high time urgency primarily triggers autocratic leadership behavior if supervisors perceive themselves as having a pronounced status position. Hence, organizations could aim to create an egalitarian work atmosphere in which supervisors perceive themselves as being socially close to subordinates (Cole, Bruch, & Shamir, 2009). Similarly, organizations may limit or even eliminate the overt use of status symbols (e.g., the ‘corner office’) and/or avoid excessive pay differentials to prevent inflated status differentials across hierarchical levels (Bloom, 1999; Gruenfeld & Tiedens, 2010).

In addition, training and assessment procedures may enable organizations to more directly address supervisors’ autocratic tendencies. As part of their leadership development efforts, for example, organizations may acknowledge the value of efficient time usage and deadline-oriented behavior, while also explaining that a chronic sense of hurriedness that manifests itself in autocratic leadership can result in undesirable consequences. Combined with performance appraisal systems (e.g., 360-degree feedback; Brett & Atwater, 2001) that measure and reward supervisors’ use of alternative leadership styles, such efforts may encourage supervisors to avoid autocratic behavior even if they score high on time urgency.

Conclusion

This study provides new insights into the complex role of supervisors’ time urgency for leadership behaviors and outcomes. It illustrates supervisors’ self-perceived status as a key boundary condition for the consequences of time urgency, and it highlights autocratic leadership

as a generative mechanism that may transfer a (high-status) supervisor's sense of urgency and hurriedness toward his or her subordinates. As such, we expand current knowledge on the relevance of time-based personality characteristics in a leadership context, and we hope to stimulate further research on this important issue that will advance a fresh, improved understanding of the role of temporal considerations in the literature on leadership and organizational behavior.

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Chapter 3: The Consequences of (Not) Seeing Eye-To-Eye About the Past: The Role of Supervisor-Team Fit in Past Temporal Focus for Supervisors' Leadership Behavior

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Abstract

This study seeks to advance our understanding of the leadership consequences that may ensue when supervisors and their teams have similar *vs.* differing orientations toward the past. Integrating leader-team fit theory with insights from functional leadership theory, we cast (in)congruence between supervisor and team past temporal focus as a key antecedent of supervisors' active (i.e., task-oriented and relationship-oriented) as well as passive (i.e., laissez-faire) leadership behaviors. We examined these notions in a field sample of 84 supervisors and 296 of their team members using polynomial regression and response surface analyses. Results illustrated that supervisors demonstrated more task-oriented and relationship-oriented leadership the more supervisors' and their team's past temporal focus were incongruent. Furthermore, in situations of supervisor-team congruence, supervisors' task-oriented and relationship-oriented leadership decreased and laissez-faire leadership increased with higher levels of supervisor and team past temporal focus. In sum, these findings support a complex (mis)fit model, such that supervisors' attention to the past may hinder their productive leadership behaviors in some work contexts but not in others. Hence, this research advances a novel, multiple-stakeholder perspective on the role of both supervisors' and their team's past temporal focus for important leadership behaviors.

Keywords: past temporal focus, time perspective, task-oriented leadership, relationship-oriented leadership, laissez-faire leadership

Scholars have become increasingly interested in individuals' attention to specific time frames (i.e., the past, present, or future) and how such temporal foci may help us to better understand important organizational behavior phenomena (Mohammed & Harrison, 2013; Shipp & Fried, 2014). Individuals' *past temporal focus* (i.e., "the attention individuals devote to thinking about the past;" Shipp, Edwards, & Lambert, 2009, p. 1), in particular, has been shown to distinctly shape their experiences and behaviors at work (e.g., Cojuharenco, Patient, & Bashshur, 2011; Zacher, 2016). For example, individuals characterized by a strong past temporal focus feel less powerful (Shipp et al., 2009), tend to delay actions and decisions (Díaz-Morales, Ferrari, & Cohen, 2008), and exhibit reduced energy and efficiency at work (Goldrich, 1967). Extrapolating these findings to leadership contexts, we anticipate that a supervisor's past temporal focus may critically shape his or her leadership behaviors. Scholars have generally assumed, in this regard, that past-focused supervisors are more likely to demonstrate a passive-avoidant approach toward leading others and to minimize their active leadership efforts (Bluedorn, 2002). For example, researchers have argued that "no leader wants to be called past-oriented" (Thoms, 2004, p. 103) because a strong orientation toward the past contradicts common expectations toward leaders and evokes perceptions of a "counter-ideal manager" (Alipour, Mohammed, & Martinez, 2017, p. 313) who dwells on memories instead of meeting current leadership responsibilities (see also Hernández, 2017; Weick, 1979).

Interestingly, however, the existing research offers little evidence to validate these widely shared notions. Whereas scholars have frequently examined supervisors' present and/or future temporal focus (e.g., West & Meyer, 1997; Zhang, Wang, & Pearce, 2014), the empirical leadership research has largely ignored possible connections between supervisors' past temporal focus and their leadership behaviors. In fact, we are aware of only one empirical study that has investigated the role of past temporal focus in a leadership context (i.e., Nadkarni & Chen, 2014),

linking a CEO's past temporal focus with his or her company's new product introductions. Hence, our understanding of the leadership implications associated with supervisors' past temporal focus is fragmented and incomplete, despite common concerns about potential drawbacks for supervisors' leadership behaviors.

Importantly, research on the role of time-based personality characteristics for other types of behavior (i.e., outside a leadership context) suggests that the linkage between a supervisor's past temporal focus and his or her leadership behaviors may be more intricate than often assumed. A number of studies have emphasized that an individual's time-based personality characteristics do not operate in a social vacuum but, rather, that the behavioral consequences associated with such characteristics are a function of both the focal person *and* his or her social context (Jansen & Kristof-Brown, 2005; Slocombe & Bluedorn, 1999). For temporal focus, in particular, scholars have repeatedly suggested that (mis)fit between an individual's and his or her focal work team's temporal focus can trigger strong behavioral reactions and influence important work outcomes (Eldor et al., 2017; Shipp et al., 2009). This is because (mis)fit in terms of temporal focus often leads to positive (negative) evaluations about a focal team's ability to diligently work on its tasks, swiftly and effectively achieve relevant goals, and maintain positive work relationships (Gibson, Waller, Carpenter, & Conte, 2007; Mohammed & Nadkarni, 2011).

Extrapolating these notions to a leadership context, we draw from leader-team fit theory (Carter & Mossholder, 2015; Cole, Carter, & Zhang, 2013) to propose that supervisors' behavioral reactions will hinge on the degree to which their own temporal focus is congruent with that of their direct work team. It is important to note in this regard that due to a substantial rise in team-based forms of work (Mathieu, Hollenbeck, van Knippenberg, & Ilgen, 2017), supervisors are now more often than not tasked with leading a team rather than individual subordinates (Chen, Kirkman, Kanfer, Allen, & Rosen, 2007). Hence, a supervisor's respective team (rather

than individual team members) represents a highly salient, central part of his or her social context at work (Hu & Judge, 2017; Oc, 2018). Accordingly, scholars have demonstrated that leadership behavior and team outcomes critically hinge on whether or not a supervisor's personality or goals is aligned with his or her team's collective preferences and characteristics (Gibson, Cooper, & Conger, 2009; Lam, Lee, Taylor, & Zhao, 2018). Rather than suggesting a direct linkage between supervisor past temporal focus and leadership behavior, we therefore propose that the degree of *(in)congruence* between a supervisor's past temporal focus and the past temporal focus prevalent in his or her work team will shape the supervisor's behaviors.

To more fully explicate the nature of this relationship, we integrate our previous argumentation, as drawn from leader-team theory, with insights from functional leadership theory (Hackman & Walton, 1986; McGrath, 1962). This latter perspective holds that supervisors are more likely to engage in active leadership behavior when their team fails to exhibit attitudes and behaviors that supervisors consider critical for team functioning (Morgeson, DeRue, & Karam, 2010). Alternatively, when supervisors perceive their teams as functioning appropriately, they are less likely to intervene in team processes and, thus, adopt a more 'hands off' (i.e., passive) leadership style (Zaccaro, Rittman, & Marks, 2001). Importantly, scholars have suggested that (mis)fit between supervisors' and their subordinates' time-based personality characteristics may shape supervisors' conclusions about the adequacy of subordinates' efforts and outcomes (Alipour et al., 2017). On this basis, we infer that a supervisor may view his or her team's ability to address relevant task and social issues in a distinctly negative light when supervisor and team past temporal focus are incongruent, whereas a supervisor's respective perceptions of the team may be more favorable in situations of greater congruence – with tangible consequences for the supervisor's active and passive team leadership behaviors. As depicted in Figure 3.1, our key research question therefore is how supervisor-team (in)congruence in past temporal focus relates

with supervisors' task-oriented and relationship-oriented leadership (i.e., behaviors aimed at proactively promoting task execution and employee well-being, respectively; DeRue, Nahrgang, Wellmann, & Humphrey, 2011) and with laissez-faire leadership (i.e., behaviors aimed at avoiding leadership responsibilities; Hinkin & Schriesheim, 2008).⁸

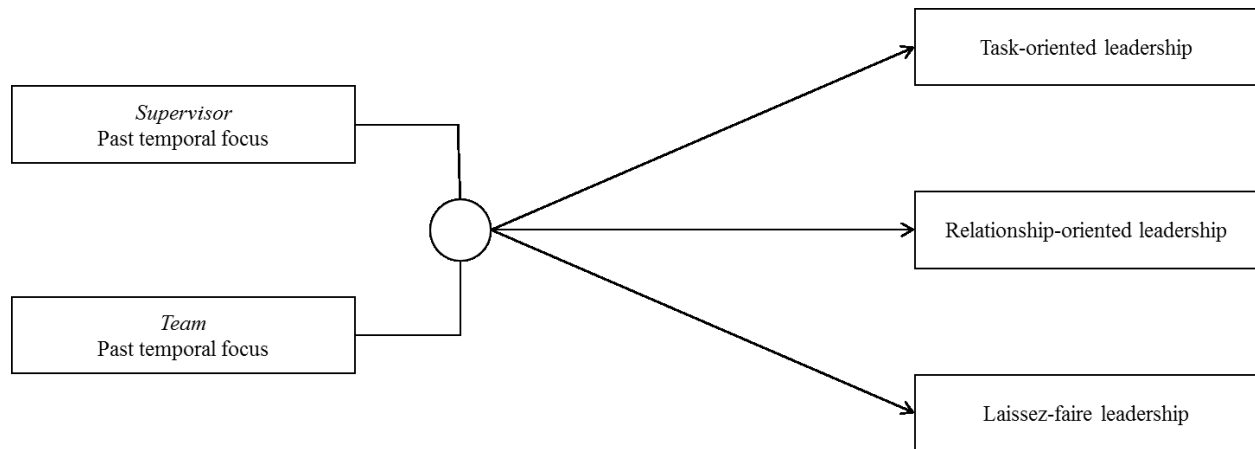


Figure 3.1. Conceptual model of Chapter 3.

By empirically examining this question, the present study responds to repeated calls for new insights into the leadership implications of individuals' temporal focus (Alipour et al., 2017; Thoms & Greenberger, 1995), moving beyond the examination of supervisors' present and future temporal focus prevalent in previous research to also investigate supervisors' *past* temporal focus. As such, this study broadens current theoretical knowledge on the role of time-based personality characteristics for leadership phenomena. In doing so, we aim to challenge the widely

⁸ We conceptualize past temporal focus (in)congruence between a supervisor and his or her team in terms of *objective (mis)fit* – i.e., supervisors' and their team's past temporal focus exist independently of one another (Kristof-Brown, Zimmerman, & Johnson, 2005). Moreover, we note that task-oriented and relationship-oriented behaviors represent prototypically active leadership styles (Fleishman, 1973), whereas laissez-faire behavior represents a prototypically passive-avoidant type of leadership (Skogstad, Einarsen, Torsheim, Aaslang, & Hetland, 2007). A large volume of research attests to the relevance of these leadership behaviors for key organizational outcomes (e.g., supervisor and team performance as well as team members' job satisfaction and motivation; Judge & Piccolo, 2004; Judge, Piccolo, & Ilies, 2004).

held assumption that supervisors' past temporal focus consistently evokes undesirable, passive-avoidant leadership tendencies and diminishes proactive leadership efforts. Rather, we advance a novel, multiple-stakeholder perspective (cf. Carter & Mossholder, 2015; Cole et al., 2013) that highlights the complex interplay between supervisors' and their team's past temporal focus as a key explanatory factor. This investigation therefore breaks new conceptual ground for research on subjective time frames and leadership, demonstrating that a full understanding of these linkages requires joint consideration of all relevant parties' temporal focus.

Theory and Hypotheses Development

Past Temporal Focus and its Psychological Consequences

The general construct of temporal focus describes the degree to which people tend to direct their attention toward the past, present, or future (Shipp et al., 2009; Zimbardo & Boyd, 1999). Scholars have argued that such temporal foci develop through early childhood experiences and cultural socialization processes, leading to a relatively stable, trait-like pattern of temporal orientations (Shipp & Aeon, 2019). Past temporal focus, in particular, represents an individual's attention to past events and actions (Shipp et al., 2009). Individuals with a strong past temporal focus spend significant time vividly remembering past experiences, emotions, and decisions (Holman & Silver, 1998). They value history and tradition, appreciate past successes, but also dwell on earlier mistakes and failures (Zimbardo & Boyd, 1999). Individuals with a relatively low past temporal focus, by contrast, do not attach much relevance to (and, thus, easily forget about) past events and experiences (Shipp et al., 2009). As such, earlier accomplishments or failures have less influence on these individuals' current decision-making and actions (Karniol & Ross, 1996).

In considering associated consequences, research and theory suggest that individuals with a pronounced focus on the past may become "psychologically locked" and passive (Rabinovich

& Morton, 2012, p. 399; see also Holman & Silver, 1998). These individuals heavily rely on established routines and existing mindsets, and they prefer well-known procedures over new approaches that deviate from the status quo (Karniol & Ross, 1996). Scholars have demonstrated, accordingly, that highly past-focused individuals tend to choose avoidance-oriented goals over approach-oriented ones (Peeters, Schreurs, & Damen, 2014), are less likely to change their behavioral intentions (Rabinovich & Morton, 2012), and report relatively low self-efficacy (Gana, Klein, Saada, & Trouillet, 2013). As such, it is not surprising that highly past-focused individuals are often characterized as indecisive and ineffective (Karniol & Ross, 1996, Shipp & Aeon, 2019).

Integrating a Leader-Team Fit Perspective with Functional Leadership Theory

This prevalent – and rather negative – depiction of highly past-focused individuals notwithstanding, consideration of the leader-team fit literature suggests that the relationships between supervisors' past temporal focus and their leadership behaviors may be more complex and context-specific. Leader-team fit theory stems from the more broad domain of person-group (P-G) fit and, in general, holds that supervisors' and their team's attitudes and behaviors are a function of the (in)congruence between a supervisor's characteristics and inclinations, on the one hand, and the respective collective features within his or her team, on the other (Cole et al., 2013; Gibson et al., 2009). A supervisor's team represents a particularly important referent for (mis)fit judgments among individuals in supervisory positions, because team members' joint attitudes, values, and behaviors critically define a supervisor's social context at work (Carter & Mossholder, 2015; Hu & Judge, 2017).

In the present study, we expect that the degree of (in)congruence between a supervisor's and his or her team's collective past temporal focus, in particular, may decisively shape the supervisor's perceptions and assessments of the team. In line with previous research on team

personality composition (e.g., Barrick, Stewart, Neubert, & Mount, 1998; Homan et al., 2008), we define this team past temporal focus as an additive composition model, such that individual team members' past temporal focus, when combined, form a configural team property (cf. Chen, Mathieu, & Bliese, 2004; Klein & Kozwloski, 2000) that reflects the team's characteristic pattern of paying attention to and thinking about the past.⁹ In particular, team past temporal focus describes the degree to which team members, on average, tend to rethink previous actions, rely upon behavioral strategies used in the past, and value tradition and history (Peetz & Wohl, in press). It is important to note, in this regard, that although temporal focus has been initially conceptualized as an individual-level construct by Shipp and colleagues (2009), scholars have recently suggested that teams often possess a collective temporal focus and have called for research examining (in)congruence effects between a focal individual's and his or her team's collective temporal focus (Eldor et al., 2017; Shipp, in press).

We argue that supervisors' evaluation of and attitudes toward their team will particularly hinge on supervisor-team (in)congruence with regard to both parties' past temporal focus. Studies have repeatedly found that alignment between an individual's and his or her work team's time-based personality characteristics is associated with favorable work experiences (Jansen & Kristof-Brown, 2005; Slocombe & Bluedorn, 1999). For temporal focus, in particular, scholars have long assumed (e.g., Waller, Conte, Gibson, & Carpenter, 2001) and recently demonstrated (Mohammed & Nadkarni, 2011) that diversity in temporal focus may shape important organizational outcomes. Because scholars suggested that a supervisor's pattern of temporal focus strongly affects how he or her she prefers to navigate the organizational landscape

⁹ Following past research on additive composition models (Deng, Leung, Lam, & Huang, 2019; Lvina, Johns, & Vandenberghe, 2018), we argue that this configural team property is reflected in the mean value of individual team members' past temporal focus (cf. Chen et al., 2004; Klein & Kozlowski, 2000). We outline this conceptualization in more detail in the Methods section.

(Nadkarni & Chen, 2014; Zhang et al., 2014), we therefore argue that (mis)alignment with the direct team's collective temporal focus may constitute an important basis for the supervisor's assessment of team functioning.¹⁰ Such (in)congruence perceptions may form as a result of daily interactions, in which both supervisors and their team can observe, for example, whether or not the other party relies on strategies or work procedures used in the past, regularly refers to past failures or successes, or engages in team traditions.

To better explicate how such (in)congruence-judgments may translate into specific leadership behaviors, we enrich these considerations with notions from relevant theory and research on leadership in teams. Functional leadership theory, in particular, provides critical insights in this regard. This theoretical perspective argues that a supervisor's core responsibility is to "do, or get done, whatever is not being adequately handled for group needs" (McGrath, 1962, p. 5). Following this logic, supervisors are likely to proactively intervene in their team when they perceive relevant problems that may undermine team processes and effectiveness (Hackman & Walton, 1986). When supervisors perceive that their team operates smoothly and without coordination or interaction problems, by contrast, this conceptual approach intimates that supervisors may feel that their team does not require proactive leadership interventions and, hence, they may adopt a more passive stance toward leadership (Zaccaro et al., 2001).

Integrating these arguments with leader-team fit theory, we anticipate that a supervisor's and his or her team's past temporal focus will *jointly* shape the supervisor's leadership behaviors. First, we draw from leader-team fit theory to propose that supervisors will contrast their team's

¹⁰ Scholars have emphasized that the subtle effects associated with specific temporal foci "may manifest explicitly in behaviors and consequences that have real implications for leaders and followers" (Alipour et al., 2017, p. 301). Hence, even if supervisors are not consciously aware of their team's past temporal focus, they are likely to perceive team members' resulting attitudes and behaviors (e.g., preference of past strategies over new procedures, resurgence of past interpersonal conflicts).

past temporal focus with their own respective focus, drawing conclusions about the adequacy of the team's efforts and social interactions based on these (in)congruence judgments. Second, we draw from functional leadership theory to argue that supervisors' behavioral reactions toward the team will critically hinge on these conclusions, thereby prompting supervisors to either intervene with active behaviors (i.e., task-oriented and/or relationship-oriented leadership) or to act in a passive-avoidant manner (i.e., laissez-faire leadership).

Past Temporal Focus and Leadership Behavior: (In)Congruence Effects

If a supervisor's and his or her team's past temporal focus are aligned, our conceptual rationale, as drawn from leader-team fit theory (Cole et al., 2013), suggests that the supervisor will perceive the team as well-functioning and harmonious. In such a scenario, team members' approaches toward their job tasks and interpersonal relations should largely mirror supervisory preferences and inclinations. Hence, we hold that the supervisor is likely to view the team as working adequately towards goal attainment and maintaining an appropriate, collaborative atmosphere. Hence, a functional leadership logic suggests that the supervisor will conclude that proactive leadership interventions are not required (Zaccaro et al., 2001). By contrast, we argue that a supervisor's inferences about the team's functioning may be more negative when supervisor and team past temporal focus are incongruent. The supervisor may infer, then, that the team's task-related efforts and interpersonal interactions are problematic, such that decisive leadership interventions are necessary to address these issues (Hackman & Walton, 1986).

Accordingly, we anticipate a supervisor to exhibit more task-oriented leadership when his or her past temporal focus is incongruent (rather than congruent) with the team's past temporal focus. As outlined before, highly past-focused individuals draw heavily from established routines and value traditional, well-known approaches toward their job tasks, whereas less past-focused individuals often neglect prior experiences and, thus, are more likely to appreciate novel means

of task accomplishment (Shipp, in press; Shipp et al., 2009). For supervisors whose team's past temporal focus exceeds their own, on the one hand, the team may therefore appear to be 'stuck in the past', with members spending too much time ruminating on past experiences instead of investing efforts in current problem-solving and goal attainment. In such contexts, a supervisor may conclude that the team is overly rigid and sluggish, relying on outdated solutions rather than flexibly adapting to new task requirements or trying out innovative procedures. When a team's past temporal focus is less pronounced than the supervisor's past temporal focus, on the other hand, we believe the supervisor is likely to infer that his or her team is missing important lessons that could be learned from past successes and failures. The team may appear, then, to neglect strategies and procedures that have proven effective, exhibiting a tendency to 'reinvent the wheel' rather than maintaining well-established and functional routines. Accordingly, the supervisor may conclude that such a team is at risk of repeating previous errors, making the team's work efforts appear ineffective and inefficient.

Consistent with our overarching conceptual rationale, we therefore anticipate that supervisors will perceive more salient problems for their team's task-related functioning as supervisor and team past temporal focus become more discrepant in either direction. Consequently, we propose that supervisors will exhibit more task-oriented behaviors if their own past temporal focus is incongruent with the past temporal focus prevalent among their team members, as illustrated by the convex (i.e., upward-curved) shape of the proposed response surface along the incongruence line in the left panel of Figure 3.2. In an effort to maintain successful task execution, in particular, supervisors are likely to closely monitor team members' work behavior in such situations, to structure and coordinate their team's joint efforts, and to clearly communicate expected procedures and guidelines for team task accomplishment. Hence, we hypothesize:

Hypothesis 1a: Supervisors will exhibit more task-oriented leadership the more their own and their team's past temporal focus are incongruent.

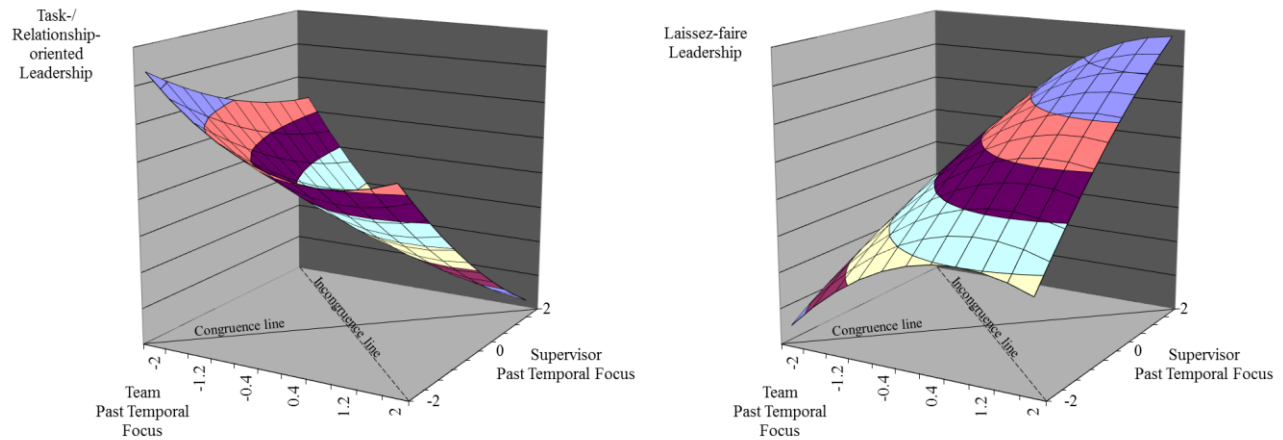


Figure 3.2. Hypothesized response surface graphs for the relationships of supervisor-team (in)congruence in past temporal focus with task-oriented leadership, relationship-oriented leadership, and laissez-faire leadership.

Similarly, we anticipate that a supervisor will exhibit more relationship-oriented leadership when his or her past temporal focus is incongruent (rather than congruent) with the team's respective focus. Research has shown that individuals with a strong past temporal focus often hold long-lasting grudges and, thus, find it difficult to overcome past personal disputes (Pierro, Pica, Giannini, Higgins, & Kruglanski, 2018; Zakay & Fleisig, 2011). Also, such individuals generally put a strong emphasis on existing interpersonal relations and they are rather conservative in building new social connections (Park et al., 2017; Zimbardo & Boyd, 1999), whereas less past-focused individuals attach less value to (and more easily forget about) their personal relationship histories (Holman & Zimbardo, 2009; Zimbardo & Boyd, 2008). It therefore seems reasonable to assume, on the one hand, that supervisors charged with leading a team that exceeds their own past temporal focus may view the team as unnecessarily reviving old

disagreements and personal conflicts. Moreover, supervisors in this situation may perceive their team members as too rigidly maintaining long-established relationships, thus failing to adequately integrate new members into the team. On the other hand, supervisors whose team's past temporal focus is lower than their own may believe that team members are carelessly undervaluing each other's past accomplishments and joined histories, increasing the risk that daily hassles or misunderstandings trigger intense interpersonal conflicts. In this scenario, supervisors may perceive their team as shortsighted, investing too little effort into the maintenance of existing relationships and the establishment of team traditions.

In sum, our theoretical rationale suggests that supervisors should perceive more substantive problems regarding team members' social relations and interpersonal interactions if their own and their team's past temporal focus are incongruent in either direction. Consequently, we propose that supervisors are then likely to increase their relationship-oriented leadership efforts to address these issues. Again, this is illustrated by the convex shape of the proposed response surface along the incongruence line in the left panel of Figure 3.2. Supervisors may try to solve perceived team conflicts and facilitate favorable, productive interactions within the team, for example, by creating a positive work atmosphere, encouraging trust and collaboration between team members, and acting as a friendly and approachable coach and mentor. We therefore predict:

Hypothesis 2a: Supervisors will exhibit more relationship-oriented leadership the more their own and their team's past temporal focus are incongruent.

Building on the above argumentation, we predict that laissez-faire leadership will be less frequent when a supervisor's past temporal focus is incongruent (in either direction) with his or her team's past temporal focus. As outlined before, supervisors are likely to perceive substantive problems both with their team's task-related efforts and with team members' interpersonal

relations in such situations. Hence, we anticipate that supervisor will doubt their team's ability to function effectively without proactive leadership interventions. It appears unlikely, then, that supervisors will resort to the passive-avoidant types of behavior that characterize laissez-faire leadership (Skogstad et al., 2007), instead exhibiting targeted behaviors to stimulate more productive team processes. As illustrated by the concave (i.e., downward-curved) shape of the proposed response surface along the incongruence line in the right panel of Figure 3.2, we therefore suggest:

Hypothesis 3a: Supervisors will exhibit less laissez-faire leadership the more their own and their team's past temporal focus are incongruent.

Past Temporal Focus and Leadership Behavior: Congruence at Higher vs. Lower Levels

Our previous theorizing suggests that, with increasing incongruence between supervisor and team past temporal focus (in either direction), supervisors will enact more active and fewer passive leadership behaviors. Beyond these relationships, we also expect a pattern of congruence effects, such that – in situations of supervisor-team congruence – a supervisor's leadership behavior should hinge on the *level* at which the supervisor's and his or her team's past temporal focus are aligned.

Specifically, we build on prior theory and research on the behavioral consequences of past temporal focus to suggest that supervisors will exhibit fewer task-oriented behaviors when their own and their team's past temporal focus are congruent at higher (rather than lower) levels. As noted before, studies have repeatedly demonstrated that a stronger focus on the past is associated with individuals' passive and avoidance-oriented behaviors (Rabinovich & Morton, 2012; Zimbardo & Boyd, 1999). Leadership scholars have, accordingly, depicted highly past-focused supervisors as lacking in active and goal-directed leadership efforts (Thoms, 2004). By the same token, teams with a strong focus on the past should exhibit a passive-avoidant approach toward

their tasks, such that members are less likely to proactively demand task-related guidance from their supervisor. Hence, when both supervisors and their teams are highly past-focused, we conclude that supervisors may be less willing – and may perceive little necessity – to actively take charge of their team’s ongoing work processes and goal accomplishment.

By contrast, research has shown that individuals with a relatively weak past temporal focus are more approach-oriented and energetic than their highly past-focused counterparts (Shipp et al., 2009; Zimbardo & Boyd, 1999). Hence, even though supervisors may not perceive urgent task problems when the team mirrors their own relatively low, past temporal focus, we anticipate that such supervisors will be inclined to strive for continuous improvements in their team’s task accomplishment. Similarly, teams with a relatively low past temporal focus consist of goal-oriented, dedicated individuals (Shipp & Aeon, 2019) who may appreciate – or even proactively seek – their supervisors’ task-related guidance and contributions. On this basis, we expect that, if supervisor-team congruence occurs at relatively low levels of past temporal focus, supervisors will be more motivated to set priorities for their team’s tasks and organize members’ collaborative efforts towards the achievement of common goals. As illustrated by the downward slope of the proposed response surface along the congruence line in the left panel of Figure 3.2, we therefore propose:

Hypothesis 1b: Supervisors will exhibit less task-oriented leadership when their own and their team’s past temporal focus are congruent at higher (rather than lower) levels.

Similarly, we anticipate supervisors to exhibit less relationship-oriented leadership when supervisor-team congruence occurs at higher (rather than lower) levels of past temporal focus. Scholars have repeatedly demonstrated that highly past-focused individuals are less sociable and more withdrawn in their interpersonal interactions, as compared with less past-focused individuals (Shipp, in press; Zimbardo & Boyd, 1999). Hence, if supervisors and their teams

share a strong orientation toward the past, it seems likely that both of these parties will act rather indifferently in social settings and exhibit little interest in developing deep interpersonal relationships. On this basis, we anticipate that supervisors will be less motivated to engage in relationship-oriented leadership in this situation, investing relatively little effort in building high-quality relationships within their team or in nurturing a positive team atmosphere.

By contrast, research has shown that less past-focused individuals are outgoing and socially active, seeking to purposefully facilitate their ongoing interpersonal relations and to build new social relationships (Park et al., 2017; Zimbardo & Boyd, 1999). Such individuals typically enjoy interacting with others, and they are willing to actively invest in creating a positive social environment (Zimbardo & Boyd, 2008). On this basis, we expect that, with a relatively low past temporal focus, both supervisors and their team members will value favorable interpersonal relationships and a positive atmosphere within the team. Hence, even if supervisors perceive their team as relatively harmonious (because their own and their team's past temporal focus are aligned at relatively low levels), supervisors may be motivated to personally engage with team members in this situation, acting as a coach and mentor and proactively looking out for members' personal welfare – and team members are likely to encourage such relationship-oriented leadership efforts. As again illustrated by the downward slope of the proposed response surface along the congruence line in the left panel of Figure 3.2, we therefore suggest:

Hypothesis 2b: Supervisors will exhibit less relationship-oriented leadership when their own their team's past temporal focus are congruent at higher (rather than lower) levels.

Finally, we predict that supervisors will more frequently exhibit laissez-faire leadership when supervisor and team past temporal focus are aligned at higher (rather than lower) levels. In support, scholars have argued that highly past-focused supervisors may be prone to “inertial tendencies” (Nadkarni & Chen, 2014, p. 1812), spending much of their time indulging in

reminiscences of the past rather than actively guiding task-related team efforts or facilitating a positive team climate (Thoms, 2004). Similarly, members within a strongly past-focused team should be rather passive and avoidance-oriented (Rabinovich & Morton, 2012), such that they may be relatively unconcerned about (or may even appreciate) a ‘hands off’ approach toward leadership that imposes little explicit demands and expectations upon them. Hence, in situations of supervisor-team congruence at high levels of past temporal focus, supervisors may lean towards passive behaviors and shirk their leadership duties to a large extent.

By contrast, the literature has depicted less past-focused supervisors as more dedicated, goal-driven, and outgoing (Bluedorn, 2002). Similarly, with relatively low team past temporal focus, members are likely to be cognizant of the need for goal-directed efforts and positive interpersonal relationships within the team (Zimbardo & Boyd, 1999) and, thus, they may appreciate and expect active leadership in this regard. Hence, we predict that supervisors will lean less toward a passive leadership approach if both their own and their team’s past temporal focus are relatively low. Even though supervisors may not perceive a pressing need for leadership interventions (due to alignment with their team’s past temporal focus) in this situation, they appear unlikely to leave task accomplishment completely up to the team, to neglect their role in maintaining favorable member relations, or to otherwise abdicate their leadership responsibilities. As illustrated by the upward slope of the proposed response surface along the congruence line in the right panel of Figure 3.2, we therefore propose:

Hypothesis 3b: Supervisors will exhibit more laissez-faire leadership when their own and their team’s past temporal focus are congruent at higher (rather than lower) levels.

The Potential Roles of Supervisors’ and Teams’ Present and Future Temporal Focus

The current study’s central goal is to advance a better understanding of the leadership consequences associated with supervisors’ (and their team’s) past temporal focus. We chose to

examine past temporal focus, in particular, because (a) this type of temporal focus has received little attention in the empirical leadership research to date and (b) we aimed to challenge the widely shared assumption that a pronounced focus on the past is universally detrimental for a supervisor's leadership behavior. We note, however, that prior research has often jointly examined individuals' past, present, and future temporal focus to provide a more comprehensive assessment of these differing orientations toward time (e.g., Cojuharenco et al., 2011; Zacher, 2016). And in fact, one might speculate that our previous argumentation regarding past temporal focus could similarly apply to supervisors' and their team's present and future temporal focus.

Importantly, however, research has shown that the psychological and behavioral consequences of individuals' present and future temporal focus differ in fundamental ways, as compared to the respective consequences associated with a focus toward the past (Shipp & Aeon, 2019; Shipp et al., 2009). Whereas a high past temporal focus has been explicitly linked with passive-avoidant types of behavior (Peters et al., 2014; Rabinovich & Morton, 2012), for example, neither individuals' present nor future temporal focus have been associated with such behavioral tendencies. Hence, we submit that a systematic, in-depth investigation of supervisor-team (in)congruence in present and/or future temporal focus extends well beyond the scope of this study. Nevertheless, we included measures of present and future temporal focus as part of our research design and data collection, and we examined supervisors' and their team's respective focus in an exploratory manner. In doing so, we follow best practice recommendations for the post-hoc analysis of scientific data (Chen, 2018; Hollenbeck & Wright, 2017), thereby enabling a clearer interpretation of the study's main findings and strengthening core inferences on the potentially unique role of supervisor and team past temporal focus.

Method

Sample and Procedure

We collected data from various organizations and industries across Germany, in an attempt to increase the generalizability of our findings (Demerouti & Rispens, 2014). In doing so, we approached potential participants (i.e., supervisors and their direct team members) using personal and university contacts (for similar procedures, see Bunderson, van der Vegt, Cantimur, & Rink, 2016; Pundt & Venz, 2017). To be included in the present sample, our contact person in each team had to confirm that the respective members actually worked as a team, such that they shared mutual goals, interacted regularly, cooperated toward joint goal achievement, and directly reported to a common supervisor (Arrow & McGrath, 1995; Kozlowski & Bell, 2003). After initial contact, potential participants received general information about the study and, depending on organizational constraints, they received either a web-based or a (otherwise identical) paper-and-pencil survey. The supervisor survey assessed supervisors' past temporal focus, potential control variables, and demographics. The team member survey captured team past temporal focus, potential control variables, and demographics. Additionally, it asked team members to assess their immediate supervisor's task-oriented, relationship-oriented, and laissez-faire leadership. We informed participants about the voluntary nature of the study and assured confidentiality.

After initial contact, 94 supervisors (with 602 direct team members) indicated their interest to participate in the study. From this initial sample, 91 supervisors (97%) and 307 of their team members (51%) provided data. To be included in the study, (1) supervisors had to provide their own, complete survey, and (2) two or more team members needed to complete the team member survey (cf. Rubin, Munz, & Bommer, 2005). Based on these criteria, we excluded 7 supervisors and 11 team members. Our final sample therefore comprised 84 supervisors and 296

of their direct team members. The number of member responses per team ranged from 2 to 11 ($M = 3.52$, $SD = 1.76$), for an average within-team response rate of 55%. Supervisors were, on average, 44 years old ($SD = 10.41$) and 54% were male. Their mean organizational tenure was 11.53 years ($SD = 8.85$). The team members in our sample were, on average, 38 years old ($SD = 11.84$), and 63% were female. Their mean organizational tenure was 8.27 years ($SD = 8.84$). The participating supervisors and team members came from a wide variety of industry sectors, including services (30%), public administration (21%), manufacturing (17%), health care (15%), sales (11%), and finance (6%).¹¹

Measures

We translated all measurement instruments to German following a back-translation procedure (Brislin, 1980).

Supervisor past temporal focus. We asked supervisors to self-rate their past temporal focus using a four-item measure developed by Shipp et al. (2009). Example items are, “I replay memories of the past in my mind” and “I think back to my earlier days.” Supervisors used a 1 (rarely or never) to 5 (very often or constantly) response scale for these items. Cronbach’s alpha was .86.

Team past temporal focus. Team members rated their past temporal focus using the same four items as for supervisors’ past temporal focus (Shipp et al., 2009). As noted before, we conceptualize team past temporal focus as a configural unit property (Kozlowski & Klein, 2000) that derives from individual members’ respective focus through a compilation process.

Specifically, individuals’ past temporal focus represents a trait-like, relatively stable

¹¹ Controlling for industry sector using dummy variables did not alter the conclusions drawn from our hypotheses tests. Similarly, including a dummy control variable for the mode of data collection (online vs. paper-and-pencil) did not alter the respective conclusions.

characteristic (Shipp & Aeon, 2019), and we therefore do not expect pronounced convergence within a team. Nevertheless, team members' overall degree of past temporal focus can be used to characterize the team as a whole, and we suggest such team past temporal focus to be functionally equivalent with (although structurally different from) individual members' respective traits (cf. Kozlowski & Klein, 2000; Morgeson & Hofmann, 1999). A common way to operationalize such configural unit properties is through "additive" (Chan, 1998, p. 236) or "summary index" (Chen et al., 2004, p. 282) models that do not rely on within-unit agreement but, rather, use the average or sum of a lower-level variable to depict the unit-level construct. Accordingly, research has frequently used team members' average scores on a specific personality trait to represent a team's respective personality composition (e.g., Barrick et al., 1998; Homan et al., 2008). Consistent with this approach, we employ the mean value of individual team members' past temporal focus scores to reflect a team's overall past temporal focus. Cronbach's alpha for this construct was .88.

Task-oriented leadership. Team members rated their supervisors' task-oriented leadership using five items from Stogdill (1963). Example items are, "My supervisor lets his or her subordinates know what is expected of them" and "My supervisor schedules the work to be done" (1 = strongly disagree; 5 = strongly agree). Cronbach's alpha was .87

Relationship-oriented leadership. Team members assessed their supervisors' relationship-oriented leadership using five items from Stogdill (1963). Example items are, "My supervisor does little things to make it pleasant to be a member of the team" and "My supervisor looks out for the personal welfare of his or her subordinates" (1 = strongly disagree; 5 = strongly agree). Cronbach's alpha was .88.

Laissez-faire leadership. Team members rated their supervisors' laissez-faire leadership using a three-item measure developed by Van Dierendonck, Stam, Boersma, Windt, and Alkema

(2014). Items are, “My supervisor is absent when his or her subordinates need him or her,” “My supervisor postpones answering his or her subordinates’ questions,” and “My supervisor is not concerned with the team’s results” (1= strongly disagree; 5 = strongly agree). Cronbach’s alpha was .80.

Control variables. We considered a number of variables as potential controls. First, research suggests that alternative temporal foci (i.e., present and/or future focus; Shipp et al., 2009) might influence the behavioral consequences associated with past temporal focus (Alipour et al., 2017; Gibson et al., 2007). Hence, we captured supervisors’ and their team’s present and future temporal focus using Shipp et al.’s (2009) 4-item measures. Cronbach’s alpha values were .74 and .89 for supervisor present and future temporal focus, respectively, and .74 and .92 for team present and future temporal focus.

Additionally, we considered supervisors’ gender (0 = female; 1 = male) and age (in years) as potential covariates because theory and research suggest that role expectations associated with these factors might bias our proposed relationships. Task-oriented leadership, for example, may be more congruent with stereotypically male (rather than female) role expectations (Eagly & Johnson, 1990) and with stereotypes toward younger (rather than older) individuals (Buengeler, Homan, & Voelpel, 2016). By contrast, relationship-oriented leadership may be more congruent with stereotypes toward females (Eagly, Makhijani, & Klonsky, 1992) and toward older individuals (Buengeler et al., 2016), whereas laissez-faire leadership may be more accepted among males (Eagly, Johannesen-Schmidt, & van Engen, 2003) and older persons (Zacher, Rosing, & Frese, 2011). Moreover, we considered teams’ mean organizational tenure (in years) as a possible covariate. Team members’ average organizational tenure may bias a supervisor’s perceptions of the team’s expertise (Bell, Villado, Lukasik, Belau, & Briggs, 2011) and, thus, may alter his or her leadership style.

Finally, scholars have argued that it is important to consider possible dispersion effects when using the team mean to operationalize a configural unit property (Kozlowski & Klein, 2000). Hence, we incorporated the within-team standard deviation of individual members' past temporal focus as a control variable when testing our hypotheses (see also Homan et al., 2008; Gibson et al., 2009).

Aggregation Statistics

As discussed before, we conceptualize team past temporal focus (and the control variables team present and future temporal focus) as a *configural* team property, such that aggregation of individuals' scores to the team level does not require within-team consensus (cf. Chan, 1998; Chen et al., 2004). By contrast, we follow prior research in conceptualizing task-oriented, relationship-oriented, and laissez-faire leadership as *shared* team properties that emerge from individual team members' respective ratings (Kozlowski & Klein, 2000). These constructs reflect a supervisor's respective behavior toward all of his or her team members, thus representing ambient stimuli that should similarly shape all members' leadership perceptions (Courtright, Colbert, & Choi, 2014; Hartnell, Kinicki, Lambert, Fugate, & Corner, 2016). Hence, aggregation of these variables to the team level follows a consensus composition model (Chan, 1998), such that team members' average ratings can only be used to meaningfully reflect a supervisor's behavior if there is sufficient convergence among individuals' scores (Chen et al., 2004).

We therefore followed recommended best practices to assess such within-team agreement regarding individual members' task-oriented, relationship-oriented, and laissez-faire leadership ratings. Consistent with Biemann, Cole, and Voelpel's (2012) suggestions, we computed $r_{WG(J)}$ scores for these variables using a rectangular (uniform) null distribution as well as several alternative null distributions (see also James, Demaree, & Wolf, 1984). The alternative null distributions represented (a) a slight skew for all three variables (allowing for some leniency

bias), (b) a normal distribution for task-oriented and relationship-oriented leadership (because a bell-curve might reflect the ‘true’ distribution of these variables), and (c) a triangular distribution for laissez-faire leadership (because respondents may lean towards the middle, neutral response option for this undesirable type of leadership). Furthermore, we computed intraclass correlation coefficients (ICCs), with ICC(1) depicting the variance in individual members’ leadership ratings that can be attributed to an individual’s membership in a specific team and ICC(2) representing the reliability of the respective team means (Bliese, 2000).

Table 3.1 reports the estimates for these aggregation statistics. As shown, the obtained $r_{WG(j)}$ values revealed moderate to strong within-team agreement for all three leadership styles (cf. LeBreton & Senter, 2008). Furthermore, the ICC(1) values (along with the F -values from the one-way ANOVAs used to calculate the respective scores) illustrated that a statistically significant and considerable proportion of the variance in individual members’ leadership ratings was attributable to their team membership. Finally, the ICC(2) values for task-oriented and relationship-oriented leadership indicated acceptable reliability, although we note that the respective value was lower than desirable for laissez-faire leadership. In sum, this overall pattern of aggregation statistics suggests that it was justified to aggregate individual members’

Table 3.1

Aggregation Statistic Results for Supervisors' Task-oriented, Relationship-oriented, and Laissez-Faire Leadership

Measure	<i>r</i> _{WG(J).uniform}			<i>r</i> _{WG(J).first-alternative-distribution}			<i>r</i> _{WG(J).second-alternative-distribution}			ICCs	
	Mean	Shape	σ^2_E	Mean	Shape	σ^2_E	Mean	<i>F</i>	ICC(1)	ICC(2)	
Task-oriented leadership	.87	Slight skew	1.34	.74	Normal	1.04	.62	2.51***	.31	.60	
Relationship-oriented leadership	.88	Slight skew	1.34	.77	Normal	1.04	.68	2.78***	.34	.64	
Laissez-faire leadership	.74	Slight skew	1.34	.60	Triangular	1.32	.60	1.67**	.16	.40	

Note. N = 84 teams. Shape = the shape of the alternative null distribution; σ^2_E = variance of the alternative null distribution.

assessments of their supervisors' leadership behavior to the team level of analysis (cf. Bliese, Maltarich, & Hendricks, 2018).

Analytic Strategy

We utilized polynomial regression techniques (Edwards & Cable, 2009; Edwards & Parry, 1993) to test our (in)congruence hypotheses using the following equation (to simplify, control variables are not displayed):

$$\text{LSB} = b_0 + b_1S + b_2T + b_3S^2 + b_4(ST) + b_5T^2 + e, \quad (1)$$

where LSB represents the respective leadership behavior (i.e., task-oriented, relationship-oriented, and laissez-faire leadership) and S and T represent supervisor and team past temporal focus, respectively. Prior to conducting the analyses, we scale-centered supervisor and team past temporal focus to facilitate the interpretation of the results (Edwards, 1994; Edwards & Parry, 1993). In a first step, we then regressed our respective outcomes on the control variables. In a second step, we added the set of five polynomial terms, as depicted in Equation 1 (Edwards, 2002). Finally, we used the resulting coefficient estimates to generate three-dimensional response surface plots that we subsequently used to evaluate the overall pattern of the relationships (Edwards & Parry, 1993).

Specifically, we examined slopes and curvatures in the response surfaces along two critical lines of interest: the congruence line (where $S = T$) and the incongruence line (where $S = -T$). As exemplified in Figure 3.2, the congruence line in our response surface plots runs from the left corner ($S = T = -2$) to the right corner ($S = T = 2$), and the incongruence line extends from the corner that is closest to the reader ($S = -2$ and $T = 2$) to the rear corner that is most distant to the reader ($S = 2$ and $T = -2$).¹² Support for Hypotheses 1a and 2a (i.e., task-oriented and relationship-

¹² For presentation purposes, we rotated the response surface graphs, such that fit along the congruence line (i.e., $S = T = 2$) is shown at the right corner, as opposed to the back corner.

oriented leadership will be higher the more supervisor and team past temporal focus are incongruent) would require, in particular, that the curvature along the respective incongruence line (calculated as $a_4 = b_3 - b_4 + b_5$) is positive and significant. Support for Hypothesis 3a (i.e., laissez-faire leadership will be lower the more supervisor and team past temporal focus are incongruent) would require the curvature along the incongruence line to be negative and significant. Furthermore, to support Hypotheses 1b and 2b (i.e., task-oriented and relationship-oriented leadership will be lower when supervisor and team past temporal focus are congruent at higher rather than lower levels), the slope along the respective congruence line (calculated as $a_1 = b_1 + b_2$) should be negative and significant. And finally, support for Hypothesis 3b (i.e., laissez-faire leadership will be higher when supervisor and team past temporal focus are congruent at higher rather than lower levels) would require the slope along the congruence line to be positive and significant.¹³

Results

Descriptive Statistics and Bivariate Correlations

Table 3.2 presents means, standard deviations, and bivariate correlations for all study variables. The correlations revealed an absence of significant relationships between the focal study variables and supervisors' as well as their team's present and future temporal focus. By

¹³ We conducted several analyses to examine whether our sample contained an adequate distribution of (in)congruence combinations regarding supervisors' and their team's past temporal focus. Using z-standardized past temporal focus scores, these analyses revealed that supervisors exceeded their team's past temporal focus by more than .5 *SD* in 38.1% of the present cases, whereas teams exceeded their supervisor's respective focus by more than .5 *SD* in 41.7% of the cases. In the remaining 20.2% of the cases, there was relatively high supervisor-team similarity in past temporal focus (i.e., difference less than .5 *SD*). Similarly, visual scatterplot inspections (available from the first author) showed that our sample adequately covered the possible range of supervisor-team (in)congruence combinations, although extreme past temporal focus values were relatively rare. Finally, we screened all our analyses for multivariate outliers based on leverage, studentized residuals, and Cook's *D* statistics (Aguinis & Edwards, 2014). Depending on the outcome variable, we identified and dropped three to four outliers (i.e., less than 5% of the sample) and subsequently re-estimated the hypotheses tests. The results and conclusions from these additional analyses did not meaningfully differ from the full-sample findings reported in the following.

Table 3.2

Means, Standard Deviations, and Correlations of Chapter 3 Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Supervisor present temporal focus	4.08	.53	(.74)												
2. Supervisor future temporal focus	3.58	.75	.25*	(.89)											
3. Team present temporal focus	4.02	.38	-.16	-.08	(.74)										
4. Team future temporal focus	3.60	.52	-.03	-.05	.22*	(.92)									
5. Supervisor gender (0 = f; 1 = m)	.54	.50	.14	.22*	-.07	.01	—								
6. Supervisor age	43.96	10.41	.11	-.12	.14	-.20 [#]	.18	—							
7. Team organizational tenure	7.91	7.04	-.08	-.07	.03	-.27*	.13	.32**	—						
8. Team past temporal focus (within-team SD)	.67	.30	.10	.02	-.17	-.27*	-.24*	-.18	-.25*	—					
9. Supervisor past temporal focus	2.83	.68	-.38***	.02	.00	.10	.06	-.22*	.04	.11	(.86)				
10. Team past temporal focus	3.08	.48	-.26*	.12	-.20 [#]	.13	-.04	-.12	-.21 [#]	.07	-.04	(.88)			
11. Task-oriented leadership	3.68	.53	.10	-.14	.03	.15	-.16	-.32**	-.27*	.07	-.07	.02	(.87)		
12. Relationship-oriented leadership	4.00	.54	.05	-.17	.04	.03	-.18 [#]	-.23*	-.29**	.00	-.01	-.02	.56***	(.88)	
13. Laissez-faire leadership	1.73	.53	-.01	.19 [#]	.04	-.03	.30**	.19 [#]	.19 [#]	-.13	.17	.04	-.61***	-.65***	(.80)

Note. N = 84 teams. [#] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$, coefficient alphas are shown along the diagonal in parentheses

contrast, we observed significant correlations between focal study variables and supervisor gender, supervisor age, and mean team organizational tenure. Consequently, we excluded supervisors' and teams' present and future temporal focus from all further analyses to reduce the number of parameters to be estimated and, thus, provide increased power for the following statistical tests (Becker et al., 2016). Despite a lack of associations with other study variables, however, we controlled for the within-team dispersion (i.e., standard deviation) of team past temporal focus because partialling out within-team variability is recommended when estimating supervisor-team (in)congruence polynomials (e.g., Gibson et al., 2009). Notably, excluding all of the covariates or including all considered control variables did not unduly influence the pattern of the hypotheses tests reported in the following.

Confirmatory Factor Analyses

We conducted multilevel confirmatory factor analyses (CFAs) to examine our focal measures' viability. First, we estimated a multilevel CFA for the hypothesized five-factor measurement model, with supervisor and team past temporal focus as well as task-oriented, relationship-oriented, and laissez-faire leadership as correlated latent factors and no item cross-loadings allowed. In doing so, we included all items at their original level of measurement, such that the items for supervisor past temporal focus were modeled at the supervisor level whereas all other items were modeled at the individual team member level. This multilevel CFA yielded acceptable fit to the data ($\chi^2 = 296.23$, $df = 115$, $CFI = .91$, $RMSEA = .07$, $SRMR_{within} = .07$, $SRMR_{between} = .05$). Moreover, the hypothesized five-factor model demonstrated significantly better fit ($p < .001$), as compared to a series of alternative four-factor models that subsequently forced the items for any two of the three leadership styles to load onto a common latent factor. Similarly, the five-factor model showed significantly better fit ($p < .001$), as compared to a three-factor model with all leadership items loading on a single latent factor. Overall, these results

support our measures' convergent and discriminant validity. Detailed results for all CFAs are available from the first author.

Hypotheses Tests

Task-oriented and relationship-oriented leadership. Our theorizing suggests that supervisors' task-oriented and relationship-oriented leadership (1) will be more pronounced the more supervisor and team past temporal focus are incongruent (rather than congruent; Hypotheses 1a and 2a) and (2) will be less pronounced when supervisor and team past temporal focus are congruent at higher (rather than lower) levels (Hypotheses 1b and 2b). As shown in Table 3.3, the curvatures of the response surfaces along the incongruence lines were positive and significant for both task-oriented ($a_4 = .31, p < .01$) and relationship-oriented leadership ($a_4 = .23, p < .05$). Examination of the respective response surface plots (see Figures 3.3 and 3.4) illustrates these convex (i.e., upward curved) shapes, such that task-oriented and relationship-oriented leadership were higher when supervisor and team past temporal focus were incongruent in either direction, as opposed to when they were congruent. Hence, both Hypotheses 1a and 2a were supported.

As further shown in Table 3.3, the slope of the response surface along the congruence line was negative and significant for task-oriented leadership ($a_1 = -1.10, p < .05$), whereas this coefficient reached marginal significance for relationship-oriented leadership ($a_1 = -1.01, p = .06$).¹⁴ Accordingly, as Figures 3.3 and 3.4 illustrate, both task-oriented and relationship-oriented leadership were lower when supervisor-team congruence occurred at higher rather than lower levels of past temporal focus.

¹⁴ As shown in Table 3.3, the response surface for task-oriented leadership also had a significant curvature along the congruence line ($a_2 = -.17, p < .05$). This indicates that, while task-oriented leadership decreased when supervisor and team past temporal focus were congruent at higher rather than lower levels (as predicted), it did so at a diminishing rate. As such, the nature of this association may be more complex than we had initially expected.

Hence, we conclude that Hypothesis 1b was supported, whereas Hypothesis 2b received marginal support.

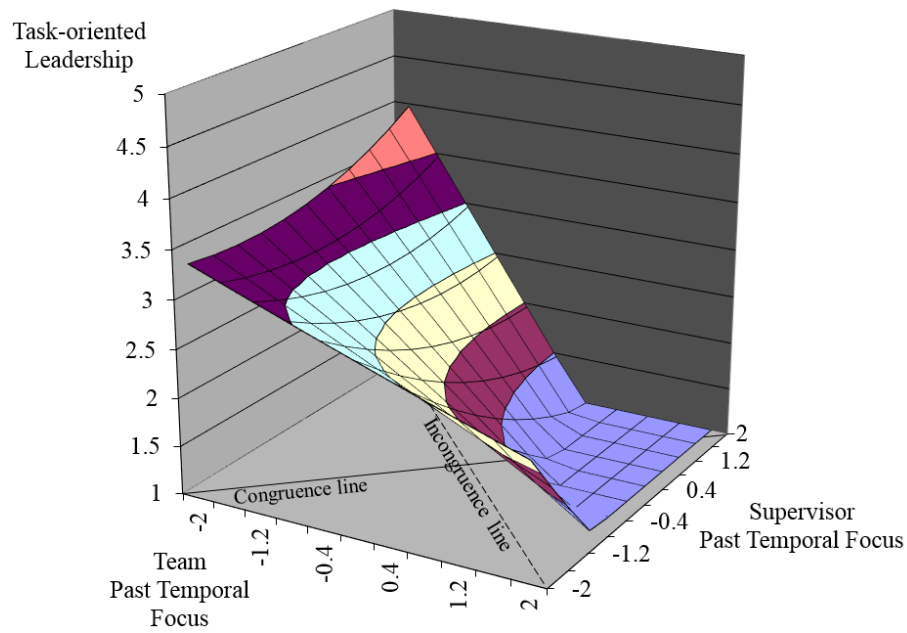


Figure 3.3. Congruence effect of supervisor and team past temporal focus on task-oriented leadership.

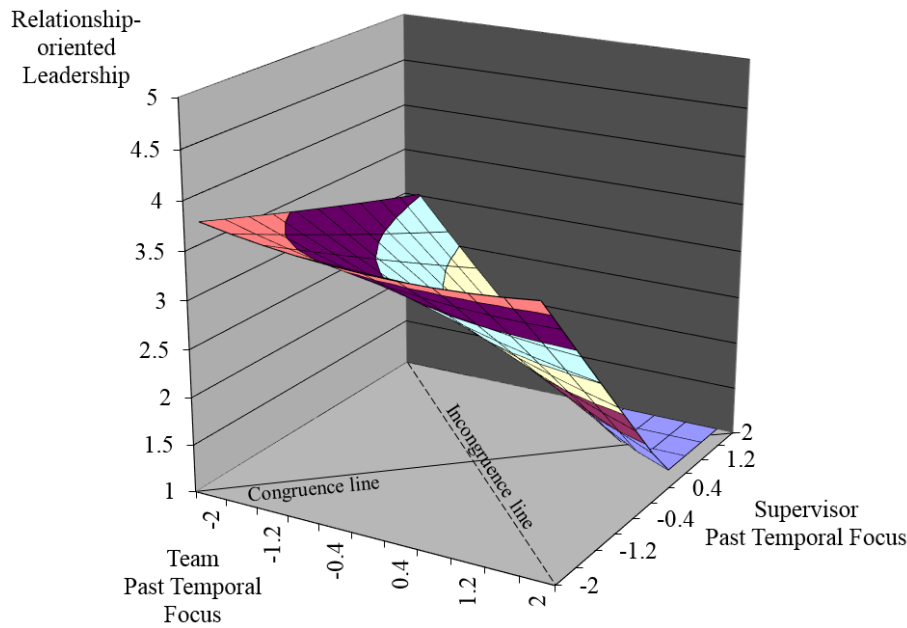


Figure 3.4. Congruence effect of supervisor and team past temporal focus on relationship-oriented leadership.

Table 3.3

Polynomial Regression Results of Leadership Behavior on Supervisor-Team (In)Congruence in Past Temporal Focus

Variables	Task-oriented Leadership		Relationship-oriented Leadership		Laissez-faire Leadership	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	3.74*** (.09)	1.87* (.75)	4.11*** (.09)	2.43** (.81)	1.60*** (.09)	3.69*** (.80)
Supervisor gender (0 = f; 1 = m)	-.11 (.12)	-.09 (.11)	-.19 (.12)	-.18 (.12)	.26* (.12)	.22# (.12)
Supervisor age	-.14* (.06)	-.12* (.06)	-.08 (.06)	-.07 (.06)	.06 (.06)	.08 (.06)
Team organizational tenure	-.10 (.06)	-.11# (.06)	-.14* (.06)	-.15* (.06)	.07 (.06)	.09 (.06)
Team past temporal focus (within-team SD)	-.02 (.06)	-.07 (.06)	-.07 (.06)	-.10 (.06)	-.01 (.06)	.02 (.06)
Supervisor past temporal focus (<i>S</i>)		-.77** (.26)		-.42 (.28)		.58* (.27)
Team past temporal focus (<i>T</i>)		-.33 (.34)		-.59 (.37)		.60# (.36)
<i>S</i> ²		.00 (.04)		.03 (.04)		.00 (.04)
<i>S</i> × <i>T</i>		-.24*** (.06)		-.19** (.06)		.16* (.06)
<i>T</i> ²		.06 (.05)		.00 (.05)		.01 (.05)
R ²	.15*	.33***	.14*	.24*	.12*	.25*
ΔR ²	.15*	.18**	.14*	.10#	.12*	.13*
<i>Congruence Line (S = T)</i>						
Slope (<i>a</i> ₁)		-1.10* (.49)		-1.01# (.53)		1.17* (.52)
Curvature (<i>a</i> ₂)		-.17* (.08)		-.15# (.09)		.16# (.09)
<i>Incongruence Line (S = -T)</i>						
Slope (<i>a</i> ₃)		-.44 (.34)		.17 (.37)		-.02 (.36)
Curvature (<i>a</i> ₄)		.31** (.10)		.23* (.10)		-.15 (.10)

Note. N = 84 teams. Unstandardized regression coefficients are reported. Standard errors are in parentheses.

#*p* < .10, **p* < .05, ***p* < .01, ****p* < .001.

Laissez-faire leadership. Regarding supervisors' laissez-faire leadership, our theorizing suggests that such behavior (1) will be less pronounced the more supervisor and team past temporal focus are incongruent (rather than congruent; Hypothesis 3a), and (2) will be more pronounced when supervisor and team past temporal focus are congruent at higher (rather than lower) levels (Hypothesis 3b). As shown in Table 3.3, the curvature of the respective response surface along the incongruence line did not reach statistical significance ($a_4 = -.15, p = .15$). As such, Hypothesis 3a was not supported. As predicted, however, the slope along the congruence line was positive and significant ($a_1 = 1.17, p < .05$). Supporting Hypothesis 3b, Figure 3.5 shows that laissez-faire leadership was higher when congruence between supervisors' and their team's past temporal focus occurred at higher (rather than lower) levels.

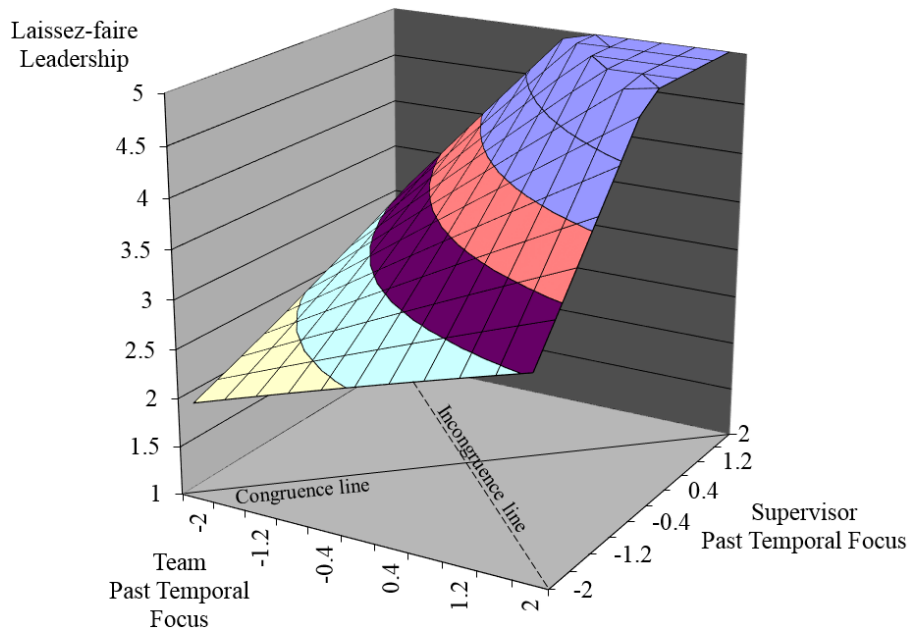


Figure 3.5. Congruence effect of supervisor and team past temporal focus on laissez-faire leadership.

Exploratory Analyses

Although our research primarily aimed at uncovering the leadership consequences associated with supervisors' and their team's past temporal focus, we conducted a number of supplementary analyses to explore the potential roles of supervisor-team (in)congruence in present and future temporal focus. In doing so, we repeated our polynomial regression analyses, but we consecutively replaced supervisor and team past temporal focus with present temporal focus in the first set of analyses and with future temporal focus in the second set of analyses. Importantly, the respective results for all three leadership styles yielded no significant slope or curvature estimates regarding either present or future temporal focus. In contrast to past temporal focus, it therefore appears that (in)congruence between supervisors' and their team's present as well as future temporal focus is not associated with a supervisor's task-oriented, relationship-oriented, or laissez-faire leadership. Detailed results for these additional analyses are available from the first author.

Discussion

By integrating a leader-team fit perspective with insights from functional leadership theory, the present research illustrates how (in)congruence between a supervisor's and his or her team's past temporal focus may shape the supervisor's leadership behavior. Our findings revealed that supervisors were more likely to exhibit task-oriented and relationship-oriented leadership when their own past temporal focus diverged from their team's respective focus, whereas such proactive leadership efforts were lower when supervisor and team past temporal focus were congruent. Moreover, when supervisors' and their team's past temporal focus were aligned, task-oriented and relationship-oriented leadership were less pronounced, and laissez-faire leadership more pronounced, when such congruence occurred at higher (rather than lower) levels of past temporal focus.

Theoretical Implications

We believe these findings offer a number of contributions to the leadership literature. Specifically, this research provides new insights into the role of supervisors' (and their team's) time-based personality characteristics for processes of leadership, thereby addressing scholars' repeated calls for the further investigation of this important, yet long-neglected aspect (e.g., Alipour et al., 2017; Bluedorn & Jaussi, 2008; Thoms & Greenberger, 1995). Despite relevant theoretical advances on the possible role of supervisors' temporal focus (Alipour et al., 2017; Thoms, 2004), empirical research on this issue has been sparse and one-sided, as it has largely remained limited to examining supervisors' focus on the present and future (e.g., West & Meyer, 1997; Zhang et al., 2014). Adding to this literature, the current study illustrates that supervisors' past temporal focus may go along with critical consequences for their leadership behavior (over-and-above their present and future temporal focus). To fully understand the relevance of supervisors' temporal focus for different types of leadership behavior, it therefore seems necessary to adopt a wider perspective, comprehensively considering the extent to which supervisors direct attention toward past, present, and future events and experiences.

Moreover, the present study develops a multiple-stakeholder view of the leadership implications associated with supervisors' past temporal focus, thereby shedding new light on the important role of supervisor-team (in)congruence in this regard. Our findings illustrate that the behavioral consequences of supervisors' past temporal focus are more complex and multi-faceted than previous theory might suggest. In general, the existing literature has described highly past-focused supervisors in distinctly negative terms, arguing that such supervisors will often shirk their current leadership duties and adopt a passive, ineffective approach toward leadership (Bluedorn, 2002; Thoms, 2004). Our study revealed, however, that this depiction only holds true when highly past-focused supervisors are faced with a team that shares this pronounced

orientation toward the past. In other situations (e.g., when working with a less past-focused team), even highly past-focused supervisors may exhibit proactive leadership efforts. Hence, this investigation demonstrates that a clear, nuanced picture of supervisors' past temporal focus requires consideration of the social context in which the respective behavioral implications unfold. Consistent with prior research on supervisor-team (mis)fit (e.g., Carter & Mossholder, 2015; Gibson et al., 2009), supervisors' and their team's past temporal focus may *jointly* shape supervisors' leadership behaviors. Therefore, an integrative perspective on both of these parties' focus on the past appears vital for an adequate understanding of the associated leadership consequences. Parenthetically, we note that our exploratory analyses did not yield comparable relationship patterns for the role of supervisor-team (in)congruence in present or future temporal focus. Although tentative, these findings suggest that supervisors' and their team's orientation toward different time frames (i.e., past, present, and future) may not be functionally equivalent but, rather, may uniquely shape processes of leadership.

Limitations

Despite some notable strengths (e.g., multiple data sources from different organizations, multiple raters of supervisors' team leadership behavior), this study also has some relevant limitations. The sample was drawn from one single country (i.e., Germany), which may raise concerns about cross-cultural generalizability. Prior research has indicated, for example, that a pronounced focus on the past is more highly appreciated in other culture contexts (e.g., some Asian countries), as compared to Europe or North America (Gao, 2016; Ji, Guo, Zhang, & Messervey, 2009). Hence, although our theorizing is not bound to a specific cultural setting, research that aims to constructively replicate our study in alternative cultures or cross-cultural teams may be helpful to better understand potential cultural boundary conditions.

Similarly, our focal measures were originally developed in a different cultural context (i.e., the US), raising potential concerns about data equivalency. As noted before, we used recommended back-translation procedures to transfer these measures into German, in an effort to enhance semantic and measurement equivalence (Brislin, 1980). Additionally, we followed suggestions by Hult and colleagues (2008) to further examine data equivalency issues. Comparing our focal measures' descriptive statistics (i.e., means, standard deviations, and reliability estimates) with prior studies using the same instruments in the US (Courtright et al., 2014; Hartnell et al., 2016; Shipp et al., 2009; Thoroughgood & Sawyer, 2018), in particular, yielded highly similar values, providing some confidence that the measures were similarly interpreted (details on these results are available from the first author). Finally, our survey-based data collection procedures closely mirrored prior organizational research on temporal focus and/or leadership, as conducted both in the US (e.g., Hartnell et al., 2016; Thoroughgood & Sawyer, 2018) and in Germany (e.g., Blickle et al., 2013; Strobel, Tumasjan, Spörrle, & Welpe, 2013). In sum, we believe these considerations alleviate data equivalency concerns to some extent (Hult et al., 2008) – although we acknowledge that cross-cultural studies with sub-samples from diverse cultural contexts would be required to conclusively address this issue.

We further note that our cross-sectional, correlational study design precludes causal conclusions. Longitudinal investigations could help to address this concern and advance a more dynamic perspective on our conceptual model. Because team constellations may change over the course of a supervisor's tenure, for example, a fruitful extension of the present research could be to investigate the behavioral consequences of “retrospected, current, and anticipated fit” (Shipp & Jansen, 2011, p. 76) between supervisor and team past temporal focus. More generally, examining supervisors' and their team's *subjective* time orientations over the course of *objective* time may allow scholars to adopt a “completely temporal” perspective (Shipp & Cole, 2015, p.

250) and, thus, enable them to more comprehensively understand the role of temporal orientations for leadership behaviors and processes.

Furthermore, we acknowledge that both our supervisor-level sample size (supervisor $n = 84$) and our average within-team response rate (i.e., 55%) are somewhat lower than desirable. Importantly, however, we ensured that at least two members rated each supervisor's leadership behaviors (as well as team past temporal focus), with an average of 3.52 raters per team. Also, the supervisor-level sample size is comparable to several recent studies on supervisor-team (mis)fit (e.g., Carter & Mossholder, 2015; Cole et al., 2013; Lam et al., 2018). and our within-team response rate mirrors the overall average response rates commonly observed in organizational field research (see reviews by Anseel, Lievens, Schollaert, & Choragwicka, 2010; Baruch & Holtom, 2008) as well as the within-team response rates obtained in other leadership studies (e.g., Chun, Cho, & Sosik, 2016; Cole, Bedeain, & Bruch, 2011; Joshi, Lazarova, & Liao, 2009). Finally, supplementary analyses illustrated that within-team response patterns are unlikely to have unduly biased our findings. When including within-team response rate as an additional control variable in all of our hypotheses tests, in particular, the respective results were virtually identical to the ones reported before. Nonetheless, further research replicating our results in larger samples with higher within-team response rates could add confidence in our findings' robustness.

Finally, we acknowledge that we did not test the mechanisms assumed to underlie our proposed relationships. Adopting a functional leadership lens (Zaccaro et al., 2001), we argued that (in)congruence between supervisor and team past temporal focus may influence a supervisor's leadership behavior by shaping his or her inferences about the team's functioning. Future research could benefit from directly capturing such judgements, for example by measuring supervisors' perceptions of relevant task and interpersonal processes within the team (cf. Marks,

Mathieu, & Zaccaro, 2001). Such investigations could provide a more in-depth understanding of the present study's results and further corroborate our conceptual rationale.

Directions for Future Research

Beyond addressing limitations, leadership research could benefit from extending our model by further examining the consequences of supervisor-team (in)congruence in other temporal foci (i.e., present and future). Although our study only revealed significant associations between supervisor-team (in)congruence in *past* temporal focus and supervisors' task-oriented, relationship-oriented, and laissez-faire leadership, we note that prior studies have demonstrated linkages between supervisors' present and future temporal focus and other leadership behaviors (e.g., transformational leadership; Zhang et al., 2014). Hence, research could examine whether supervisor-team (in)congruence in present and/or future temporal focus may shape such alternative leadership behaviors. Although supervisors with a pronounced future temporal focus may generally lean toward visionary, transformational behaviors (Thoms & Greenberger, 1998), for example, a functional leadership logic would suggest that they might find such leadership to be superfluous when their team shares this strong orientation toward the future. Similarly, scholars could build on our study's theoretical rationale to investigate linkages between supervisor-team (in)congruence in different temporal foci and leadership behaviors such as autocratic leadership (Harms, Wood, Landay, Lester, & Lester, 2018) or abusive supervision (Tepper, 2007), thereby advancing a broader, more generalized understanding of the role of supervisors' and their team's temporal focus in processes of leadership.

Along the same lines, research could draw on this study's theoretical framework to expand existing knowledge on the role of other time-based personality constructs for supervisors' leadership behavior. Chen and Nadkarni (2017), for example, demonstrated that supervisors with pronounced time urgency (i.e., chronic hurriedness; Landy, Rastegary, Thayer, & Colvin, 1991)

exhibit more temporal leadership (e.g., scheduling deadlines and making sure that these deadlines are met; Mohammed & Nadkarni, 2011). Following our study's rationale, this relationship might be attenuated for supervisors working with a similarly time-urgent team, because even highly time-urgent supervisors may perceive temporal leadership as redundant in this situation. By examining such notions, scholars could generate important insights for leadership research, potentially offering a more comprehensive understanding of the leadership consequences associated with supervisors' and their team's time-based personality characteristics.

Finally, research could investigate the relationships between supervisor-team (mis)fit in time-based personality characteristics and important organizational outcomes other than leadership behavior. Studies have shown, for example, that incongruence between team members' hurriedness or polychronicity can trigger team members' psychological strain and reduce their job satisfaction and organizational commitment (Jansen & Kristof-Brown, 2005; Slocombe & Bluedorn, 1999). It might be interesting, therefore, to investigate the role of supervisor-team (in)congruence in past temporal focus for supervisors' and team members' work experiences. Besides contributing to proactive leadership behaviors, for example, incongruence between supervisor and team past temporal focus may decrease both parties' job satisfaction and increase their stress levels. Such findings would complement our study's rather positive depiction of supervisor-team incongruence in past temporal focus with a more nuanced and critical perspective.

Practical Implications

This study's findings yield important insights for organizational practice. As noted before, the existing literature has typically described supervisors who devote substantial attention to the past as "counter-ideal" and passive managers (Alipour et al., 2017, p. 313; see also Thoms, 2004). Our results, however, demonstrate that this depiction of highly past-focused supervisors

tells only part of the story. Indeed, such supervisors may lean towards more passive (i.e., laissez-faire) and less active (i.e., task-oriented and relationship-oriented) leadership when matched with a similarly past-focused team, and previous research has repeatedly shown the detrimental consequences associated with such a ‘hands off’ approach toward leadership (e.g., Judge & Piccolo, 2004; Judge, Piccolo, & Ilies, 2004). Nevertheless, our findings also suggest that excluding highly past-focused individuals from supervisory positions would be premature. After all, even highly past-focused supervisors may be willing and able to exhibit proactive leadership and refrain from passive leadership when faced with a less past-focused team.

Hence, rather than using past temporal focus as a selection criterion for supervisory positions, we believe organizations are well-advised to consider their supervisors’ temporal focus in leadership development procedures. Organizations may, for example, implement leadership training programs that address (highly past-focused) supervisors’ tendencies toward passive leadership. Such programs could showcase alternative leadership approaches (beyond laissez-faire behaviors) that supervisors could productively employ when they perceive their team as functioning well (e.g., due to high congruence in past temporal focus). Empowering leadership that actively encourages team members’ self-leadership (Srivastava, Bartol, & Locke, 2006) might be particularly relevant in this regard. Like laissez-faire leadership, such empowering behaviors avoid strong leader interference – yet, at the same time, highly empowering leaders remain available as a tangible source of support for the team, rather than withdrawing from their leadership responsibilities (Wong & Giessner, 2018). As such, research has shown empowering leadership to positively associate with desirable outcomes, such as members’ job satisfaction and team performance (e.g., Srivastava et al., 2006). Hence, an empowering leadership approach could enable supervisors to leave sufficient leeway to their team in situations of a congruent,

relatively high past temporal focus – without incurring the negative consequences typically associated with more passive-avoidant leadership (DeRue et al., 2011).

Conclusion

This study advances a multiple-stakeholder perspective on the role of past temporal focus for processes of leadership, demonstrating that (in)congruence between supervisors' and their team's past temporal focus may critically shape supervisors' proactive and passive-avoidant leadership behaviors. As such, the present research extends our knowledge about the relevance of subjective time orientations in leadership situations, illustrating that the role of supervisors' focus on the past critically hinges on the social group in which the respective consequences unfold. We hope that our findings can provide an impetus for further research on this issue that will advance a deeper understanding of the role of subjective time for organizational behavior in general and leadership in particular.

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Chapter 4: Are We in Time? An Actor-Partner Interdependence Approach Toward the Interpersonal Consequences of Time Pressure

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Abstract

Although research has shown that time pressure can shape employees' behavior, little remains known about how *differing* perceptions of time pressure between cooperating individuals may influence their behavioral reactions. The present investigation addresses this issue by examining the joint role of a focal individual's (i.e., an actor's) and a dyadic interaction partner's time pressure perceptions for the actor's time-oriented and relationship-oriented behavior. We tested our predictions using an online and a laboratory experiment across different cultural contexts. Results demonstrated that an actor's perceptions of time pressure were positively related with his or her time-oriented behavior. Also, in Study 1 (but not Study 2), the partner's time pressure moderated this association, such that the linkage between an actor's time pressure and time-oriented behavior was more pronounced when the partner experienced lower (rather than higher) time pressure. Furthermore, the partner's time pressure perceptions moderated the linkage between an actor's time pressure and relationship-oriented behavior across both studies. This linkage was positive and significant when the partner experienced high (but not low) time pressure. In sum, this research advances new insights into the consequences of time pressure in cooperating dyads, illustrating that conflicting time pressure perceptions may critically influence individuals' interpersonal behavior.

Keywords: time pressure, dyads, time-oriented behavior, relationship-oriented behavior, actor-partner interdependence model

Many employees in modern work environments regularly perceive substantive time pressure, such that they feel there is insufficient time to adequately complete their tasks (Eurofund, 2017; Rudd, 2019). Hence, it is not surprising that a large body of research has developed on the consequences of such time pressure (e.g., Maruping, Venkatesh, Thatcher, & Patel, 2015; Stuhlmacher, Gillespie, & Champagne, 1998). This literature has shown an employee's time pressure perceptions to shape his or her work-related attitudes and decisions (Wright, 1974) and to influence important work outcomes, such as individual creativity (Baer & Oldham, 2006) and task performance (Beck & Schmidt, 2013). Extrapolating these findings toward interpersonal contexts, scholars have demonstrated that time pressure can critically alter individuals' interactions with other persons (Karau & Kelly, 1992; McGrath & Kelly, 1986). In group settings, for example, this stream of research suggests that perceptions of time pressure may trigger two distinct types of interpersonal (or informal leadership) behavior. On the one hand, time pressure may lead group members to exhibit time-oriented behavior, such as emphasizing timeliness and deadlines, pushing others toward a faster working speed, and proactively synchronizing joint task accomplishment (Karau & Kelly, 1992; Waller, Zellmer-Bruhn, & Giambatista, 2002). On the other hand, research has linked time pressure with relationship-oriented, friendly, and cooperative acts, with some studies demonstrating that such perceptions may diminish interpersonal helping and support within groups (Kelly & Loving, 2004; Pearson & Porath, 2004) and others illustrating that time pressure may amplify such behavior (Maruping et al., 2015; Rand, Greene, & Nowak, 2012).

Importantly, this existing research has predominantly assumed that individuals working together in the same group and/or on the same task hold shared, similar perceptions of time pressure, with these collective perceptions shaping key behavioral reactions and outcomes (Chong, van Eerde, Chai, & Rutte, 2011; Isenberg, 1981). Due to fundamental changes in modern

work environments, however, even employees working in the same group or task context may often perceive differing degrees of time pressure (Cummings & Haas, 2012). Many employees in today's organizations belong to multiple teams and work on multiple concurrent projects, for example, simultaneously occupying diverse roles across these distinct assignments (Ballard, Vancouver, & Neal, 2018; Van de Brake, Walter, Rink, Essens, & van der Vegt, 2018). Hence, even individuals working together on the same task may, at any given point, have non-overlapping schedules and differing temporal demands, potentially evoking pronounced differences in individuals' perceptions of time pressure for the task at hand (O'Leary, Mortensen, & Woolley, 2011). The existing empirical research has not examined the consequences associated with such conflicting time pressure perceptions. As such, little remains known about how a focal individual may react to the common type of situation in which his or her own time pressure exceeds an interaction partner's respective perceptions or vice versa. Despite the pervasive nature of time pressure, our current understanding of this phenomenon therefore remains cursory and incomplete.¹⁵

The present study addresses this issue by investigating the role of time pressure for individual employees' interpersonal behavior in cooperative dyadic interactions. We draw from TIP theory (time, interaction, and performance theory; McGrath, 1991) to propose an actor-partner interdependence model (Kenny, Kashy, & Cook, 2006), such that a focal employee's (i.e., an actor's) own time pressure and his or her dyadic interaction partner's respective perceptions may *jointly* influence the actor's interpersonal behavior toward the partner. Specifically, as depicted in Figure 4.1, we examine the joint role of actor and partner time pressure for an actor's

¹⁵ We note that some studies have examined team diversity in members' time-based personality characteristics (e.g., Mohammed & Nadkarni, 2011, 2014). Although informative, however, this research has focused on members' stable personality traits rather than acute, situational perceptions of time. Moreover, these studies have adopted a team-level perspective on the consequences of temporal diversity, rather than examining individual employees' reactions toward another person's more or less divergent time orientations and preferences.

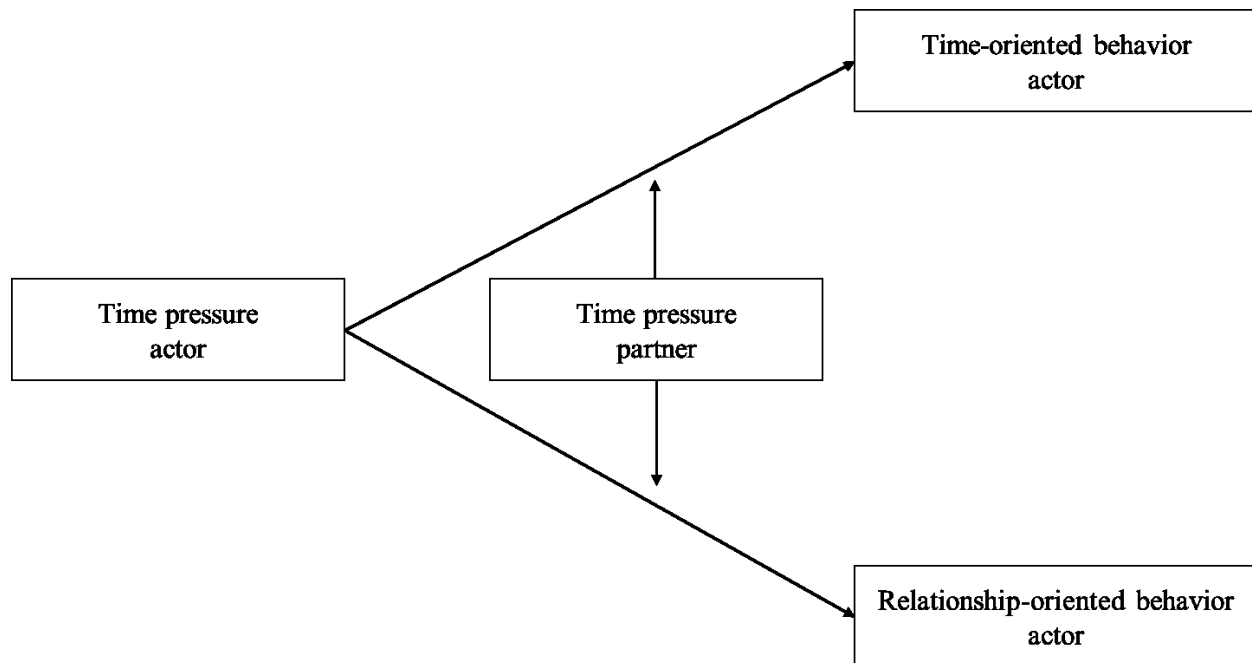


Figure 4.1. Conceptual model of Chapter 4.

time-oriented behavior (i.e., structuring the joint pace of work, synchronizing common efforts, monitoring schedules and deadlines; Janicik & Bartel, 2003; Mohammed & Nadkarni, 2011)¹⁶ and relationship-oriented behavior (i.e., friendly, considerate, and helpful acts; Brief & Motowidlo, 1986; Mossholder, Richardson, & Settoon, 2011). Prior research attested to the relevance of such behavior for individuals' interpersonal relations (e.g., trust and coordination; Janicik & Bartel, 2003; McAllister, 1995) and joint goal attainment (e.g., task performance; Mohammed & Nadkarni, 2011; Ng & van Dyne, 2005).

We empirically examine our conceptual model across two independent experimental studies, including an online scenario design and a laboratory investigation. In doing so, our goal is to advance existing theory and research on time pressure in organizations, shedding new light on the important consequences of conflicting time pressure perceptions between individuals

¹⁶ Other scholars have labeled similar types of behavior as “temporal planning” (Janicik & Bartel, 2003, p. 122) or, if conducted in a hierarchical context, as “temporal leadership” (Mohammed & Nadkarni, 2011, p. 492). In line with Waller, Giambatista, and Zellmer-Bruhn (1999), we refer to such actions as time-oriented behavior.

working on a joint task. More specifically, we aim to move beyond existing research on individual or group-level time pressure by highlighting the *interplay* between an actor's and a partner's (potentially divergent) time pressure perceptions as a critical factor that shapes an actor's behavioral choices. Our research therefore depicts time pressure as an inherently social phenomenon. By doing so, it emphasizes the complexity of the associated behavioral implications in modern work environments, where individuals' unique job arrangements may induce conflicting perceptions of time pressure even within cooperative interactions. As such, we strive to introduce a new, more nuanced perspective on the role of time pressure in today's organizations that anchors an individual's respective perceptions within his or her work context.

Theory and Hypotheses Development

Time Pressure and Time-Oriented Behavior

We draw from TIP theory (McGrath, 1991) to explain how, within cooperative dyads that work interdependently toward shared goals, an actor's and a partner's time pressure perceptions may jointly influence the actor's behavioral choices toward the partner. In a first step, we suggest that an actor's own perceptions of time pressure will positively relate with his or her time-oriented behavior toward the partner. TIP theory holds that individuals in cooperative settings face "generic temporal problems" (McGrath, 1991, p. 162) that may threaten successful and timely goal attainment (see also Mohammed & Nadkarni, 2011). One key problem, in this regard, results from perceptions of time pressure (i.e., a "scarcity of temporal resources;" McGrath, 1991, p. 162). Such perceptions indicate that successful task achievement is endangered unless all relevant parties work swiftly, quickly, and in synchrony to jointly meet tight deadlines and stay on schedule (Karau & Kelly, 1992).

To solve this problem, a TIP perspective suggests that actors experiencing high time pressure will typically respond with time-oriented behavior, urging their interaction partners to

work faster and proactively scheduling partners' task activities to meet perceived temporal requirements (McGrath, 1991). In such situations, an actor may believe that quick and decisive action is paramount, such there is no time to carefully consider alternative task approaches (Payne, Bettman, & Luce, 1996). Consequently, time-pressed actors may cut short time-consuming discussions (Carnevale & Conlon, 1988), and they may try to impose their own, hurried working pace upon others, urging a cooperation partner to work as fast as possible and trying to synchronize his or her work pace with their own (Chen & Nadkarni, 2017).

Actors under lower time pressure, by contrast, may perceive little need for time-oriented acts because they feel there is sufficient time for successful task completion (Kelly & McGrath, 1985; Waller et al., 2002). Hence, from a TIP perspective, these actors are less likely to perceive temporal scarcity as a substantive problem, such that they can afford to consider and discuss alternative task approaches in detail without having to nudge a cooperation partner toward timely task accomplishment or to proactively structure the pace of a partner's work activities (Kelly & Loving, 2004; McGrath, 1991). In this situation, the actor is likely to perceive that it is possible to attain joint goals even if actor and partner work at their own, possibly divergent paces. Supporting these notions, scholars have demonstrated that with lower (rather than higher) time pressure, group members talk less about time and deadlines, steer their attention away from temporal demands, and settle for a relatively modest working speed (Karau & Kelly, 1992; Waller et al., 2002). In sum, we therefore hypothesize:

Hypothesis 1: An actor's time pressure will be positively associated with his or her time-oriented behavior toward the partner.

Beyond time scarcity as such, TIP theory suggests that conflicting temporal interests and requirements constitute a second key problem for collaborative efforts (McGrath, 1991; see also Waller, Conte, Gibson, & Carpenter, 2001). In cooperating dyads, for example, this type of

problem may occur if an actor needs to finish a joint project as quickly as possible, whereas the partner has different priorities and, thus, focuses most of his or her time and efforts on other, concurrent projects. Based on a TIP perspective, it seems likely that the actor will perceive the need to address such temporal misalignment. Hence, we anticipate that the interaction partner's time pressure will moderate the relationship between an actor's respective perceptions and his or her time-oriented behavior.

In particular, we suggest that an actor's perceptions of time pressure will positively relate with his or her time-oriented behavior when the partner's time pressure is relatively low. The actor may perceive little need for time-oriented interventions, on the one hand, if he or she shares an interaction partner's low time pressure perceptions. In this situation, both actor and partner are likely to exhibit a relatively slow working pace regarding the task at hand, with little concern about tight schedules and deadlines (Blount & Janicik, 2002). As such, the partner's relatively unhurried work approach should match the actor's own preferences, affirming the actor's view that there is abundant time for joint goal accomplishment (Waller et al., 2001). Hence, the actor should perceive the interaction partner's working style as adequate, and he or she is unlikely to push toward an increased work pace (Mohammed & Nadkarni, 2011).

On the other hand, an actor that feels pronounced time pressure may find it necessary to exhibit time-oriented behavior when facing an interaction partner with lower time pressure perceptions. In this scenario, the actor should be highly concerned with efficient and timely task accomplishment, whereas the partner may tend to work more slowly on joint assignments, potentially assigning higher priority to other, unrelated tasks (Blount & Janicik, 2002; Kelly & Loving, 2004). Hence, the partner's working style is likely to contradict the actor's preferences in this situation, and the actor may perceive the partner as causing delays that obstruct successful collaboration (Sheldon, Thomas-Hunt, & Proell, 2006). To counter these tangible threats, TIP

theory suggests that the actor will try to impose his or her scheduling preferences upon the partner, for example by defining clear-cut deadlines, issuing temporal reminders, and urging the partner to work faster (McGrath, 1991).

By contrast, we anticipate that the linkage between an actor's time pressure perceptions and his or her time-oriented behavior will be less pronounced when working with a partner who experiences relatively high time pressure. Specifically, we expect an actor to exhibit moderate levels of time-oriented behavior if his or her interaction partner feels highly pressed for time, largely irrespective of the actor's own respective perceptions. If an actor experiences relatively low time pressure, in this situation, he or she will initially assign little relevance to timely and efficient task accomplishment and perceive no heightened urgency when working on joint tasks (Kelly & Karau, 1999; Wright, 1974). Nevertheless, the partner's strong preference for quick and timely goal attainment may color the actor's respective behavior, because the partner is likely to assertively emphasize temporal demands and requirements (Waller et al., 2001) and, thus, to potentially increase the actor's awareness of such issues. Moreover, this scenario is ripe with temporal conflict, as actor and partner may find it difficult to agree on a common, synchronized working pace (Santos, Passos, Uitdewilligen, & Nübold, 2016; Standifer et al., 2015). Even among actors perceiving relatively low time pressure, we anticipate that such temporal misalignment may evoke time-oriented behavior to some extent, as temporal issues become a focal point in actor-partner interactions and as the actor tries to bring the partner's timing of work tasks closer to his or her own inclinations.

Likewise, a TIP perspective (McGrath, 1991) suggests that an actor will exhibit moderate levels of time-oriented behavior when experiencing high time pressure and working with a partner who shares this perception. In this scenario, the actor may feel that timely goal attainment is a key problem, thus focusing his or her attention on deadlines, schedules, and efficient task

accomplishment (Waller et al., 1999). Importantly, however, the partner's similar emphasis on a quick and efficient working style may mitigate the actor's resulting time-oriented behavior.

Although timing issues may be central to actor-partner interactions in this situation, the actor may not find it necessary to forcefully push the partner toward a faster working pace and to consistently remind the partner of upcoming deadlines, because the partner's behavior will already be aligned with the actor's respective preferences (Gevers, Rispens, & Li, 2016; Mohammed & Harrison, 2013)

Taken together, this rationale suggests that the positive relationship between an actor's time pressure and time-oriented behavior should be more pronounced when working with a partner who experiences relatively low (rather than higher) time pressure. Offering initial support for this notion, research has shown that individuals with a highly time-urgent personality feel frustrated when interacting with less time-urgent individuals and, by consequence, tend to impose strict deadlines upon such persons (Jansen & Kristof-Brown, 2005; Waller et al., 1999). Hence, we hypothesize:

Hypothesis 2: The partner's time pressure will moderate the positive association between an actor's time pressure and his or her time-oriented behavior toward the partner, such that this linkage will be stronger when the partner's time pressure is lower rather than higher.

Time Pressure and Relationship-Oriented Behavior

Our previous argumentation has focused on task- and outcome-related concerns, such that potential timing and productivity problems resulting from actors' and their interaction partners' time pressure perceptions may affect actors' time-oriented behavior. Importantly, however, TIP theory and related research suggest that individuals' perceptions of time may also shape social aspects of their interpersonal relations, potentially influencing the degree to which interaction

partners are seen as likable and trustworthy (e.g., Jansen & Kristof-Brown, 2005; McGrath, 1991). On this basis, we expect perceptions of time pressure within cooperating dyads to also shape an actor's relationship-oriented behavior toward the partner, although we anticipate the pattern of this association to differ substantially from our suggestions for time-oriented behavior. In fact, empirical findings on the role of an individual's time pressure for his or her relationship-oriented behavior have been ambiguous and contradictory. Some studies have shown that higher time pressure may decrease interpersonal helping and support, for example, because individuals may feel that they do not have sufficient temporal resources to afford such behavior (Pearson & Porath, 2004; Škerlavaj, Connelly, Cerne, & Dysvik, 2018). By contrast, other studies have demonstrated that pronounced time pressure may fuel collaboration and interpersonal support to cope with such stressful circumstances (Kinicki & Vecchio, 1994; Rand et al., 2012). Consequently, we see little reason to expect an actor's time pressure to directly associate with his or her relationship-oriented behavior (i.e., a main effect). Rather, we again draw from TIP theory and related research to propose that the interaction partner's time pressure perceptions will critically moderate this linkage.

Specifically, we expect a negative association between an actor's perceptions of time pressure and relationship-oriented behavior when the partner's time pressure is relatively low. When both the actor and the partner experience little time pressure, on the one hand, we suggest that the actor is likely to demonstrate considerate and helpful behavior toward the partner. Research has shown, accordingly, that individuals value and appreciate it if others' temporal attitudes and preferences mirror their own (Gevers, van Eerde, & Rutte, 2009). An actor with low time pressure may feel comfortable and relaxed, in particular, if the partner shares his or her easy-going work attitudes and modest working speed (Blount & Janicik, 2002). By consequence, the actor may view the partner in a favorable light, experiencing positive attitudes and emotions

toward him or her (Waller et al., 2001). We therefore suggest, in this situation, that the actor should be more likely to approach the partner in a friendly, cooperative, and considerate manner.

On the other hand, an actor experiencing higher time pressure may be less motivated to exhibit such relationship-oriented behavior toward a partner with relatively low time pressure perceptions. In this scenario, the partner's preference for a relatively slow working pace may sharply contradict the actor's sense of urgency, endangering the actor's temporal interests and, thus, inducing him or her to view the partner as a disturbance and a cause of annoying delays (Blount & Janicik, 2002). By consequence, the actor may feel "frustrated and discomforted" by the partner (Mohammed & Nadkarni, 2011, p. 493), rendering it less likely that the actor will exhibit friendly and attentive behavior. In fact, research suggests that such situations of temporal misfit may even trigger aggressive acts and evoke open conflicts (e.g., Mohammed & Angell, 2004; Santos et al., 2016).

When working with a partner experiencing relatively high time pressure, by contrast, we anticipate the linkage between an actor's own time pressure and relationship-oriented behavior to be positive. On the one hand, we expect an actor to rarely exhibit relationship-oriented behavior in this situation when he or she experiences relatively low time pressure. In this scenario, the actor's preference for a modest working speed may be in stark contrast to the partner's fast and deadline-oriented working style and with the partner's tendency to emphasize scheduling and timing issues (Waller et al., 2001). Hence, the actor may perceive the partner as demanding and obtrusive, potentially resulting in adverse interpersonal attitudes and negative emotions such as "anger, frustration, and/or anxiety" (Blount & Janicik, 2002, p. 255). We propose that such unsatisfying experiences will increase the likelihood of pronounced arguments and conflicts about temporal issues, impairing the actor's motivation to act courteously and friendly toward the partner (Mohammed, Alipour, Martinez, Livert, & Fitzgerald, 2017; Santos et al., 2016).

Actors experiencing relatively high time pressure, on the other hand, are more likely to exhibit relationship-oriented behavior when working with a highly time-pressed partner. In this situation, the interaction partner's fast working pace and swift efforts will mirror the actor's own preferences for timeliness and speed (Mohammed et al., 2017). Because of such shared temporal interests, it seems likely that the actor will be satisfied with the partner's work attitudes and will view him or her in a favorable light (Mohammed & Harrison, 2013). Even under higher time pressure, an actor may perceive such a situation as relatively enjoyable and collegial and as providing a pleasant work atmosphere (Jansen & Kristof-Brown, 2005). Accordingly, we suggest that such instances of similarly high time pressure may lead an actor to invest efforts in building and maintaining a positive social relationship.

In sum, we therefore anticipate an actor to engage in relationship-oriented behavior toward an interaction partner with relative frequency if actor and partner share similar perceptions of time pressure. By contrast, if the actor experiences greater time pressure than the partner (or vice versa), we expect the actor's relationship-oriented behavior to be less pronounced. Providing some initial support for this notion, team-level research has demonstrated that similarity among individual members' stable temporal personality traits can reduce team conflicts, smoothen interaction processes, and increase members' satisfaction (Gevers et al., 2016; Mohammed & Angell, 2004). Hence, we hypothesize:

Hypothesis 3: The partner's time pressure will moderate the association between an actor's time pressure and his or her relationship-oriented behavior toward the partner, such that this linkage will be positive when the partner's time pressure is relatively high and negative when the partner's time pressure is relatively low.

Overview of the Present Research

We implemented a multi-study design to examine the present hypotheses, using two distinct experimental approaches across different cultural contexts. Specifically, Study 1 used an online scenario design with participants from the US to test our conceptual model. Study 2 used a laboratory experiment with participants from Germany to constructively replicate Study 1's results and examine the hypotheses in an actual dyadic interaction context.

Study 1

Sample and Procedure

Study 1 tested the hypotheses using an experimental scenario design as a first step toward disentangling causal relations. Participants were randomly assigned to one condition in a 2 (actor time pressure: low vs. high) \times 2 (partner time pressure: low vs. high) between-subjects design. Using Amazon's MTurk, we recruited 185 Master Workers (i.e., individuals with a track record of conscientious participation in previous MTurk tasks) located in the US in exchange for a small monetary compensation. Participation was restricted to individuals who indicated they had prior organizational work experience. Research has shown that data collected through such online methods do not systematically differ in validity and reliability, as compared with data collected in laboratory settings (Buhrmester, Kwang, & Gosling, 2011; Peer, Brandimarte, Samat, & Acquisti, 2017). Moreover, as outlined below, we used attention checks to safeguard data quality (Meade & Craig, 2012), and seven participants who did not pass these attention checks were excluded from further analyses. The final sample therefore comprised 178 participants. Of these participants, 56% were male and 44% female, and their mean age was 37.57 years ($SD = 10.57$). On average, they had 18.04 years of work experience ($SD = 11.82$), and 71% had a college degree or higher.

Experimental Materials and Manipulations

After providing informed consent, all participants read the following excerpt, *“Imagine that you work for a pharmaceutical company called Randberg Inc. You started working on a very important project together with a colleague. You have not worked previously with this colleague. While you two normally work in different departments under different supervisors, the results of this project will be meaningful for both of your future careers within Randberg Inc. Then,* participants (who served as actors in the present study) received their own time pressure manipulation. In the high [low] actor time pressure condition, participants read, *“For you, this project is very time sensitive [not time sensitive], so you feel [no] time pressure and a [no] need to hurry. Hence, you will do your best to make the project successful, but you will also try to finish the project as quickly as possible [take your time to finish the project].”* Finally, participants received the manipulation for the partner’s time pressure. In the high [low] partner time pressure condition, participants read, *“For your colleague, this project is very [not] time sensitive, and he is under a lot of [not under any] time pressure. Therefore, you expect that he will do his best, but he will also try to finish the work as fast as possible [take his time to finish the work].”*

Dependent Variable Measures

After reading the scenario and manipulations, participants were asked to think about the situation and assess how they would behave toward their colleague. All measures were assessed using a 5-point response scale from 1 (strongly disagree) to 5 (strongly agree).

Time-oriented behavior. We used three items from Mohammed and Nadkarni (2011) to measure time-oriented behavior. Consistent with our research focus, these items capture behavior aimed at structuring the collective work pace and reminding others about timely task accomplishment. We slightly adapted the items to refer to participants’ likely behavior toward

their colleague in the scenario (rather than time-oriented leadership behavior toward subordinates). The items were, “I would urge my colleague to finish his tasks on time,” “I would remind my colleague of the time left for his tasks,” and “I would pace my colleague so that the work is finished on time.” Cronbach’s alpha was .84.

Relationship-oriented behavior. We measured relationship-oriented behavior using a five-item instrument from Stogdill (1963) that captures friendly, helpful, and considerate behavior. Again, we slightly modified these items to allow for self-ratings in a hypothetical interaction with a colleague (rather than relationship-oriented leadership behavior toward subordinates). Example items are, “I would be friendly and approachable toward my colleague,” “I would look out for the personal welfare of my colleague,” and “I would act without consulting my colleague” (reverse coded). Cronbach’s alpha was .78.

Attention and Manipulation Checks

Scholars have pointed toward potential problems with careless responding in online research designs (e.g., Bowling et al., 2016). We therefore used two instructed response items (e.g., “This is a control question as an attention check – please select strongly disagree”) to check whether the participants paid attention when completing the measures. As noted before, we excluded seven participants who did not respond correctly to one or both of these questions from further analyses.

Further, to examine our manipulations’ viability, we asked the participants (after they had completed the dependent variable measures) to describe their own and their partner’s time pressure in the scenario with the following questions: (1) “How time sensitive was this project for you?” and (2) “How time sensitive was this project for your colleague?” Answer options ranged from 1 (“not time sensitive at all”) to 5 (“very time sensitive”). A one-way analysis of variance (ANOVA) indicated that individuals perceived the project to be more time sensitive for

themselves in the high (rather than low) actor time pressure condition ($M = 4.82$, $SD = .53$, vs. $M = 1.26$, $SD = .72$), $F(1, 176) = 1415.58$, $p < .001$, $\eta^2 = .89$. Similarly, participants perceived the project as more time sensitive for their partner in the high (rather than low) partner time pressure condition ($M = 4.76$, $SD = .82$, vs. $M = 1.41$, $SD = 1.05$), $F(1, 176) = 553.35$, $p < .001$, $\eta^2 = .76$.

Tests of Hypotheses

Hypothesis 1 predicted an actor's time pressure to positively associate with his or her time-oriented behavior. A two-way ANOVA on time-oriented behavior, with actor and partner time pressure as independent factors, revealed a significant main effect for actor time pressure ($F[1, 174] = 51.47$, $p < .001$, $\eta^2 = .23$), but not for partner time pressure ($F[1, 174] = 1.98$, $p = .16$, $\eta^2 = .01$). Individuals in the high actor time pressure condition reported significantly higher tendencies to engage in time-oriented behavior ($M = 3.67$, $SD = 0.81$) than individuals in the low actor time pressure condition ($M = 2.67$, $SD = 1.01$). Thus, Hypothesis 1 was supported.

Importantly, however, this main effect was qualified by a two-way interaction of actor and partner time pressure ($F[1, 174] = 15.89$, $p < .001$, $\eta^2 = .08$), as anticipated in Hypothesis 2. Specifically, this hypothesis suggested that the association between an actor's time pressure and time-oriented behavior will be more strongly positive when working with a partner under lower (rather than higher) time pressure. As depicted in Figure 4.2, participants with high actor time pressure indicated that they would exhibit more time-oriented behavior than participants with low actor time pressure in both the low partner time pressure ($M = 3.84$, $SD = .79$ vs. $M = 2.37$, $SD = .91$; $t(92) = 8.37$, $p < .001$) and the high partner time pressure conditions ($M = 3.50$, $SD = .81$ vs. $M = 3.08$, $SD = 1.01$; $t[82] = 2.13$, $p = .04$). As illustrated by the significant interaction coefficient, however, the respective simple effect was more pronounced in the low partner time pressure condition ($d = 1.73$) than in the high partner time pressure condition ($d = .46$). Hence, Hypothesis 2 was supported.

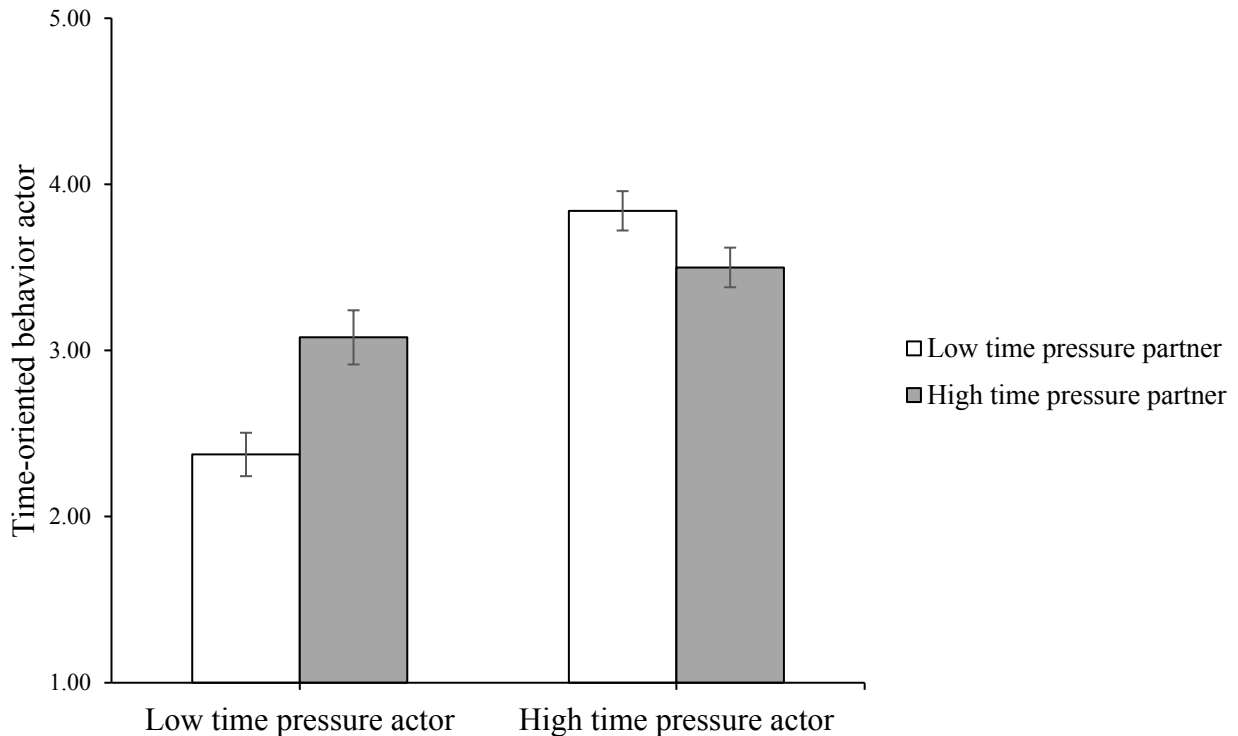


Figure 4.2. Interaction between actors' and partners' time pressure on actors' time-oriented behavior (Study 1). Error bars represent standard errors.

Hypothesis 3 predicted partner time pressure to moderate the association between an actor's time pressure and his or her relationship-oriented behavior, such that this linkage should be positive with higher partner time pressure and negative with lower partner time pressure. As expected, a two-way ANOVA on relationship-oriented behavior revealed no significant main effects for either actor time pressure ($F[1, 174] = .02, p = .89, \eta^2 = .00$) or partner time pressure ($F[1, 174] = .29, p = .59, \eta^2 = .00$). Again, however, there was a significant two-way interaction of actor and partner time pressure ($F[1, 174] = 5.05, p = .03, \eta^2 = .03$). We depicted this interactive relationship in Figure 4.3. When working with a high time pressure partner, participants in the high actor time pressure condition indicated (marginally) greater tendencies toward relationship-oriented behavior ($M = 4.33, SD = .44$) than participants in the low actor time pressure condition ($M = 4.12, SD = .60, t(82) = 1.82, p = .07, d = .40$). When working with a low

time pressure partner, by contrast, participants' tendencies toward relationship-oriented behavior did not differ significantly between the high ($M = 4.09$, $SD = .65$) and low actor time pressure conditions ($M = 4.27$, $SD = .59$), $t(88) = 1.42$, $p = .16$, $d = .29$. Hence, despite a significant interaction, these findings do not offer unequivocal support for Hypothesis 3 – although the interaction pattern depicted in Figure 4.3 illustrates a trend in the proposed directions.

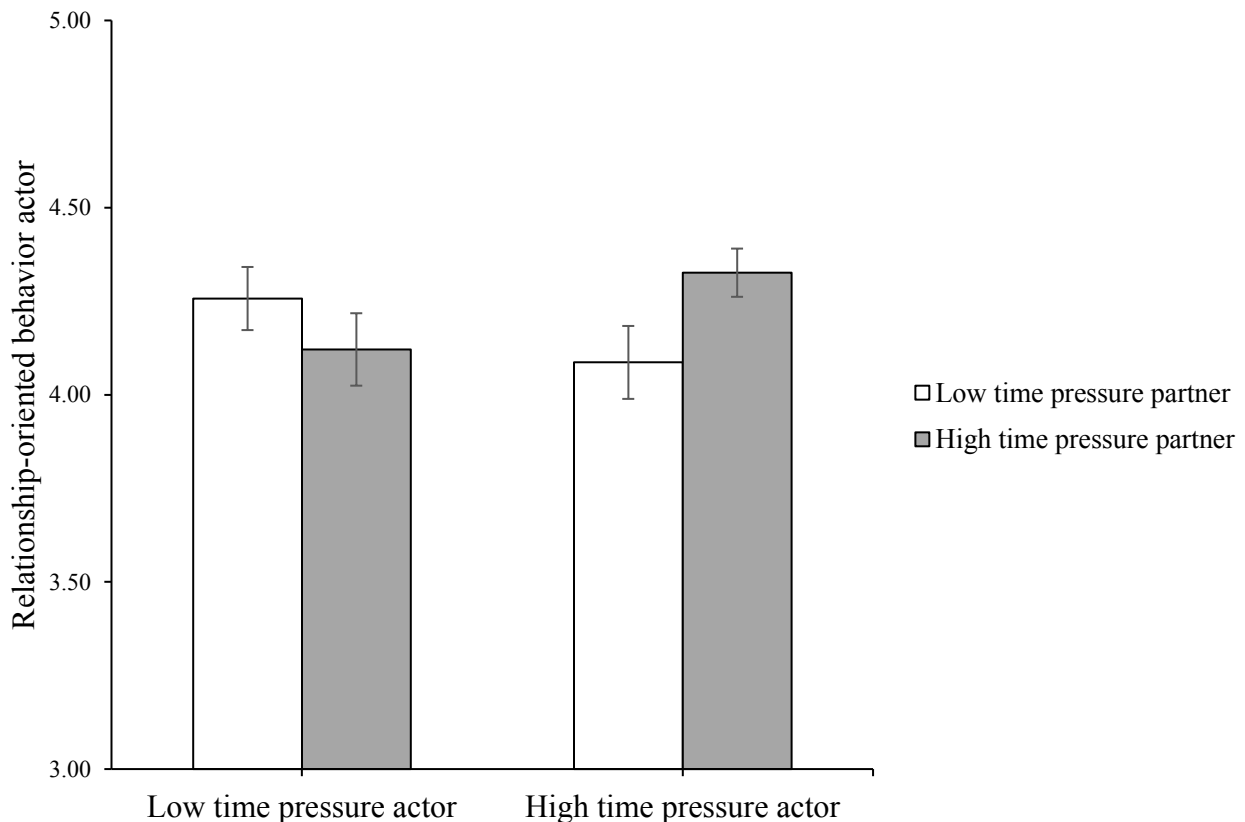


Figure 4.3. Interaction between actors' and partners' time pressure on actors' relationship-oriented behavior (Study 1). Error bars represent standard errors.

Discussion of Study 1

As hypothesized, our first study revealed a positive relationship between an actor's time pressure perceptions and his or her time-oriented behavior. This positive relationship was qualified by a significant two-way interaction between actor and partner time pressure, such that the role of an actor's time pressure for his or her time-oriented behavior was more pronounced

when the partner's time pressure was lower (rather than higher). Moreover, Study 1 revealed that the partner's time pressure moderated the linkage between an actor's time pressure and relationship-oriented behavior, although the specific shape of this interaction differed slightly from our expectations.

Hence, we believe these initial results attest to the plausibility of our theoretical considerations – but we also acknowledge that the present study has a number of relevant limitations. Study 1's experimental scenario design, in particular, may raise external validity concerns because (a) participants read descriptions about their own and their interaction partner's time pressure perceptions, rather than actually experiencing such time pressure, and (b) we measured participants' self-rated behavioral inclinations in a hypothetical situation, rather than actual behavior. Moreover, as the results for relationship-oriented behavior (i.e., Hypothesis 3) were not fully in line with expectations, it is clear that further evidence is required to draw more robust conclusions in this regard. We conducted Study 2 to address these limitations, using a dyadic laboratory experiment with actual actor-partner interaction.

Study 2

Sample and Procedure

We recruited 120 students at a German university for an experimental study on problem solving via online and classroom announcements, in exchange for monetary compensation. As in Study 1, the participants were randomly assigned to one condition in a 2 (actor time pressure: low vs. high) \times 2 (partner time pressure: low vs. high) between-subjects design. Participation was voluntary and anonymity guaranteed, and we randomly matched participants to form same-sex dyads (to prevent gender differences from biasing interaction processes; cf. Eagly & Karau, 1991).¹⁷ Three dyads were excluded because (a) at least one participant did not follow the

¹⁷ Controlling for gender did not meaningfully alter the results or conclusions.

experimental instructions or (b) at least one participant experienced technical difficulties during the experimental task. Hence, the final sample comprised 114 participants (58 female and 56 male) across 57 dyads. The participants' average age was 25.11 years ($SD = 4.01$).

The study was conducted within an on-campus behavioral research laboratory, and the experiment was run with one dyad at a time. After they had provided informed consent, we told participants that they were to subsequently complete an individual and a dyadic exercise. We used the first, individual exercise to manipulate participants' perceptions of time pressure in the second, dyadic exercise. To do so, the participants within a dyad were seated individually in front of a computer in different cubicles to complete the "Lost on the Moon" task (Hall & Watson, 1970; see also Sheldon et al., 2006). Participants were asked to imagine that they were on a space mission that had crash-landed on the moon, and their task was to rank-order 15 pieces of equipment (without explicit time limit) according to their importance for survival and rescue. We depicted this individual exercise as a trial task for the subsequent, highly similar dyadic exercise, and we emphasized that the computer would assess participants' performance in both exercises based on two criteria, namely (a) how correct their responses were and (b) how fast they had completed the respective exercise. In addition, we informed the participants that the best performing dyad in the subsequent exercise could win a € 50 gift certificate. After the individual exercise, bogus feedback was provided to independently manipulate both individuals' time pressure perceptions within each dyad, as outlined below.

In the following phase of the study (after the time pressure manipulation), both participants in a dyad were seated in front of a single computer to conduct the "Lost at Sea" exercise together (Nemiroff & Pasmore, 1975; see also Reinig, Horowitz, & Whittenburg, 2015). In this exercise, participants are asked to imagine that they are part of a shipwrecked crew drifting on the ocean in a lifeboat, and their task is to rank-order 15 pieces of equipment on their

importance for survival and rescue.¹⁸ As in the first exercise, participants were to complete the task as correctly and quickly as possible. Importantly, however, the participants in each dyad had to agree on a common solution in the second exercise, such that discussion and collaboration were required to solve the problem.

After completing the dyadic exercise, the participants returned to their previous, individual cubicles to complete a post-task questionnaire. This questionnaire captured our dependent variables, asking individuals to assess their interaction partner's time-oriented and relationship-oriented behavior during the dyadic exercise. Finally, we debriefed, thanked, and compensated the participants.

Time Pressure Manipulation

We randomly assigned individual participants to either a high time pressure or a low time pressure condition. Hence, given our dyadic study design, each participant was randomly placed in a dyad in which (a) his or her own time pressure (as actor) was either high or low and (b) the other participant's time pressure (as partner) was either high or low. Specifically, all participants received bogus feedback on their performance in the first, individual exercise on their individual computer screens, with two bars allegedly comparing a participant's own performance with other participants' average performance. In reality, all participants were informed that their performance was slightly below average, as compared with other participants.¹⁹ The high and low time pressure conditions differed, however, in the reasons and recommendations accompanying this evaluation.

¹⁸ We chose two similar tasks across both experimental phases so that participants were more likely to consider the feedback obtained for the first task as relevant to the second task.

¹⁹ To avoid suspicion, the exact performance feedback differed slightly within each dyad, such that one participant had allegedly achieved 46 points and the other participant 48 points. We note that this slight variation did not affect any of the study variables. Compared to participants who had supposedly achieved 46 points, participants who had allegedly scored 48 points did not significantly differ in either time-oriented behavior ($F[1, 112] = 1.94, p = .17, \eta^2 = .02$) or relationship-oriented behavior ($F[1, 112] = .37, p = .55, \eta^2 = .00$).

In the high time pressure condition, participants were told that the main reason for their substandard evaluation was that they had taken too much time for the task, whereas the correctness of their solution was adequate. Therefore, it was explicitly recommended that they should try to work much faster in the dyadic task to have a chance at winning the gift certificate. In the low time pressure condition, by contrast, participants received the information that they had worked sufficiently fast, but that they had made too many content errors. Thus, they received the explicit advice that they should take more time during the dyadic task to have a chance at winning the certificate. Participants within a dyad were blind to their partner's respective time pressure manipulation.

Dependent Variable Measures

We translated all measures to German using a double-blind back-translation procedure (Brislin, 1980). All items were assessed using a 5-point response scale from 1 (strongly disagree) to 5 (strongly agree).

Time-oriented behavior. We used the same three items as in Study 1 to measure time-oriented behavior (Mohammed & Nadkarni, 2011), slightly adapted to allow for peer-ratings (rather than self-ratings of one's own hypothetical behavior) of the dyadic interaction partner's respective behavior (e.g., "My partner urged me to finish the task on time"). Coefficient alpha was .77.

Relationship-oriented behavior. We used the same five items as in Study 1 to capture relationship-oriented behavior (Stogdill, 1963), again slightly adapted to allow for peer-ratings of the partner's respective behavior (e.g., "My partner was friendly and approachable"). Coefficient alpha was .70.

Manipulation Checks

After the time pressure manipulation (and before the dyadic task), participants were asked about the feedback they had received. Specifically, we asked the participants to indicate how they had been evaluated regarding their overall performance (1 = “well below average”, 5 = “well above average”) as well as their speed (1 = “far too slow”, 5 = “far too fast”) and the correctness of their solutions (1 = “well below average”, 5 = “well above average”). One-way ANOVAs showed that participants in the high (vs. low) time pressure conditions perceived (a) their overall performance evaluations as virtually identical ($M = 2.09$, $SD = .29$ vs. $M = 2.00$, $SD = .38$; $F[1, 112] = 2.03$, $p = .16$, $\eta^2 = .02$), (b) their working speed evaluations as slower ($M = 1.96$, $SD = .87$ vs. $M = 4.17$, $SD = .68$; $F[1, 112] = 228.12$, $p < .001$, $\eta^2 = .67$), and (c) their correctness evaluations as better ($M = 3.75$, $SD = 1.75$ vs. $M = 2.24$, $SD = .84$; $F[1, 112] = 34.73$, $p < .001$, $\eta^2 = .24$). Hence, as expected, participants in the high time pressure condition perceived that they had worked too slowly in the first exercise (but had produced sufficiently correct solutions), whereas participants in the low time pressure condition perceived that they had worked too quickly and, therefore, had made too many content errors.

Analytic Strategy

In the present study, individual participants were nested within dyads, such that each individual appeared in the data as both an actor and a partner. This dyadic data structure violates independence assumptions, potentially producing biased parameter estimates (Cook & Kenny, 2005). Consequently, scholars have recommended the use of dyadic techniques of data analysis to explicitly model such non-independence (Kenny et al., 2006; Krasikova & LeBreton, 2012). Following such recommendations, we used Kenny and colleagues’ (2006) actor-partner interdependence model (APIM) to test our hypotheses.

Our particular data structure reflects a “reciprocal standard design” with indistinguishable dyads (Krasikova & LeBreton, 2012, p. 743), such that (a) every dyad comprises two individuals who are not members of another dyad, (b) all focal variables were gathered from both members of a dyad, and (c) the members of a dyad could not be ordered in theoretically or empirically meaningful ways (as would be the case, for example, for supervisor-subordinate dyads). Hence, we followed suggestions by Krasikova and LeBreton (2012; see also Cook & Kenny, 2005) to apply a dyadic multilevel modeling approach when estimating our APIM, using the DyadR web program (Kenny, 2015). Dyadic multilevel modeling retains individual-level (i.e., Level-1) variables but accounts for the fact that these variables are nested within dyads (i.e., Level-2), treating them as repeated measures within dyads and fixing the Level-1 slopes to be equal (Kenny et al., 2006; Krasikova & LeBreton, 2012).

More specifically, we used actor-partner interdependence moderation models (APIMoM) to test Hypotheses 2 and 3, with partner time pressure representing a mixed moderator that varies both between and within dyads. Following Kenny and colleagues’ recommendations (Garcia, Kenny, & Ledermann, 2015; West, Popp, & Kenny, 2008), we tested these hypotheses by including the interaction term between actor and partner time pressure together with both actor and partner effects to predict an actor’s time-oriented and relationship-oriented behavior, respectively. Subsequently, we examined the simple effects of actors’ time pressure on these behavioral outcomes under conditions of low vs. high partner time pressure, respectively.

Tests of Hypotheses

As shown in Table 4.1, an actor’s perceived time pressure was positively associated with his or her time-oriented behavior (estimate = .37, $SE = .17$; $p = .03$), even after controlling for partner effects. Thus, Hypothesis 1 was supported. Moreover, Hypothesis 2 predicted that a partner’s time pressure moderates the association between an actor’s time pressure and his or her

Table 4.1

Dyadic Multilevel Modeling Results for Actors' Time-oriented and Relationship-oriented Behavior (Study 2)

	Outcome Variables											
	Time-oriented behavior actor						Relationship-oriented behavior actor					
	Model 1			Model 2			Model 1			Model 2		
	Estimate	SE	95% CI	Estimate	SE	95% CI	Estimate	SE	95% CI	Estimate	SE	95% CI
Time Pressure Actor ^a	.37*	.17	[.04; .71]	.45 [#]	.09	[-.02; .93]	-.11	.10	[-.31; .08]	-.41**	.14	[-.69; -.14]
Time Pressure Partner ^a	-.23	.17	[-.56; .11]	-.15	.24	[-.79; .17]	.02	.10	[-.18; .21]	-.28*	.14	[.05; .61]
Time Pressure Actor x Time Pressure Partner				-.16	.35	[-.84; .52]				.61**	.21	[.21; 1.01]
ΔR^2		.04*			.00			.00			.07**	

Note. $N = 114$. [#] $p < .10$, * $p < .05$, ** $p < .01$ (two-tailed)

^aExperimentally manipulated (0 = low time pressure condition; 1 = high time pressure condition).

time-oriented behavior. As depicted in Table 4.1, however, the interaction term of actor and partner time pressure was not significantly related with time-oriented behavior (estimate = $-.16$, $SE = .35$; $p = .65$). Hence, contrary to Study 1, the present findings did not support Hypothesis 2. We will return to this unexpected finding in the General Discussion section.

Hypothesis 3 argued that a partner's time pressure moderates the association between an actor's time pressure and his or her relationship-oriented behavior. As shown in Table 4.1, the interaction coefficient for actor and partner time pressure was significantly related with an actor's relationship-oriented behavior (estimate = $.61$, $SE = .21$; $p = .003$), after controlling for main effects. Further, as illustrated in Figure 4.4, the simple relationship between an actor's time pressure and relationship-oriented behavior was positive under conditions of high partner time pressure (estimate = $.33$, $SE = .14$; $p = .02$), whereas this relationship was negative under conditions of low partner time pressure (estimate = $-.28$, $SE = .14$; $p = .045$). Hence, these results supported Hypothesis 3.

Overall Discussion

This research examined the joint role of actor and partner time pressure perceptions for individuals' interpersonal (or informal leadership) behavior in cooperating dyads. Across two independent studies, our results showed that an actor's perceived time pressure is positively related with his or her time-oriented behavior. Moreover, Study 1 illustrated this positive association to be more pronounced when the partner experienced low (rather than high) time pressure, although the respective interaction did not reach significance in Study 2. Hence, this investigation provides initial evidence that an interaction partner's time pressure may moderate the role of an actor's own time pressure perceptions for time-oriented behavior, although our inconsistent findings clearly call for further research in this regard. Furthermore, across both studies, the interaction partner's time pressure moderated the linkage between an actor's own

time pressure perceptions and his or her relationship-oriented behavior. Both studies illustrated that this association was positive when the interaction partner's time pressure was relatively high. When the partner's time pressure was low, by contrast, the linkage between actor time pressure and relationship-oriented behavior was non-significant in Study 1 and negative in Study 2.

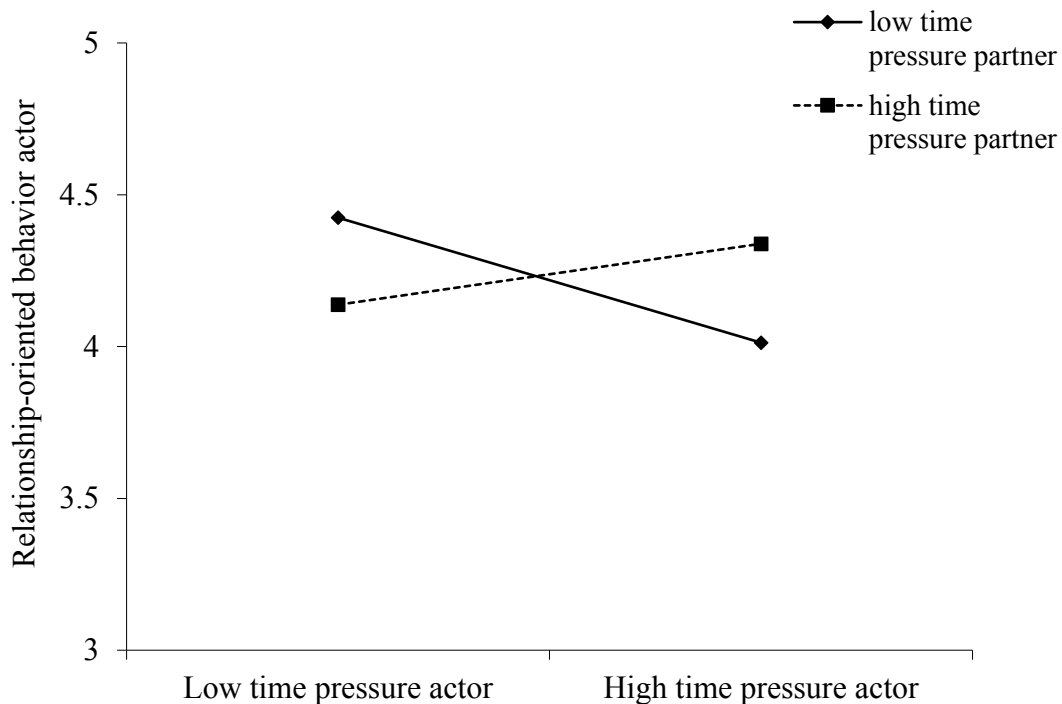


Figure 4.4. Interaction between actors' and partners' time pressure on actors' relationship-oriented behavior (Study 2).

Theoretical Implications

The present findings offer important theoretical implications for our understanding of the behavioral consequences associated with time pressure in organizations. Existing research on the role of time pressure in collaborative contexts has typically depicted this construct either as an individual phenomenon (e.g., Baer & Oldham, 2006; Beck & Schmidt, 2013) or as a collective, shared feature of the work environment (e.g., Kelly & Loving, 2004; Maruping et al., 2015). In modern work settings, however, cooperating employees often have differing perceptions of time

pressure regarding their common tasks, for example due to divergent temporal requirements and priorities (Cummings & Haas, 2012). Our research illustrates how such divergent time pressure perceptions may shape interpersonal interactions. As such, our findings provide a novel, more nuanced perspective toward the role of time pressure, illustrating that joint consideration of all interaction parties' potentially diverse time pressure perceptions is required for a more complete and realistic understanding of how this common phenomenon may shape individuals' behavior toward each other.

In doing so, this study advances the emerging literature that has examined how group-level diversity in stable temporal personality traits (e.g., time urgency, temporal focus, or polychronicity) may influence group outcomes (Mohammed et al., 2017; Mohammed & Nadkarni, 2014). Moving beyond this prior focus on stable characteristics, the present findings demonstrate how similarities and differences between cooperating individuals' *situational, task-specific* time pressure perceptions can influence important interpersonal behaviors. Hence, with employees' schedules and timetables being fluid and often changing on a daily basis (Blount & Janicik, 2001), it seems necessary to consider both individuals' time-related personality traits and their momentary temporal experiences at work to understand the consequences of temporal diversity.

Finally, this investigation sheds new light on a long-standing debate regarding the role of time pressure for individuals' helpful, cooperative, and friendly behavior. As outlined before, previous findings on this issue have been inconsistent and controversial, with some studies demonstrating that time pressure may increase interpersonal support and collaboration (e.g., Kinicki & Vecchio, 1994; Rand, 2016) and others illustrating that time-pressed individuals may act less civil and neglect others' needs (e.g., Darley & Batson, 1973; Pearson & Porath, 2004). Our results offer a possible explanation for this seemingly contradictory state of the research by

emphasizing the *joint* consequences of both interaction parties' time pressure perceptions in dyadic settings. It appears that the role of an actor's time pressure for his or her relationship-oriented behavior critically hinges on the time pressure experienced by the interaction partner, such that this type of behavior is most pronounced when both parties' respective perceptions are aligned (rather than misaligned). Integrating previous results, individuals' perceptions of time pressure may, therefore, both increase (when the interaction partner perceives relatively high time pressure) and decrease (when the partner perceives little time pressure) the likelihood of friendly and considerate acts.

Strengths and Limitations

We believe our multi-study approach is an important strength of this research, enabling us to counterbalance many of the individual studies' specific limitations and, thus, to draw more robust conclusions. At the same time, we acknowledge some limitations that pertain to our research as a whole and that should be considered when interpreting its outcomes. Although our studies covered two different national contexts (i.e., the United States and Germany), they were both conducted in Western cultures. Scholars have argued that individuals' assessments of time pressure may differ across cultures (Fulmer, Crosby, & Gelfand, 2014), such that high time pressure may be an implicit status symbol in Western societies (Keinan, Bellezza, & Paharia, 2019), whereas some Eastern cultures may assign greater value to patient and well-wrought rather than fast-paced actions (Brislin & Kim, 2003; Salmon et al., 2016). Hence, although our theoretical rationale is not bound to a specific cultural setting, the pattern of results we observed might differ in other cultures. Constructive replication of our findings in alternative cultural contexts would therefore be worthwhile to strengthen the generalizability of our conclusions.

Moreover, we note that our findings pertain to dyadic settings, possibly limiting their generalizability toward larger groups. For example, majority and minority influence processes

(Levine & Russo, 1987; Nemeth, 1986) might alter the present relationships, such that a time-pressed actor may be reluctant to engage in time-oriented behavior if several other group members perceive little time pressure (Blount & Janicik, 2002). Scholars have emphasized that “the dyad is arguably the fundamental unit of interpersonal interaction and interpersonal relations” (Kenny et al., 2006, p. 1; see also Krasikova & LeBreton, 2012). Hence, we believe our dyadic focus is justified as a first step toward understanding the role of individuals’ divergent time pressure perceptions. Nonetheless, we encourage future research to extend our theoretical model and empirical investigation toward larger groups to more comprehensively understand the behavioral consequences of time pressure in cooperating work units.

Finally, an important inconsistency between our two studies’ results deserves mention. As noted before, Study 1 revealed a significant interaction effect of actor and partner time pressure on time-oriented behavior, but the respective interaction term was not significant in Study 2. A possible explanation may be that Study 1 used a hypothetical scenario to manipulate partner time pressure as unambiguously high or low, whereas Study 2’s participants did not receive explicit information about the partner’s time pressure but, rather, observed the partner’s high or low time pressure during the experimental interaction. It therefore seems possible that the partner’s time pressure was less clear and salient in Study 2. This inconsistent finding certainly calls for further investigation. It may be particularly fruitful to examine this issue in longer social interactions that may offer more opportunities for individuals to recognize each other’s degree of time pressure and, thus, to react accordingly.

Directions for Future Research

Beyond addressing limitations, future research could extend the present model to advance a broader understanding of the behavioral consequences associated with actors’ and partners’ time pressure perceptions. As noted before, for example, scholars have suggested that conflicting

time pressure perceptions may induce feelings of anger and irritation (Blount & Janicik, 2002). Hence, such temporal misalignment between actor and partner may also trigger distinctly negative, counterproductive interpersonal behaviors characterized by aggression and hostility. Studies examining such additional behavioral outcomes could advance a wider perspective on the role of time pressure in collaborative contexts.

Moreover, future research could adopt a dynamic perspective to examine the present conceptual model. Punctuated equilibrium theory (Gersick, 1988), for example, suggests that time-related issues become more salient for social interactions after the temporal midpoint of a joint task or project. Hence, scholars could investigate whether the role of actors' and partners' time pressure perceptions may be more pronounced after a dyad has reached the midpoint of its assignments. By integrating "objective" time into our considerations, such research could promote a "completely temporal" perspective (Shipp & Cole, 2015, p. 250), investigating subjective perceptions of time pressure over the course of objective time to more deeply understand the interpersonal consequences of conflicting time pressure perceptions in cooperative dyads.

Another fruitful direction for future research would be to extend our study's focus on peer interactions toward interactions in hierarchical relations. Specifically, Chen, Blount, and Sanchez-Burks (2004, p. 129) suggested that "with status, comes the control of time," such that individuals with higher status are more likely to impose their temporal preferences upon others (see also Blount & Leroy, 2007). Similarly, formal supervisors may be particularly likely to follow their temporal inclinations when interacting with subordinates (Chen & Nadkarni, 2017). Hence, it seems possible that such hierarchical differentiation alters the degree to which actors' and partners' time pressure perceptions shape their behavior. Examining this notion may enable

future research to provide a more context-specific understanding of the behavioral consequences associated with perceived time pressure.

Finally, as our study's focus was on collaborative contexts, researchers could extrapolate our ideas and findings to competitive situations. Scholars have long acknowledged, for instance, that time pressure may shape negotiation processes and outcomes (De Dreu, 2003; Stuhlmacher et al., 1998). Similar to existing research within collaborative contexts, however, the negotiation literature has not empirically investigated the role of conflicting time pressure perceptions. It would be interesting to examine, for example, whether misaligned time pressure perceptions may limit cooperation and friendliness among negotiators, thus possibly reducing the chance of integrative agreements.

Practical Implications

Our findings yield relevant implications for managers and employees in organizations, demonstrating that time pressure perceptions can critically shape individuals' time-oriented and relationship-oriented behavior in cooperating dyads. Hence, our research alerts organizational practitioners to the relevance of actively considering their employees' respective perceptions in organizing and monitoring joint task efforts. Specifically, both of the present studies have shown that an individual's perceptions of time pressure can promote his or her time-oriented behavior toward an interaction partner. Corroborating research that has depicted time pressure as an activating challenge stressor (e.g., Baer & Oldham, 2006; Maruping et al., 2015), our results therefore suggest that projects requiring fast results and strict adherence to deadlines could benefit from including a highly time-pressed employee who synchronizes the joint work pace and diligently monitors temporal milestones.

Moreover, our studies have shown that within cooperating dyads, both parties' time pressure perceptions may jointly influence an actor's relationship-oriented behavior, with such

friendly and supportive acts being more pronounced if both parties' respective perceptions are aligned rather than misaligned. Hence, managers and employees should be aware of the potentially detrimental consequences of conflicting time pressure perceptions for a harmonious work environment. In such situations, managers could strive to proactively align employees' time pressure perceptions. Temporal leadership behaviors (Mohammed & Nadkarni, 2011) may be particularly relevant in this regard, such that managers may explicitly and consistently communicate temporal priorities, joint deadlines, and common scheduling requirements toward all employees working on a joint project (Santos et al., 2016). Moreover, managers could encourage employees to openly discuss their pacing expectations and temporal preferences. By doing so, employees may be able to identify and resolve conflicting temporal demands and expectations (Bluedorn & Jaussi, 2007), thus increasing the likelihood of interpersonally supportive and considerate behaviors.

Conclusion

Our study provides new insights into the consequences of time pressure, illustrating that an employee's and his or her interaction partner's time pressure perceptions may jointly shape the focal employee's behavior toward the partner in dyadic task settings. Hence, this research extends current knowledge on the relevance of time pressure for interpersonal behavior. We hope this study will stimulate further research on this important topic that will advance an improved, deeper understanding of this common phenomenon in modern work environments.

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Chapter 5: General Discussion

In his seminal book ‘The Effective Executive’, Peter Drucker (1967, p. 22) concluded that

“Everything requires time. It is the one truly universal condition. All work takes place in time and uses up time. Yet most people take for granted this unique, irreplaceable and necessary resource. Nothing else, perhaps, distinguishes effective executives as much as their tender loving care of time.”

Recent reviews in the management literature echo this observation of the ubiquity and power of time for leaders and organizational decision makers, suggesting that “time is central to strategy, organizational performance, and survival” (Kunisch, Bartunek, Mueller, & Huy, 2017, p. 1005; see also Aeon & Aguinis, 2017; Halbesleben, Novicevic, Harvey, & Buckley, 2003). Despite this potential relevance for such key aspects of leadership, however, temporal issues have all too frequently been neglected in leadership theory and research, such that, in conclusion, “time plays a vital yet poorly studied role in the process of leadership” (Castillo & Trinh, 2018, p. 165; see also Bluedorn & Jaussi, 2008) .

This relative neglect of time holds especially true for leadership research on temporal cognitions, which investigates the potential role of leaders’ and followers’ time-based personality characteristics and/or situational time perceptions for leadership behaviors and outcomes (Bluedorn & Jaussi, 2008). In this regard, scholars have long assumed that temporal cognitions may shape leadership processes (Bluedorn & Denhardt, 1988; Das, 1986). Depending on their time-based personality characteristics and situational temporal perceptions, in particular, leaders and followers may pay attention to different environmental cues, may favor different kinds of leadership styles, and might differentially evaluate their work context (Alipour, Mohammed, & Martinez, 2017; Chen & Nadkarni, 2017). In recent years, researchers have picked up on these

notions and called for a better integration of temporal cognitions from both leaders' and followers' perspectives (Alipour et al., 2017; Bluedorn & Jaussi, 2007). Despite these long-standing and repeated calls, however, systematic and thorough examinations in this regard have been largely absent in the leadership literature.

The goal of this dissertation was to address this issue and, thus, to “bring time into the foreground” of leadership studies (Ancona, Goodman, Lawrence, & Tushman, 2001, p. 656). Across three independent research projects, using various methodological and analytical approaches and drawing from different samples and contexts, I investigated the role of different temporal cognitions for a wide range of leadership behaviors and associated consequences. By doing so, I aimed to address key oversights in the leadership literature on time-based traits and perceptions and to amend the existing research on this important, yet heretofore often neglected topic. The final chapter of this dissertation summarizes key findings from Chapters 2, 3, and 4, highlights relevant theoretical contributions, and points toward promising future research directions and implications for managerial practice.

Summary of Findings

Chapter 2's aim was to shed new light on the behavioral implications of leaders' time urgency and to challenge the largely positive view prior research has voiced in this regard (e.g., Chen & Nadkarni, 2017). Drawing from cognitive perspectives on time urgency (Kruglanski, Pierro, Mannetti, & Grada, 2006), I suggested that leaders who are chronically hurried will be more likely to exhibit a dominant and authoritarian style of leadership that, in turn, will impair followers' well-being. Combining these insights with the idiosyncrasy credit model (Hollander, 1958), I suggested that only leaders who believe they possess high levels of status among their followers will freely live out their preference for autocratic leadership arising from high levels of time urgency. I tested this multilevel moderated mediation model in a multisource field study of

60 formal supervisors and 277 of their direct subordinates across different industries in Germany. The results demonstrated that highly time-urgent supervisors were more likely to engage in autocratic leadership behavior when they perceived their status among their subordinates to be high, but not when such perceptions were low. Furthermore, the findings indicated that highly time-urgent supervisors' autocratic acts, in turn, increased individual subordinates' perceptions of work stress and time pressure. Taken together, these results showcase that the prevalent, largely positive depiction of highly time-urgent leaders might tell only one part of the story. At least among supervisors who perceive their status among their subordinates to be high, pronounced time urgency might result in detrimental leadership behavior and undesirable work experiences among subordinates.

Chapter 3's goal was to scrutinize the predominantly negative, yet empirically untested assumptions about the behavioral implications associated with leaders' past temporal focus (Bluedorn, 2002; Thoms, 2004). In particular, I integrated research and theory on leader-team fit (Cole, Carter, & Zhang, 2013) with functional leadership theory (Zaccaro, Rittman, & Marks, 2001) to suggest that leader-team (dis)similarity in past temporal will shape leaders' enactment of task-oriented, relationship-oriented, and laissez-faire leadership behavior. I tested this (mis)fit model in a field study of 84 formal supervisors and 296 of their team members working in different industries across Germany. Results obtained through polynomial regression and response surface analyses largely supported the hypothesized model. In particular, supervisors engaged more in both task-oriented and relationship-oriented leadership the more their own and their team's past temporal focus were incongruent. Moreover, when supervisor and team past temporal focus were aligned, supervisors demonstrated less task-oriented and relationship-oriented leadership and more laissez-faire leadership in situations of congruence at high (as opposed to low) levels of past temporal focus.

In sum, Chapter 3's results move beyond the existing leadership literature on supervisors' past temporal focus. Although many organizational scholars and practitioners believe that supervisors preoccupied with the past are a burden for organizations (Bluedorn, 2002; Clemens & Dalrymple, 2005), Chapter 3's findings indicate that such assumptions might paint an overly negative picture. In fact, it seems that only when teams share their pronounced focus on the past, supervisors will demonstrate a passive-avoidant leadership approach and refrain from structuring and considerate leadership behaviors. By contrast, the results suggest that highly past-focused supervisors that face a team with a lower past temporal focus as themselves are able to engage in proactive leadership behavior aimed at coordinating their team's task efforts and maintaining a supportive and friendly work environment.

Chapter 4's main purpose was to contribute to the literature on time pressure by examining a phenomenon prevalent in modern work organizations, conflicting time pressure perceptions between cooperating individuals. I drew from time, interaction, and performance theory (McGrath, 1991) to build an actor-partner interdependence model (Kenny, Kashy, & Cook, 2006) toward time pressure and its consequences for processes of informal leadership in dyads. In particular, I suggested that actors would engage in more time-oriented behavior toward their partner when their own time pressure would be higher (as opposed to lower) and, furthermore, that this linkage would be stronger when their partner's perception of time pressure would be lower (rather than higher). Moreover, I hypothesized that actors would demonstrate more relationship-oriented behavior when they and their partner would both operate under the same (lower or higher) levels of time pressure. I tested these assumptions in two experimental studies, including an online scenario design with 178 US-based participants and a laboratory experiment with 114 participants located in Germany. The findings obtained in these experiments suggest that (a) actors' time pressure is positively associated with their time-oriented behavior

toward the interaction partner and (b) that the linkage between actors' time pressure and relationship-oriented behavior is moderated by partner time pressure. In particular, both experiments demonstrated that the latter linkage was positive when the partner's time pressure was relatively high, and Study 2 (but not Study 1) indicated that the association between actor time pressure and relationship-oriented behavior was negative when the partner's time pressure was relatively low. Furthermore, results from Study 1 (but not Study 2) suggested that when partner time pressure is high, the linkage between actor time pressure and time-oriented behavior may be attenuated.

In a nutshell, Chapter 4 points toward conflicting time pressure perceptions as a critical force in collaborative contexts, demonstrating that all parties' (potentially different) perceptions of time scarcity may conjointly shape their interpersonal behavior toward each other. By doing so, this chapter provides a novel, more nuanced and context-specific view toward the behavioral implications of time pressure in organizations.

Theoretical Implications

All in all, the findings obtained in this dissertation make several contributions to the organizational behavior and leadership literature. Most notably, I provide novel insights into the leadership consequences of leaders' and followers' temporal cognitions. In particular, I shed new light on the consequences of different time-related constructs (i.e., time urgency, past temporal focus, and perceived time pressure) for relevant leadership behaviors and outcomes. By doing so, this dissertation addresses scholarly calls to integrate temporal cognitions into leadership research that started as early as the 1980s (Bluedorn & Denhardt, 1988; Das, 1986) and have intensified during the last years (Alipour et al., 2017; Shipp & Cole, 2015). Importantly, despite these calls, empirical investigations in this regard are still relatively scarce. Moreover, the few research studies that have been conducted are often one-sided, as they have examined a limited range of

temporal cognitions (mainly future temporal focus; e.g., Zhang, Wang, & Pearce, 2014) and/or have suggested such constructs to be axiomatically ‘good’ (e.g., time urgency) or ‘bad’ (e.g., past temporal focus, time pressure) for leadership outcomes. Moving beyond such prior work, this dissertation examines temporal cognitions that have largely been overlooked in previous empirical work and disentangles their specific leadership consequences in a more nuanced and finer-grained manner.

In particular, this dissertation adopts a new approach toward examining the linkages between leaders’ temporal cognitions on the one hand, and leadership behaviors, on the other, by using a multiple-stakeholder perspective (Carter & Mossholder, 2015; Cole et al., 2013). Existing studies have nearly exclusively focused on how a leader’s *own* time-based traits and perceptions shape his or her attitudes, decision-making, and behaviors. It is important to note, however, that time is an inherently social phenomenon (McGrath & Tschan, 2004), such that (a) temporal cognitions have an influence on how individuals behave toward others in their social environment (e.g., Lang & Carstensen, 2002), (b) individuals are greatly affected by the time-based perceptions prevalent in their social context (e.g., Pfeffer & DeVoe, 2012), and (c) the interplay between individuals’ own temporal cognitions and the respective traits or perceptions within their social group may critically shape individuals’ experiences and behaviors (e.g., Hecht & Allen, 2005). This dissertation integrates such notions by examining (a) how leaders’ view of their standing within their social environment (i.e., self-perceived status) affects whether they will freely act out their time-based traits (Chapter 2) and (b) how (mis)alignment between individuals’ temporal cognitions shapes their interpersonal behavior in both formal supervisor-subordinate (Chapter 3) and informal leadership settings (Chapter 4). By doing so, I extend the existing, predominantly leader-centric literature on temporal cognitions (e.g., Thoms & Greenberger, 1998; Zhang et al., 2014), and I respond to frequent calls to investigate the interplay between

leader and follower temporal cognitions (Alipour et al., 2017; Bluedorn & Jaussi, 2007). This dissertation, therefore, provides a more context-specific conceptualization of the role of time-based traits and perceptions for leadership processes, anchoring relevant parties' temporal preferences and orientations (and their associated consequences) within the social environment in which they occur.

Finally, the present findings contribute to the emerging literature on temporal diversity (Mohammed & Nadkarni, 2011). Research in this regard has demonstrated how persistent differences in team members' orientations toward time may affect team processes and outcomes (Mohammed & Harrison, 2013). Importantly, however, this stream of research has only examined how diversity in stable, trait-like temporal personality variables affects team-level outcomes (Mohammed & Nadkarni, 2011, 2014). Moreover, scholars have investigated such dispersion effects for employees located at the same hierarchical level and have mostly concentrated on employees' present and future temporal focus (Mohammed & Nadkarni, 2011; Waller, Conte, Gibson, & Carpenter, 2001). My dissertation adds to this nascent line of inquiry by emphasizing the roles of (a) differences in past temporal focus between leaders and their team for leadership behavior (Chapter 3) and (b) situational differences in time pressure perceptions for employees' interpersonal influence behaviors (Chapter 4). Moreover, Chapter 2 hints toward specific leadership actions (i.e., autocratic leadership behavior) as a potential mechanism for fostering the development of shared temporal perceptions (i.e., entrainment; Ancona & Chong, 1996; Harrison, Mohammed, McGrath, Florey, & Vanderstoep, 2003). All in all, this dissertation breaks new conceptual ground by demonstrating that (dis)similarity in previously overlooked time-based orientations and preferences and also between actors located at different hierarchical levels shapes relevant leadership processes and outcomes.

Strengths, Limitations, and Future Research Directions

This dissertation has severable notable strengths, including the use of different methodological approaches (i.e., experiments and field studies) and state-of-the-art analytical techniques (i.e., multilevel modeling, polynomial regression and response surface analyses, and actor-partner interdependence modeling). Moreover, all three empirical chapters of this dissertation apply multi-source approaches, such that I included several parties' ratings of temporal cognitions and leadership behaviors to examine the respective research questions and ameliorate common method/source concerns (cf. Podsakoff, MacKenzie, & Podsakoff, 2012).

At the same time, there are potential limitations (beyond each individual study's constraints, as discussed before) that pertain to this dissertation as a whole and should be considered when interpreting its conclusions and findings. For example, all of the individual study samples were drawn from Western cultures (i.e., Germany and the United States), possibly limiting the generalizability of the results to Eastern cultures that often view and value time differently (Fulmer, Crosby, & Gelfand, 2014; Ji, Guo, Zhang, & Messervey, 2009). Moreover, it is noteworthy that I did not utilize longitudinal study designs that would have enabled me to provide a more dynamic and complete perspective toward temporal cognitions (Shipp & Cole, 2015). Also, I explicitly concentrated on a relatively small range of temporal cognitions (i.e., time urgency, past temporal focus, and time pressure), and, as such, I did not investigate the role of other time-based personality characteristics (e.g., polychronicity, temporal depth, pacing style; Shipp & Cole, 2015) or situational temporal perceptions (e.g., timelessness, Mainemelis, 2001; idle time, Brodsky & Amabile, 2018; procedural timeliness, Outlaw, Colquitt, Baer, & Sessions, 2019) for leadership processes. It is clear that addressing these shortcomings would help to provide further insights into the findings' generalizability, and I encourage future research to

replicate my dissertation's studies in other settings and extend their conceptual models toward new contexts and alternative time-based constructs.

Beyond addressing such limitations, there are several fruitful directions for future research. In particular, the leadership literature could benefit from investigating the interplay between stable time-based personality characteristics and situational temporal perceptions. Trait activation theory, for example, suggests that individuals are more likely to display their personality characteristics when confronted with relevant contextual cues that "activate" these traits (Tett & Burnett, 2003, p. 507). As such, it seems reasonable to assume that time-urgent leaders might be more likely to express their preference for fast, deadline-oriented work when operating in situations or environments of acute time pressure. Along the same lines, contextual factors might amplify (or buffer) the linkage between supervisor-team congruence in past temporal focus and supervisors' leadership behavior. For example, situations of organizational nostalgia ("wistful affection for past events and aspects of one's organizational life"; Leunissen, Sedikides, Wildschut, & Cohen, 2018, p. 444) might drive highly past-focused leaders, who face a similarly strongly past-focused team, to refrain from their leadership duties even more. Investigating such notions may provide more context-specific, in-depth insights about the leadership consequences associated with both stable time-based personality characteristics and situational temporal perceptions.

Furthermore, it seems interesting to examine followers' temporal cognitions as a boundary condition for leaders' behavior. Beyond leaders themselves, followers may critically shape leadership processes and outcomes (Shamir, 2007). Because different leadership styles (explicitly or implicitly) often communicate specific temporal preferences or requirements, in particular, they might more or less resonate with followers' temporal cognitions (Alipour et al., 2017). As such, followers' time-based traits and perceptions may represent a key boundary

condition for effective leadership. For example, as strongly past-focused followers are often reluctant to accept deviations from the status quo (Karniol & Ross, 1996; Shipp, Edwards, & Lambert, 2009), change-oriented leadership styles (Yukl, 2013) that challenge a group's or organization's current practices might trigger negative work experiences and impaired performance among such individuals. Moreover, one might assume that leadership behaviors that explicitly encourage a fast-working pace and put temporal issues in the foreground, such as temporal leadership (Mohammed & Nadkarni, 2011), are more easily accepted and, thus, lead to more positive and productive work processes when directed at highly time-urgent followers. By further examining such notions, future research could provide a more comprehensive view of both leaders' and followers' temporal cognitions, illustrating how all relevant leadership parties' perceptions of and orientations toward time shape leadership effectiveness.

Another interesting opportunity for future research would be to investigate the role of temporal cognitions at the organizational level of analysis. This dissertation is among the first to empirically test higher-level conceptualizations of time-based personality characteristics (i.e., team past temporal focus). Interestingly, beyond individual or team temporal focus, theorists have repeatedly suggested that even "organizations can have dominant temporal focus profiles" (Shipp et al., 2009, p. 19; see also McGrath & Rotchford, 1983; Shipp, in press) and scholars have noted that such higher-level conceptualizations are also possible for other time-based personality characteristics, including time urgency (Bluedorn & Jaussi, 2007; Schriber & Gutek, 1987). On this basis, future research could investigate the consequences associated with the interplay between leaders' and their organization's time-based traits and perceptions. For example, it would be interesting to examine whether highly past-focused leaders will also reduce their proactive leadership efforts when they work for a past-focused organization that prominently remembers and values past strategies and projects. Moreover, future research could test whether

in organizations with a strong sense of time urgency (Bluedorn & Jaussi, 2007), decision-making structures are highly autocratic, with such procedures leading to feelings of stress and time pressure among individual employees. Adopting such a multilevel lens toward the study of leadership and temporal cognitions could help researchers to gain a deeper understanding of the nature and consequences of time-based traits and perceptions for organizational processes.

Finally, it would be worthwhile to examine temporal cognitions as potential outcomes (rather than antecedents) of leadership experiences. Following most conceptualizations of temporal focus and time urgency, I have operationalized these constructs as stable, trait-like facets of a temporal personality. Importantly, however, recent research has suggested that such characteristics may be susceptible to situational changes (Shipp, in press), such that these “time-related constructs may change over time owing to major events or the accumulation of experiences in one’s life” (Shipp & Cole, 2015, p. 245). Along these lines, Shipp et al. (2009, p. 2) suggested that an individual’s temporal focus, for example, “could be reinforced or modified through additional socialization experiences such as education, occupational choice, or personal experiences.” As such, one could imagine that when leaders see their own or their companies’ scandalous practices from the past uncovered (e.g., the Volkswagen emission scandal; Rhodes, 2016), for example, they might pay more attention to the past, at least for a specific period of time (cf. Holman & Silver, 1998). Similarly, scholars have suggested that within companies that constantly emphasize the value of time, speed, and punctuality, individual organizational actors may develop a chronic sense of hurriedness as a result (Pfeffer & DeVoe, 2012). And with regard to leaders’ time pressure, researchers have long acknowledged that occupying a formal leadership position often involves increased perceptions of time scarcity (Mintzberg, 1973; Rudd, 2019). It would be interesting for research to investigate when, why, and for which leaders an increase in perceived time pressure occurs and, with repeated exposure, might enhance their chronic sense of

time urgency. All in all, examining how leadership experiences may shape time-based traits and perceptions could enable future research to more fully understand the relationships between leadership and temporal cognitions.

Practical Implications

This dissertation offers important implications for organizational decision-makers and HR professionals. Temporal cognitions often operate “beneath the radar of conscious awareness” (Alipour et al., 2017, p. 301), such that organizations often do not easily reflect upon or make decisions based on their employees’ time-based traits or perceptions (Mohammed & Harrison, 2013). Despite this fact, my dissertation corroborates the notion that leaders’ and followers’ temporal cognitions “have real implications for leaders and followers in organizations” (Alipour et al., 2017, p. 301). As such, a critical takeaway from this dissertation is that executives and human resource professionals should ask for, evaluate, and acknowledge their employees’ temporal cognitions (Mohammed & Harrison, 2013). More importantly, individuals working together, whether located at the same or at different hierarchical levels, may benefit from openly discussing their temporal preferences and requirements and admit (and mutually respect) “temporal comfort zones” (Van der Erve, 2004, p. 605), in order to preempt potential temporal conflicts and ensure a productive and harmonious work environment (Bluedorn & Jaussi, 2007; Santos, Passos, Uitdewilligen, & Nübold, 2016).

Moreover, my dissertation points toward the risk of possibly detrimental organizational selection and promotion procedures due to existing assumptions about leaders’ orientations toward and perceptions of time. In this regard, research has shown that their deadline-oriented, fast-paced work style often brings highly time-urgent individuals into formal leadership positions (Leroy, Shipp, Blount, & Licht, 2015; Stewart-Belle & Lust, 1999). By contrast, organizations often think of strongly past-focused leaders as narrow-minded, passive, and ineffective

(Bluedorn, 2002; Thoms, 2004). This dissertation highlights that such assumptions are somewhat premature, demonstrating that leaders' time-based traits and perceptions have to be considered and understood within the social context in which they occur. In particular, leaders' (and their followers') temporal cognitions and associated behavioral consequences should not be treated as inherently positive or negative. Rather, organizations should try to tap the full potential of such time-based traits and perceptions, while also providing work constellations and installing development procedures aimed at mitigating potential downsides of these temporal cognitions (cf. Thoms, 2004).

Depending on the task or project at hand, for example, organizations could consider their employees' temporal cognitions for project staffing and team composition (Mohammed & Nadkarni, 2011). Highly time-urgent leaders could be provided with egalitarian work environments free of excessive status symbols, in particular, to attenuate their autocratic preferences. Moreover, my results suggest that organizations should think of assigning highly past-focused leaders to less past-focused teams so that these leaders are more likely to engage in proactive rather than passive-avoidant leadership styles. With regard to individuals' time pressure, by contrast, leaders who want to ensure a harmonious work environment are well advised to synchronize followers' time pressure perceptions, for example by applying temporal leadership behavior, such as clearly communicating expected temporal milestones, reminding followers about deadlines, and coordinating the pace of joint actions (Mohammed & Nadkarni, 2011). In sum, this dissertation points toward time-based preferences, orientations, and perceptions as relevant factors of leadership processes, such that organizational practitioners should more fully include considerations of temporal cognitions into their leadership selection, development, and training procedures (Bluedorn & Jaussi, 2008).

Conclusion

Both leadership and time are key facets of organizational life. Yet, for too long, research streams on time and leadership “have tended to coexist in isolated silos of knowledge specialization” (Shipp & Cole, 2015, p. 245). The aim of this dissertation was to address this issue by enriching leadership research with a subjective temporal perspective. Across three empirical projects, the obtained results demonstrate the important roles of leaders’ and their followers’ time urgency, temporal focus, and time pressure for relevant behaviors and outcomes related to both formal and informal leadership. On this basis, I concur with Ancona et al.’s (2001, p. 659) assertion that “by applying a temporal lens, we may discover a fundamentally new view of leadership,” and I am confident that the time is right to deepen our understanding of leadership processes by more solidly and consistently integrating time-based traits and perceptions into leadership theory and research. I hope that the present work may serve as a relevant step in this regard and will help to stimulate much-needed future research on this important topic.

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Affidavit

Ich erkläre hiermit, dass ich die vorgelegten und nachfolgend aufgelisteten Aufsätze selbstständig und nur mit den Hilfen angefertigt habe, die im jeweiligen Aufsatz angegeben sind. In der Zusammenarbeit mit den aufgeführten Koautoren war ich mindestens anteilig beteiligt. Bei den von mir durchgeführten und in den Aufsätzen erwähnten Untersuchungen habe ich die Grundsätze guter wissenschaftlicher Praxis, wie sie in der Satzung der Justus-Liebig-Universität Giessen zur Sicherung guter wissenschaftlicher Praxis niedergelegt sind, eingehalten.

I hereby declare that I completed the papers submitted and listed hereafter independently and with only those forms of support mentioned in the relevant paper. When working with the authors listed, I contributed no less than a proportionate share of the work. In the analyses that I have conducted and to which I refer in the papers, I have followed the principles of good academic practice, as stated in the Statute of Justus Liebig University Giessen for Ensuring Good Scientific Practice.

Giessen, 23.04.2019



Roman Briker

Briker, R., Walter, F., & Cole, M. S. (working paper). Hurry Up! The Role of Supervisors' Time Urgency and Self-Perceived Status for Autocratic Leadership and Subordinates' Work Experiences.

Briker, R., Walter, F., & Cole, M. S. (working paper). The Consequences of (not) Seeing Eye-to-Eye about the Past: The Role of Supervisor-Team Fit in Past Temporal Focus for Supervisors' Leadership Behavior.

Briker, R., Hohmann, S., & Walter, F. (working paper). Are We in Time? An Actor-Partner Interdependence Approach Toward the Interpersonal Consequences of Time Pressure.