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Three essays on overwork in the leader-follower dyad

par
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Three essays on overwork in the leader-follower dyad

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Résumé

Des données récentes de l'Organisation internationale du travail révèlent que, dans le monde, plus d'un tiers des personnes en emploi travaillent "des heures excessivement longues" (Messenger, 2018, p.2). Parallèlement, de nombreuses recherches indiquent que les longues heures de travail nuisent à la santé physique et mentale des individus et, en fin de compte, aux organisations (Anxo & Karlsson, 2019). Cependant, alors que les superviseurs ont une influence considérable sur les attitudes et comportements des subordonnés, la question des longues heures de travail dans le contexte de la relation superviseur-subordonné a été peu abordée. Cette thèse examine cette question à travers trois essais.

Le premier article examine l'effet combiné de la qualité de la relation superviseur-subordonné et du climat psychologique de surinvestissement professionnel sur le workaholisme des employés – la tendance à travailler excessivement et à être obsédé par son travail – et sur leur stress professionnel. En utilisant les théories de l'échange social (Blau, 1964) et de la force situationnelle (Mischel, 1973), nous proposons que, lorsque les employés perçoivent que les longues heures de travail sont valorisées au sein de leur organisation, une relation d'échange leader-membre (leader-member exchange; LMX) de haute qualité favorise l'émergence du workaholisme et du stress chez les subordonnés. L'analyse de trois vagues de données issues d'un échantillon diversifié de salariés (N = 449) au moyen de modélisation par équations structurelles indique que, lorsque le climat psychologique de surinvestissement professionnel est élevé, il existe une association positive entre le LMX et le workaholisme et une association positive indirecte entre le

LMX et le stress via le workaholisme.

Le deuxième article investigate l'effet des longues heures de travail des superviseurs sur les subordonnés. En nous appuyant sur la théorie de l'épuisement de l'ego (Baumeister et al., 1998), nous formulons l'hypothèse que les longues heures de travail des superviseurs entraînent une augmentation des comportements de supervision abusifs, ce qui nuit à la qualité de l'échange leader-membre. Nous suggérons que ce processus est exacerbé chez les subordonnés ayant un concept de soi relationnel élevé (i.e., une tendance à se définir en fonction de leurs relations interpersonnelles). Nous avons testé ces hypothèses au moyen des mêmes données que celles employées dans le premier article ainsi que de données multi-sources recueillies auprès d'un échantillon de 181 employés d'une même organisation. Les résultats d'analyses de modélisation par équations structurelles et d'analyses multi-niveaux confirment nos hypothèses.

Le troisième article développe un modèle théorique qui explore les mécanismes sous-tendant la contagion des longues heures de travail. En utilisant la théorie de l'apprentissage social (Bandura, 1986), nous suggérons que les subordonnés imitent les heures de travail du superviseur via l'apprentissage vicariant (i.e., par observation). Nous identifions quatre facteurs - le statut perçu du superviseur, la centralité du travail pour le subordonné, la congruence entre les normes organisationnelles et les heures de travail du superviseur, et l'identification du subordonné avec le superviseur - qui influencent la désirabilité d'adopter les heures de travail du superviseur. Nous examinons ensuite l'influence relative de chacun de ces facteurs à travers le prisme des motivations fondamentales des subordonnés.

Mots clés : heures de travail ; travail excessif ; workaholisme ; addiction au travail ; échange leader-membre ; climat psychologique de surinvestissement professionnel ; stress professionnel ; supervision abusive ; épuisement de l'ego ; contagion sociale ; apprentissage vicariant ; motivations du soi.

Méthodes de recherche : Questionnaire en ligne.

Abstract

Recent data from the International Labor Organization reveal that more than one-third of jobholders around the world work “excessively long hours” (Messenger, 2018, p.2). At the same time, there is accumulating evidence that long hours are detrimental to the physical and mental health of individuals, and ultimately to organizations (Anxo & Karlsson, 2019). Yet, although supervisors have considerable influence on subordinates’ attitudes and behaviors, research on the issue of overwork from the perspective of leader-follower dynamics has been lacking. This dissertation examines this issue of overwork in the leader-follower context through three essays.

The first article investigates the joint effect of supervisor-subordinate relationship quality and psychological overwork climate on employee workaholism—a combination of excessive and obsessive work—and strain. Drawing from social exchange (Blau, 1964) and situational strength (Mischel, 1973) theories, we hypothesize that, when employees perceive that overwork is valued within their organization, a high LMX fosters subordinate’s workaholism and subsequent strain. Through a three-wave study and the use of structural equations modeling analyses on a diversified sample of employees ($N = 449$), we found LMX to be positively related (vs. unrelated) to subsequent workaholism when psychological climate for overwork was high (vs. low). Additionally, change in workaholism mediated the interactive effect of LMX and psychological climate for overwork on change in subordinate strain over time.

The second article examines how supervisors’ long work hours affect subordinates. Drawing on ego depletion theory (Baumeister et al., 1998), we argue that supervisors’ long hours result in increased abusive supervision behaviors, which in turn,

undermine LMX relationships with subordinates. We further posit that this process is exacerbated among followers with a strong relational self-concept (i.e., a tendency to define themselves through interpersonal relationships). We tested our hypotheses with the same three-wave data collected for the first article and with a multi-source study in an organizational sample of 181 employees. Results from structural equation modeling and multilevel modeling analyses supported our predictions.

The third article develops a theoretical model that highlights the mechanisms underlying the contagion of long working hours from supervisors to subordinates. Drawing upon social learning theory (Bandura, 1986), we suggest that subordinates mimic the supervisor's working hours through vicarious learning (i.e., learning through observation). We identify four factors, namely supervisor's perceived status, subordinate's work centrality, congruence between organizational norms and supervisor's working hours, and subordinate's identification with the supervisor, that may influence the perceived desirability of adopting the supervisor's working hours. We then examine the relative influence of each of these factors through the lens of subordinates' self-motives.

Keywords: work hours; overwork; workaholism; leader-member exchange; psychological climate for overwork; job strain; abusive supervision; ego depletion; social contagion; vicarious learning; self-motives.

Research methods: Online questionnaire.

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To Roxane, Ava and Mayeul.

who know that play is worth more than work

To Guillaume,

who knows where the priorities are

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“Well you told me one time that you'd be somebody

That you weren't working just to survive

But you're working so hard

That you don't even know you're alive”

Jessica Harper, Special to Me (Phoenix Audition Song),

Phantom of the Paradise, 1974

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Introduction

Almost a century ago, the economist John Maynard Keynes predicted that we would enter an “age of leisure” in which we would end up working “three-hour shifts or a fifteen-hour week” (Keynes, 1931, p.369). At that time, average daily and weekly working hours had already been decreasing for several decades (Roediger & Foner, 1989) and the prospect of an age of leisure may have seemed a realistic possibility. However, ninety years later, we can safely conclude that Keynes’s prediction proved wrong. Quite the contrary, actually. In their most recent report on working hours, the International Labor Organization note that “more than one in three workers in the world regularly work more than 48 hours per week” (Messenger, 2018, p.vii). Furthermore, trends indicate that the proportion of those working excessive long hours is not only significant but also on the rise. Evidence indeed suggests that the secular decline in working hours that had started at the end of the 19th century have ceased in the last decades of the 20th century and even reversed for some categories of workers, such as highly educated professionals (Golden, 2009; Messenger, 2018).

This pervasive phenomenon of long working hours raises two questions: first, why do such a significant proportion of jobholders work excessive long hours, while most countries have a legal arsenal that restricts these working hours (Lee et al., 2007)? And second, how do these long working hours affect individuals and organizations?

The first question of the causes of long working hours is a complex one (Kodz et al., 2003) that can be approached from several academic fields (e.g., economy, law, sociology). In an attempt to disentangle the why of long working hours, the two

economists Golden and Altman (2008) noted that “why some people work long or longer hours reflects an often complex interaction between workplace constraints, institutions, incentives, working conditions, organizational culture, macroeconomic climate, preference formation, behavioral contagion and innate motivations.” (p.75), thereby suggesting that the issue of long hours is a relevant topic for organizational behavior research.

The second question of the consequences of long working hours, albeit apparently simpler, is also a complex one. So far, most research has focused on mental and physical health outcomes, with the general finding that long working hours negatively affect workers’ health (e.g., Bannai & Tamakoshi, 2013; Goh et al., 2016; Virtanen et al., 2012). Other studies have sought to understand the relationship between working hours and productivity (e.g. Dolton, 2017; Pencavel, 2014) and work/life conflict (e.g., Greenhaus et al., 1987; Nielson et al., 2001). Yet one question has not been addressed: how does one’s long hours affect coworkers and subordinates? This dissertation addresses the above two gaps in the specific context of the leader-follower dyad. We believe that this specific focus is relevant because leaders have considerable influence on their subordinates’ experience of work (Bass & Bass, 2008). Moreover, because leaders and followers are part of the same social system, it is reasonable to assume that what affects the leader will eventually ripple to the follower (Clark, Stevens, et al., 2016; Moos, 1984). Through three essays, this thesis seeks to provide a partial answer to the following two questions that mirror the questions of the why and of the consequences presented above: (1) What kind of leadership style or

behaviors may push subordinates to work excessively long hours? And (2) How leader's long working hours affect followers?

In a first study, we look at the leadership context as a driver of overwork. We examine the relationship between the quality of leader-member exchange relationships and followers' workaholism and strain. Specifically, we investigate the interactive consequences of leader-member exchange and psychological climate for overwork: we first examine its positive direct effect on followers' workaholism and then focus on its positive indirect effect on followers' job strain through workaholism. Our three-wave study allows us to get a better understanding of the consequences of having a high-quality relationship with the leader on one's overwork. In a second study, we explore the consequences of leaders' working hours. Using a three-wave study and a cross-sectional multi-level multisource study, we examine how leaders' long working hours are associated with negative emotions and abusive supervision and how abusive supervision is a key mechanism that mediates a negative relationship between the leader's working hours and leader-member exchange. Finally, our third essay is a conceptual effort that seeks to identify the mechanisms that underlie the contagion of long working hours from supervisors to subordinates. As such, this essay brings together the issues of the why (i.e., leader's own hours) and of the consequences (i.e., follower's hours) of overwork.

Altogether, these three essays point to the fact that when investigating the causes and the consequences of overwork (i) it is worthwhile for organizational behavior researchers to move beyond the individual level and that (ii) the dyadic level of the leader-follower pair, in particular, may enrich our knowledge. In the next chapter, we

briefly present the key definitions and theoretical frameworks that we deem to be most suitable to study overwork in the leader-follower dyad.

Chapter 1. Overwork and the Leader-Follower Dyad:

Constructs and Theoretical Frameworks

In this chapter, we define and review the most important constructs, findings and theoretical processes that relate to overwork in the leader-follower context. We start by defining overwork and by framing the present thesis around the two constructs of long working hours and workaholism. We then briefly discuss the literature about the antecedents and outcomes of these two constructs. In a second section, we review two main processes of influence in the leader-follower context: leader-member exchange theory (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975), which is the dominant conceptual approach to the leader-follower relationship, and the theoretical perspective of role modeling (Bandura, 1977, 1986; Manz & Sims, 1981).

1.1 Overwork: Constructs, Antecedents and Consequences

Examining the issue of overwork requires first an explicit framing of what overwork is. Some researchers simply define overwork as work that exceeds contractual obligations (e.g., Bartlett, 2004). Others equate overwork with long working hours (e.g., Zhang & Seo, 2016), without necessarily specifying how many hours are long hours. Others suggest overwork occurs when employees work more hours than they prefer (Drago, Wooden, & Black, 2009). And still others restrict the term overwork to those situations where individuals' working hours threaten their mental and physical well-being (Golden & Altman, 2008), thereby including long working hours as detrimental consequences in the definition of overwork. In this dissertation, we retain a broad conceptualization of overwork and refer to it as situations in which employees' working hours importantly

exceeds standard hours. We thus do not include any notion of preferences nor consequences in our definition of overwork.

Overwork may cover a variety of situations. One may work excessive hours because of a heavy workload, to earn more money, or because of the enjoyment of work. An attempt to disentangle these types of overwork can be found in Snir and Harpaz's (2012) distinction between situational (e.g., dictated by financial needs or by the employer) and dispositional (e.g., work devotion, workaholism) forms of heavy work investments. Though we recognize that these variety of situations call for specific examinations of their antecedents and consequences, this dissertation addresses overwork from the very broad perspective of long working hours (Study 1 and Study 3). In study 2, we nonetheless focus on the specific construct of workaholism, because it is one of the most studied form of overwork (Burke & Cooper, 2008).

1.1.1 Definitions

1.1.1.1 Long Working Hours

The construct of long working hours, though apparently straightforward (Ganster, Rosen, & Fisher, 2016), is currently lacking an accepted universal definition (Skinner & Pocock, 2008). The meaning of long working hours is indeed likely to vary depending on occupations, industries or cultures (Skinner & Pocock, 2008), rendering the setting of a limit at least partially arbitrary. Such lack of consensus is reflected in the literature, in which long working hours are defined and operationalized in inconsistent ways (e.g., long working hours = more than 40 hours a week; van der Hulst, 2003; long working hours = more than 60 hours a week; Brett & Stroh, 2003). Furthermore, even though most studies consider long working hours on a weekly basis, others use a daily basis in

their definitions, thereby bringing further complexity to this field of research (Beswick, 2003).

Many studies however tend to rely on the International Labor Organization's definition of long working hours "as regularly working more than 48 hours per week" (Messenger, 2018, p.3). This threshold of 48 hours is consistent with the International labor standards of working time that set 48 working hours as the upper limit to the normal working week hours and with the European Union working time guideline that imposes the same limit of 48 hours of work per week. It is consistent with our definition of overwork as significantly departing from standard hours, which tend to converge around 40 hours a week around the globe (Lee, McCann, & Messenger, 2007). It also reflects the empirical findings that suggest that specific effects (e.g., fatigue, work-family conflict) tend to occur at or beyond this threshold (Messenger, 2018).

1.1.1.2 Workaholism

The issue of workaholism has garnered a growing interest within the academic literature in the past decades (Clark, Michel, Zhdanova, Pui, & Baltes, 2014). First described by Oates (1971) as "the compulsion or the uncontrollable need to work incessantly" (p.1), workaholism has since then been labelled and defined in various ways (Clark, Michel et al. 2014). Constructs such as work addiction (Robinson, 1998), obsessive passion for work (Vallerand, Paquet, Philippe, & Charest, 2010), work over-involvement (Lehr, Koch, & Hillert, 2010) or excessive overwork (Andreassen, 2013), though not necessarily conceptualized as synonymous with workaholism, significantly overlap with the workaholism construct (Andreassen, 2013).

Such variety of terminologies to describe addicted workers reflects a lack of consensus around the definition of workaholism (Clark, Michel et al. 2014). In the last five decades, workaholism has indeed been defined in various and sometimes conflicting ways. For example, Mosier (1983) only used the number of hours spent working (≥ 50 per week) to define workaholism. Spence and Robbins (1992) used the three dimensions of work involvement, drive and enjoyment of work to describe workaholics and argued that they were high on the first two dimensions and low on the third. In contrast, Ng, Sorensen, and Feldman, (2006) stated that workaholics “enjoy the act of working” (p.114) but are also individuals who are “obsessed with working, and who devote long hours and personal time to work”.

Overall, despite areas of disagreement, there is significant consensus among scholars on the idea that workaholism is an addiction characterized by two key components: long working hours and compulsion towards work (Schaufeli, Taris, & Bakker, 2008). That is, workaholism combines a behavioral component (i.e., excessive time spent working) with a cognitive component (i.e., obsessive thoughts about work). Workaholics work long hours, but they are also highly preoccupied with work: they constantly think about work, even when they are not working, and tend to feel guilty when they are not working. Such compulsive thoughts are relieved by the act of working. In other words, workaholics do not work in excess due to external pressures (e.g., role overload, financial needs) but because of an inner drive to do so (Clark, Michel et al., 2014). Therefore, workaholism is closely related to long working hours in that most workaholics work long hours but not all those who work long hours are workaholics.

1.1.2 Models of Long Working Hours

1.1.2.1 Why the Long Hours?

There is no simple explanation to the fact that people work long hours (Kodz, Kersley, Strebler, & O'Regan, 1998) and some important reasons behind the current rise in long working hours fall outside the field of management and organizational behavior. A variety of economic, regulatory or sociological aspects indeed contribute to explain long hours (Golden & Altman, 2008; Kodz et al., 1998). One example of these can be found in Schor's (1991) contention that consumerism is a key determinant of workers' deliberate choice to devote more hours than they are explicitly required by contract. In the management field, researchers recognize that factors such as organizational culture, social contagion, social comparison processes or role overload contribute to explain long working hours (Cowling, 2007; Kodz et al., 1998). For example, in an empirical effort to test competing theories about the why of long hours, Brett and Stroh (2003) found that part of male managers' motivation behind long hours involved intrinsic rewards, while multiple reasons – trade-off between work and leisure costs, work as a reward and social contagion – accounted for female managers' excessive hours. Yet, even from the sole management field perspective, the why of long hours remains vague, which has led Major, Klein, and Ehrhart, (2002) to note that “we know little about why people spend more or less time working” (p. 427).

In the context of the leader-follower dyad, researching the origins of long working hours involves examining what, in the leadership context, pushes followers to work long hours. Long working hours may derive from explicit requirements from the supervisor or from implicit pressures to work long hours. In this dissertation, we focus

on the second aspect and focus on two issues – contagion and the ideal worker norm – that we believe help understand the why of long hours in the specific context of the leader-follower dyad.

Social Contagion. Social contagion theory, initially developed in sociology research, seeks to explain why people who are embedded in the same network tend to feel, think or behave in similar ways (Owens, Baker, Sumpter, & Cameron, 2016). Social contagion occurs when one's emotions, attitudes or behaviors change and align with those of others. Explicit intent to persuade or influence is not necessary for social contagion to occur. Rather, contagion is partly thought to occur through comparisons with peers (Scherer & Cho, 2003).

When it comes to working hours, social contagion processes may explain both why people devote long hours to work (Brett & Stroh, 2003; Cowling, 2007; Eastman, 1998; Kodz et al., 1998; Landers, Rebitzer, & Taylor, 1996) and why they come to adhere to the idea that time spent working is more important than leisure time (Latané, 2000). Specifically, Zhang and Seo (2016) found some evidence for a social contagion process of working hours from supervisors to subordinates. However, the specific mechanisms at play remain poorly understood. The article we present in Chapter 4 is an endeavor to fill this gap.

The Ideal Worker Norm. Examining why followers would work hard in response to the leadership context requires understanding the meaning attached to working hours. Indeed, work time is loaded with meaning that goes beyond the accomplishment of work. Long working hours are one key constituent of the ideal worker norm (Blair-Loy 2003; Jacobs & Gerson 2004) that characterizes the best workers as those who express

full devotion and dedication to their work. Those who want to be seen as good workers are therefore expected to work long hours. Furthermore, working hours serve as a proxy for performance or commitment for those workers whose work output is not easily measurable (Clarkberg & Moen, 2001; Cowling, 2007). The meaning attached to working long hours in fine participates to the perpetuation of a long work hours culture where the act of working attests to one's value within the organization (Kodz et al., 1998). This extended significance of work time suggests one may want to work long hours not only to get work done but also to demonstrate one's value, commitment, and performance, including to one's supervisor. We build on these ideas in our first article presented in Chapter 2.

1.1.2.2 Consequences

The most researched consequences of long working hours are physical and mental health outcomes. Overall, empirical findings suggest a positive association between long working hours and outcomes such as depression, anxiety, sleep, and coronary heart disease (Bannai & Tamakoshi, 2013). A literature review by the International Labor Organization recently noted that “overwhelming empirical evidence has begun to demonstrate that persistent exposure to long working hours has detrimental effects on workers’ safety, health and work-life balance.” (p. 1). However, this assertion is still debated, as recent papers suggest that these effects may have been overestimated and that they vary significantly depending on work conditions, demographic characteristics, and affective or cognitive experience of work (Ganster et al., 2016; ten Brummelhuis, Rothbard, & Uhrich, 2017).

Other works have focused on other types of consequences. For example, studies have investigated the association between working hours and productivity, yielding inconsistent results, with some showing linear positive associations (Crocker & Horst, 1981) and others suggesting a decreasing return effect (Dolton, 2017; Pencavel, 2014). Several studies also reported an increase in work/life conflict when working hours rose (e.g., Greenhaus, Bedeian, & Mossholder, 1987; Nielson, Carlson, & Lankau, 2001). However, though it has been suggested that the consequences of one's working hours may extend to other people (Caruso, 2006), research is still needed to substantiate this view.

Theoretical processes. The dominant lens through which the effects of working hours have been studied is that of resource loss. Long working hours consume workers' resources, increase the duration of one's exposure to the workplace stressors and reduce the time available for recovery (Ganster et al., 2016). Resource-based theories of stress such as the job demands–resources (JD-R) model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) predict that long working hours create imbalances in which too few resources are available to face the demands associated with work, which eventually contribute to deteriorate workers' health (Ruderman, Clerkin, & Deal, 2017).

In the specific context of the leader-follower dyad, the interpersonal outcomes of long working hours can be understood using the resource-based theory of ego depletion (Baumeister, Bratslavsky, Muraven, & Tice, 1998). In the work context, ego depletion theory suggests that job demands consume the self-regulation resources one needs for controlling one's impulsive behaviors and emotions. Because long working hours are

resource-consuming, they are likely to deplete one's ability to regulate impulses, which is likely to impinge upon the quality of interpersonal relationships. We investigate this possibility in our second article, presented in Chapter 3.

1.1.3 Models of Workaholism

1.1.3.1 Why Workaholism?

Workaholism research has mainly portrayed it as being primarily rooted in dispositional tendencies (Balducci, Avanzi, & Fraccaroli, 2018; Keller, Spurk, Baumeler, & Hirschi, 2016). Supporting this view, research has shown that traits such as perfectionism, neuroticism, negative affect, or Type A personality (Burke, 2000; Burke, 2006; Clark, Lechhook, & Taylor, 2010; Clark, Michel et al., 2014) were positively related to workaholism. However, a growing body of research suggests that contextual factors, such as high job demands or overwork climate, may also contribute to the emergence of workaholism (Andreassen, Pallesen, & Torsheim, 2018; Balducci et al., 2018; Johnstone & Johnston, 2005; Mazzetti, Schaufeli, Guglielmi, & Depolo, 2016; Molino, Bakker, & Ghislieri, 2015; Schaufeli, 2016). These findings are in line with theoretical models that depict workaholism as resulting from a combination of external and internal pressures (Ng et al., 2006; Liang & Chu 2009; Kanai, 2006). For example, Ng et al. (2006) argued that, along with individual traits, socio-cultural experiences (e.g., vicarious learning, competitive work climate) and behavioral reinforcements (e.g., rewards) foster workaholism. Because the leadership context is a situational factor that has a strong influence on followers, investigating its role in the emergence of workaholism is warranted. Yet, this issue has not been granted much attention so far. We explore this possibility in our first article, presented in Chapter 2.

The mechanisms that underlie the impact of contextual factors on workaholism remain somewhat obscure (Balducci et al., 2018). It has been proposed that workaholism may develop as a coping strategy to face excessive work demands (Molino et al., 2015). However, Balducci et al. (2018) noted that though this view could usefully shed light on the effects of external pressures on the behavioral component of workaholism (i.e., long hours), the process by which the cognitive component of workaholism emerges remains ambiguous. Recent research points to the role of work rumination and specific cognitions (e.g., “I have not done enough”) in the emergence of compulsion to work (Balducci et al., 2018; van Wijhe, Peeters, & Schaufeli, 2014).

1.1.3.2 Consequences

The negative consequences of workaholism are well-documented (Balducci et al., 2018). The most recent meta-analysis conducted by Clark, Michel et al. (2014) indeed reported positive associations between workaholism with various negative work outcomes (e.g., job dissatisfaction, job stress), family outcomes (e.g., work-life conflict, marital dissatisfaction) and individual outcomes (e.g., burnout, low physical health). It is worth noting, however, that although there is not much debate about the negative impacts of workaholism, the predominant use of cross-sectional designs to investigate these effects leaves open the possibility that many of these negative outcomes actually result from the effects of some confounding factors. In particular, the same stable characteristics (e.g., neuroticism, negative affect) that predispose to the development of workaholism may also be conducive to the negative outcomes observed in the literature (Balducci et al., 2018). Furthermore, as is the case for long working hours, the effects of workaholism on coworkers are yet to be investigated. In a theoretical piece, Clark,

Stevens, Michel, and Zimmerman, (2016) indeed argued that leaders' workaholism may affect followers' well-being through a contagion process or through its negative impacts on the leader.

Theoretical processes. As for long working hours, the lens of resource loss is the most used theoretical perspective used to account for the consequences of workaholism.

Workaholics are indeed often depicted as being caught in endless cycles in which they consume extraordinarily large amounts of resources (i.e., time and energy) in order to protect their current resources (Hakanen & Peeters, 2015; Porter, 2004). The conservation of resources theory (Hobfoll, 1989) and the recovery theory (Geurts & Sonnentag, 2006) predict that such an endless pursuit depletes workaholics' resources and leaves them with no time and energy to restore their lost resources. In the case of workaholism, this resource depletion process is thought to be aggravated by the fact that workaholics do not only work excessively but also constantly keep thinking about their work (Balducci et al., 2018). Such on-going thoughts about work would act as obstacles to psychological detachment from work during leisure time (Sonnentag & Fritz, 2014), thereby impeding workaholics from mentally recovering from work and from restoring their resources (Sonnentag & Fritz, 2014).

1.2 The Leader-Follower Dyad

Scholars working on ethical leadership have suggested that leaders influenced followers' ethical behaviors through two main pathways: "interpersonal relationships" and "personal actions" (Brown, Treviño, & Harrison, 2005, p. 120; Neubert, Carlson, Kacmar, Roberts, & Chonko, 2009). In this dissertation, we adopt this perspective and use the theoretical lenses of leader-member exchange theory (LMX) and of role

modeling to examine the issue of overwork in the leader-follower dyad. Leader-member exchange is the most popular approach used in research on leader-follower relationships (Pundt & Herrmann, 2015; Uhl-Bien, 2006) and role modeling focuses on the imitation by observers (i.e., followers) of targets' actions (i.e., leaders).

1.2.1 Leader-Member Exchange Theory

In contrast to leadership approaches that focus on leaders' or followers' traits, behaviors or styles (Epitropaki & Martin, 2015), LMX theory is a dyadic leadership approach that postulates that effective leadership stems from the nature of the relationship between a leader and a follower (Graen & Uhl-Bien, 1995). LMX theory was first introduced as Vertical Dyadic Linkage (VDL) theory forty-five years ago (Dansereau et al., 1975) with the idea, which was novel at that time, that the type of leadership that leaders exert depends on the specific relationship they have with their various subordinates (Graen & Uhl-Bien, 1995). Since then, LMX theory has been importantly refined, with an increased understanding of the dynamics and of the nature of the leader-follower relationships.

LMX theory proposes that leaders form relationships of differing quality with their subordinates (Dansereau et al., 1975; Graen & Uhl-Bien, 1995). Though LMX relationships tend to be qualified as either "high" or "low", their levels of quality are assumed to range on a continuum from high to low. High-quality LMX relationships are characterized by high levels of mutual trust, support, liking, respect and obligation. In these relationships, leaders and followers tend to interact more frequently and followers tend to receive extent emotional and instrumental support from their leader (i.e., challenging opportunities, training). In contrast, low-quality LMX are narrower in scope

and are thought to be limited to the employment contract (Graen & Uhl-Bien, 1995). In these relationships, both leaders and followers tend to stick to the formal requirements of their job. LMX theory is conceptually grounded in two main theories: social exchange theory (Blau, 1964) and role theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Below, we briefly describe these two perspectives.

1.2.1.1 The Social Exchange Perspective

At the core of the social exchange theory are the notions of reciprocity and equity. In their relationships with others, individuals indeed tend to seek a balance between what they give and what they take (Blau, 1964), which implies an inner tendency to expect a return for what one gives and to feel obligated to repay what has been received from others. This latter norm of reciprocity (Gouldner, 1960), which dictates individuals to return in an equivalent form the benefits they received, is at the heart of the dynamics of LMX relationships.

Social exchange theory distinguishes between social and economic exchanges. Blau (1964, p. 93) describes social exchange relationships as those that involve “favors that create diffuse future obligations, not precisely defined ones” and in which “the nature of the return cannot be bargained about but must be left to the discretion of the one who makes it”. In other words, in social exchanges, the norm of reciprocity applies but the nature and timing of repayments are left unspecified. High-quality LMX relationships are theorized to operate according to the principles of social exchange (Graen & Uhl-Bien, 1995). In these high-quality relationships, the tangible (e.g., monetary rewards, promotions) and intangible (e.g., positive feedback, emotional support) resources that the leader provides generate feelings of obligation to reciprocate.

But because the repayments need not occur immediately nor be of equivalent form (Blau, 1964), followers generally reciprocate using other currencies that benefit their supervisor (Wayne, Shore, & Liden, 1997), such as greater efforts and commitment. This generalized form of reciprocity (Gouldner, 1960) that underlies high-LMX relationships is useful to understand why followers involved in these relationships may work particularly hard. We explore this assumption in our first article, presented in Chapter 2.

In contrast, low-quality LMX relationships are theorized to operate as per the rules of economic exchanges, which are characterized by *quid pro quo*, short term and tangible reciprocity (Blau, 1964). That is, because followers involved in these low-quality LMX receive fewer benefits than their high-quality LMX counterparts, the breadth of their reciprocity obligations are more limited.

1.2.1.2 The Role Theory Perspective

Role theory (Kahn et al., 1964) provides another theoretical anchor to understand the development and maintenance of LMX relationships. Role theory suggests that individuals tend to enact their work role in ways that are consistent with the expectations attached to their position and status within the organization. In the context of LMX theory, it is suggested that LMX relationships develop through a role-making process (Graen & Scandura, 1987) in which both the leader and the follower negotiate their respective roles across a series of role episodes. This role-making process is thought to consist of three stages: the role-taking phase, the role-making phase and the role-routinization phase (Graen & Scandura, 1987). In the role-taking phase, the leader sends one or several first role expectations (e.g., requests or assignments) to the follower and

assesses the follower's response. This initial phase allows the leader to make a first assessment of the follower's skills and motivation. In the role-making phase, both the leader and the follower refine their assessment of each other's fulfillment of various role expectations. At the end of this stage, the leader and the follower are presumed to enter a role-routinization stage, characterized by a relative stability of their relationship. This role making model is assumed to lead to a high-quality LMX when the dyadic partners both make positive assessments of each other's responses to role expectations.

Otherwise, the relationship should remain one of low-quality (Graen & Scandura, 1987). In the context of this dissertation, the role theory grounding of LMX suggests that the specific phase that the leader and the follower have attained may be a critical aspect to consider. Their responses may indeed be more constrained at the beginning of their relationships, when they are just beginning to negotiate their roles, than when they have established a stable relationship. We explore this possibility in our third article, presented in Chapter 4. Furthermore, as we suggest in our second article, presented in Chapter 3, overwork may contribute to damage the development of high-quality LMX because it may cause leaders to behave in ways that fall short of followers' expectations.

1.2.1.3 LMX Outcomes

The quality of the relationship between leaders and followers has considerable influence on followers' work experience (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011). When this relationship is of high quality (i.e., high LMX), followers have an extended access to a variety of emotional and material resources, which are instrumental in shaping a positive experience of work. Research on the individual level outcomes of

LMX have indeed consistently found positive associations between LMX and numerous outcomes related to followers' attitudes, well-being and performance. For example, meta-analyses of the literature have reported positive relationships between LMX and organizational commitment, job satisfaction, and in-role and extra-role performance, and negative relationships with turnover intention, overall stress, and stressors such as role ambiguity and role conflict (e.g., Dulebohn et al., 2011; Gerstner & Day, 1997; Harms, Credé, Tynan, Leon, & Jeung, 2017; Ilies, Nahrgang, & Morgeson, 2007).

However, a recent line of research has begun to call for a closer examination of the potential dark side of high LMX (Erdogan & Bauer, 2015; Matta & Van Dyne, 2015). This call has been motivated by studies that have reported a detrimental effect of high levels of LMX on stress-related outcomes, such as followers' stress (Harris & Kacmar, 2006; Hesselgreaves & Scholarios, 2014; Lawrence & Kacmar, 2012), job tension (Hochwarter, 2005) and emotional exhaustion (Jiang, Law, & Sun, 2014). So far, one of the main explanations that have been offered to account for the above findings is that followers involved in high-quality LMX relationships experience more work pressure because of the joint effect of having to face greater performance expectations from their leader and of feeling obligated to meet these expectations as a form of repayment to their leader (Breevaart, Bakker, Demerouti, & van den Heuvel, 2015; Harris & Kacmar, 2006). Our first article, presented in Chapter 2, explores this possibility of a dark side to LMX.

1.2.2 Role Modeling

In his presentation of social learning theory, Bandura states that "most of the behaviors that people display are learned either deliberately or inadvertently, through the influence of example" (p. 5). Role modeling, also referred to as vicarious learning, is a process by

which an observer learns what behaviors to display and how to display them by looking at what others (i.e., role models) do (Bandura, 1986). As such, role modeling constitutes a powerful mechanism of influence within organizations (Manz & Sims, 1981).

Role modeling is likely to occur in the leader-follower dyad because leaders are in a position that makes them particularly likely to serve as role models for their subordinates (Manz & Sims, 1981). Indeed, for someone to serve as a role model, s/he must appear credible and attractive in the eyes of the observer (Bandura, 1986). Leaders are likely to be attributed such credibility and attractiveness because of the power and status attached to their hierarchical position and because they personify the organization's norms (Burke, 2006; Scandura & Lankau, 1997).

The leadership literature has indeed placed a significant emphasis on role modeling as a mechanism of influence leaders can use. For example, role modeling constitutes a key element of ethical leadership and authentic leadership theories (Avolio & Gardner, 2005; Treviño & Brown, 2005), and is also a core component of the construct of family supportive supervisor behaviors (FSSB; Hammer, Kossek, Zimmerman, & Daniels, 2007). In the third article of this dissertation (presented in Chapter 4), we examine how the process of role modeling unfolds in the context of long working hours.

Chapter 2.

Article 1: The Interactive Effect of Leader-Member Exchange and Psychological Climate for Overwork on Subordinate Workaholism and Strain

2.1 Abstract

The proportion of workers putting long hours into work is on the increase, which paves the way for workaholism, a syndrome that combines long hours and obsessive thoughts about work and is known to harm employee health. This study explores the role of the context in the emergence of workaholism and strain, a stance that has rarely been taken in the field. We specifically examined the combined effects of leader-member exchange (LMX) and psychological climate for overwork on employee workaholism and strain. Drawing upon social exchange and situational strength theories, we posited that when overwork is perceived to be valued in the organization, LMX may foster subordinate workaholism and indirectly lead to increased psychological strain. Through a three-wave study and the use of structural equations modeling analyses with full information maximum likelihood estimation on a diversified sample of employees ($N = 449$), we found LMX to be positively related (vs. unrelated) to subsequent workaholism when psychological climate for overwork was high (vs. low). Additionally, change in workaholism mediated the interactive effect of LMX and psychological climate

for overwork on change in subordinate strain over time. We discuss the implications of these findings for research on LMX and workaholism

2.2 Introduction

Though the estimates of the prevalence of workaholism vary across sources (Andreassen et al., 2014; Quinones & Griffiths, 2015), ranging from 5% to 25% (Andreassen et al., 2014), its pervasiveness is not negligible. As the proportion of employees working long hours is on the rise (Messenger, 2018), it is likely that workaholism, a combination of excessive work hours and compulsive attention to work (Schaufeli, Taris, & Bakker, 2008), is also affecting an increasing number of workers. Workaholism has been found to have deleterious effects on employees, such as more counterproductive work behaviors and job and life dissatisfaction (Clark, Michel, Zhdanova, Pui, & Baltes, 2016). Therefore, understanding how this syndrome develops represents a timely endeavor that is essential to limit its spread and adverse effects.

The question raised by Mazzetti, Schaufeli, and Guglielmi (2014), “Are workaholics born or made?” (p. 227), reveals a growing shift in the literature on workaholism. To date, much research on the antecedents of workaholism has focused on dispositional factors (Balducci, Avanzi, & Fraccaroli, 2018; Keller, Spurk, Baumeler, & Hirshi, 2016). However, recent conceptual reviews suggest that workaholism may result from the combination of dispositional and situational factors (Kanai, 2006; Liang & Chu 2009; Ng, Sorensen, & Feldman, 2006). Yet, empirical research exploring the role of contextual factors remains scarce (e.g., Balducci et al., 2018; Gillet, Morin, Cougot, & Gagné, 2017). This gap is important because while organizations can do little about their employees’ traits, they can promote work environments that protect employees from

workaholism (Loscalzo & Giannini, 2017; Mazzetti et al., 2014). One area in which research is particularly warranted is “the intersection of workaholism and leadership” (Clark, Stevens, Michel, & Zimmerman, 2016, p. 3). Leadership practices count among contextual factors that most influence employees’ work behavior and well-being (Bass & Bass, 2008; Harms, Credé, Tynan, Leon, & Jeung, 2017). Therefore, one may expect workaholism to be influenced by the leadership context. However, there is a dearth of research on the effects of leadership on subordinate workaholism.

In parallel, within the leadership literature, a nascent stream of research suggests that high levels of supervisor-subordinate relationship quality, as conceptualized by leader-member exchange (LMX) theory (Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986), may cause subordinates to experience job strain (e.g., Brouer & Harris, 2007; Hesselgreaves & Scholarios, 2014; Hochwarter & Byrne, 2005; Jiang, Law, & Sun, 2014). Although LMX is generally negatively associated with job strain (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011; Harms et al., 2017), evidence suggests that this relationship may become positive in specific conditions, for example when followers are high on trait negative affect (Brouer & Harris, 2007), have infrequent interactions with their leader (Brouer & Harris, 2007) or when leaders are low on moral integrity (Jiang et al., 2014). However, the mechanisms underlying this relationship remain poorly understood and potential boundary conditions are largely unexplored (Sonnentag & Pundt, 2015). Empirical studies linking LMX quality to employees’ hard work (e.g., Lawrence & Kacmar, 2012; Lu & Sun, 2017) indicate that “LMX quality may motivate the employee to the detriment of his or her well-being” (Erdogan & Bauer, 2015; p. 449), which points to workaholism as a potential mediating mechanism in the LMX-job strain relationship.

Indeed, the sense of obligation to repay the supervisor that employees experience in high-LMX relationships (Lee, Gerbasi, Schwarz, & Newman, 2018) may, under specific conditions, lead to excessive and compulsive work. Yet, we are not aware of any study that examined workaholism as a linking mechanism in the relationship between LMX and job strain. One boundary condition of this relationship may be whether employees feel being exposed to a climate that encourages overwork. Such psychological climate for overwork has been found to act as an organizational “enabler” (Holland, 2008) of workaholism (Mazzetti et al., 2014). However, empirical studies are lacking (Loscalzo & Giannini, 2017; Mazzetti et al., 2014).

To address the above gaps, the present study examines the role of LMX, which refers to the quality of the social exchange relationship between leaders and subordinates (Dienesch & Liden, 1986), in subordinates’ workaholism and subsequent strain. Drawing from social exchange theory (Blau, 1964; Gouldner, 1960) and the theory of situational strength (Mischel, 1973, 1977), we posit that the relationship of LMX to subordinate workaholism and strain is contingent on the extent to which employees perceive that a psychological climate for overwork pervades the workplace. We argue that if employees perceive that their work environment promotes working long hours (Mazzetti et al., 2014) (i.e., a psychological climate for overwork; Parker et al., 2003), employees involved in high-LMX relationships may be cued to use excessive and compulsive work as a social exchange currency to repay their supervisor for being favorably treated. Thus, under conditions of a strong psychological climate for overwork, LMX may lead to workaholism and, indirectly, increased strain. A three-

wave longitudinal study was used to test our moderated mediation model, as depicted in Figure 2.1.

Our study makes the following contributions. First, it provides insights into a contextualized approach to workaholism. Although scholars have suggested that contextual factors may intervene in the emergence of workaholism (e.g. Kanai, 2006; Liang & Chu 2009; Ng et al., 2006), empirical research exploring the role of such factors remains scarce (e.g., Balducci et al.2018; Gillet et al., 2017). By highlighting that a psychological climate for overwork provides situational cues that may foster a willingness to respond to LMX relationships through workaholism, this study offers a novel approach to workaholism research. Second, our study adds to recent work on the drawbacks of high LMX relationships (Erdogan & Bauer, 2015; Greenbaum, Mawritz, Bonner, Webster, & Kim, 2017; Matta & Van Dyne, 2015). While LMX has been associated with a host of positive outcomes for subordinates (Dulebohn et al., 2011; Gerstner & Day, 1997), including reduced stress and burnout (Harms et al., 2017), some studies identified boundary conditions to LMX's effects on stress-related outcomes (e.g., Hochwarter & Byrne, 2005; Jiang et al., 2014). For example, Brouer and Harris (2007) found that a combination of low frequency of interactions with supervisors and high LMX was associated with increased work tension. The present study adds to this burgeoning literature by unveiling a mechanism (i.e., workaholism) and a boundary condition (i.e., psychological climate for overwork) through which LMX can induce workaholism and strain.

Third, the present study counts among the few studies that have used a longitudinal approach to explore the relationship between workaholism and strain

(Balducci et al., 2018; Clark, Michel, et al., 2016) and how change in these psychological states is driven by leadership-and climate-related factors. As workaholism and psychological strain are processes that unfold over time, exploring how our predictor (i.e., LMX) and moderator (i.e., psychological climate for overwork) drive these processes has the potential to increase our understanding of the dynamics of workaholism and strain. Our results lend support to a resource-based perspective (Geurts & Sonnentag, 2006; Hobfoll, 1989) that suggests that workaholics experience strain as a result of their inability to recover from the excessive amount of resources they put into working hard and obsessively.

[Insert Figure 2.1 about here]

2.3 Workaholism: Definition and Development

The term “workaholism” has been coined to designate those workers literally addicted to work (Oates, 1971). Though the definition of workaholism remains an issue in the literature, a consensus has emerged around two key defining features: working excessively and working compulsively (Clark, Michel et al., 2016; Schaufeli et al., 2008). Working excessively is a behavioral manifestation of workaholism exemplified by spending long hours working. Working compulsively is a cognitive manifestation of workaholism characterized by obsessive and uncontrollable thoughts about work. In sum, workaholism is the “tendency to work excessively hard and being obsessed with work, which manifests itself in working compulsively” (Schaufeli, Shimazu, & Taris, 2009). As such, it is different from work effort or hard work which are behavioral in nature.

Research has established that individual dispositions (e.g., perfectionism, trait negative affect, type A personality; Clark, Michel, et al., 2016) are important sources of workaholism (Keller et al., 2016; Mazzetti et al., 2014). However, the view that workaholism is exclusively explainable by individual differences has been challenged by researchers from the clinical field (e.g., Griffiths & Karanika-Murray, 2012; Loscalzo & Giannini, 2017) and the management arena (e.g., Balducci et al., 2018; Kanai, 2006; Liang & Chu 2009; Mazzetti et al., 2014; Ng et al., 2006). For example, Ng et al. (2006) suggested that the sources of workaholism fall into three categories: individual traits (e.g., self-esteem), socio-cultural experiences (e.g., peer competition at work), and behavioral reinforcements (e.g., rewards associated with hard work). More recently, Loscalzo and Giannini (2017) developed a comprehensive model of workaholism that includes situational antecedents, particularly work-related climates that convey expectations regarding the amount of hours spent working.

Recent studies indeed suggest that situational factors such as job demands (e.g., Andreassen, Nielsen, Pallesen, & Gjerstad, 2019; Andreassen, Pallesen, & Torsheim, 2018; Gillet et al., 2017; Johnstone & Johnston, 2005), perceived organizational climate (Johnstone & Johnston, 2005; Mazzetti et al., 2014; Schaufeli, 2016), and laissez-faire leadership (Andreassen et al., 2019) may contribute to workaholism. However, this line of research is still nascent and has produced little longitudinal evidence for these effects (Balducci et al., 2018). One plausible underlying mechanism is that workaholism constitutes a response that helps employees face the excessive demands of their work environment (Balducci et al., 2018; Molino, Bakker, & Ghislieri, 2015). It is also likely that workaholism develops as a response to reinforcements from the environment (Ng et

al., 2006), such as when employees perceive that hard work is valued and rewarded by the supervisor or the organization (Mazzetti et al., 2014). The next sections further develop these arguments.

2.4 LMX and Workaholism: A Social Exchange View

LMX theory states that supervisors develop and maintain relationships of varying quality with their subordinates (Dienesch & Liden, 1986). High LMX situations are characterized by mutual support, trust and communication within the dyad while low LMX relationships involve transactional exchanges that are limited to the terms of the employment contract (Dienesch & Liden, 1986). High levels of LMX are generally thought to protect subordinate emotional health (Harms et al., 2017). This protective effect occurs because in high-LMX relationships subordinates receive material and emotional support from supervisors that help reduce stress and burnout (Bass & Bass, 2008; Harms et al., 2017). For example, subordinates in high LMX relationships report less role ambiguity and role conflict (Dulebohn et al., 2011) because they presumably receive supervisory guidance that helps clarify role expectations. Additionally, the resources and emotional support associated with high-quality LMX relationships may help subordinates cope with job demands (Harms et al., 2017).

Social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) state that subordinates involved in high-LMX relationships receive benefits (e.g., support, resources, and rewards; Wayne, Shore, & Liden, 1997) that they feel compelled to reciprocate. Although the terms of social exchange are left unspecified (Blau, 1964), LMX research has generally considered superior task and contextual performance (Martin, Guillaume, Thomas, & Epitropaki, 2015; Wilson, Sin, & Conlon, 2010) as

currencies of exchange that subordinates use to reciprocate resources received from supervisors (Liden, Sparrowe, & Wayne, 1997). Meta-analytic reviews have indeed reported LMX to be positively related to task and citizenship performance (Dulebohn et al., 2011; Gerstner & Day, 1997; Martin et al., 2015). Moreover, LMX has been found to be positively associated with supervisor-directed citizenship behaviors (Cropanzano, Prehar, & Chen, 2002), suggesting that high LMX situations encourage subordinates to engage in actions that benefit the supervisor.

The dedication to delivering superior performance may push high-LMX subordinates to work long hours. Indeed, working long hours may constitute a relevant currency of exchange because it is a visible behavior that serves as a proxy for performance and job dedication (Brett & Stroh, 2003; Sheridan, 2004). Therefore, a subordinate may want to work hard to express his or her willingness to serve the supervisor's interests. This rationale suggests that, as LMX quality increases, the growing feeling of obligation to repay the supervisor (Lee et al., 2018) may lead subordinates to work excessively and enact behaviors that are typical of workaholics (i.e., the behavioral facet of workaholism). Compulsive work (i.e., the cognitive facet of workaholism) may also develop because delivering superior performance goes along with a number of challenges (e.g., solving complex tasks, having difficulties completing tasks on time) that plausibly engender ruminations and obsessive thoughts about work (Balducci et al., 2018).

However, as discussed above, social exchange theory suggests that the currency of social exchange remains open and unspecified (Blau, 1964). That is, while subordinates in high-LMX situations are likely to put extra efforts into their work, these endeavors

will not necessarily become disproportionate and entail the development of workaholism. Therefore, one may wonder what circumstances would encourage subordinates to use excessive and compulsive work (i.e., workaholism) as a means of reciprocation in high LMX relationships. In the next section, we suggest that psychological climate for overwork is a central element of the context that will guide employees' reactions to the exchange relationship with the supervisor.

2.5 The Role of Psychological Climate for Overwork

Leadership does not operate in a vacuum (Liden & Antonakis, 2009). LMX is no exception and various scholars have emphasized the need to account for contextual variables in studying the effects of LMX (Cogliser & Schriesheim, 2000; Tordera, González-Romá, & Peiró, 2008). Using this contingent perspective and drawing upon the theory of situational strength (Mischel, 1973, 1977), we suggest that a high level of psychological climate for overwork serves as a catalyst for workaholism in high LMX relationships. The theory of situational strength (Mischel, 1973, 1977) emphasizes the role of situations in directing behaviors. Situation strength can be broadly defined as the extent to which situations constrain behaviors (Judge & Zappata, 2015). Strong situations provide clear cues on the kind of behaviors that are expected and rewarded (Meyer, Dalal, & Hermida, 2010; Mischel, 1977). In strong situations, individuals have a clear perception of the limited set of behaviors that are deemed appropriate in their environment and of the negative consequences that would be associated with a failure to display these behaviors (Meyer et al., 2010). In contrast, weak situations provide less guidance as to how to behave. In such ambiguous contexts, there are no clear cues that

dictate what appropriate behaviors are, which results in more behavioral latitude for individuals (Mischel, 1973).

Following these lines, we argue that a psychological climate for overwork acts as a signal of a strong situation regarding how subordinates should respond to social exchange relationships with their supervisor. A psychological climate is the subjective perception of employees regarding features of the work environment (Parker et al., 2003). Such climate refers to how employees, individually, make sense of the behaviors that are expected in the organization (Jones & James, 1979; Parker et al., 2003). Therefore, psychological climates lay the ground for strong situations if they unequivocally point towards specific behavioral expectations. That is, even though a psychological climate is a subjective interpretation of the environment (James, Hater, Gent, & Bruni, 1978), it can materialize the inducements of a strong situation for the individual to the extent that it conveys the message that certain behaviors are expected and rewarded.

A psychological climate for overwork (Mazzetti et al., 2014) reflects the perception that the work environment “requires and expects employees to perform overwork” (Mazzetti, Schaufeli, Guglielmi, & Depolo, 2016, p. 884). A high level of such a climate would induce the feeling that working long hours and working over the weekend or during evenings to finish tasks that were not completed during regular hours would be behaviors that are valued in the organization (Mazzetti et al., 2014) and a prerequisite for career success (Mazzetti et al., 2014; Schaufeli, 2016). Such climate would convey expectations regarding time spent working and signal that those who do not meet these expectations may be penalized (e.g., via slower career progression or

poor performance evaluations). As such, a psychological climate for overwork may serve as a strong situation that constrains employees' work hours behaviors.

We argue that a psychological climate for overwork acts as a strong situation that makes workaholism, a construct otherwise rooted in personality influences, a likely response to the LMX context. Such climate would encourage employees to use excessive work as a response to high LMX situations. That is, indebted subordinates (i.e., experiencing high LMX) would feel obligated to engage in excessive work because they may think that working long hours is the most appropriate way to reciprocate the favorable treatment received from the supervisor. As LMX quality increases, subordinates will feel increasingly indebted toward their supervisor (Lee et al., 2018). As a result, subordinates in higher LMX situations will likely be caught in an endless feeling of obligation to be working, hence enacting the behavioral component of workaholism (i.e., working excessively long hours). Obsessive thoughts towards work (i.e., cognitive component of workaholism) will also likely arise because, as social exchange relationships do not specify the limits of reciprocation (Blau, 1964), high-LMX subordinates will "never be done" with work. The belief that one has not done enough has indeed been found to be a central feature of the compulsive facet of workaholism (e.g., van Wijhe, Peeters, & Schaufeli, 2011, 2014). Moreover, working excessively long hours may foster obsessive thoughts about work because long work hours increase the salience of work activities (Ng & Feldman, 2008).

A low psychological climate for overwork would instead indicate a weak situation as overwork would not be signaled as an expected behavior in the organization. In such context, high-LMX subordinates would have more latitude in determining how they

reciprocate their supervisor's favorable treatment. They may perceive that working excessively and obsessively is not a mandatory means through which supervisors should be repaid and that alternative behaviors (e.g., cooperation with coworkers, creative thinking, etc.) would be viable options. Thus, in a context of low psychological climate for overwork, LMX is not expected to be (positively) related to workaholism. To summarize, the above rationale suggests that the psychological climate for overwork acts as a boundary condition in the relationship between LMX and workaholism. This leads to the following hypothesis.

Hypothesis 1. Psychological climate for overwork moderates the relationship between LMX and subordinate workaholism such that LMX will be more strongly (and positively) (vs. more weakly) related to workaholism when the psychological climate for overwork is high (vs. low).

Available evidence suggests that workaholism negatively relates to workers' mental health (Clark, Michel, et al., 2016). This negative relationship occurs because, as proposed by recovery (Geurts & Sonnentag, 2006) and conservation of resources (COR; Hobfoll, 1989) theories, workaholics are not able to recover from the loss of resources caused by their constant mental and behavioral absorption by work (Balducci et al., 2018). Moreover, although some studies have found evidence for a positive relationship between LMX and stress-related constructs under certain conditions (e.g., Brouer & Harris, 2007), the boundary conditions associated with this relationship remain unclear. One such condition may be a psychological climate for overwork. As argued above, LMX may increase workaholism in the context of a psychological climate for overwork because this climate promotes hard work as a convenient way to reciprocate positive

social exchange relationships. As workaholism is expected in turn to increase strain, i.e., a major outcome of stress (Hart & Cooper, 2001), the indirect relationship between LMX and strain through workaholism should be stronger and positive when the psychological climate for overwork is strong. In contrast, a weak psychological climate for overwork should not encourage employees to reciprocate high LMX through strong investment in work activities, which should be followed by little effect on strain. Thus, the following hypothesis is proposed.

Hypothesis 2. Psychological climate for overwork moderates the indirect relationship between LMX and job strain through workaholism such that this indirect relationship will be stronger (vs. lower) and positive when the psychological climate for overwork is high (vs. low).

2.6 Method

2.6.1 Sample and Procedure

We tested our hypotheses using a three-wave longitudinal study among alumni from a French business school. Prospective participants were contacted through email and invited to respond to three surveys spaced by a four-month interval, a time span that allows for change in workaholism and strain to occur while limiting respondent attrition due to organization or supervisor change. To encourage participation, we offered respondents the opportunity to make a \$5 gift to the Charity of their choice among six options. Participants were to have salaried employment and an identifiable supervisor. They were informed of the study objectives and assured of the confidentiality of their responses. Questionnaires were completed in French or English. LMX was assessed at Time 1, workaholism was assessed at Time 1 and Time 2, psychological climate for

overwork was measured at Time 2, and psychological strain was assessed at Time 2 and Time 3. These data allowed testing our hypotheses using an autoregressive approach (Maxwell & Cole, 2007). Specifically, the baseline levels of workaholism (i.e., Time 1) and of psychological strain (i.e., Time 2) were controlled for while testing the relationships among Time 1 LMX, Time 2 psychological climate for overwork and workaholism, and Time 3 strain.

We obtained 540 responses at Time 1, 264 at Time 2, and 178 at Time 3, for a 33% overall response rate from Time 1 to Time 3. Of the Time 1 respondents, 91 were excluded because they changed organizations or supervisors between Time 1 and Time 3, leaving 449 usable responses at Time 1 for analysis. We conducted attrition analyses to determine whether respondent attrition across time occurred randomly (Goodman & Blum, 1996). The results of a logistic regression analysis revealed that none of the Time 1 variables (i.e., age, gender, organizational tenure, dyadic tenure, LMX and workaholism) did predict the probability (i.e., 0 vs. 1) of remaining in the sample at Time 3 ($\chi^2[6] = 3.73, ns$). Therefore, the data appeared to be missing completely at random (MCAR; Enders & Bandalos, 2001; Ployhart & Vandenberg, 2010) across time. This justified testing hypotheses through full information maximum likelihood (FIML) estimation with robust standard errors (i.e., MLR) in Mplus 7.4 (Muthén & Muthén, 2010). Contrary to other approaches (e.g., listwise or pairwise deletion, data imputation), the FIML method does not delete or replace missing data. Rather, it uses all the information available in the covariance matrix ($N = 449$) to estimate model parameters. FIML is the recommended approach in longitudinal studies (e.g., Enders, 2010; Enders & Bandalos, 2001), particularly when the data are MCAR (Ployhart &

Vandenberg, 2010). Moreover, the FIML method has been shown to produce unbiased estimates and to display high power to detect interactions in latent moderated structural equations models (Cham, Reshetnyak, Rosenfeld, & Breitbart, 2016), making it particularly suitable in our study.

In our sample of 449 Time 1 respondents, 47% were men, average age was 37.67 years ($SD = 9.00$), average organizational tenure was 6.07 years ($SD = 5.67$), and average tenure with the supervisor was 2.95 years ($SD = 2.28$). Nearly all (96%) of the participants worked full-time, and 62% held a managerial position. Most of them (97.6%) completed the French version of the survey questionnaires. More than half of the respondents (59%) worked for large companies (> 1,000 employees), 22% worked for mid-sized companies (100-1000 employees), and 19% worked for small companies (< 100 employees). Respondents were affiliated with various industries including banking and insurance (16%), professional, scientific and technical services (11%), manufacturing (9%), trade (8%), health care and social services (5%), information and cultural industries (4%), construction (3%) and public administration (2%).

2.6.2 Measures

A translation-back-translation procedure was used to create French versions of English scales (Schaffer & Riordan, 2003). Except for workaholism items, a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) was used for all items.

LMX was assessed at Time 1 using Liden and Maslyn's (1998) 12-item multidimensional measure of LMX (LMX-MDM). Though it has been developed to reflect the multidimensional nature of LMX, the LMX-MDM scale has been shown to be a valid instrument for assessing LMX as a global construct (Liden & Maslyn, 1998).

The 12 items capture four facets within LMX: affect (e.g., “I like my supervisor very much as a person”), professional respect (e.g., “I respect my supervisor’s knowledge of and competence on the job”), loyalty (e.g., “My supervisor would come to my defense if I were “attacked” by others”) and contribution (e.g., “I do work for my supervisor that goes beyond what is specified in my job description”). The internal consistency of the 12-item LMX scale was .92.

Workaholism was measured at Time 1 ($\alpha = .85$) and Time 2 ($\alpha = .82$) using the 10-item Dutch Work Addiction Scale (DUWAS; Schaufeli et al., 2009). The DUWAS has demonstrated good psychometric properties (Balducci et al., 2018) and is well suited to assess workaholism as a single general construct (Gillet, Morin, Sandrin, & Houle, 2018). The scale captures excessive (e.g., “I find myself continuing to work after my co-workers have called it quits”) and compulsive (e.g., “It’s important to me to work hard even when I don’t enjoy what I’m doing”) work. Participants reported how often they engaged in the described behaviors during the past few months using a 5-point frequency scale ranging from 1 (*never*) to 5 (*often, nearly every day*).

Perceived strain was assessed at Time 2 ($\alpha = .93$) and Time 3 ($\alpha = .91$) using a 3-item scale developed by Marchand and Vandenberghe (2015; e.g., “My quality of life has been reduced by my work”).

Psychological climate for overwork was measured at Time 2 using the 8-item scale developed by Mazzetti et al. (2016) which has proven to have good psychometric properties (e.g., Mazzetti et al., 2016). A sample item is “It is considered normal to work on weekends.” Cronbach’s alpha for this scale was .88.

Control variables. Our analyses controlled for the autoregressive effects of workaholism and strain, rendering the control of stable variables such as demographics and personality traits unnecessary (Zapf, Dormann, & Frese, 1996). However, as role overload has been shown to relate to both workaholism (Clark, Michel, et al., 2016) and psychological strain (e.g., Shultz, Wang, & Olson, 2010), we initially controlled for its effect. Schaubroeck, Cotton, and Jennings's (1989) 3-item scale was used ($\alpha = .92$). As role overload did not affect the findings, we report the results of analyses without controlling for this variable, which is in line with recommendations regarding the proper use of control variables (e.g., Becker et al., 2016).

2.7 Results

2.7.1 Measurement Invariance

We first conducted invariance tests to examine whether the meaning of workaholism and perceived strain was stable across time (Little, Preacher, Selig, & Card, 2007) since we included their autoregressive effects in our model. The invariance of factor structure (i.e., configural invariance) was supported for both workaholism, $\chi^2(15) = 33.77$, comparative fit index (CFI) = .98, Tucker-Lewis index (TLI) = .96, root-mean-square error of approximation (RMSEA) = .05, and perceived strain, $\chi^2(5) = 7.38$, CFI = 1.00, TLI = .99, RMSEA = .05. Adding invariance constraints resulted in nonsignificant decreases in model fit, indicating stability of psychometric properties across time and suitability for longitudinal analysis (Cheung & Lau, 2012). Therefore, for both scales, we tested our hypotheses based on the most parsimonious model with strict invariance measurement specifications (e.g., invariance of factor structure, loadings, intercepts, and residuals).

2.7.2 *Confirmatory Factor Analyses*

To examine the distinctiveness of our variables, we conducted a series of confirmatory factor analyses through Mplus 7.4 and compared the fit of our four-factor model including Time 1 LMX, Time 2 psychological climate for overwork, Time 2 workaholism, and Time 3 strain to more parsimonious models. We used the Satorra-Bentler scaled χ^2 difference test with the MLR estimator to compare our model to other, nested models (Satorra & Bentler, 2001). LMX was modeled as a second-order factor comprising affect, loyalty, contribution and respect (Liden & Maslyn, 1998) as first-order factors. In addition, the errors of two items of the contribution dimension (“I do work for my supervisor that goes beyond what is specified in my job description,” and “I am willing to apply extra efforts, beyond those normally required, to meet my supervisor’s work goals”) were allowed to correlate because of overlap in their content. To reduce model complexity, we created four parcels for workaholism based on random assignment of items to parcels (Little, Rhemtulla, Gibson, & Schoemann, 2013). Perceived strain and psychological climate for overwork were defined by their individual items. Results are presented in Table 2.1. The four-factor model yielded a good fit ($\chi^2[313] = 540.13$, CFI = .95, TLI = .95, RMSEA = .04). This model outperformed a three-factor model that combined workaholism and strain ($\chi^2[3] = 140.03$, $p < .001$), a three-factor model that combined workaholism and psychological climate for overwork ($\chi^2[3] = 191.18$, $p < .001$), a three-factor model that merged strain and psychological climate for overwork, ($\chi^2[3] = 155.47$, $p < .001$), a two-factor model that merged workaholism, strain and psychological climate for overwork, ($\chi^2[5] =$

320.51, $p < .001$), and a one-factor model ($\chi^2[6] = 376.68, p < .001$). These results support the distinctiveness of our variables.

[Insert Table 2.1 about here]

2.7.3 *Descriptive Statistics and Correlations*

Descriptive statistics and correlations are reported in Table 2.2. Noticeably, Time 1 LMX was negatively correlated with both Time 2 ($r = -.33, p < .01$) and Time 3 ($r = -.19, p < .05$) perceived strain. Time 2 workaholism was positively related to Time 3 perceived strain ($r = .43, p < .01$). Time 2 psychological climate for overwork was unrelated to Time 1 LMX ($r = -.02, ns$) but was positively related to Time 2 workaholism ($r = .22, p < .01$) and Time 3 perceived strain ($r = .19, p < .05$).

[Insert Table 2.2 about here]

2.7.4 *Hypotheses Testing*

We tested our hypotheses using the Latent Moderated Structural Equations (LMS) approach (Klein & Moosbrugger, 2000) with the Mplus XWITH command in Mplus 7.4 (Muthén & Muthén, 2010). The LMS approach generates more reliable estimates and standard errors and has more power than other methods (e.g., linear regression) to detect interaction effects. It is the recommended approach to test moderating effects using latent variables (Cheung & Lau, 2017; Sardeshmukh & Vandenberg, 2016). We followed a two-step approach to examine our moderation and moderated mediation hypotheses (Maslowsky, Jager, & Hemken, 2015; Sardeshmukh & Vandenberg, 2016). To examine Hypothesis 1, we first specified a baseline model that contained only the main effects of LMX and psychological climate for overwork on workaholism. We then added the latent interaction term to the baseline model. We compared the fit of these

models using a log-likelihood ratio difference test (D; Maslowsky et al., 2015). A significant D would indicate that the moderated model adds variance over the baseline model and should be retained (Maslowsky et al., 2015). Furthermore, a smaller value for the Akaike Information Criterion (AIC) would indicate that there is no loss of information relative to the baseline model (Sardesmukh & Vandenberg, 2016) and would suggest a better fitting model. Finally, we examined the latent moderated mediation model where perceived strain was added as the outcome. To examine the moderated mediation effect specified in Hypothesis 2, we used bootstrapping and its associated bias-corrected 95% confidence interval (CI) for conditional indirect effects using maximum likelihood estimation (ML) in Mplus (Lau & Cheung, 2012; MacKinnon, Lockwood, & Williams, 2004) with 5,000 data resamples.

Hypothesis 1. To test hypothesis 1, we specified a baseline model that included the direct effects of Time 1 LMX and Time 2 psychological climate for overwork on Time 2 workaholism while controlling for the autoregressive effect of workaholism (i.e., Time 1). This model showed an adequate fit ($\chi^2[345] = 656.16$, CFI = .94, TLI = .94, RMSEA = .05). However, the latent interaction model proved superior to the baseline model, $D(1) = 7.33$, $p < .01$. Moreover, the interaction model yielded a smaller AIC value than the baseline model (22509.76 vs. 22515.09). Thus, we retained this model. The interaction between LMX and psychological climate for overwork was significant ($B = .23$, $SE = .09$, $p < .05$; Table 2.3). The interaction (see Figure 2.2) indicates that LMX was positively related to workaholism when psychological climate for overwork was high (1 *SD* above the mean) ($B = .28$, $SE = .11$, $p < .01$; Table 2.3) but unrelated to it when psychological climate for overwork was low (1 *SD* below the mean) ($B = -.09$,

$SE = .10$, ns ; Table 2.3). The difference between these two relationships was significant ($B = .37$, $SE = .15$, $p < .05$; Table 2.3). Hypothesis 1 is thus supported.

[Insert Table 2.3 and Figure 2.2 about here]

Hypothesis 2. To test Hypothesis 2 we first specified a baseline mediation model that included the main effects of Time 1 LMX and Time 2 psychological climate for overwork on Time 2 workaholism and Time 3 strain, controlling for the autoregressive effects of workaholism (Time 1) and perceived strain (Time 2). The lagged paths from T1 variables to Time 2 strain and the covariances among the exogenous variables at Time 1 and among the residuals of the endogenous variables at Time 2 were also estimated (MacKinnon, 2008). This baseline model showed an adequate fit ($\chi^2[520] = 886.36$, $CFI = .94$, $TLI = .94$, $RMSEA = .04$). However, the moderated mediation model proved superior to the baseline model, $D(1) = 9.10$, $p < .01$. Furthermore, the value of the AIC was smaller for the moderated mediation model (24775.00 vs. 24782.10). Thus, we retained this model. Bootstrapping analyses revealed a significant indirect effect of LMX on perceived strain through workaholism at high (1 SD above the mean) ($B = .08$, $SE = .04$, 95% CI [.014, .207]; Table 2.3) but not at low (1 SD below the mean) values of psychological climate for overwork ($B = -.03$, $SE = .03$, 95% CI [-.012, .016]; Table 2.3). Moreover, the difference between these two effects was significant ($B = .12$, $SE = .05$, 95% CI [.023, .293]; Table 2.3). Hypothesis 2 is thus supported. Standardized parameters for the moderated mediation model are reported in Figure 2.3.

[Insert Figure 2.3 about here]

2.8 Discussion

This study investigated the interactive effects of LMX and psychological climate for overwork on subordinate workaholism and strain over time. In line with our hypotheses, the results from a three-wave longitudinal design showed that LMX increased subordinate workaholism in the context of a strong psychological climate for overwork. We further found that change in subordinate workaholism mediated the joint effects of LMX and psychological climate for overwork on subordinate strain over time. That is, subordinates who reported having a high-quality relationship with their supervisor and who perceived the organizational climate as encouraging overwork were more likely to report high job strain eight months later, in part because of an increased level of workaholism.

2.8.1 Theoretical implications

Our study contributes to the workaholism literature by examining the emergence of this phenomenon through the lens of contextual influences. As such, it adds to a recent line of research that has shown that the work context may foster workaholism (e.g., Balducci et al., 2018; Gillet et al., 2018; Mazzetti et al., 2014; Molino et al., 2015). More precisely, the combined influence of LMX relationships and psychological climate for overwork acted as a driver of excessive and compulsive work. This finding is consistent with a situational strength account (Mischell, 1973) by indicating that high-LMX relationships may encourage employees to engage in workaholism, a phenomenon that has at least partly a dispositional basis (Balducci et al., 2018; Keller et al., 2016). Our results also show that when the psychological climate for overwork is low (i.e., a weak situation), LMX is unrelated to workaholism. Although untested in our study, it might

be that in such “weak” contexts, personality traits would outweigh LMX as predictors of workaholism. Future research is however needed to explore this possibility.

Moreover, this study indicates that leadership can play a role in creating workaholism, an area of study that has been neglected so far. In line with Ng et al.’s (2006) assumption that workaholism can be attributed to environmental reinforcers, our results may indicate that the rewards associated with behaviors that contribute to a high-quality exchange with the supervisor (e.g., a sense of accomplishment resulting from behaviors that serve the supervisor’s interests) feed workaholism under specific circumstances (e.g., climate for overwork). Future research could further examine this assumption. It is worth noting however that in contrast to previous research (Mazzetti et al., 2014), we found no main effect of psychological climate for overwork on workaholism. Thus, although the work climate may encourage workers to work hard, other factors such as tacit obligations to the supervisor must be simultaneously salient for employees to engage in excessive and compulsive attention to work.

Second, our study indicates that LMX has potentially a dark side (Erdogan & Bauer, 2015; Greenbaum et al., 2017; Matta & Van Dyne, 2015). For example, LMX may induce job strain but the mechanisms by which this may happen and the circumstances that can moderate such influence remain largely unknown (Sonnentag & Pundt, 2015). The present study is one of the first attempts to examine longitudinally *when* (i.e., a high psychological climate of overwork) and *how* (i.e., through workaholism) LMX can induce employee strain. Our findings suggest that while high-LMX subordinates may enjoy well-being owing to a good relationship with the supervisor, this well-being may come along with sacrifices in terms of overwork and,

ultimately, strain (Inceoglu, Thomas, Chu, Plans, & Gerbasi, 2018, Lawrence & Kacmar, 2012). Plausibly, different processes mediate the effect of LMX on subordinate well-being, resulting in a positive or negative indirect relationship depending on which process dominates (Inceoglu et al., 2018). Our study suggests that workaholism is one mechanism that underlies the positive association between LMX and subordinate strain and that a psychological climate for overwork is an important catalyst of this relationship.

Relatedly, this study adds to what we know of social exchange processes within LMX relationships. As reasoned, a strong psychological climate for overwork acted as an important contextual factor that cued subordinates to engage in workaholism as a way to reciprocate the favorable treatment they received from supervisors. This is consistent with a study by Hofmann, Morgeson, and Gerrass (2003) who also found that a strong climate for safety strengthened the relationship between LMX and employees adopting safety-oriented citizenship behaviors. Overall, these findings illustrate the importance of specific climates as boundary conditions in the relationship between LMX and employee outcomes (Dienesch & Liden, 1986).

Finally, our study provides evidence for the longitudinal effect of workaholism on job strain. Although the association between workaholism and strain-related constructs has been widely studied (see Clark, Michel, et al., 2016), almost all previous studies used cross-sectional designs (see Balducci et al., 2018, for an exception). The present study overcomes the limitations of cross-sectional designs in which the directional relationships among the constructs cannot be established. For example, the association between workaholism and strain could be explained by confounding factors

(e.g., negative affect or role overload). This study controlled for the baseline level of strain and examined the potential effect of role overload as a confounding factor in the relationship between workaholism and strain, thereby providing strong evidence for the idea that workaholism drives job strain. Though these results do not rule out a reciprocal relationship whereby strain would increase workaholism, they support the idea that workaholism may contribute to deplete subordinates' resources over time, leading to job strain.

2.8.2 Practical implications

The present study shows that workaholism can result from the influence of environmental factors such as the psychological climate in the workplace and the quality of the exchange relationships with supervisors. This finding is important because it sheds light on what organizations can do to reduce workaholism and promote well-being among their employees (Loscalzo & Giannini, 2017). For example, organizations may want to refrain from conveying cues and communicating information indicating that overwork is necessary to meet performance expectations. Second, they may train managers to recognize workaholism among their subordinates and make them aware of their influence on such habits. Supervisors should also be advised of the potential downside of high LMX, as it may foster employees' willingness to reciprocate through long work hours, particularly if the work climate magnifies overwork. Managers should encourage employees to work smarter rather than harder, thereby limiting the negative impact of a high LMX combined with a strong psychological climate for overwork. Finally, as our findings indicate that workaholism harms employees' well-being,

organizations should question the value of having employees who work excessively hard as this may be a visible manifestation of workaholism.

2.8.3 Limitations and Future Research Directions

Despite the strengths of our design, this study has limitations. First, data were obtained from a single source, which may inflate the associations between constructs due to common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). To reduce this bias, we used procedural remedies (i.e., temporal separation between the predictors and criterion) (Podsakoff et al., 2012) and controlled for autoregressive effects (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), thereby removing much endogeneity in the data. Furthermore, findings related to interaction effects are unlikely to be affected by common method variance (Siemsen, Roth, & Oliveira, 2010). However, future research should consider using multisource data. A multisource assessment of subordinate workaholism would be particularly warranted because some research has suggested that employees themselves may be biased in their judgment of overwork habits (Mazzetti, Schaufeli, & Guglielmi, 2018). Second, the climate for overwork was measured as an individual perception rather than as a shared climate within the organization. Future research should examine whether perceived overwork climate can be aggregated to the team or organization level and whether a cross-level moderating effect can be detected between such a climate and individual LMX. Finally, our sample was composed of highly educated professionals, most of whom occupied a managerial position. Such a sample may be predisposed to engage in workaholism (Clark, Michel, et al., 2016). Future studies should attempt to replicate the present findings with more diversified samples of employees.

Given the detrimental effects of workaholism on employee health, we hope this study will also encourage future research on the role of supervisors and other contextual factors in the emergence of workaholism in the workplace. First, because dispositional factors play a significant role in fostering workaholism (Clark, Michel et al., 2016), future studies may seek to investigate how relevant traits interact with LMX to predict workaholism. This would help clarify the context and situations where LMX is harmful vs. protective. Second, the role of leadership styles in the emergence of workaholism should be further examined. For example, using a nationally representative sample and cross-sectional data collected in Norway, Andreassen et al. (2019) found no association between transformational leadership and abusive supervision and workaholism. However, they found a positive association between laissez-faire leadership and workaholism. These preliminary findings call for future replications and extensions using longitudinal and multisource data. It is also possible, as our study suggests, that various leadership styles become harmful only under certain conditions (e.g., a strong psychological climate for overwork or other conditions such as heavy workloads). More generally, exploring other contextual determinants of workaholism (e.g., HR policies, organizational norms, intense use of information and communication technologies) would help deepen our understanding of this syndrome and provide actionable avenues to limit its influence.

2.9 Conclusion

This study aimed to broaden the understanding of the contextual antecedents of workaholism. Supporting our hypotheses, we found that, in organizational contexts perceived to promote long work hours, a good subordinate-supervisor relationship

quality increased subordinates' likelihood of engaging in workaholism and ultimately experiencing job strain. These findings shed light on the role of organizations and managers in preventing their employees from falling into the spiral of workaholism and suffering from its health-related consequences.

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Tables and Figures

Table 2. 1. Results for Confirmatory Factor Analyses.

	χ^2	df	CFI	TLI	RMSEA	SB $\Delta\chi^2$	Δdf
1. Hypothesized four-factor model: LMX (T1), workaholism (T2), psychological climate for overwork (T2), and perceived strain (T3)	540.130*	313	.95	.95	.04	—	—
2. Three-factor model, combining workaholism (T2) and perceived strain (T3)	653.491*	316	.93	.92	.05	140.03*	3
3. Three-factor model, combining workaholism (T2) and psychological climate for overwork (T2)	718.455*	316	.92	.91	.05	191.18*	3
4. Three-factor model, combining psychological climate for overwork (T2) and perceived strain (T3)	795.812*	316	.90	.89	.06	155.47*	3
5. Two-factor model, combining workaholism (T2), psychological climate for overwork (T2), and perceived strain (T3)	952.548*	318	.87	.86	.07	320.51*	5
6. One-factor model	1015.572*	319	.86	.84	.07	376.68*	6

Note. $N = 449$, based on full information maximum likelihood estimation. df = degrees of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root-mean-square error of approximation; SB = Santorra-Bentler scaled; T1 = Time 1; T2 = Time 2; T3 = Time 3.

* $p < .001$.

Table 2. 2. Descriptive Statistics and Correlations for the Study Variables.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	37.67	9.00	—									
2. Gender	1.53	0.50	-.14**	—								
3. Organizational tenure (years)	6.07	5.67	.42**	-.12*	—							
4. Tenure with the supervisor (years)	2.95	2.28	.22**	-.10*	.34**	—						
5. LMX (T1)	3.57	0.84	-.06	-.03	-.03	-.02	(.92)					
6. Workaholism (T1)	3.51	0.74	.08	.01	.08	.07	.07	(.85)				
7. Workaholism (T2)	3.36	0.71	.17*	.02	.06	.06	.12	.70**	(.82)			
8. Psychological climate for overwork (T2)	2.40	0.98	.09	.02	.01	.03	-.02	.38**	.22**	(.88)		
9. Perceived strain (T2)	2.74	1.34	.12	.10	.14	.14	-.33**	.37**	.34**	.38**	(.93)	
10. Perceived strain (T3)	2.76	1.31	.14	.06	.01	.07	-.19*	.40**	.43**	.19*	.72**	(.91)

Note: Correlations are based on the data available at a given time: T1 *N* = 430-449, T2 *N* = 173-181, T3 *N* = 118. For gender, 1 = Male, 2 = Female; LMX = Leader-member exchange; T1 = Time 1; T2 = Time 2; T3 = Time 3. Coefficient alphas are reported in parentheses along the diagonal.

p* < .05; *p* < .01.

Table 2. 3. Structural Equations Modeling Results for the Moderated Model and the Moderated Mediation Model.

Parameter estimates	Moderation			Moderated mediation				
	Baseline model		Moderated model	Baseline model		Moderated mediation model		
	B	SE	B	SE	B	B	SE	95% CI
LMX (T1) → Workaholism (T2)	.09	.08	.10	.07	.09	.09	.07	[-.064, .229]
Workaholism (T1) → Workaholism (T2)	.74***	.06	.75***	.06	.77***	.77***	.06	[.646, .889]
PCO (T2) → Workaholism (T2)	-.12	.10	-.12	.09	-.16	-.16	.09	[-.370, .012]
LMX (T1) x PCO (T1) → Workaholism (T2)			.23*	.09		.25**	.09	[.024, .449]
LMX (T1) → Perceived strain (T2)					-.62***	-.63***	.12	[-.900, -.392]
Workaholism (T1) → Perceived strain (T2)					.50***	.50***	.10	[.306, .726]
LMX (T1) → Perceived strain (T3)					-.08	-.08	.15	[-.387, .224]
PCO (T2) → Perceived strain (T3)					-.08	-.08	.12	[-.340, .153]
Workaholism (T2) → Perceived strain (T3)					.29**	.29**	.10	[.082, .517]
Perceived strain (T2) → Perceived strain (T3)					.62***	.62***	.09	[.428, .788]
First stage moderation								
High PCO (+1 SD)			.28**	.11		.29**	.10	[.020, .510]
Low PCO (-1 SD)			-.09	.10		-.12	.10	[-.320, .075]
Difference (± 1 SD)			.37*	.15		.41**	.15	[.040, .736]
Indirect effect								
High PCO (+1 SD)						.08*	.04	[.014, .207]
Low PCO (-1 SD)						-.03	.03	[-.012, .016]
Difference (± 1 SD)						.12*	.05	[.023, .293]

Note: N = 449, based on full information maximum likelihood estimation. Entries are unstandardized path coefficients (B); SE = standard error; CI = confidence interval; LMX = leader-member exchange; PCO = Psychological climate for overwork; T1 = Time 1; T2 = Time 2; T3 = Time 3.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Figure 2. 1. Theoretical model for the study. T1 = Time 1; T2 = Time 2; T3 = Time 3.

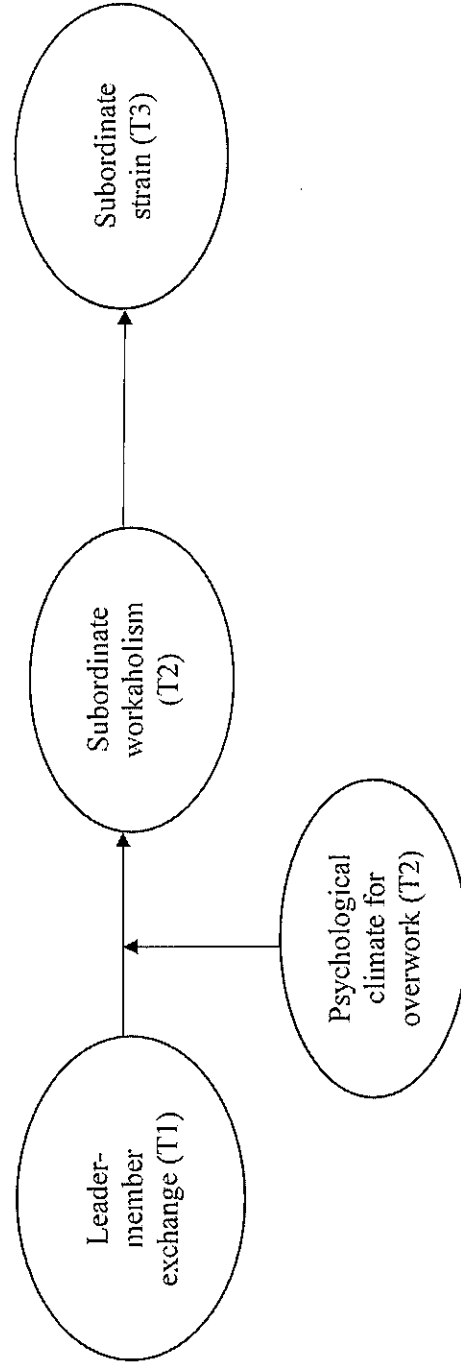


Figure 2. 2. Interaction between Time 1 LMX and Time 2 psychological climate for overwork predicting Time 2 workaholism, controlling for Time 1 workaholism. Effects are represented at 1 SD below and above the mean of psychological climate for overwork.

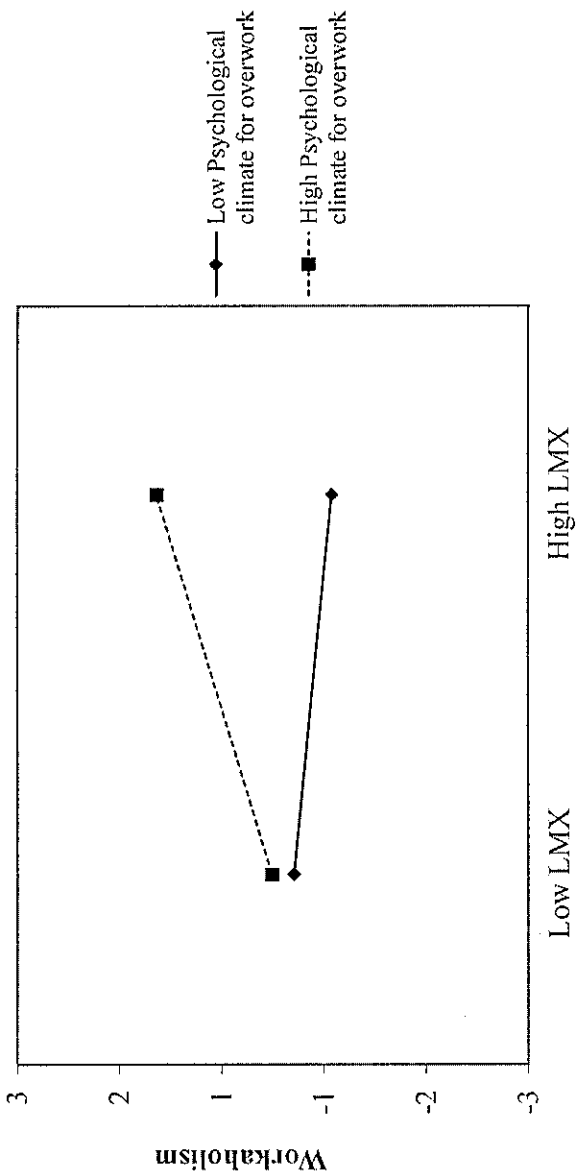
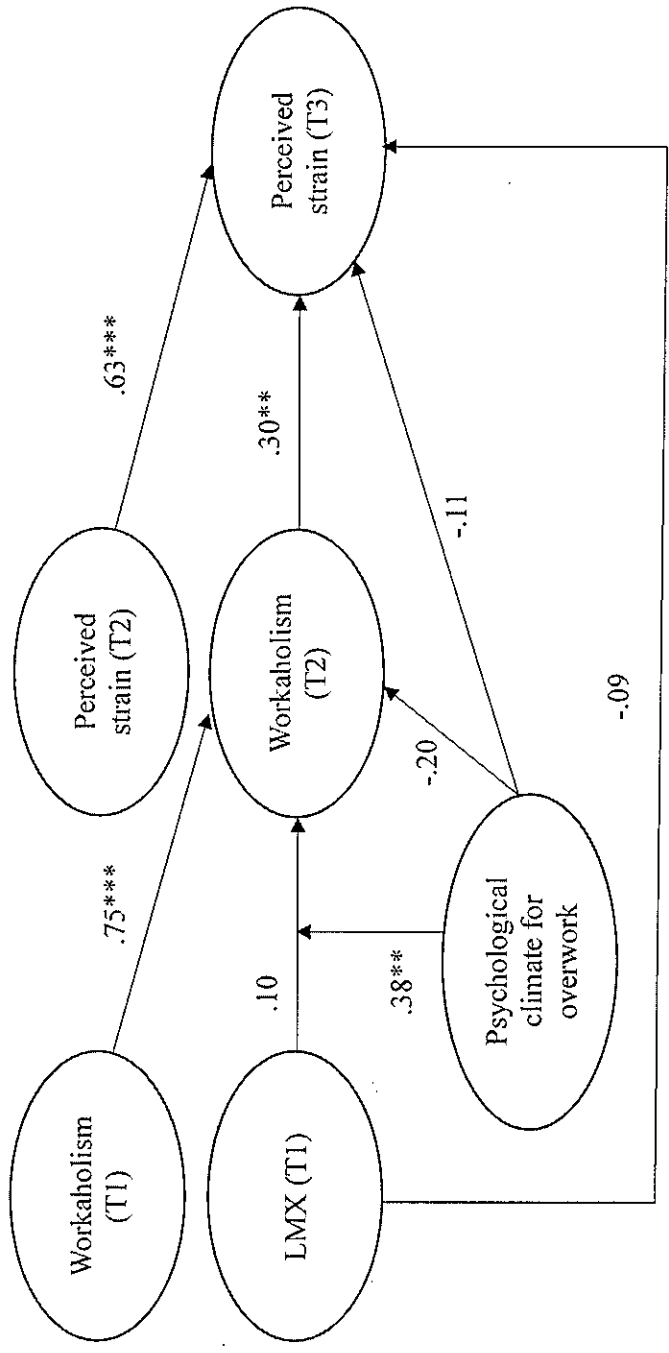


Figure 2. 3. Final structural model with standardized parameter estimates. T1 = Time 1; T2 = Time 2; T3 = Time 3. For the sake of clarity, covariances among exogenous variables and among the residuals of endogenous variables are not reported. The lagged paths from T1 variables to T2 strain were estimated (see Table 2.3) but are not reported.

* $p < .05$; ** $p < .01$; *** $p < .001$.



Chapter 3.

Article 2: Supervisors' Work Hours, Abusive Supervision and Leader-Member Exchange: How Supervisors' Hard Work Harms their Relationships with Subordinates

3.1 Abstract

While research shows that working long hours is detrimental to physical and mental health, there is a dearth of research on the influence of supervisors' work hours on subordinates. This paper addresses this gap by exploring the relationship among supervisors' work hours, abusive supervision, and leader-member exchange (LMX). Drawing upon ego depletion theory and the literatures on emotions and LMX, we argue that supervisors' work hours positively relate to abusive supervision behaviors through negative affect, which in turn, undermines LMX relationships with subordinates. We further posit that this process is exacerbated among subordinates with a strong relational self-concept. We tested our hypotheses in a three-wave study among a sample of 449 employees from multiple organizations and a multi-source study of an organizational sample of 181 employees. Results from structural equation modeling and multilevel modeling analyses supported our predictions, indicating that supervisors' long work hours may have detrimental consequences for subordinates. We discuss the theoretical implications of these findings for research on work hours and abusive supervision, as well as their practical significance for organizations and managers

3.2 Introduction

“Could you work 130 hours in a week?” In an interview with Bloomberg, Marissa Mayer, the former Chief executive of Yahoo stated that: “Yes, if you’re strategic about when you sleep, when you shower, and how often you go to the bathroom.” (Chafkin, 2016). Although this statement appears extreme, there is evidence that long work hours are common. According to the most recent figures from the International Labour Organization, 36% of workers around the world work long hours (i.e., more than 48 hours a week) and 12% work very long hours (i.e., more than 60 hours a week; Messenger, 2018). These percentages are even higher among employees who hold managerial positions (Feldman, 2002; Lanaj, Johnson, & Wang, 2016) as their work hours have increased over the past decades (Golden, 2009). Working long hours is the hallmark of the ideal worker (Acker, 1990; Blair-Loy, 2003), particularly for managers (Hewlett & Luce 2006; Reid, 2015). Indeed, as it is difficult to quantify the productivity of managers, the number of hours spent working may act as a surrogate (Golden & Altman, 2008). After all, managers working long hours should be high performers and expected to spend more time supervising their team and attending to their needs. Who wouldn’t see this positively?

Yet, there are drawbacks to having managers working long hours. First, long work hours do not necessarily result in increased productivity (Pencavel, 2014). Second, there is “overwhelming empirical evidence” (Anxo & Karlsson, 2019, p. 1) indicating that long work hours have negative consequences on individuals such as increased fatigue (Beckers et al., 2008; Dahlgren, Kecklund, & Åkerstedt, 2006; Van Der Hulst, 2003), psychological distress (Bannai & Tamakoshi, 2013; Kleppa, Sanne, & Tell, 2008; Ng &

Feldman, 2008; Van Der Hulst & Geurts, 2001), and job stress (Ng & Feldman, 2008). Third, though this area is scarcely explored, the consequences of supervisors' long work hours may extend to subordinates. As supervisors and subordinates are part of the same social system, what affects supervisors may also affect subordinates (Clark, Stevens, Michel, & Zimmerman 2016; Moos, 1984). Notably, it has been suggested that supervisors' work hours may dampen their interpersonal skills (De Raeve, Jansen, van den Brandt, Vasse, & Kant, 2008; Spector, Dwyer, & Jex 1988), which may negatively influence the quality of relationships with subordinates. This possibility needs attention because the quality of subordinate-supervisor relationships, most often studied through the lens of leader-member exchange (LMX) theory (Liden, Sparrow, & Wayne, 1997), is known to impact subordinates' attitudes and behaviors (Dulebohn, Bommer, Liden, Brouer, & Ferris 2011). As a first goal, this research intends to fill this gap by looking at the consequences of supervisors' work hours on LMX relationships with subordinates.

The second purpose of this study is to investigate how supervisors' work hours lead to LMX. We draw upon the above assumption that work hours impinge on supervisors' interpersonal skills and the idea that long work hours deplete individuals' ability to control their regulatory resources (Ganster, Rosen, & Fisher, 2016) to propose that abusive supervision will mediate the negative relationship between supervisors' work hours and LMX. Abusive supervision reflects "subordinates' perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and non-verbal behaviors, excluding physical contact" (Tepper, 2000; p.178). Self-regulation impairments, as described by ego depletion theory (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Muraven & Baumeister, 2000), are thought to underlie abusive

supervision (Tepper, Simon, & Park, 2017), making long work hours a likely antecedent to abusive supervision. The LMX literature (Graen, 1976; Graen & Scandura, 1987) and empirical research (Mackey, Frieder, Brees, & Martinko, 2015; Xu, Huang, Lam, & Miao, 2011) suggest that abusive supervision will, in turn, have a detrimental effect on LMX relationships. To further explore the depletion process associated with long work hours, we examine supervisors' negative emotional displays as an intervening mechanism between their work hours and abusive supervision. Drawing from affective events theory (Weiss & Cropanzano, 1996), we posit that supervisors working long hours lack the self-regulatory resources to control negative emotions, hence engage in abusive supervisory behaviors.

Third, this research explores a boundary condition associated with the relationships among supervisors' work hours, abusive supervision, and LMX. Research suggests that subordinates may differ in how they react to mistreatment (Tepper et al., 2017). An individual difference variable that may affect subordinates' reaction is the relational self-concept, which refers to the extent to which an employee defines him/herself based on dyadic relationships with others (Brewer & Gardner, 1996; Johnson, Selenta, & Lord, 2006). As it focuses on dyadic ties, the relational self-concept may influence how subordinates react to leaders' behavior (Li, Laurence, & Blume, 2018). Subordinates with strong relational self-concepts are sensitive to the leadership context (Johnson et al., 2006; Luo, Wang, Marnburg, & Øgaard, 2016). Therefore, they may react more negatively to abusive supervisory behaviors. Thus, we examine subordinates' relational self-concept as a moderator in the relationships among supervisors' work hours, abusive supervision, and LMX.

This research contributes to the literature in several ways. First, despite the seemingly straightforwardness of the work hours construct (Ganster et al., 2016), its consequences are largely misunderstood (Ganster et al., 2016). In particular, there is a scarcity of research on the consequences of supervisors' work hours on subordinates (e.g., Clark et al., 2016). This study innovates by examining the implications of supervisors' work hours for subordinates, which has both theoretical and practical relevance. Second, we contribute to the literature on destructive leadership by exploring supervisors' work hours as an antecedent to abusive supervision. Abusive supervisory behaviors (Tepper, 2000) are costly to organizations (Tepper et al., 2017) and undermine subordinates' well-being and performance (e.g. Mackey et al., 2015, Tepper et al., 2017). Preventing abusive supervision from occurring can only be addressed if the antecedents and processes leading up to it are identified (Barnes, Lucianetti, Bhawe, & Christian., 2015; Mackey et al., 2015). Though efforts have recently been made to address this gap, there is still insufficient knowledge in this area (Zhang & Bednall, 2015). By identifying long work hours as an antecedent to abusive supervision, this study adds to the literature by demonstrating that such behavior does not necessarily emanate from a toxic supervisor but also relates to the amount of time devoted to work.

Third, we also add to the abusive supervision literature by suggesting that abusive supervision may result from self-regulation impairments (Tepper et al., 2017). By examining the mediating role of supervisor's negative emotional displays between work hours and abusive supervision, we suggest that ego depletion underlies the influence of supervisors' work hours on abusive supervision. Finally, we explore the subordinate's relational self-concept as a moderator, hence identify an important boundary condition

to the effect of supervisors' work hours on LMX. More specifically, we show that the negative effect of abusive supervision on LMX is contingent on subordinates' relational self-identity and as such draw the attention of researchers to the role of individual differences in the effects of abusive supervision (Jian, Kwan, Qiu, Liu, & Yim, 2012).

Our hypothesized model (Figure 3.1) is tested across two studies using a confounded replication design (Kohler & Cortina, *in press*) in which each study brings specific design strengths. Study 1 examines the longitudinal indirect effect of the supervisor's work hours on LMX through abusive supervision as well as the moderating role of the subordinate's relational self-concept. Study 2 uses a multisource multilevel design to explore the role of the supervisor's negative emotional displays as an intervening mechanism between supervisors' work hours and abusive supervision. Altogether, the conjunction of a longitudinal study and a multilevel multisource study helps make our conclusions more robust.

[Insert Figure 3.1 about here]

3.3 Study 1: Theory Development and Hypotheses

We draw from the self-regulation impairment perspective (Tepper et al., 2017) to describe why long hours can lead supervisors to display abusive behaviors towards subordinates. Self-regulation helps understand both the mechanisms underlying the negative effects of long work hours (Ganster et al., 2016) and the antecedents of abusive supervision (Tepper et al., 2017). Central to the self-regulation impairment perspective is ego depletion theory (Baumeister et al. 1998; Muraven & Baumeister, 2000). Ego depletion theory states that individuals consume resources each time they need to control their thoughts, affects, and behaviors, and when they make choices (Baumeister,

Muraven, & Tice, 2000). However, these resources are limited. When people use these resources excessively (e.g., when they resist impulses for an extended period), they become depleted. It follows that their ability to further exert self-control is impaired so that they may fail to repress aggressive behaviors. Baumeister et al. (2000) use the analogy of a muscle to illustrate this theory: just like a muscle, the ability to regulate one's behavior and thoughts wanes with use but can be fully restored with rest (Baumeister, Vohs, & Tice, 2007; Muraven & Baumeister, 2000). In support of ego depletion theory, Dai, Milkman, Hofmann, and Staats (2015) found that nurses' compliance with hygiene rules decreased with fatigue, suggesting that depletion altered nurses' capacity to regulate their behaviors. However, recovery was associated with greater compliance, indicating that self-control can be restored with rest. Studies have also demonstrated that people tend to display more aggressive behaviors after a prolonged episode of self-control (Finkel & Campbell, 2001; Schmeichel, Vohs, & Baumeister, 2003; Stucke & Baumeister, 2006).

Task completion consumes regulatory resources because it requires attention and concentration. This is particularly true for supervisors (Tepper et al., 2017) because their tasks include decision making, solving complex situations and managing subordinates. For example, supervisors are likely to be exposed to daily demands that require the control of negative thoughts and emotions. Managing conflicting demands, handling unexpected delays on a project, or dealing with unsatisfied clients or subordinates are examples of such circumstances. Taken together, these activities require constant self-regulation efforts (Barnes et al., 2015; Ganster et al., 2016; Lanaj et al., 2016; Schmidt, Hupke, & Diestel, 2012). For instance, when a subordinate interrupts the supervisor to

ask for advice, negative thoughts (e.g., annoyance) are likely triggered in the supervisor. To comply with role expectations (Lanaj et al., 2016), the supervisor will likely refrain these negative thoughts and respond positively to the subordinate's request. However, this response will consume self-regulatory resources.

When a supervisor works long hours, the mundane situations like the one described above that require self-regulation efforts, are likely to add up over the day, rendering further self-control endeavors more difficult. In addition, long work hours increase the length of time during which individuals are exposed to the specific job stressors of their environment (Ganster et al., 2016), hence increase the need for self-regulation efforts (Baumeister et al. 2000; Nägel, Sonnentag, & Kühnel, 2015). A corollary to this increased exposure to stress factors is that long work hours reduce the time available for restoring one's resources (Fritz & Sonnentag 2006; Kühnel, Zacher, de Bloom, & Bledow, 2016; Lanaj, Johnson, & Barnes, 2014). Supporting this view, studies have reported positive relationships between work hours and stress and fatigue (e.g., Beckers et al., 2008; Johnson & Lipscomb, 2006; Kleppa et al., 2008; Ng & Feldman, 2008; Van Der Hulst & Geurts, 2001), even when one's work is experienced as enjoyable (Vohs, Baumeister, & Schmeichel, 2012).

Following the above logic, we expect that as a result of reduced self-regulation capabilities, supervisors who work long hours will have a greater propensity to engage in abusive behaviors towards subordinates. Abusive supervision includes behaviors such as belittling subordinates, making hurtful comments, or pointing out mistakes in front of others (Lian, Ferris, & Brown, 2012; Tepper, 2007) and is considered intentional (Mawritz, Greenbaum, Butts, & Graham, 2017). However, more recent

conceptualizations suggest that abusive supervision can also stem from contextual demands such as intense work pressure or low subordinate performance (Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012; Tepper, Moss, & Duffy, 2011) that weaken the supervisor's ability to self-control behavior towards subordinates. We thus posit that long hours may drive abusive supervision. Indeed, after having worked long hours, supervisors will likely lack the necessary resources to self-control their behavior and will eventually display aggressive behaviors towards subordinates (Lin, Ma, & Johnson, 2016). The same supervisor who has patiently addressed subordinates' requests all day may therefore abruptly make a hostile comment about a subordinate's mistake due to inability to further refrain the expression of frustration. Supporting this logic, Barnes et al. (2015) found that ego depletion mediated the positive effect of supervisors' poor sleep quality on abusive supervision. Other studies have shown that depleted individuals tend to behave less ethically (e.g., Barnes, Schaubroeck, Huth, & Ghumman, 2011; Christian & Ellis, 2011; Mead, Baumeister, Gino, Schweitzer, & Ariely, 2009), suggesting that fatigue indeed reduces the ability to self-regulate one's behavior. Based on the above logic, we offer the following hypothesis.

Hypothesis 1. Supervisors' work hours will be positively associated with abusive supervisory behaviors directed towards subordinates.

Abusive supervision renders the development of high-quality relationships between supervisors and subordinates unlikely. The LMX literature proposes that leaders develop relationships of various quality with each of their subordinates (Graen, 1976; Graen & Scandura, 1987). High LMX relationships are based on mutual trust and respect, support, and liking. Conversely low LMX relationships are transactional and limited to

contractual exchanges (Graen & Uhl-Bien, 1995). LMX relationships are thought to develop gradually through role episodes in which each member assesses the other member's response to various role expectations (Graen, 1976; Graen & Cashman, 1975). If role expectations are met, a relationship of high quality develops, otherwise the relationship remains of a low quality. A subordinate who perceives the leader as abusive is particularly unlikely to make a positive assessment of the leader's responses to role expectations. This is because subordinates attach importance to relational aspects such as support and trust (Dockery & Steiner, 1990; Maslyn & Uhl-Bien, 2001) in their interactions with supervisors. Therefore, abusive supervision likely hampers the development of high-quality LMX. Accrued research has reported abusive supervision to be negatively related to LMX (Mackey et al., 2015; Xu et al., 2011). We thus expect that abusive supervision will be negatively related to LMX. Taken together with Hypothesis 1, this suggests an indirect relationship between supervisors' work hours and LMX through abusive supervision. This leads to the following hypothesis.

Hypothesis 2. Abusive supervisory behaviors directed towards subordinates will mediate an indirect, negative relationship between the supervisor's work hours and LMX.

Accumulated evidence regarding the consequences of workplace mistreatment suggests these are generally damaging in various respects (Martinko, Harvey, Brees, & Mackey, 2012). However, the magnitude of these effects appears to vary as a function of subordinates' characteristics such as locus of control, self-esteem, and narcissism (e.g., Burton & Hoobler, 2011; Burton, Hoobler, & Kernan, 2011; Mitchell & Ambrose, 2012). In the context of the relationship between abusive supervision and LMX, we

propose that the trait-like characteristic (Cross, Bacon, & Morris, 2000; Cross, Hardin, & Gercek-Swing, 2011) of relational self-concept acts as boundary condition.

Subordinates with strong relational self-concepts attach utmost importance to dyadic relationships because they value such relationships as defining features of who they are as individuals (Cross et al., 2000; Johnson et al., 2006). Therefore, they are prone to develop harmonious relationships with others and tend to experience conflicts with others as a threat to their self-esteem (Cross et al., 2011).

Given the importance they attribute to dyadic relationships, subordinates with strong relational self-concepts may experience abusive supervision as hindering the development of LMX relationships. First, as they value dyadic relationships (Fehr & Gelfand, 2010), they are likely sensitive to any sign of hostility expressed by the supervisor (Li et al., 2018). Therefore, they may react more strongly when exposed to abusive supervisory behaviors and interpret them as indicating a worsening of LMX relationships. Second, because relational abuse threatens their identity (Holmvall & Bobocel, 2008), they are likely to flee such destructive relationships and turn to the more constructive relationships they have with other people. This should result in the development of transactional, rather than social, exchange relationships with the supervisor (Chen, Chen, & Portnoy, 2009). Indirect support for this argument can be found in a study by Jian et al. (2012) that reported subordinates with strong relational self-concepts to display a more negative relationship between abusive supervision and organizational-based self-esteem, suggesting that they are more negatively affected by abusive supervision. Accordingly, we expect the relationship between abusive supervisory behaviors and LMX to be more negative among subordinates with a strong

relational self-concept. This moderating effect should similarly apply to the indirect relationship between supervisors' work hours and LMX through abusive supervision.

The above discussion leads to the following hypotheses.

Hypothesis 3. Subordinates' relational self-concept moderates the negative relationship between supervisors' work hours and LMX such that this relationship will be stronger (and negative) (vs. weaker) when subordinates' relational self-concept is high (vs. low).

Hypothesis 4. Subordinates' relational self-concept moderates the indirect, negative relationship between supervisors' work hours and LMX through abusive supervision such that this indirect relationship will be stronger (and negative) (vs. weaker) when subordinates' relational self-concept is high (vs. low).

3.4 Study 1: Method

3.4.1 Sample and Procedure

The data for this study are part of a larger research project on leadership. We surveyed the alumni of a French business school at three points in time using a four-month time lag between measurement occasions. Prospective participants received an invitation email which included a secured link to the survey, provided information regarding the study objectives, and assured that participation would remain confidential.

Questionnaires could be answered in French or English. We obtained 540, 246, and 180 responses at Time 1, Time 2, and Time 3, respectively. Of these respondents, 91 were excluded because they changed supervisors between Time 1 and Time 3. This left a sample of 449 usable responses at Time 1. Supervisors' work hours, abusive

supervision, LMX, subordinates' relational self-concept, and role overload (as a control; see below) were measured at Time 1; abusive supervision was reassessed at Time 2; and LMX was measured again at Time 3. In the analyses, the autoregressive effects of the mediator (i.e., Time 1 abusive supervision) and the outcome (i.e., Time 1 LMX) variables were controlled for.

Following Goodman and Blum's (1996) guidelines, we conducted attrition analyses to examine whether those who remained in the sample at Time 3 vs. dropped out differed on the study variables. The logistic regression model for this analysis was non-significant, $\chi^2[4] = 2.07$, *ns*, and none of the predictors was significant, indicating that the data were missing completely at random¹ (MCAR; Enders & Bandalos, 2001; Ployhart & Vandenberg, 2010) across time. This allowed us to use the full information maximum likelihood (FIML) method to generate the model estimates in Mplus (Muthén & Muthén, 2010). The FIML method uses all the information available in the covariance matrix and is the recommended approach in longitudinal studies (e.g., Enders, 2010; Fitzmaurice, Laird, & Ware, 2004) when the data qualify as MCAR.

In the final sample used for analyses ($N = 449$), 53% of the respondents were women. Participants had an average age of 37.67 years ($SD = 9.00$), an average organizational tenure of 6.07 years ($SD = 5.67$), and an average tenure with supervisor of 2.95 years ($SD = 2.28$). Respondents worked in various industries including banking and insurance (16%), professional, scientific and technical services (11%), manufacturing (9%), trade (8%), health care and social services (5%), information and cultural industries (4%), construction (3%), and public administration (2%). Most

¹ The results of these analyses are available upon request.

respondents (59%) were employed in large organizations (> 1,000 employees), while 22% were employed in mid-sized organizations (100-1000 employees), and 19% in small organizations (< 100 employees).

3.4.2 Measures

French versions of the scales were created by using translation-back-translation procedures (Schaffer & Riordan, 2003). All scales were assessed on a 5-point agreement scale (1 = *strongly disagree*; 5 = *strongly agree*), except the abusive supervision measure, which was responded on a 5-point frequency scale (1 = *never*; 5 = *often, nearly every day*).

Supervisor's work hours. We measured supervisors' work hours at Time 1 using employees' response to the following question: "On average, how many hours do you think your immediate supervisor work per week?" In their reports, employees were invited to include the hours they thought their supervisor worked outside of the office.

Abusive supervision. We assessed abusive supervisory behaviors at Time 1 ($\alpha = .93$) and Time 2 ($\alpha = .93$) using the 13-item supervisor undermining measure developed by Duffy, Ganster, and Pagon (2002) (e.g., "How often has your immediate supervisor intentionally made you feel incompetent?"). Duffy et al.'s supervisor undermining scale differs from the most frequently used measure of abusive supervision (Tepper, 2000) by explicitly assuming intent on the part of the supervisor. However, the scale reflects a broad conceptualization of supervisory workplace abuse (Bowling, Camus, & Blackmore, 2015) and has large overlap with abusive supervision from both "a conceptual and operational standpoint" (Tepper, 2007; p.268), making it suitable to assess the construct of abusive supervision (Tepper, 2007).

LMX. LMX was assessed at Time 1 ($\alpha = .92$) and Time 3 ($\alpha = .95$) using Liden and Maslyn's (1998) 12-item scale (e.g., "I like my supervisor very much as a person") which comprises affect, loyalty, contribution, and professional respect as subdimensions.

Relational self-concept. The relational self-concept was assessed at Time 1 using a 5-item subscale of Johnson et al.'s (2006) Levels of the Self-Concept Scale (e.g., "Caring deeply about another person such as a close friend or relative is important to me"). Note that as one item from the original scale reduced the internal consistency of the scale, it was removed. The alpha coefficient for the reduced 4-item scale was .71.

Control variables. As our analyses controlled for the baseline levels of the mediator (i.e., abusive supervision) and outcome (i.e., LMX) variables, it was not necessary to include specific control variables (Zapf, Dormann, & Frese, 1996). However, because role overload could affect the subordinate's perception of the supervisor's work hours and reports of abusive supervision (Eissa & Lester, 2016), we included this variable (measured at Time 1) as a control in our analyses. As role overload did not affect the significance of the results, we removed this variable from our analyses, as suggested in recent recommendations regarding the proper use of control variables (e.g., Becker et al., 2016).

3.5 Study 1: Results

3.5.1 *Measurement Invariance*

We first examined the time invariance of the abusive supervision and LMX scales as their autoregressive effects were included in hypothesis tests. Such invariance tests establish the stability of the constructs' meaning across time (Little, Preacher, Selig, &

Card, 2007) and therefore their appropriateness for longitudinal analyses (Cheung & Lau, 2012). To reduce model complexity, we modeled abusive supervision and LMX using a disaggregation approach (Little, Rhemtulla, Gibson, & Schoemann, 2013): the items of abusive supervision were randomly assigned to three parcels while the items of LMX were assigned to four parcels corresponding to the dimensions of affect, loyalty, contribution, and professional respect. We used these parcels in all subsequent analyses, including measurement invariance tests. Using confirmatory factor analysis (CFA) and robust maximum likelihood estimation in Mplus 7.4 (Muthén & Muthén, 2010), configural invariance was supported for both abusive supervision, $\chi^2(5) = 4.35$, *ns*, comparative fit index (CFI) = 1.00, Tucker-Lewis index (TLI) = 1.00, root-mean-square error of approximation (RMSEA) = .00, and LMX, $\chi^2(15) = 48.44$, $p < .01$, CFI = .96, TLI = .93, RMSEA = .07. Setting equal factor loadings (i.e., metric invariance), and invariance among intercepts (i.e., strong invariance) and residuals (i.e., strict invariance) did not significantly decrease model fit. Therefore, the most parsimonious model with strict invariance measurement specifications for both constructs was incorporated in subsequent analyses.

3.5.2 Confirmatory Factor Analyses

The distinctiveness of our study variables was examined through a series of CFAs using robust maximum likelihood estimation in Mplus 7.4 (Muthén & Muthén, 2010).

Contrary to abusive supervision and LMX, the relational self-concept was directly represented by its four items. Results are presented in Table 3.1. The theorized three-factor model (i.e., Time 1 relational self-concept, Time 2 abusive supervision, and Time 3 LMX) yielded an adequate fit, $\chi^2(40) = 95.19$, $p < .01$, CFI = .93, TLI = .91, RMSEA

= .06, and outperformed more parsimonious models obtained by merging LMX with relational self-concept, $\chi^2(2) = 108.63, p < .001$, LMX with abusive supervision, $\chi^2(2) = 123.44, p < .001$, abusive supervision with relational self-concept, $\chi^2(2) = 109.73, p < .001$, or all three variables altogether, $\chi^2(3) = 472.67, p < .001$.

[Insert Table 3.1 about here]

3.5.3 Descriptive Statistics and Correlations

The means, standard deviations, reliability coefficients and correlations for the study variables are presented in Table 3.2.

[Insert Table 3.2 about here]

3.5.4 Hypotheses Testing

As our design involved measures of abusive supervision (i.e., the mediator) at Time 1 and Time 2 and of LMX (i.e., the dependent variable) at Time 1 and Time 3, we were able to test longitudinal mediation in a stringent manner (Maxwell & Cole, 2007). This is because we controlled for the autoregressive effects of abusive supervision and LMX in hypotheses tests. Hypotheses 1 and 2 were tested using a model in which (a) Time 2 abusive supervision was regressed onto Time 1 abusive supervision and Time 1 supervisor's work hours and (b) Time 3 LMX was regressed onto Time 1 LMX and Time 2 abusive supervision. Hypothesis 1 predicted that Time 1 supervisor's work hours would be positively associated with Time 2 abusive supervision while Hypothesis 2 proposed that abusive supervision would mediate the indirect relationship between Time 1 supervisor's work hours and Time 3 LMX. The model used to test these hypotheses yielded a good fit to the data, $\chi^2(93) = 213.39, p < .01$, CFI = .95, TLI = .94, RMSEA = .054. Time 1 supervisor's work hours had a significantly positive relationship with Time

2 abusive supervision ($B = .11, SE = .05, p < .05$). Hypothesis 1 is thus supported. Moreover, Time 2 abusive supervision had a significantly negative relationship with Time 3 LMX ($B = -.38, SE = .11, p < .01$). Using bootstrapping with 2,000 replications (Preacher & Hayes, 2008), the indirect effect of Time 1 supervisor's work hours on Time 3 LMX was found to be significantly negative ($B = -.04$, 95% bias-corrected confidence interval [CI]: $-.106, -.008$), which lends support to Hypothesis 2.

Hypothesis 3 predicted that the subordinate's relational self-concept would moderate the relationship between abusive supervision and LMX. To examine this hypothesis, we followed the most recent recommendations on latent interaction testing (Maslowsky, Jager, & Hemken, 2015; Sardeshmukh & Vandenberg, 2017). We first specified a baseline model that only included the main effects of the variables (including the subordinate's relational self-concept). We then used the XWITH command in Mplus to specify a second model that additionally included the latent interaction between Time 2 abusive supervision and Time 1 subordinate's relational self-concept predicting Time 3 LMX. Because fit indices are not available when a latent interaction term is included, we assessed whether the moderated model improved over the baseline model by computing a log-likelihood difference test between the two models (D-2LL; Dimitruk, Schermelleh-Engel, Kelava, & Moosbrugger, 2007) and examining the values for the Akaike Information Criterion (AIC) for the two models. A significant D-2LL and a smaller AIC value are indicative of a better fitting model. The baseline model had a good fit, $\chi^2(153) = 258.96, p < .01$, CFI = .95, TLI = .95, RMSEA = .045. However, the moderated model outperformed the baseline model, $D-2LL(1) = 6.45, p < .05$, AIC = 11359.355 (vs. 11362.521). In the moderated model, the interaction between Time 2

abusive supervision and Time 1 subordinate's relational self-concept was significant ($B = -.22, SE = .10, p < .05$). As illustrated in Figure 3.2, the relationship between Time 2 abusive supervision and Time 3 LMX was significantly negative ($B = -.40, SE = .12, p < .01$) when the relational self-concept was high (i.e., 1 *SD* above the mean) but was non-significant when it was low (i.e., 1 *SD* below the mean) ($B = -.20, SE = .13, ns$). Moreover, the difference between the two effects was significant ($B = -.20, SE = .09, p < .05$). Hypothesis 3 is thus supported.

Hypothesis 4 predicted that the subordinate's relational self-concept would moderate the indirect relationship between the supervisor's work hours and LMX via abusive supervision. We followed the same procedure as for Hypothesis 3 and first specified a baseline mediational model that included (a) the autoregressive effects for abusive supervision and LMX, (b) the effects of the supervisor's work hours on Time 2 abusive supervision and Time 3 LMX, (c) the effect of Time 2 abusive supervision on Time 3 LMX, and (d) the effect of Time 1 subordinate's relational self-concept on Time 3 LMX (Table 3.3). We then specified a moderated mediational model that included the latent interaction between Time 2 abusive supervision and Time 1 subordinate's relational self-concept predicting Time 3 LMX. The baseline model yielded a good fit, $\chi^2(151) = 311.95, p < .01, CFI = .94, TLI = .93, RMSEA = .049$. However, the moderated mediation model proved superior to the baseline model, $D-2LL(1) = 5.08, p < .05$, and had a smaller value for the AIC (12626.389 vs 12629.462). In this model, the interaction between Time 2 abusive supervision and Time 1 subordinate's relational self-concept was significant ($B = -.22, SE = .10, p < .05$). We tested the significance of the conditional indirect effects of Time 1 supervisor's work hours using 95% bias-

corrected CIs as obtained through 2,000 bootstrap resamples. This analysis revealed a significantly negative indirect effect of Time 1 supervisor's work hours on Time 3 LMX at high (1 *SD* above the mean) ($B = -.05$, $SE = .02$, 95% CI $[-.114; -.010]$) but not at low (1 *SD* below the mean) ($B = -.03$, $SE = .02$, 95% CI $[-.094, .000]$) values of the subordinate's relational self-concept. The difference between the two effects was significant ($B = -.02$, $SE = .01$, 95% CI $[-.064; -.002]$) (Table 3.3). Hypothesis 4 is thus supported.

[Insert Table 3.3 and Figure 3.2 about here]

3.6 Study 1: Discussion

Study 1 results provide support for the idea that the supervisor's work hours contribute to damage LMX relationships with subordinates by increasing the likelihood of supervisors engaging in abusive behaviors towards subordinates. Furthermore, this indirect relationship is stronger among subordinates with a strong relational self-concept. Study 2 seeks to further explore the relationship between the supervisor's work hours and abusive supervisory behaviors by investigating the role of the supervisor's negative emotional displays as an intervening mechanism in this process. Study 2 also extends Study 1 by using a multisource, multilevel design to the examination of the supervisor's work hours-abusive supervision relationship.

3.7 Study 2: Theory Development and Hypotheses

Study 1 posited that ego depletion is the underlying mechanism explaining the relationship between the supervisor's work hours and abusive supervision. Study 2 aimed at testing this rationale by examining the mediating role of the supervisor's negative emotional displays as a mediator. We have argued that supervisory

responsibilities are demanding tasks that require supervisors to self-regulate their emotions and behaviors. In particular, per the tenets of affective events theory (Weiss & Cropanzano, 1996), demanding work situations act as events that arouse affective reactions, including negative emotions such as anxiety, anger or frustration (Tepper et al., 2017; Yam, Fehr, Keng-Highberger, Klotz, & Reynolds, 2016). Consistent with the above theorizing on ego depletion, as work hours increase, the supervisor's ability to control for the display of such emotions will diminish. Therefore, the display of negative emotions is an indicator of the impairment of the supervisor's affective regulation system and as such attests to an ego depletion process. The supervisor's work hours should be positively associated with negative emotional displays.

We then theorize that failing to control for the expression of negative emotions may lead supervisors to be perceived as engaging in abusive behaviors towards subordinates. In support for this assertion, Mawritz, Folger, and Latham (2014) found that supervisors' anger and anxiety were positively related to abusive supervision. Moreover, meta-analytic findings indicate that supervisors' negative affect is positively related to abusive supervision (Zhang & Bednall, 2015). This may be explained by the idea that supervisors' negative affects are more likely to induce abusive behaviors. Indeed, both affective events theory and the literature on the emotional basis of aggressive behaviors (e.g., Fox & Spector, 1999) suggest that negative emotions lead to negative behaviors such as mistreatment (Eissa & Lester, 2016). Because subordinates represent safe targets (Tepper, 2007), interpersonal aggression is likely to take the form of abusive supervision. As emotions are proximal causes for behaviors (Weiss & Cropanzano, 1996), supervisors' failure to control for the display of negative emotions

should result in negative behaviors. Therefore, negative emotional displays by supervisors should relate to subordinates' perceptions of abusive supervisory behaviors. Our discussion leads to the following hypothesis.

Hypothesis 5. The supervisor's negative emotional displays will positively mediate the relationship between the supervisor's work hours and abusive supervisory behaviors directed towards subordinates.

3.8 Study 2: Method

3.8.1 Sample and Procedure

We obtained the agreement of the principal of a private secondary school in Eastern Canada to survey their teaching and non-teaching employees about a variety of issues including supervisors' work hours, supervisors' display of negative emotions, and abusive supervision. The school provided the research team with employees' email addresses and a detailed chart that allowed matching supervisors' with subordinates' responses. Each participant (i.e., supervisors and subordinates) received an email that described the study, provided a secured link to the survey, and assured them of the confidentiality of their responses. Of the 304 school employees, we obtained responses from 161 employees whose responses could be matched to those of 20 supervisors. Participants were predominantly women (66%), average age was 28.97 years ($SD = 7.91$), average organizational tenure was 8.60 years ($SD = 7.41$), and average tenure with the supervisor was 3.59 years ($SD = 3.20$). Approximately half of the respondents were teachers (53%) while the remainder held support staff positions (23%) such as clerks or monitors, or administrative and managerial positions (24%).

3.8.2 Measures

All scale items were translated into French using a translation-back-translation procedure (Schaffer & Riordan, 2003).

Supervisors' work hours. Supervisors reported the number of hours they worked per week, including any overtime and work performed outside of the office.

Supervisors' negative emotional displays. We assessed supervisors' negative emotions using a 5-item scale developed by Bull Schaefer and Palanski (2013) based on Diener, Smith, and Fujita's (1995) work. Subordinates indicated the frequency (1 = *never*; 5 = *almost every day*) at which their supervisors expressed various discrete negative emotions (i.e., irritation, anxiety, sadness, fear, dissatisfaction) during the past few weeks ($\alpha = .78$). As in previous research (e.g., Wang & Seibert, 2015), the frequency of the display of the five emotions was averaged to obtain an overall measure of supervisors' negative emotional displays.

Abusive supervision. We assessed abusive supervisory behaviors using Harris, Harvey, and Kacmar's (2011) shortened 6-item version of Tepper's measure (2000). Items were rated by subordinates using a 5-point frequency scale (1 = *never*; 5 = *almost every day*). A sample item is "My supervisor makes negative comments about me to others" ($\alpha = .91$).

Control variable. To rule out the potential confounding effect of role overload in the relationship between the supervisor's work hours and display of negative emotions (e.g., Cordes, Dougherty, & Blum, 1997), we included supervisors' role overload as a control in our analyses. Supervisors reported their perceptions of role overload using a 3-item

scale (e.g., “I never seem to have enough time to get everything done”) developed by Schaubroeck, Cotton, and Jennings (1989) ($\alpha = .92$).²

3.9 Study 2: Results

3.9.1 Confirmatory Factor Analyses

CFAs using the robust maximum likelihood method of estimation were conducted in Mplus 7.4 (Muthén & Muthén, 2010) to examine the dimensionality of the data. The two-factor model comprising the supervisor’s display of negative emotions and abusive supervision yielded a good fit to the data, $\chi^2(43) = 72.10$, $p < .01$, CFI = .95, TLI = .94, RMSEA = .060, and improved significantly over the one-factor model, $\Delta\chi^2(1) = 119.56$, $p < .001$. Thus, the two-factor model was retained.

3.9.2 Descriptive Statistics and Correlations

Descriptive statistics, zero-order correlations and reliability coefficients for Study 2 are reported in Table 3.2.

3.9.3 Hypothesis Test

To account for the nested nature of the data, we conducted the analyses using multilevel modeling in Mplus 7.4 (Muthén & Muthén, 2010). As recommended by Preacher, Zyphur, and Zhang (2010), we estimated all parameters simultaneously. Due to the small number of clusters in our sample, we followed recommendations (McNeish, 2017; Preacher et al., 2010; Zigler & Ye, 2019) to use multilevel modeling with observed variables rather than multilevel modeling with latent variables. We first specified a null

² As prior research suggests some demographic variables may relate to our study variables (e.g., Tepper et al., 2017), we initially controlled for gender, age, organizational tenure, and tenure with the supervisor in our analyses. Including these controls did not affect the significance of the results. Therefore, as is recommended in the literature regarding the proper use of control variables (e.g., Becker et al., 2015), we present the results of the analyses without the controls.

model to assess the amount of variance in the outcome variables that could be attributed to differences across supervisors. Results indicated that 5.3% of the variance in supervisors' displays of negative emotions and 8.3% of the variance in abusive supervision pertained to differences across supervisors (i.e., Level 2). These values, while relatively modest, justify that our data be handled through a multilevel approach (Bliese, Maltarich, & Hendricks, 2017).

In the model used for examining Hypothesis 5, supervisors' work hours and role overload were specified as Level 2 predictors while supervisors' displays of negative emotions were specified as a Level 1 predictor. Because Hypothesis 5 involved the effect of a Level 2 variable (i.e., supervisor's work hours) on Level 1 variables, we grand mean centered all predictors (Enders & Tofighi, 2007). The indirect effect of supervisors' work hours on abusive supervision via supervisors' display of negative emotions was tested using a Monte Carlo simulation (Preacher & Selig, 2012). Results are presented in Table 3.4. Supervisors' work hours were positively related to supervisors' display of negative emotions ($B = .022$, $SE = .01$, $p < .001$), which in turn was positively related to abusive supervision ($B = .324$, $SE = .08$, $p < .001$). The indirect effect of supervisors' work hours on abusive supervision was significant and positive ($B = .007$, $SE = .02$, 95% CI [.003, .013]). Hypothesis 5 is thus supported.

[Insert Table 3.4 about here]

3.10 Study 2: Discussion

The results from Study 2 extend those obtained in Study 1 by providing evidence that supervisors' work hours positively relate to abusive supervision through the intervening mechanism of negative emotions. They suggest that long work hours deplete

supervisors' regulatory resources, as indicated by the experience of negative emotions, which then lead supervisors to engage in abusive supervision. As these results were obtained from multiple sources, they provide a useful addition to Study 1's findings.

3.11 General Discussion

The objectives of this research were to (a) investigate how supervisors' work hours influence relationships with subordinates and examine a mechanism that underlies this association, (b) explore work hours as a novel, context-based antecedent to abusive supervisory behaviors, and (c) identify subordinates' relational self-concept as an important boundary condition related to this process. Two studies that employed different designs and samples were used to examine our hypothesized model.

Supervisors' work hours were found to foster abusive supervision and supervisors' negative emotional displays mediated this relationship. Moreover, abusive supervision was found to mediate a negative relationship between supervisors' work hours and LMX, and this effect was stronger among subordinates with a relational self-concept.

3.11.1 Theoretical Contributions

Our research contributes to the literature on work hours and, more generally, to the related literature on heavy-work investment (Snir & Harpaz, 2012) by demonstrating that the negative effects of long work hours extend beyond the individual. Specifically, supervisors' long work hours lead them to mistreat subordinates, ultimately affecting their relationship with them. Since high-quality LMX relationships relate to important individual and organizational consequences such as increased job performance and job satisfaction and lower turnover intention (Dulebohn et al., 2011), our studies indicate that the breadth of the negative effects of long work hours may have been overlooked.

Second, this research contributes to the abusive supervision literature. By identifying supervisors' work hours as an antecedent to abusive supervision, our findings reveal that abusive supervision can be triggered by situational factors (Barnes et al., 2015). Moreover, even though we treated work hours as a supervisor-related variable, research on the social contagion of work hours (Brett & Stroh, 2003; Eastman, 1998; Landers, Rebitzer, & Taylor, 1996) suggests that long work hours can also be induced by the organization (Zhang & Bednall, 2015). That is, supervisors' work hours are potentially influenced by the norms and practices that prevail in the organization. As such, our studies add to the nascent literature on the organizational antecedents of abusive supervision (Zhang & Bednall, 2015).

Third, our findings indicate that abusive supervision can emerge from an impairment of the ability to self-regulate negative emotions (Tepper et al., 2017). As shown in Study 2, negative emotions mediated the work hours–abusive supervision relationship, suggesting that long work hours may reduce the ability of supervisors to refrain the expression of negative affective states. Moreover, consistent with affective events theory, Study 2 found that the supervisor's negative emotions mediated the positive relationship between work hours and abusive supervision. This finding suggests that the negative emotions experienced by the supervisor accounted for the abusive treatments (e.g., aggressive behavior or negative comments) exerted by long work hours. However, it is plausible that other forms of abusive supervision (e.g., not complying with promises or failing to recognize good work) may be more deliberate. For example, the clinical psychology literature distinguishes between impulsive vs. premeditated aggressive behaviors (Stanford et al., 2003). Impulsive behaviors are those

mistreatments that are affectively loaded and characterized by a lack of control while premeditated behaviors are those that are planned and controlled (Barratt, Stanford, Dowdy, Liebman, & Kent, 1999). This possibility evokes a multi-faceted view of abusive supervision where different mechanisms lead to different forms of abuse. Though Tepper (2007) has suggested that abusive supervision may take various forms and Mitchell and Ambrose (2007) distinguished between active and passive abusive behaviors, this area of research remains largely unexplored. Future research could seek to examine how the various antecedents to abusive supervision relate to differentiated forms of mistreatment.

Fourth, the moderating role of subordinates' relational self-concept in the abusive supervision–LMX association suggests that subordinates differ in the extent to which they experience abuse as a threat to LMX relationships (Tepper et al., 2017). Subordinates with a strong relational self-concept are more likely to experience abusive supervision as undermining LMX while subordinates with low relational self-concept may be more tolerant of their supervisor's abusive behavior. These findings inform the self-concept literature: while individuals with a strong relational self-concept are more likely to build close relationships with others (Cross et al., 2011), our study reveals that they may also react more negatively when they feel mistreated. In an experimental study, Chen et al. (2009) observed that individuals with a strong relational self-concept responded less negatively to unfavorable treatment than those with low relational self-concept only when the exchange partner was a close other (e.g., a close colleague or friend). However, the authors acknowledge that their study only focused on a single negative event and that exposure to chronic mistreatment may lead individuals with a

strong relational self-concept to react more negatively. Our results are consistent with this view. More broadly, our findings add to the leadership literature by providing empirical support to the idea that subordinates' self-concepts are important moderators of the effects of leadership styles (Van Knippenberg, Van Knippenberg, De Cremer, & Hogg, 2004).

3.11.2 Practical Implications

This research has implications for both managers and organizations. Importantly, our results should raise concerns about the benefits of supervisors working long hours. The more supervisors put hours into their work, the more likely a destructive form of leadership (i.e., abusive supervision) is likely to emerge in treating subordinates, which hampers the development of high-quality LMX relationships. These are important drawbacks that organizations should consider, particularly as high LMX is known to have multiple benefits for organizations and employees (e.g., Dulebohn et al., 2011). Our results also suggest that abusive supervisory behaviors may not be necessarily determined by individual differences but can also result from supervisors spending much time working. Supervisors should therefore be aware that long work hours not only affect their own health but also how well they feel able to supervise subordinates' work. Organizations should seek to warn supervisors regarding the potential downsides associated with working long hours and make sure that policies aimed at curbing abusive supervision include reducing supervisors' workload and related job stressors. Finally, the moderating role of subordinates' relational self-concept indicates that some people are particularly vulnerable to the detrimental consequences of supervisors'

abusive behaviors. For example, women generally score higher on the relational self-concept (Cross et al., 2000). Organizations should pay special attention to these groups.

3.11.3 Limitations and Future Research Directions

Though our conclusions are based on the combination of a longitudinal study and a multi-source, multilevel study, this research has limitations. First, we did not test our full theoretical model in a single piece with both supervisors' negative emotional displays and abusive supervision as sequential mediators between supervisors' work hours and LMX. Second, the self-report nature of the data may have affected the reliability and the validity of our measures. For example, though the number of work hours was reported by supervisors in Study 2, they may still be subject to self-report biases such as recall bias (Ganster et al., 2016). Some scholars have argued that diaries provide more reliable estimates of work hours (Robinson & Bostrom, 1994). However, this assertion is controversial (Major, Klein, & Ehrhart, 2002). Furthermore, the relationships between variables are not thought to be affected by the self-report of work hours (Major et al., 2002). Also, consistent with the idea that depleted supervisors have a difficult time refraining the expression of negative emotions, we used a subordinate-rated, rather than a supervisor-rated, measure of the supervisor's emotional displays. However, this measure itself is also subject to biases due to subordinate-related characteristics (e.g., negative affectivity; Zhang & Bednall, 2015). We did not control for these variables and therefore cannot rule out the possibility that they act as confounding factors in the relationship between supervisors' emotional displays and abusive supervision. The use of self-reports may have also affected the assessment of abusive supervision in Study 2, as subordinates may have underreported the occurrence

of abusive supervisory behaviors due to fear that their responses would not remain confidential. However, our results suggest that such bias has not significantly affected the data as the mean for abusive supervision in Study 2 ($M = 1.49$, $SD = .76$) is similar to the meta-analytic mean obtained in recent research (Mackey et al., 2015: $M = 1.79$, $SD = .46$, overall data; $M = 1.52$, $SD = .69$, Canadian samples).

A third limitation pertains to our findings that supervisors' work hours and abusive supervision were positively related to one another in Study 1 while they were not in Study 2. One explanation may be that the number of supervisors' work hours was assessed by subordinates in Study 1 (vs. by supervisors in Study 2). Subordinates who perceive their supervisor as working long hours may partly base their judgment on behavioral cues that also relate to abusive supervision. For example, we can speculate that micro-management (i.e., supervisors overly controlling behaviors), which has been found to relate to abusive supervision (Tepper, 2007), may lead subordinates to overestimate the supervisor's work hours. Subordinates may indeed infer that closely controlling employees' work activities increase the supervisor's workload and therefore involves longer work hours. Second, the lack of a significant relationship between the supervisor's work hours and abusive supervision in Study 2 may mask the presence of competitive mediators (Zhao, Lynch, & Chen, 2010) that cancel each other out. It is indeed plausible that the positive indirect effect of the supervisor's work hours on abusive supervision through negative emotions is offset by a counteracting negative indirect effect. For instance, when supervisors work long hours, they develop increased skills, knowledge and mastery (Ng & Feldman, 2008) that feed feelings of competence and self-efficacy, which in turn, diminish their propensity to engage in destructive

leadership behaviors (Mumford, Gessner, Connelly, O'Connor, & Clifton, 1993). This possibility is worth exploring in future research.

Finally, though the use of a 4-month time lag in Study 1 allowed us to capture the effects of change in supervisors' work hours on change in abusive supervision and of the latter on change in LMX, future research could seek to replicate our findings using different time frames. Indeed, some research has examined ego depletion as unfolding over days (Barnes et al., 2015; Lin et al., 2016) while the effect of abusive supervision on LMX presumably occurs over a longer period of time. Combining experience sampling (i.e., daily measures) with longitudinal designs that use longer time lags might be useful to examine whether our findings remain similar across various time spans.

We encourage researchers to explore how supervisors' work hours influence subordinates' outcomes, such as well-being and performance. Supervisors' work hours may for example be experienced as a job stressor by subordinates if they perceive the norms in their workplace as encouraging working long hours. Following the stressor-strain literature, this would suggest a negative relationship between supervisors' work hours and subordinates' well-being. In contrast, as work hours increase, supervisors may allocate more time to activities that serve subordinates' achievements (i.e., discuss expectations, help on a task), thereby helping them reach performance goals. Another avenue for future research would be to examine the influence of the supervisor's experience of work (e.g., pleasant vs. stressful) as a moderator in the relationship between work hours and abusive supervision. Recent research suggests that the cognitions and affective states associated with work (e.g., workaholism, engagement) may alter the effect of work hours on health (ten Brummelhuis, Rothbard, & Uhrich,

2017). This possibility warrants further consideration as supervisors' inner experience may have implications on the strength and direction of the association between work hours and subordinates' related outcomes. Relatedly, research indicates that work hours have fewer negative consequences on employee health and attitudes when employees have a sense of control over work hours (Ganster et al., 2016; Sturman & Walsh, 2014), suggesting that ego depletion might be less of a problem when people volunteer for working more hours. Likewise, further research should explore whether ego depletion can be caused by supervisors' approach vs. avoidance motivation towards their tasks and perception of task difficulty (Johnson, Muraven, Donaldson, & Lin, 2017). Work hours might be less depleting if these are devoted to tasks that require few regulatory resources.

3.12 Conclusion

Long work hours are common among managers. Building on ego depletion theory and the literatures on LMX and emotions, we found evidence for a negative ripple effect of supervisors' work hours: supervisors who spend more hours working are more likely to be perceived by subordinates as engaging in abusive supervision, which negatively affects LMX relationships with subordinates. Moreover, subordinates' relational self-concept acted as a moderator in this process, such that the negative relationship between abusive supervision and LMX was exacerbated among subordinates with strong relational self-identities. These findings contribute to increase our understanding of how supervisors' work hours may affect relationships with subordinates and advance our knowledge of the contextual antecedents of, and boundary conditions associated with, abusive supervision.

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Tables and Figures

Table 3. 1. Results for Confirmatory Factor Analyses.

	χ^2	df	CFI	TLI	RMSEA	SB $\Delta\chi^2$	Δdf
Study 1							
1. Hypothesized three-factor model: relational self-concept (T1), abusive supervision (T2), leader-member exchange (T3)	95.190**	40	.93	.91	.06	—	—
2. Two-factor model, combining relational self-concept (T1) and abusive supervision (T2)	298.389**	42	.69	.59	.12	109.73**	2
3. Two-factor model, combining relational self-concept (T1) and leader-member exchange (T3)	268.449**	42	.73	.64	.11	108.63**	2
4. Two-factor model, combining abusive supervision (T2) and leader-member exchange (T3)	218.93**	42	.79	.72	.10	123.44**	2
6. One-factor model	431.238**	43	.53	.40	.14	472.67**	3
Study 2							
1. Hypothesized two-factor model: supervisor's display of negative emotions and abusive supervision	72.104*	43	.95	.94	.06	—	—
2. One-factor model	189.806**	44	.75	.69	.13	119.56**	1

Note. Study 1: $N = 449$, based on full information maximum likelihood estimation; Study 2: $N = 161$ subordinates and 20 supervisors; df = degrees of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root-mean-square error of approximation; SB = Santorra-Bentler scaled; T1 = Time 1; T2 = Time 2; T3 = Time 3.
* $p < .01$. ** $p < .001$.

Table 3. 2. Descriptive Statistics and Correlations for the Study Variables.

Study 1 variables		<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Supervisor's work hours (T1)		55.13	13.56	—					
2. Abusive supervision (T1)		1.48	0.67	.02	(.93)				
3. Abusive supervision (T2)		1.47	0.66	.13	.77**	(.93)			
4. LMX (T1)		3.57	0.84	.15**	-.51**	-.43**	(.92)		
5. LMX (T3)		3.44	1.00	.19*	-.47**	-.55**	.80**	(.95)	
6. Subordinate's relational self-concept (T1)		4.46	0.52	-.01	-.02	.05	.11*	.01	(.71)
Study 2 variables		<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Supervisor level									
1. Supervisor's work hours		52.00	7.20	—					
2. Supervisor's role overload		2.99	0.92	.14	(.92)				
Subordinate level									
3. Supervisor's negative emotional displays		2.00	0.71	.21*	-.14	(.78)			
4. Abusive supervision		1.49	0.76	.07	-.21**	.33**	(.91)		

Note: Study 1 correlations are based on the data available at a given time: T1 *N* = 430-449, T2 *N* = 178, T3 *N* = 120; Study 2: *N* = 161 subordinates and 20 supervisors; correlations between supervisor-level and subordinate-level variables were computed by assigning to subordinates the corresponding supervisor's score on the supervisor-level variable. LMX = Leader-member exchange; T1 = Time 1; T2 = Time 2; T3 = Time 3. Alpha reliabilities are reported in parentheses along the diagonal.

p* < .05; *p* < .01.

Table 3. 3. Study 1: Structural Equations Modeling Results for the Mediation Model and the Moderated Mediation Model.

Parameter estimates	Mediation			Moderation			Moderated mediation		
	Baseline model			Moderated model			Baseline model		
	B	SE		B	SE		B	SE	SE
Supervisor's work hours (T1) → Abusive supervision (T2)	.11*	.05					.11*	.05	.05
Abusive supervision (T1) → Abusive supervision (T2)	.79***	.07					.79***	.07	.07
Abusive supervision (T2) → LMX (T3)	-.38***	.11		-.36**	.12		-.38***	.12	.11
LMX (T1) → LMX (T3)	.74***	.10		.76***	.11		.74***	.11	.11
Supervisor's work hours (T1) → LMX (T3)	.10	.08					.10	.09	.08
Relational self-concept (T1) → LMX (T3)				.02	.10		.03	.09	.09
Relational self-concept (T1) * Abusive supervision (T2) → LMX (T3)							-.22*	.10	.10
Indirect effect	-.04	.02							
	95% CI [-.106, -.008]								
Moderated indirect effect									
High Relational self-concept (+1 SD)				-.40**	.12		-.05*	.02	.02
							95% CI [-.114, -.010]		
Low Relational self-concept (-1 SD)				-.20	.13		-.03	.02	.02
							95% CI [-.094, .000]		
Difference (± 1 SD)				-.20*	.09		-.02	.01	.01
							95% CI [-.064, -.002]		

Note: $N = 449$, based on full information maximum likelihood estimation. Entries are unstandardized path coefficients (B); $SE =$ standard error; CI = confidence interval; LMX = leader-member exchange; T1 = Time 1; T2 = Time 2; T3 = Time 3; SD = standard deviation.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3. 4. Study 2: Unstandardized Coefficients for Multilevel Analysis of the Effects of Supervisor's Role Overload, Work Hours and Negative Emotional Displays.

Variable	Supervisor's negative emotional displays		Abusive supervision	
	B	SE	B	SE
Supervisor's role overload (Level 2)	-.126**	.039	-.132	.114
Supervisor's work hours (Level 2)	.022**	.010	.002	.008
Supervisor's negative emotional displays (Level 1)			.324**	.082
Indirect effect			.007** 95% CI [0.003-0.013]	.002
Pseudo- R^2			.05	

Note: $N = 161$ subordinates and 20 supervisors. CI = confidence interval. Pseudo- R^2 = overall variance explained by both Level 1 and Level 2 variables (Xu, 2003).

* $p < .05$; ** $p < .01$.

Figure 3. 1. Theoretical model for the study.

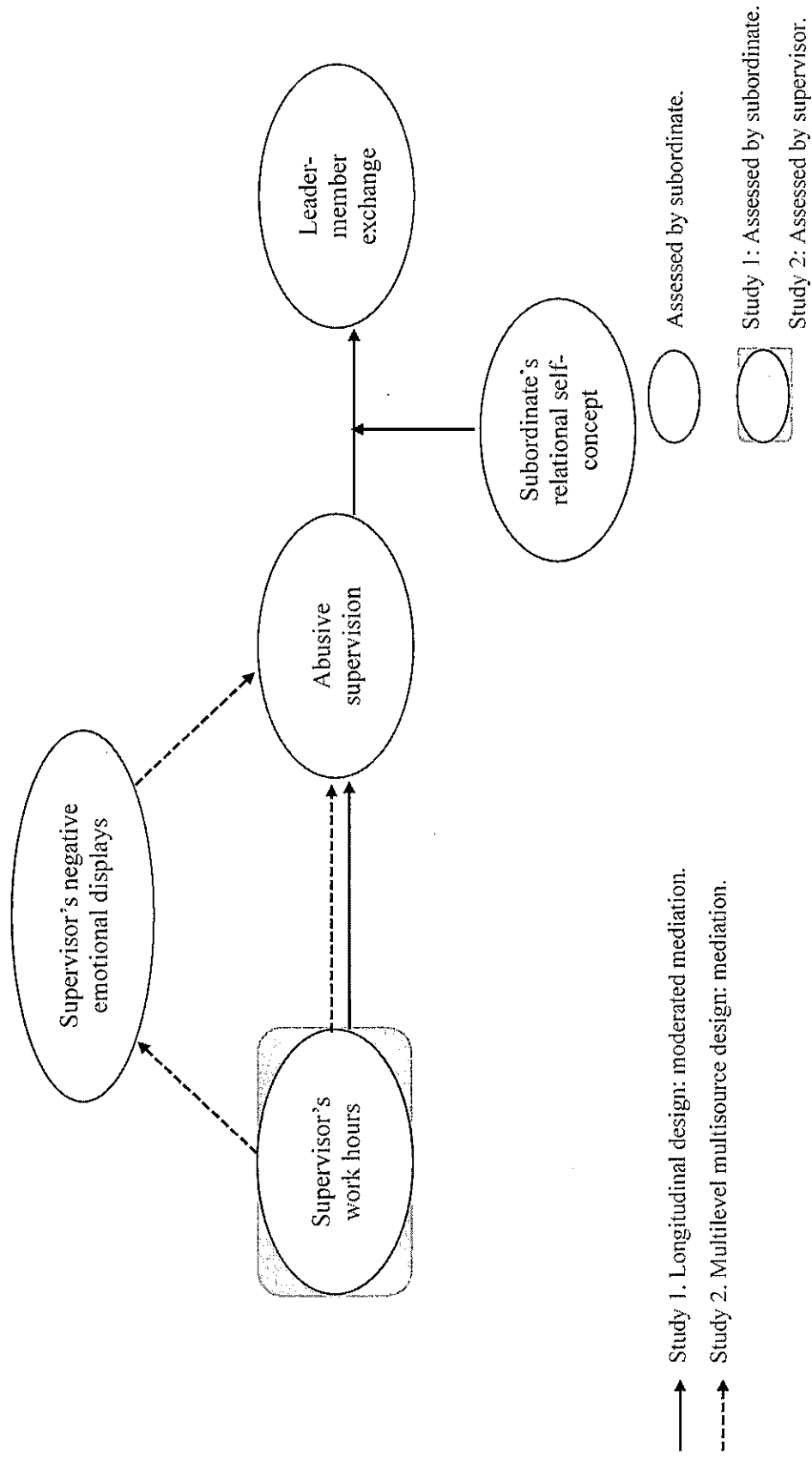
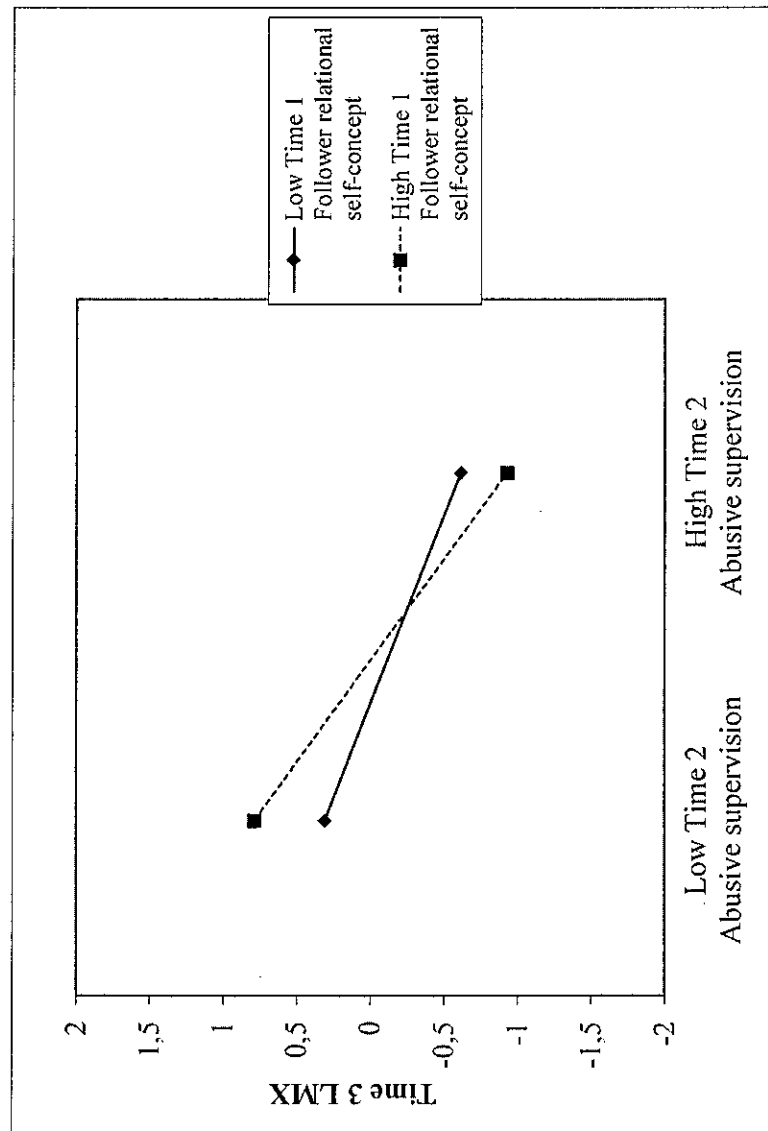


Figure 3. 2. Interaction between Time 2 abusive supervision and Time 1 subordinate's relational self-concept predicting Time 3 LMX, controlling for Time 1 LMX. Effects are represented at 1 SD below and above the mean of subordinate's relational self-concept.



Chapter 4.

Article 3: How Supervisors Set the Tone for Long Hours: Vicarious Learning, Subordinates' Self-Motives and the Contagion of Working Hours

4.1 Abstract

This paper develops a theoretical model that highlights the mechanisms underlying the contagion of long working hours from supervisors to subordinates at different stages of their relationship. Drawing upon social learning theory, we suggest that subordinates mimic the supervisor's working hours through vicarious learning. Focusing first on the role-taking stage of the supervisor-subordinate relationship, we identify four factors, namely supervisor's perceived status, subordinate's work centrality, congruence between organizational norms and supervisor's working hours, and subordinate's identification with the supervisor, that may influence the perceived desirability of adopting the supervisor's working hours. We then examine the relative influence of each of these factors through the lens of subordinates' self-motives. Turning, next, to the routinized supervisor-subordinate relationship, we elaborate on how social contagion may evolve over time. Lastly, the implications of our model as well as future research avenues are presented.

4.2 Introduction

Global indicators suggest that in the last century, working time has been decreasing in all developed countries (Lee, McCann, & Messenger, 2007). However, this overall pattern masks a large variability across groups of workers. Actually, the share of individuals who are working very long (i.e., above 50 hours a week) hours has been on the increase in the last decades (Golden, 2009). There is accumulating evidence that a substantial proportion of workers continue to put in long work hours (e.g., Angrave & Charlwood, 2015; Golden, 2009). In fact, there seems to be a significant mismatch between workers' ideal working hours and their actual working hours. In the United States, the proportion of overemployed workers – that is, workers who work more hours than they wish – has been estimated to vary between 6% and 50%, depending on the categories of workers (Golden & Gebreselassie, 2007).

A puzzling question therefore arises: Why do some people work long hours when they seem to resent it? Several explanations have been offered in the literature, among which is social contagion (Brett & Stroh, 2003; Cowling, 2007; Kodz, Kersley, Strebler, & O'Regan, 1998). Social contagion occurs when an individual's behavior changes as a result of interactions with others (Latané, 2000). Although several studies have found support for a social contagion effect of working hours (Brett & Stroh, 2003; Cowling, 2007; Eastman, 1998; Kodz et al., 1998; Landers, Rebitzer, & Taylor, 1996), to the best of our knowledge there has been only one empirical study that has demonstrated the role of the immediate supervisor in shaping subordinates' working hours (Zhang & Seo, 2016).

Supervisors are key agents who influence subordinates' behaviors, such as ethical behaviors (Falkenberg & Herremans, 1995; Grojean, Resick, Dickson, & Smith, 2004), safety behaviors

(Simard & Marchand, 1994; Weber, 1992), and organizational citizenship behaviors (Yaffe & Kark, 2011). Regan (1994) argued that supervisors are in a critical position to change long-hour norms (Blair-Loy, 2003; Gascoigne, Parry, & Buchanan, 2015) and suggested that leaders' own behaviors are important for such a change. However, the mechanisms underlying such influence are poorly understood (Zhang & Seo, 2016). If supervisors are indeed in a central position to change the working-hours norm, it is particularly important to go beyond the acknowledgement of this relationship and theorize *why* and *under what conditions* supervisors' behaviors contribute to shape subordinates' long working hours.

In this paper, we examine the processes by which newcomers may imitate their supervisor's working hours during socialization. Specifically, we identify social contagion as a process that may explain employees' voluntary engagement in working long hours in the absence of mandated overtime or excessive workload. Therefore, we focus on the many employees who have some leeway to adjust their working hours (typically, exempt employees), that is, the average number of hours they spend working per week. Employees who have this leeway may consciously or unconsciously imitate their supervisor's working hours through role modeling. We adopt a motivational perspective and build on social learning theory (Bandura, 1977, 1986) to account for the contagion of long working hours from supervisors to subordinates.

Social learning theory provides a relevant framework to account for working hours contagion because learning – particularly vicarious learning or modeling (i.e., learning through the observation of others' behaviors) – is a key process by which individuals change behaviors in organizational contexts (Manz & Sims, 1981). Using the tenets of social learning theory, we propose that subordinates engage in vicarious learning based on the perceived desirability of the expected outcomes associated with imitating their supervisor's working hours (e.g., status,

promotion, etc.). We further argue that imitation desirability is influenced by four factors—the perceived status of the supervisor, the subordinate’s work centrality, the congruence between organizational norms and supervisor working hours, and the strength of subordinate identification with the supervisor. We view the weight of these factors as a function of the subordinate’s self-motives (e.g., self-enhancement, self-verification, belongingness, and self-improvement).

Because leader-member exchange (LMX) plays an important role in the socialization process within the supervisor-subordinate dyad (Sluss & Thompson, 2012), we argue that the stage of LMX development is likely to have a critical role in the evolution of our model over time. We therefore begin by analyzing the long hours contagion processes during the role-taking stage (i.e., when the subordinate has not yet established a stable relationship with the supervisor; Graen & Scandura, 1987), and then discuss how the weight of the factors influencing imitation desirability changes when the supervisor-subordinate relationship evolves from the role-taking to the routinization stage (Graen & Scandura, 1987).

Our paper answers calls for a better understanding of the antecedents of working hour behaviors (Major, Klein, & Ehrhart, 2002), the practices influencing work-life balance (Kossek, Pichler, Bodner, & Hammer, 2011; McCarthy, Darcy, & Grady, 2010), and the role of modeling in behavior contagion within leader-subordinate dyads (ten Brummelhuis, Haar, & Roche, 2014). As such, our model makes several contributions. First, it adds to the social learning literature (Bandura, 1977) by delving into the motivational processes behind social learning, which have mainly been addressed through expected rewards and/or punishments. We argue that the subordinate’s self-motives are key boundary conditions for vicarious learning and act as motivational factors for social learning. Second, our model contributes to the literature on behavioral contagion by clarifying its underlying mechanisms. Although role modeling has been

argued to explain behavioral contagion in the workplace (e.g., Bommer, Miles, & Grover, 2003; Mayer, Aquino, Greenbaum, & Kuenzi, 2012; Robinson & O’Leary-Kelly, 1998), our model combines vicarious learning with imitation desirability to delineate the conditions under which subordinates will likely mimic the leader’s working hours. Third, we contribute to the family supportive supervisory behaviors (FSSB) literature by describing how the supervisor’s role modeling behaviors, a central component of family supportive behaviors (Hammer, Kossek, Zimmerman, & Daniels, 2007), influence subordinates’ working hours. In so doing, we emphasize the role of subordinates in the role modeling process. Lastly, by identifying the supervisor’s working hours as a predictor of the subordinate’s working hours, our model helps understand the factors influencing employees’ heavy work investment³ (Snir & Harpaz, 2012).

This paper is organized as follows. We first review how the vicarious learning literature can be useful to understand the contagion of working hours. Next, we present our model in the context of the role-taking stage of the supervisor-subordinate relationship and elaborate on its associated propositions. We then discuss how the routinization of the supervisor-subordinate relationship affects our model over time. We conclude with theoretical and practical implications as well as avenues for future research.

4.3 Vicarious Learning Regarding Working Hours

Social learning theory pinpoints the influence of role models in shaping individuals’ behaviors in organizational settings (Bandura, 1977). Because supervisors personify organizational norms and values (Burke, 2006; Scandura & Lankau, 1997), they constitute role models for their

³ We focus in this article on the behavioral component of working hours rather than on the mental states accompanying long working hours such as compulsive work and obsession toward work (Clark et al., 2016). Consequently, our paper contributes to the workaholism literature only to the extent that long hours are but one attribute of workaholism (Clark et al., 2016).

subordinates. Indeed, supervisors' behaviors have been shown to significantly influence subordinates' behaviors (e.g., Jaussi & Dionne, 2003; Potters, Sefton, & Vesterlund, 2007; Yaffe & Kark, 2011). Moreover, several leadership theories, particularly authentic leadership and ethical leadership theories, are grounded in the pivotal position of supervisors as role models (Avolio & Gardner, 2005; Manz & Sims, 1980; Trevino & Brown, 2005).

Evidence for subordinates engaging in vicarious learning of supervisory working hours is scarce. In a sample of Korean supervisor-subordinate dyads, Zhang and Seo (2016) reported a positive association between supervisors' and subordinates' working hours. Kirby and Krone (2002) observed that subordinates consider their supervisors' behaviors, including their overtime hours, when deciding to use or not work-family benefits. In the same vein, Hammer, Kossek, Yragui, Bodner, and Hanson (2009) reported that subordinates perceive their supervisors as role models in regard to work-life balance. Similarly, Koch and Binnewies (2015) found that role modeling mediated the positive association between supervisors' and subordinates' segmentation of the work and life domains. However, little is known about why and under what conditions subordinates imitate their supervisors' working hours.

A closer look at the socialization and social learning literature helps to form a clearer picture of the plausible mechanisms at play in the role-taking stage of the supervisor-subordinate relationship. When a newcomer joins an organization, a socialization process takes place (van Maanen & Schein, 1979). During this process, the newcomer learns the "ropes," which includes internalization of tacit rules (van Maanen & Schein, 1979), such as norms for working hours (Feldman, 2002). Because of the power asymmetry in the leader-subordinate dyad and because supervisors have frequent interactions with subordinates, they constitute privileged models for learning during the socialization process (Sluss & Thompson, 2012; Weiss, 1977).

However, not all subordinates are likely to adopt their supervisor's behaviors. The idea of vicarious learning (1977, 1986), which is at the core of Bandura's social learning theory (1977, 1986), is useful to understand why some subordinates mimic their supervisor's behaviors and others do not. Vicarious learning describes the process by which an individual begins to adopt behaviors through the observation of relevant models. The motivation to perform the behavior is a central aspect of vicarious learning, as an individual will mimic a model's behavior only if s/he observes that the model's behavior brings positive outcomes (i.e., rewards) to the model (Bandura, 1977). Positive outcomes increase the likelihood that a behavior is adopted while negative outcomes (i.e., punishments) decrease that likelihood (Manz & Sims, 1981). Vicarious learning is likely salient during the socialization process because the employee seeks to learn the behaviors appropriate to his/her role without incurring the cost of trials and errors (Bandura, 1986).

Based on the above considerations, we propose that the subordinate's perception of the desirability of imitating the supervisor's working hours constitutes a central aspect that motivates the subordinate to adopt the supervisor's working hours. We define *imitation desirability* as the extent to which the subordinate expects that imitating the supervisor's working hours will lead to positive outcomes (e.g., career advancement, salary increase, positive reputation). In other words, imitation desirability captures the valence, in the eyes of the subordinate, of the consequences of adopting the supervisor's working hours in terms of associated rewards and punishments. Although subordinates may anticipate a mix of positive and negative consequences, social learning theory postulates that individuals will be motivated to imitate a behavior if the perceived rewards exceed the perceived punishments (Bandura, 1977). We therefore conceptualize imitation desirability as an overall assessment ranging from extremely undesirable to extremely

desirable. Based on the above ideas, we propose that imitation desirability is a key cognitive process that underlies vicarious learning:

P1. The relationship between a supervisor's long working hours and his or her subordinate's long working hours is moderated by the desirability of imitating the supervisor's long working hours, as perceived by the subordinate. The more (less) desirable the subordinate perceives the imitation to be, the more (less) likely s/he is to adopt the supervisor's long working hours.

We now turn to the mechanisms that influence imitation desirability in the role-taking stage of the LMX relationship. Drawing upon role theory, LMX theory describes the development of the subordinate-supervisor relationship as a process involving three stages: role-taking, role-making, and role-routinization, respectively (Graen & Scandura, 1987). In the role-taking stage, the supervisor initiates a series of role episodes during which s/he learns the subordinate's skills and motivation levers by communicating role expectations and assessing the subordinate's responses. In the role-making stage, members gauge each other's responses against role expectations. This process eventually leads to the role-routinization stage where the quality of the relationship between the dyadic members stabilizes (Graen & Scandura, 1987). Working hours are likely established early in the socialization process because appropriate working hours are often implicit, and therefore from day one newcomers make decisions about when to leave the office and when to show up the next morning. We therefore place a greater emphasis on the articulation of the mechanisms of working hours' contagion during role-taking. We later analyze how these processes evolve when the LMX relationship stabilizes.

4.4 Antecedents of Imitation Desirability in the Role-Taking Stage

A central idea in social learning theory is that the decision to engage in a behavior depends on outcome expectations. In the case of vicarious learning, these expectations derive from two sources: vicarious reinforcements and self-reinforcements (Bandura, 1977; Manz & Sims, 1981). Vicarious reinforcements refer to the extent to which the observer perceives that a given model is punished vs. rewarded for his or her behaviors. Such reinforcements serve two purposes: they inform the observer of the appropriate behaviors in a given context, and they have motivational effects because they signal that observers may receive similar rewards if they engage in these behaviors (Bandura, 1977). Self-reinforcements refer to the observer's own valuation of the behavior. When the observer values a behavior, s/he will be motivated to display it because the self-satisfaction resulting from displaying the behavior is self-rewarding. While both externally rewarded and internally valued outcomes are likely to increase the individual's willingness to engage in vicarious learning (Bandura, 1986; Manz & Sims, 1981; Weiss, 1977), they are not necessarily aligned. For example, nurses who spend time socializing with patients may be punished if organizations view this as wasted time, yet they may continue to value this behavior. In addition to vicarious reinforcements and self-reinforcements, anticipated social approval may also encourage an observer to adopt a model's behavior while anticipated disapproval may have the opposite effect (Bandura, 1986).

In the context of working hours, the above discussion suggests that imitation desirability depends on the extent to which (a) the organization rewards the supervisor through tangible and intangible benefits (vicarious reinforcement), (b) the subordinate values working long hours (self-reinforcement), and (c) the supervisor's long working hours are consistent with organizational norms (social approval). We argue that these three aspects can be captured by (a) the supervisor's perceived status, (b) the subordinate's work centrality, and (c) the congruence between

organizational norms and the supervisor's long work hours, respectively. A fourth notion, the subordinate's identification with the supervisor (Ashforth, Schinoff, & Rogers, 2016), should also contribute to influence the desirability of imitating the supervisor's long working hours. As we explain below, identification with a supervisor may motivate the subordinate to mimic the supervisor's behaviors because of the personal and relational benefits it may generate (e.g., positive self-perceptions and positive impressions on the supervisor. Our model is illustrated in Figure 4.1.

[Insert Figure 4.1 about here]

4.4.1 Supervisor's Perceived Status

Social learning theory states that the observer assesses how desirable the outcomes of the role model's behaviors are by observing the environment's response to these behaviors (Bandura 1977, Bandura, 1986). In the context of working hours, the subordinate's perception of the supervisor's status is an important feature that will be used to gauge the organization's response to the supervisor's working hours. Supervisor's perceived status refers to the extent to which the supervisor is perceived to be valued by, and influential in, the organization (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). A number of cues may convey information on the supervisor's status during the role-taking stage of the supervisor-subordinate relationship. These cues may be communicated by the supervisor him/herself, or other stakeholders: for instance, the supervisor's track record of promotions and visible achievements such as securing large contracts or succeeding in important projects may be discussed within the team, in broader meetings, or alluded to in informal conversations during the socialization process (van Maanen & Schein, 1979). Other cues such as the supervisor's observable influence

over peers, higher-ranked organizational members, important clients, and suppliers may also convey information about the supervisor's status (e.g. Tangirala, Green, & Ramanujam, 2007).

A high status signals that the organization rewards the supervisor by granting him or her various benefits (e.g., recognition, access to resources, autonomy). Even if status may not specifically signal that the supervisor's long working hours are rewarded, it indicates that these hours are acceptable and can be safely imitated. Conversely, a low status may convey the impression that working long hours is either not required or even disapproved by the organization (for example, considered as indicative of low productivity), in which case this signal may be picked up by newcomers as discouraging imitation.

Altogether, this reasoning suggests that when a supervisor is perceived as having a high status in the organization, the subordinate will anticipate that mimicking the supervisor's behaviors – including long hours – will increase the chances to earn a similar status (Malhotra & Singh, 2016). On the other hand, a supervisor who is seen as having low status is less likely to be imitated because the subordinate may interpret the supervisor's low status as a form of "punishment." This is consistent with Bandura's suggestion (1977, 1986) that successful individuals are more likely to serve as models. This idea has received support in Weiss's (1977) and Adler's (1983) studies where subordinates' perception of their supervisor success in the organization resulted in greater likelihood of imitating the supervisor's behaviors.

A supervisor's perceived status may also convey information about the supervisor's degree of reward power. The more the supervisor is perceived to be influential, the more s/he will be seen as having the discretionary power to reward or punish the subordinate (e.g., deciding on his or her advancement or salary increases; Trempe, Rigny, & Haccoun, 1985). Subordinates may believe that they have more chances of obtaining those rewards if they model their supervisor's

behaviors, particularly in the early stage of the relationship with the supervisor. Indeed, during the role-taking stage, supervisors gauge subordinates' abilities using visible information (Goldberg & McKay, 2015). Long work hours may inform the supervisor about the subordinate's contributions.

P2. A supervisor's perceived status will be positively associated with the perceived desirability of imitating the supervisor's long working hours.

4.4.2 Subordinate's Work Centrality

Work centrality can be defined as a value or a core belief an individual holds about the relative importance of work in his or her life (Carr, Boyar, & Gregory, 2008). Values constitute a key aspect of one's self-concept (Carr et al., 2008; Hitlin, 2003). That is, core beliefs about desirable behaviors and end states contribute to build one's sense of self (Gecas, 2000; Hitlin, 2003).

Following the tenets of self-consistency theory (Korman, 1970, p. 32), self-conceptions motivate individuals to endorse and adopt attitudes and behaviors which are consistent with their self-views (Hitlin, 2003).

It follows that work centrality, as a key feature of the self, likely exerts a substantial impact on one's attitudes and behaviors towards work, and particularly toward one's quantitative investment as one gets socialized in a new work environment (Carr et al., 2008). Indeed, individuals fulfill multiple roles (e.g., employee, parent, community member) but tend to prioritize and invest more time in those they perceive to be important to the characterization of their self-concept (Greenhaus & Powell, 2003; Lobel, 1991; Stryker & Serpe, 1994; Thoits, 1991). Consequently, individuals for whom work is central are likely to regard long working hours as desirable (Ng & Feldman, 2008; Sharabi & Harpaz 2007; Snir & Harpaz 2002). Conversely, those with low work centrality are less likely to favor long working hours.

Supporting this view, Ng and Feldman's (2008) meta-analysis found a positive correlation between work centrality and work hours. Similarly, Carlson and Kacmar (2000) observed that work-centric individuals experienced greater work-family conflict than non-work-centric individuals and interpreted this result as an indication that work-centric individuals devoted more time to work than did non-work-centric individuals.

We therefore argue that the extent to which a subordinate is work centric will affect the perceived desirability of imitating the supervisor's long working hours because, as suggested by social learning theory, the subordinate's work centrality influences the assessment of the supervisor's working hours. A subordinate who is family centric is likely to have a less positive view of long working hours. If the supervisor works long hours, this subordinate will anticipate that imitating the supervisor will conflict with his or her self-views. Consequently, this subordinate will perceive that imitating the supervisor's long hours is not desirable and may work fewer hours to maintain a balance with family needs. Conversely, if the supervisor's working hours are congruent with the subordinate's work centrality, the subordinate may perceive imitating the supervisor's working hours as desirable and imitate the long hours early on.

We recognize that the relationship between work centrality and working-hour desirability may not always be straightforward. For example, Masterson and Hoobler (2015) and Ng and Feldman (2008) argued that family-centric individuals may perceive long working hours as a means to support their family by obtaining more economic resources. However, this pattern may be unusual among employees who have some leeway over the number of hours they work. These employees are more likely to be exempt employees (e.g., overtime is not paid for). Hence, working more than the required time would not directly yield surplus income.

P3. A subordinate's work centrality will be positively associated with the perceived desirability of imitating the supervisor's long working hours.

4.4.3 Congruence between a Supervisor's Long Working Hours and Organizational Norms

Understanding the supervisor's influence requires considering the context in which interactions take place (Greenhaus, Ziegert, & Allen, 2012; Matthew, Mills, Trout, & English, 2014).

Following this logic, we propose that the imitation desirability of the supervisor's long working hours will be influenced by organizational norms regarding working hours. We conceptualize these norms as reflecting the standards that are shared within the organization regarding the appropriate number of working hours (Birenbaum & Sagarin, 1976). As such, working hours represent a feature of an organization's culture (Bailyn, 1993; Schriber & Gutek, 1987; Thompson, Beauvais, & Lyness, 1999), defined as "a pattern of shared basic assumptions [...] that has worked well enough to [...] be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 2004, p.17). Consequently, expectations regarding working hours are internalized by newcomers during the socialization process (van Maanen & Schein, 1979) as a way to reduce anxiety and facilitate acceptance into the group (Ashforth & Mael, 1989).

Furthermore, awareness of organizational norms is important in the area of working hours because working hours reveal employees' dedication to their tasks (Acker 1990; Blair-Loy, 2003; Drago, Wooden & Black, 2009). That is, far from being anecdotal, working hours are visible artifacts of the meaning attributed to one's work life. Thus, if the supervisor's working hours are incongruent with organizational norms, that is, if the supervisor puts more hours into work than expected by the organization, then mimicking the supervisor may countervail organizational norms. This may have negative consequences for the employee and lead to feelings of rejection

by coworkers. In support of this view, Park, Fritz and Jex (2011) found that employees' behaviors regarding work-home segmentation were significantly related to their perception of segmentation norms within their workplace. Similarly, in their meta-analysis of extreme jobs (i.e., jobs with extreme expectations in terms of long working hours), Gascoigne et al. (2015) reported that long working hours often resulted from an identification with organizational values, as also pointed out by Alvesson and Willmott (2002).

Furthermore, organizational norms may prevail over individual preferences, particularly during the early stages of socialization (Van Maanen & Schein, 1989). Indeed, adjusting one's behavior to organizational norms bears more heavily than personal preferences in regard to assessing the expected outcomes of a behavior. For example, Sturges (2012) reported that while young professionals tended to value work-life balance (Lewis, Smithson, & Kugelberg, 2002), they still continued to behave in accordance with the long-hours culture in the workplace. Foucreault, Ollier-Malaterre, and Ménard (2018) found that organizational cultures perceived as favoring work-family integration reduced individuals' ability to enact their segmentation preferences. In the same vein, Eastman (1998) found that most individuals based their working hours on coworkers' working hours rather than on their preferences.

In addition, organizational norms may also, in some conditions, overrule the supervisor's organizational status. Bandura argued that a model's behavior is unlikely to be modeled if it is incongruent with the observer's perception of what is appropriate to do (i.e., the social norm), even when it is externally rewarded (e.g., through high organizational status). Such an "instance where unacceptable actions are rewarded is more apt to be viewed by observers as an eccentricity" (Bandura, 1986, p. 285). It is therefore important to account for organizational

norms, as they may influence the desirability of imitating the supervisor's working hours independently of the supervisor's status or the subordinate's work centrality.

The above discussion suggests that congruence between organizational norms and the supervisor's working hours will increase the desirability of imitating the supervisor. This view is consistent with Schein's (2004) idea that influence is stronger when messages are consistent across the organization. It is also consistent with related research indicating that the influence of supervisory support regarding work-family balance on subordinates' own work-family balance is stronger when it is consistent with organizational policies (Greenhaus et al., 2012).

P4. Congruence between organizational norms and a supervisor's long working hours will be positively associated with the perceived desirability of imitating the supervisor's long working hours.

4.4.4 Identification with the Supervisor

Identification with one's supervisor occurs when a subordinate internalizes some characteristics of the leader into his or her own identity (van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). A subordinate who identifies with the supervisor feels a strong connection with him or her, tends to feel associated with the supervisor's behaviors, and seeks this association. We argue that identification with the supervisor may drive the contagion of working hours during the role-taking stage of the relationship. Employees are likely to establish their working hours rather quickly when they join a new organization. At this stage, identification with the supervisor may develop based on perceived similarity or the supervisor's reputation and values (Gibson, 2004).

Identification with the role model increases the likelihood that the observer imitates the role model's behaviors (Ashforth et al., 2016; Bussey & Bandura, 1984; Kelman, 1961). Indeed, identification may foster vicarious learning above and beyond the influence of external rewards

for the behavior because of the personal and relational benefits the subordinate can expect from behaving consistently with the supervisor. First, imitating the supervisor's behavior may be self-satisfying for the subordinate (Kelman, 1961) and foster a positive perception of him/herself. Second, identification with the supervisor may encourage the subordinate to adopt the supervisor's behavior as a means to be positively perceived by him or her (Gu, Tang, & Jiang, 2015; Kelman, 1961). This process may be particularly salient in the role-taking stage, where the subordinate may use imitation as an ingratiation strategy to manage the supervisor's impressions (Wayne & Liden, 1994).

The role of identification as a driver of influence processes has been studied in related areas of research. For instance, it has been argued that identification with a mentor exerts a powerful influence (Ashforth et al., 2016; Kram, 1985) and that individuals tend to identify with their role models (Ashforth et al., 2016; Gibson, 2003, 2004). Furthermore, the role of identification with the supervisor has been recognized as a mechanism of successful influence (Ashforth et al., 2016; Chun, Yammarino, Dionne, Sosik, & Moon, 2009). Of relevance to our arguments, Zhang and Seo (2016) hypothesized that working hours' contagion within supervisor-subordinate dyads would be stronger when the subordinate's identification with the supervisor is higher. While they actually found the reverse (i.e., the relationship between supervisors' and subordinates' work hours was stronger among low-identifiers), their sample was composed of mature supervisor-subordinate dyads. In such dyads, as we discuss later, subordinates' need to demonstrate their value may be less pressing. Therefore, subordinates in these dyads may think the supervisor will be tolerant of deviations from long work hours' habits, suggesting that identification with the supervisor may reduce imitation desirability. In contrast, in the early development of the relationship, identification with the supervisor should increase the desirability of imitating one's

supervisor's work hours because supervisors are likely to interpret such imitation as an indication of successful work adjustment. Thus, subordinates who identify with the supervisor may imitate the supervisor's long hours in order to generate favorable impressions. Altogether, the above arguments suggest that identification serves as a powerful mechanism of vicarious learning in the role-taking stage of the supervisor-subordinate relationship.

P5. A subordinate's identification with the supervisor will be positively associated with the perceived desirability of imitating the supervisor's long working hours.

We have so far argued that four constructs, supervisor's perceived status, subordinate's work centrality, congruence between organizational norms and supervisor's long working hours, and subordinate's identification with the supervisor, act as antecedents to the desirability of imitating the supervisor's long working hours during the role-taking stage of the supervisor-subordinate relationship. However, our discussion has noted that in some cases, these antecedents may exert competing influences on imitation desirability. For example, a supervisor who works long hours may be successful, which should positively influence imitation desirability; yet, at the same time, a weak work centrality from the subordinate may reduce imitation desirability. To probe more deeply into the motivational process underlying vicarious learning, we suggest that individuals' self-motives may alter the influence of the above antecedents of imitation desirability. Self-motives act as lenses through which subordinates assess the value of the antecedents we identified, that is, the value of the expected outcomes associated with modeling the supervisor's working hours. Indeed, vicarious learning is not only conditional on the observer's expected outcomes but also on the value s/he places on the outcomes (Manz & Sims, 1981; Weiss, 1977). If the expected outcomes are not valued, they are unlikely to encourage imitation. Therefore, the predictive power of the four antecedents should depend on how the subordinate values them. We

argue that outcome desirability can be influenced by the following self-motives: self-enhancement, self-verification, belongingness, and self-improvement. We now proceed to detail how these self-motives operate in our model.

4.5 The Moderating Role of Self-Motives

Various motives guide human behavior (e.g., Baumeister, 1999; Cooper & Thatcher, 2010; Sedikides & Strube, 1995; Vignoles, Regalia, Manzi, Golledge, & Scabini, 2006). No consensus has emerged on a list of the most prominent motives, the relations between them, and their relative strength across settings (Vignoles et al., 2006). Based on a review of the literature on primary self-motives (Brewer, 1991; Vignoles et al., 2006), we identified five motives that might influence the perceived desirability of imitating one's supervisor's working hours: the need for self-verification, self-enhancement, self-improvement, personalized belongingness and depersonalized belongingness.

Studies demonstrated that individuals vary in the extent to which they are driven by these motives (Gregg, Hepper, & Sedikides, 2011; Hepper, Gramzow, & Sedikides, 2010). For instance, the self-enhancement need is higher among narcissists (Paulhus, 1998). Contextual factors also affect the activation and intensity of the different motives (Gregg et al., 2011; Sedikides & Gregg, 2003; Sedikides & Strube, 1995). For instance, the need for self-verification is stronger in established relationships than in emerging ones (Swann, 2009). Although these motives are not mutually exclusive (Cooper & Thatcher, 2010), the literature suggests that one motive is generally more salient than the others for a given person in a given situation.

4.5.1 *Need for Self-Enhancement*

The need for self-enhancement refers to individuals' desire to present themselves in a positive light and to receive feedback that improves their self-views (Baumeister, 1999). Individuals with

a strong need for self-enhancement strive to get a positive feedback on their behaviors, traits, and attributes (Pfeffer & Fong, 2005). In the workplace, the self-enhancement motive may prompt individuals to engage in behaviors that are well-regarded by others or rewarded because these behaviors would be perceived as enhancing one's and others' view of the self. For example, an individual may work long hours because s/he observes that in the organization putting in long hours is well regarded and give access to tangible (e.g., salary increase, advancement) or intangible (e.g., positive comments) rewards.

We previously argued that a supervisor's perceived status may influence the desirability of imitating the supervisor's working hours because it signals that imitating the supervisor may bring high status and benefits to the subordinate. Such visible incentives may be appealing for those with a high need for self-enhancement because they seek social approval. Conversely, those with a low need for self-enhancement may not be interested by such attributes if they do not value them. This rationale is consistent with Pfeffer and Fong's (2005) proposition that the self-enhancement motive is a compelling human need that accounts for compliance to authority in organizational contexts, particularly at the beginning of one's career path and when the source of authority is perceived as successful.

P6. A subordinate's need for self-enhancement will moderate the relationship between supervisor's perceived status and imitation desirability such that supervisor's perceived status will be more (less) positively associated with imitation desirability when the subordinate's need for self-enhancement is higher (lower).

4.5.2 Need for Self-Verification

The need for self-verification refers to individuals' desire to maintain a stable view of themselves across time and situations (Swann, Pelham, & Krull, 1989). This yearning has a strong influence

on people's behaviors because it prompts them to behave consistently with their self-views (Shamir, House, & Arthur, 1993). By doing so, individuals self-verify (Swann, 1987, 1990) and maintain a sense of cognitive coherence (Sedikides & Gregg, 2003). For example, someone who sees him/herself as fully dedicated to work will likely work long hours because doing so enhances the perception that s/he is dedicated to work. Thus, when assessing the desirability of modeling the supervisor's working hours, subordinates with a high need for self-verification will seek to maintain concordance with their self-views, which, in the context of work hours, implies looking at their work centrality. A subordinate who perceives him/herself as work centric will consider working long hours as desirable because such behavior is in line with his or her self-conception. Conversely, a subordinate with a low need for self-verification will likely attribute more importance to social expectations than to his or her self-view.

P7. A subordinate's need for self-verification will moderate the relationship between subordinate's work centrality and imitation desirability, such that subordinate's work centrality will be more (less) positively associated with imitation desirability when the subordinate's need for self-verification is higher (lower).

4.5.3 Need for Belongingness

The need for belongingness refers to the need to be affiliated with and accepted by others. As a primary human motive, this need can be defined as a "fundamental human motivation (...) to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships" (Baumeister & Leary 1995, p. 497). This need can be split into the need for personalized belongingness and the need for depersonalized belongingness. The distinction between these two needs is important because they lead to a differential impact of identification to individuals vs. groups (Cooper & Thatcher, 2010). Specifically, the need for personalized

belongingness should increase the salience of identification with persons (e.g., the supervisor), while the need for depersonalized belongingness should increase the salience of identification with groups (e.g., the organization, a business unit). In regard to working hours, depending which need dominates, the influence of the supervisor vs. the organization will be more salient.

The need for depersonalized belongingness (Mael & Ashforth, 2001) refers to the need to feel included in a group. We have argued that the socialization process fosters identification with the organization and the internalization of its values and norms, prompting the subordinate to adopt behaviors congruent with workplace norms. That is, individuals who identify with the organization are likely to adopt its norms (Barreto & Ellemers, 2000; Mackie, 1986). Conversely, those who do not comply with workplace norms run the risk of social exclusion (Abrams, Marques, Bown, & Henson, 2000; Marques, Abrams, & Serodio, 2001). The behaviors of those for whom inclusion within the group is critical may be particularly influenced by the organization's norms.

Altogether, the above reasoning suggests that when the subordinate's need for depersonalized belongingness is high, the influence of organizational norms on the imitation desirability of the supervisor's working hours is likely heightened. Indeed, because the subordinate strives to maintain social inclusion, the congruence between the supervisor's working hours and organizational norms regarding working hours will strongly influence his or her willingness to imitate the supervisor. Conversely, subordinates who are less concerned by their inclusion in the workplace should pay less attention to organizational norms.

P8. A subordinate's need for depersonalized belongingness will moderate the relationship between congruence of supervisor's working hours with organizational norms and imitation desirability such that congruence will be more (less) positively associated with

imitation desirability when the subordinate's need for depersonalized belongingness is higher (lower).

The need for personalized belongingness refers to the need to build and maintain close personal relationships with other individuals and to feel validated as a person (Rogers & Ashforth, 2017). Individuals with a high need for personalized belongingness are sensitive to signals that indicate they are liked vs. rejected by significant others (Baumeister & Leary, 1995). For subordinates high on this need, identification with the supervisor should play an important role in shaping the imitation desirability of the supervisor's working hours. Indeed, these subordinates will be eager to maintain a close relationship with the supervisor. They will find it desirable to model their supervisor's behaviors because they may see imitation as the safest way to maintain a bond with the supervisor.

P9. A subordinate's need for personalized belongingness will moderate the relationship between identification with the supervisor and imitation desirability such that identification with the supervisor will be more (less) positively associated with imitation desirability when the subordinate's need for personalized belongingness is higher (lower).

4.5.4 Need for Self-Improvement

The need for self-improvement refers to the desire to improve aspects of the self (Sedikides, 1999) to become closer to the desired self (Banaji & Prentice, 1994). This includes developing skills, adopting new attitudes, or improving well-being (Sedikides, 1999; Sedikides & Strube, 1997). To obtain information to reach their goals, individuals who wish to self-improve tend to make upward comparisons (Taylor et al., 1995). Therefore, the supervisor is likely to constitute a relevant target of comparison, even more so when the subordinate identifies with him or her (Gibson, 2003; Lockwood & Kunda, 1997). Indeed, a subordinate high in need for self-

improvement, will likely compare his/her behaviors to those of the supervisor in order to identify specific supervisory behaviors that may help to self-improve.

Long working hours may be perceived as relevant behaviors to mimic for self-improvement because they may seem to result in various desirable outcomes (e.g., expertise, status, self-esteem). For instance, subordinates who attribute the supervisor's professional expertise to the long hours s/he devotes to work may mimic the supervisor in the hope of improving their own expertise.

P10. A subordinate's need for self-improvement will moderate the relationship between identification with the supervisor and imitation desirability such that identification with the supervisor will be more (less) positively associated with imitation desirability when the subordinate's need for self-improvement is higher (lower).

4.6 Imitation Desirability in the Role-Routinization Stage

Our model has focused so far on highlighting the mechanisms involved in working hours' contagion during socialization (role-taking stage). However, the weight of the mechanisms described in our model may change as the relationship with the supervisor becomes more established. That is, we expect that a critical aspect that may affect our model over time is the *stage* of the relationship between the subordinate and the supervisor, as conceptualized in the LMX literature. We argue that, as the relationship becomes routinized, the weight of some predictors of the contagion process changes, with the stage of LMX development being a moderator in this process. Supporting this view, Graen & Uhl-Bien (1991) proposed that the supervisor's influence differs depending on LMX stage. Past research has also emphasized the role of LMX stage on various constructs such as trust in supervisor, performance ratings,

objective performance, and effectiveness of the supervisor's behavior (e.g., Duarte, Goodson, & Klich, 1994; Frazier, Tupper, & Fainshmidt, 2016; Vecchio, 1998).

Among plausible changes, we expect that LMX stage will affect the influence of work centrality, identification with supervisor, and supervisor's perceived status on imitation desirability. Scholars have suggested that the need to self-verify may be undermined during the emergence stage (i.e., role-taking) of a dyadic relationship, particularly if it is asymmetric (Swann, 2009). However, the need to self-verify may resurge as the relationship becomes routinized because the tendency to maintain consistency between one's behavior and one's self-views can be more safely expressed (Liden, Wayne, & Stilwell, 1993; Park, Sturman, Vanderpool, & Chan, 2015). Applying this logic to our model, we posit that the influence of work centrality will increase as the LMX relationship evolves toward routinization because the need to self-verify may be expressed more intensely at this stage. A subordinate low in work centrality may for example first imitate the supervisor's long working hours and then gradually reduce his or her working hours so as to restore consistency with the self.

In contrast, the need for personalized belongingness may be particularly salient during the role-taking stage of LMX as the subordinate strives to establish positive relationships at work (Baumeister & Leary, 1995). Once a positive relationship with the supervisor is established, the need to form close interpersonal bonds should be met and therefore less salient (Baumeister & Leary, 1995). This suggests that identification with the supervisor will be particularly influential in the role-taking stage, and will then decrease as the routinization stage is reached. Furthermore, at later stages of the relationship, identification is likely accompanied by a relationship of high quality (Gu, Tang, & Jiang, 2015). In such situation, the subordinate's contribution is recognized

(Dockery, Steiner, & Dirk, 1990). Consequently, the subordinate may feel freer to work shorter hours (Zhang & Seo, 2016). Identification would then have less impact on imitation desirability.

Lastly, we have previously argued that supervisor's perceived status would positively influence the desirability of mimicking supervisory long hours because of the association of status and reward power in the subordinate's eyes. However, as the relationship stabilizes, the supervisor will hold a well-informed view of the subordinate's performance (Goldberg & McKay, 2015). The subordinate may be conscious that the weight of working hours on the supervisor's decisions regarding reward allocation will decrease accordingly. Therefore, the influence of the supervisor's perceived status on working hours' desirability should diminish.

P11. The stage of LMX development will moderate the influence of the factors of perceived desirability of imitating the supervisor's long working hours such that, in the routinization (vs. role-taking) stage of LMX: (a) the relationship between subordinate's work centrality and imitation desirability will be stronger (vs. weaker); (b) the relationship between subordinate's identification and imitation desirability will be weaker (vs. stronger); c) the relationship between supervisor's perceived status and imitation desirability will be weaker (vs. stronger).

Other contextual changes may occur over time, triggering changes in the desirability of imitating the supervisor's long working hours. For instance, the subordinate's work centrality may change following a life event such as the birth of a baby or the development of a disease (Sharabi & Harpaz, 2007). Similarly, organizational norms may evolve when the executive board establishes new cultural norms (Schein, 2004). Our model suggests that such changes will modify the relative weight of the factors of imitation desirability.

4.7 Discussion

4.7.1 Theoretical and Practical Contributions

This paper draws upon social learning theory (Bandura, 1977, 1986; Manz & Sims, 1981) to propose a model that analyzes the mechanisms underlying the contagion of long working hours from leaders to subordinates at different stages of their relationship. As such, it makes several important contributions. First, by linking vicarious learning to self-motives, we advance knowledge about social learning. In vicarious learning, motivation is viewed through the lens of the expected outcomes associated with the model's behavior (i.e., rewards and/or punishments; Bandura, 1986). However, little attention has been devoted to the process by which observers gauge the various and sometimes conflicting outcomes of the model's behavior. Although Bandura (1977) acknowledged the contradictory nature of some outcomes, he did not explore how the observer processes this information. We suggest that an individual's self-motives help elucidate how the outcomes of the model's behavior are cognitively processed and, as such, influence vicarious learning. This proposition also has implications for leadership theories that describe role modeling as a mechanism promoting leader effectiveness (e.g. authentic, ethical, charismatic, or transformational leadership). In this regard, the nascent stream of research that examines the role of subordinates' self-concept (e.g., Howell & Shamir, 2005; Jackson & Johnson, 2012) and followership (e.g., Avolio, Walumbwa, & Weber, 2009; Epitropaki, Kark, Mainemelis, & Lord, 2017) in leadership effectiveness is promising.

Second, our model contributes to deepening the understanding of the mechanisms related to behavioral contagion. Several scholars have used social learning as a framework to account for behavioral contagion in the workplace (e.g., Bommer et al., 2003; Mayer et al., 2012; Robinson & O'Leary-Kelly, 1998). However, to our knowledge, no specific model has been proposed that analyzes the process of such contagion over time. Our model is a preliminary attempt at doing so

and specifically depicts the why (e.g., key antecedents) and when (e.g., self-motives as boundary conditions and, therefore, who is more likely to imitate) of vicarious learning in the context of long working hours.

Third, the present model contributes to the FSSB literature. In the last decade, there has been a growing interest in the role of supervisors in facilitating employees' work-life balance (Li, McCauley, & Shaffer, 2017; Straub, 2012). We contribute to this line of research because long working hours have a major impact on work-life balance (Haar, Sune, Russo, & Ollier-Malaterre, *in press*; Thompson et al., 1999). Our theoretical model heeds the call of Hammer et al. (2007) to clarify the mechanisms of FSSBs (or lack thereof). Furthermore, the FSSB literature refers to role modeling as "the extent to which supervisors provide examples of strategies and behaviors that employees believe will lead to desirable work-life outcomes" (Hammer et al., 2009, p. 4). As such, this literature views role modeling as an active strategy that a supervisor consciously implements (e.g., through discussing benefits of their behaviors with subordinates) to influence subordinates' work-life balance. Our model suggests role modeling is also influenced by the subordinates' perception of the benefits attached to adopting their supervisor's behaviors. This echoes Gibson's (2004) suggestion that while leaders are urged to act as role models, the effectiveness of role modeling is forged by the observers' representations. Both views need to be investigated to fully comprehend how and when leaders can serve as relevant role models.

Finally, our paper contributes to the literature heavy work investment (Snir & Harpaz, 2012) by suggesting that overinvestment at work, which is often thought to be caused by individual characteristics (e.g., demographics, personality), may also be determined by the social environment, particularly the supervisor's own overinvestment in work activities. Supporting this argument, Mazzetti, Schaufeli, and Guglielmi (2014) found that workaholism was predicted by

both personal characteristics and an overwork climate in the organization. Although workaholism involves more than working long hours (Clark, Michel, Zhdanova, Pui, & Baltes, 2016), our approach supports the idea that the antecedents of workaholism might include the supervisor's own workaholism (Ng, Sorensen, & Feldman, 2007).

From a practical perspective, our model points to how cultures promoting long hours can spread in organizations. Substantial evidence indicates that persistent long hours negatively affect employee health and well-being (e.g., Goh, Pfeffer, & Zenios, 2016; Sparks, Cooper, Fried, & Shirom, 1997; Virtanen et al., 2012). Therefore, understanding how supervisors' long hours influence their subordinates' own working hours offers opportunities for interventions aimed at fostering more supportive and sustainable work cultures. With this aim in mind, executives and supervisors may want to monitor their own work hours, as these can be contagious. Managers who want to act as role models should adopt leadership styles such as transformational leadership that foster identification (Walumbwa & Hartnell, 2011). Organizations can also develop a healthier culture regarding working hours by promoting norms that keep supervisors' working hours within reasonable limits and ensuring career success for supervisors who work fewer hours. In addition, the expectations regarding work hours should be disclosed during the selection process to prevent incongruence between newcomers' and the organization's expectations. Employees' expectations regarding working hours, as we argued, are grounded in their work centrality. If these expectations cannot be met, employees are likely to leave due to misfit between their values and organizational norms, as per the tenets of the attraction-selection-attrition model (Schneider, 1987).

4.7.2 Boundary Conditions and Future Research

For the sake of parsimony, our theorizing has exclusively focused on the core process of working hours' contagion. However, researchers wishing to develop this model may notice that it is bounded by several factors. First, our theorizing unpacks social contagion processes in traditional employment situations where subordinates have one main role model, (i.e., their supervisor). However, future research could examine how social contagion unfolds when individuals expand the pool of possible role models at later career stages (Gibson, 2003), report to several supervisors simultaneously, or have worked with other supervisors in the past. It is reasonable to expect that exposure to multiple role models who exhibit different work patterns may reduce every single model's influence on subordinate behaviors and render the subordinate's work centrality a more critical factor of imitation desirability.

Second, examining the effects of gender would be an interesting avenue. Gender may moderate the impact of work centrality on imitation desirability. Research indicates that women are still expected to assume a greater share of responsibilities for household care, suggesting that long working hours may be more desirable, socially acceptable, and feasible, for work-centric men than for work-centric women (Greenhaus, Peng, & Allen, 2012). In addition, vicarious learning is assumed to be bounded by similarity between the observer and the model such that vicarious rewards and punishments "exert little impact when the modeled conduct is so markedly inappropriate to the sex, status, or social role of observers" (1986, p. 285). Therefore, gender dissimilarity may lessen identification with the supervisor as there is less interpersonal attraction (Kark, Waismel-Manor, & Shamir, 2012) in less homophilous dyads (McPherson & Smith-Lovin, 1987).

Third, future research should investigate the role of contextual factors such as job security and national culture. Imitating the supervisor's long work hours when job security in one's

country, industry or occupation is low, may act as a strategy to keep one's job. In addition, the cultural context likely influences several constructs in our model, such as the degree of work centrality. The long work hours norm in North America reveals the dominance of a protestant work ethic (Dumas & Sanchez-Burks, 2015; Williams, Blair-Loy, & Berdahl, 2013), suggesting that self-worth derives from one's dedication to work (Morrow, 1983). In cultures dominated by a protestant work ethic, subordinates, supervisors, and team members may share the belief that working long hours is desirable (Hirschfeld & Feild, 2000), leading to more alignment among subordinates' preferences, supervisors' behavior, and organizational norms. National culture may also influence subordinates' self-motives. Culture influences the construction of the self (Markus & Kitayama, 1991; Triandis, 1989), while the self-concept in turn impacts the salience of self-related motives (Cooper & Thatcher, 2010; Cross, Hardin, & Gercek-Swing, 2011). The self-concept's orientation, that is, the tendency to define the self on the basis of individual attributes, relationships or group belonging (Cooper & Thatcher, 2010), is thought to be shaped by one's cultural context (Markus & Kitayama, 1991; Triandis, 1989). Individuals raised in Western cultures tend to have an individual self-concept orientation, which is presumably associated with greater needs for self-enhancement and self-verification. In contrast, people raised in Asian cultures tend to hold relational or collective self-concept orientations (Cross et al., 2011; Markus & Kitayama, 1991), which would make the needs for personalized and depersonalized belongingness more salient (Cooper & Thatcher, 2010; Cross et al., 2011).

Fourth, for the sake of clarity, we have theorized the antecedents of imitation desirability as being independent. However, they may be interrelated. For example, the supervisor's perceived status may be related to the supervisor's attractiveness, which may impinge upon the subordinate's identification with the supervisor. The interrelationships among the antecedents of

imitation desirability are worth exploring in future research. Finally, our model points towards the need to further understand the main and interactional effects of dispositional and situational determinants of self-motives. Although self-motives are assumed to be rather stable over one's life, their activation and strength may vary across situations (Sedikides & Gregg, 2003).

However, no framework has been proposed that can account for this variability (Anseel, Beatty, Shen, Lievens, & Sackett, 2015). Identifying those factors that activate particular self-motives would help determine the relative weight of the antecedents of imitation desirability in various contexts and facilitate a better grasp of the conditions where contagion of working hours between supervisors and subordinates occurs.

4.8 Conclusion

Drawing upon the literature on social learning and self-motives, this paper develops an integrated model that analyzes the mechanisms explaining the contagion of long working hours from supervisors to employees. Our model contributes to the understanding of why the long-hours norm persists in organizations and how it can be managed in the best interests of employees. While this model acknowledges the role organizations play in how a supervisor's working hours influence his/her subordinates' working hours, it also suggests that supervisors are powerful agents of change.

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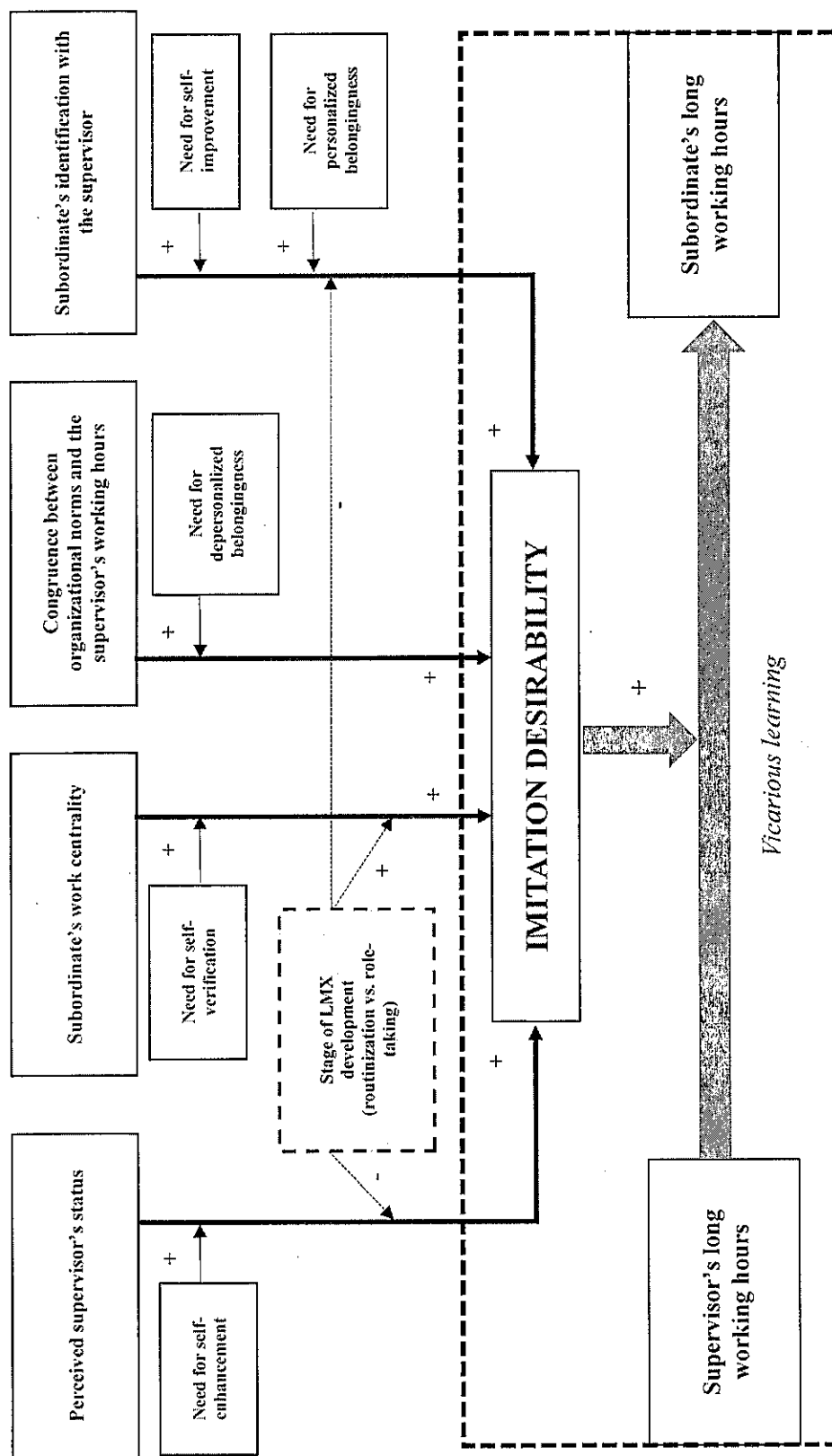
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Figure

Figure 4. 1. Contagion of long working hours from immediate supervisor to subordinate: A theoretical model.



Chapter 5. Conclusion

At a time when working long hours is common and on the rise, this dissertation was an effort to deepen our understanding of the reasons and of the consequences of overwork in the specific context of the leader-follower dyad. In particular, this work aimed at bringing some answers to two research questions: (1) How may the leadership context encourage followers to overwork? And (2) How does leaders' overwork affect followers? We addressed these two questions through two quantitative empirical studies and one conceptual essay.

Regarding the first question, our first article (Chapter 2) suggests that the quality of the relationship between a leader and a follower can contribute to the emergence of workaholism – a form of overwork that combines long hours with obsession with work – when the follower perceives that a culture valuing overwork pervades the organization. That is, using a relational perspective, we found support for the idea that the leadership context may indeed act as an antecedent to subordinates' overwork. This finding is important in that it sheds light on situations in which subordinates' overwork is not explicitly requested by the leader (Snir & Harpaz, 2012). In particular, we suggest that workaholism may be an unintended consequence of the leadership context. Our results further indicate that the psychological climate of overwork is not a sufficient condition to foster workaholism, and that, in such contexts, a high-quality LMX is a decisive component in the emergence of followers' workaholism. These findings show that specific situations (i.e., the joint effect of high LMX and high psychological climate for overwork) may override individual dispositions in the emergence of workaholism, a conclusion that contrasts with the traditional view that workaholism is attributable to

individual dispositions (Keller et al., 2016; Mazzetti et al., 2014) and that is consistent with the recent line of research that focuses on the contextual triggers of workaholism (e.g., Balducci et al., 2018; Ng et al., 2006). This is an important result that points to the role of leaders and organizations in fostering workaholism.

Our conceptual model presented as our third article (Chapter 4) goes beyond merely acknowledging that the leader's own overwork may be contagious. Using the framework of social learning theory, we suggest that followers imitate their leaders' long hours depending on various factors that pertain to the leader (status), to the follower (work centrality, self-motives), to the relational dynamics between the leader and the follower (leader-member exchange stage, identification with the leader), and to the wider organization (norms regarding working hours). We therefore suggest that the contagion of long working hours does not simply follow a "monkey-see, monkey-do" pattern (e.g., Robinson & O'Leary-Kelly, 1998) and that, although a contagion of long working hours from leaders to followers may occur (Zhang & Seo, 2016), various factors may facilitate or curb such contagion. This idea implies that organizations and leaders have the possibility to act on some factors (e.g., definition of success within the organization) to limit the contagion of long hours or encourage a contagion of shorter working hours, even if part of the success or the failure of the contagion process through role modeling depends on followers' own motives. This latter idea calls for a balanced view of role modeling as an influence tactics that leaders can successfully use to shape their followers' behaviors (e.g., Hammer, Kossek, Yragui, Bodner, & Hanson, 2009), but whose success partly lies in the hands of followers.

Taken together, these two articles highlight the fact that leaders are significant pieces of the puzzle when it comes to understand the why of long working hours. Long working hours are often partly attributed to organizational cultures that promote overwork (e.g., Golden & Altman, 2008; Holland, 2008). Because followers interpret their leaders' behaviors as the product of the organization norms and values (Levinson, 1965) and because, through their actions, leaders shape organizational norms and culture (Joseph & Winston, 2005), understanding leaders' specific role in their followers' tendency to overwork helps isolate the mechanisms behind the influence of organizations on long working hours.

Furthermore, both our first and third articles (Chapter 2 and 4) suggest that the leadership context may promote long working hours *unintentionally*. We can indeed safely assume that most leaders do not seek to develop high-quality relationship with their subordinates *in order to* make them work harder. Just as we can reasonably presume that leaders do not work long hours *in order to* be imitated by their followers. On a practical note, this means that leaders may not necessarily realize that they encourage their followers to overwork. We suggest that they should monitor their own working hours and promote high quality work as opposed to high quantity work.

Regarding the consequences of leaders' working hours, our second article is, to our knowledge, a first endeavor to examine empirically how subordinates may bear the consequences of their leader's working hours. Consistent with ego depletion theory (Baumeister et al., 1998), the results suggest that long working hours deplete leaders' ability to regulate their emotions and behaviors, which fuel abusive supervision and eventually hamper the quality of leader-follower relationships. Given the documented

destructiveness of abusive supervision (e.g., Mackey, Frieder, Brees, & Martinko, 2015) and the critical importance of leader-follower relationships in shaping followers' outcomes (e.g., Dulebohn et al., 2011), our findings call for a closer look at the rippling consequences of leader's work behaviors, including working hours. Our results are indeed consistent with the view that leaders and followers exist within the same social system (Moos, 1984) in which individual behaviors have consequences on the dyadic partner. That is, behaviors or other outcomes such as psychological states that may first seem to exist only at the individual level may actually affect those who are embedded in the same social system. Limiting this discussion on overwork only, this means that, even if excessive working hours may be viewed as a personal decision to overwork, organizations and managers should realize that they are not without consequences on subordinates. This also suggests that the dominant focus on the individual consequences of long working hours may have led to a significant underestimation of their consequences. The third article of this dissertation also addressed the consequences of the leader's long working hours in suggesting that it may shape followers' own working hours and lead them to also experience the individual consequences of overwork.

Overall, this dissertation suggests that overwork within organizations should be examined with a systemic rather than with an individual approach. Though this thesis limited its focus on leaders and followers, it suggests that apparent voluntary overwork (e.g., not explicitly required by the organization or the manager) can actually be the response to others' actions and result in significant outcomes for others. Therefore, a better understanding of the why and of the consequences of overwork would be gained by shifting the focus from individuals' behaviors, causes and consequences to a more

systemic and holistic focus that fully accounts for the environmental causes and consequences of overwork.

In addition to the limitations and avenues for future research that we have detailed in the discussion sections of each of the three articles of this dissertation, we comment below on a few higher-level issues that we believe warrant further comments.

High-LMX relationships and followers' overwork: A trigger or a deterrent?

Taken together, the three articles of this dissertation highlight the fundamental role of LMX quality in examining overwork in the leader-follower context: LMX may indeed contribute to the emergence of followers' workaholism (Chapter 2) and be negatively affected by leaders' overwork (Chapter 3). Moreover, LMX stage may act as a boundary condition of the contagion of long working hours from leaders to followers (Chapter 4). However, our findings and propositions may leave the reader uncertain about the exact role of LMX in this context. Our second article shows that the leader's own overwork may hamper the quality of LMX, which, as suggested by the results of our first article, would reduce followers' propensity to overwork. Such a conclusion may appear to contradict the idea that the contagion of long working hours from leaders to followers is more likely when followers' identification with their leader—a construct closely related to LMX (Gu, Tang, & Jiang, 2015)—is high. However, this seeming inconsistency disappears when one considers the role of time. Our theoretical model depicting the contagion of long working hours during socialization mainly focuses on the role-taking stage of LMX relationships, because working hours' habits are likely to be formed early when an employee joins an organization. At this stage, a routinized LMX does not yet exist between the leader and the follower. Later on, when such a stable relationship is

established, our model suggests that a high LMX quality may actually *reduce* the likelihood of a contagion of long working hours by decreasing the saliency of followers' need for personalized belongingness and thereby the weight of identification with the supervisor on the attractiveness of the supervisor's long working hours. Nevertheless, the above reasoning does not mean that a high-quality LMX relationship may not push subordinates to overwork. Rather, it suggests that such overwork would not necessarily result from a contagion process but would instead emerge from alternative processes, like those we highlighted in our first article (i.e., social exchange processes).

Overall, while this dissertation provides evidence for the usefulness of a relational leadership perspective to the study of overwork, further empirical research using longitudinal designs is needed to clarify the role of LMX in the processes at play. We suspect that, consistent with the findings that LMX is related to followers' workaholism *only* when psychological climate for overwork is high, the role of LMX cannot be addressed without accounting for other contextual influences (Cogliser & Schriesheim, 2000).

Moving beyond the leader-follower dyad: the influence of coworkers and organizational climate. Relatedly, though this thesis exclusively focuses on the leadership context, we acknowledge that one's overwork may be influenced not only by the leader but also by coworkers' behaviors and by the norms and practices that prevail in organizations and society at large (e.g., Brett & Stroh, 2003; Cowling, 2007; Kodz et al., 1998). Interorganizational or intercultural comparisons could usefully seek to disentangle the relative influence of these sources. However, their intertwined nature will likely render this endeavor challenging. For instance, leaders shape organizational

norms but also enact them. In like manner, work group members are subjected to the influence of the same leader.

In our third article (Chapter 4), our proposition that the congruence between the leader working hours and the organizational norms is a key factor that weighs on the likelihood of a contagion process of overwork actually mirrors this idea that an employee will indeed consider both sources of influence. In other words, we suggest that followers assess the desirability of their leaders' behaviors in light of what they observe in their work environment and particularly in their proximal environment. An interesting avenue would thus be to investigate the relative influence of leaders vs. coworkers. Because of their proximity and similarity to a focal employee, peers are indeed known to be a major source of influence (Chiaburu & Harrison, 2008; Salancik & Pfeffer, 1978). But when it comes to working hours, do peers really "make the place" (Schneider, 1987, p. 437)?

In particular, in cases where leaders and proximal coworkers behave in different ways regarding working hours, clarifying what source of influence is the most powerful would help point out who is in a better position to change the long hours' culture that prevails in many organizations (Cowling, 2007; Kodz et al., 1998). We expect that the relative influence of leaders vs. peers is contingent on various factors that, for example, pertain to the follower (e.g., career stage), to the follower's proximity and quality of interactions with the leader and with peers, or potentially to the nature of the incongruence (e.g., who is working long hours). For example, in the context of organizational identification, findings suggest that the influence of an expert peer is

stronger than that of the leader for employees with higher tenure (Kraus, Ahearne, Lam, & Wieseke, 2012). Such conclusion might also be true for working hours.

A related issue is that of working hours' diversity within the work group. Extrapolating from research on climate strength (i.e., the degree of consensus among employees about group norms and values; Koene, Boone, & Soeters, 1997), we can assume that when there is a greater diversity of working hours patterns within the group, the influence of both the leader and peers will diminish. However, works on the contagion of working hours (e.g. Brett & Stroh, 2003; Eastman, 1998; Landers et al., 1996; Zhang & Seo, 2016) precisely suggest that such diversity regarding working hours may not be that frequent, because employees naturally come to model their behaviors after others.

Unpacking the construct of working hours.

The study of working hours would seem to be a straightforward enterprise.

Compared with many working conditions and work-related stressors that have dominated the occupational health and organizational literature (...) the construct of working hours is a conceptually simple one (Ganster et al., 2016, p. 26).

Recent research on working hours actually suggests that behind the apparent simplicity of the construct of working hours lie complex issues that deserve attention. For example, a current debate is whether long working hours are inherently bad for workers' health or if their effects are contingent on factors such as the type of tasks that they complete during these hours, the voluntariness of these hours, or the affective and cognitive experience associated with these hours (Ganster et al., 2016; ten Brummelhuis et al., 2017).

Because this dissertation represented a first step in the understanding of the issue of overwork in the leader-follower dyad, we deliberately decided to focus on working hours as a global construct. However, future research could seek to enrich our findings by unpacking the construct of working hours. Depending on their content and on how leaders and followers approach them, working hours may have different outcomes. For example, aspects such as work enjoyment or perceived tasks' meaningfulness may prevent or slow down the ego depletion process that is associated with increased leader working hours (cf. Chapter 3), as well as the resource depletion process that leads workaholics to experience job strain (Chapter 1). An important question then is whether long working hours' outcomes would become qualitatively different or if they would just occur at a different pace.

What about the positive effects of long working hours? Most of the research that has investigated the individual consequences of long working hours has focused on its negative consequences. Researchers do not necessarily agree on the extent or generalizability of these consequences (e.g., Ganster et al., 2016; Haines, Marchand, Genin, & Rousseau, 2012). However, studies pointing at the potential positive consequences of long working hours are much less common. This is in contrast with the implicit assumption that long working hours are associated with higher commitment and performance (e.g., Acker, 1990; Blair-Loy, 2003). The focus on the negative effects of overwork on workers' health may be explained by researchers' dedication to conduct research that contributes to protect workers' health (Haines et al., 2012). However, given that one-third of the worldwide working population overworks (Messenger, 2018),

it is worth trying to have a broader and maybe more balanced understanding of the consequences associated with long working hours (Haines et al., 2012).

At the individual level, a few studies suggest that long working hours indeed have a bright side. For example, long working hours have been associated with greater career satisfaction (Ng, Eby, Sorensen, & Feldman, 2005), greater decision latitude (Grosch, Caruso, Rosa, & Sauter, 2006; Haines et al., 2012) and greater job control (Bernhard-Oettel, Sverke, & De Witte, 2005). Other studies have documented the fact that longer visible working hours were associated with rewards such as more frequent promotions or higher bonuses (e.g., Kossek & Van Dyne, 2008). In the specific context of the leader-follower dyad, it is possible that leaders' long working hours directly benefit subordinates if they leave supervisors with more time to offer support and organize work. It is also possible that they indirectly serve subordinates' interests through an increase in supervisory self-efficacy or expertise. Another interesting avenue would be to examine the possibility that longer hours from the supervisor actually reduce subordinates' workload, either because of a better clarification and organization of the work tasks or because the supervisor accomplishes part of the subordinates' jobs. When working long hours, a supervisor may indeed perform more tasks, leaving less to do to subordinates. The opposite might also be true, if the supervisor hours serve to increase the size of the pie. The response to this question probably differs by occupation and industry, as leaders are not necessarily in a position to take over their subordinates' tasks.

Overwork in the era of leader-follower virtual relationships. Finally, future work should examine how the issue of overwork in the leader-follower dyad plays out in

the context of employees' increased access to telecommuting. Remote working makes working hours less visible, thereby cancelling out subordinates' possibility to use them as a means to convey commitment or performance. This loss of meaning may for instance make overwork a less relevant currency to use in the social exchange leader-follower dynamics. An optimistic view would suggest that the more objective currency of actual performance and higher quality work could then replace overwork. Or, as some studies indicate, that overwork would be replaced by other, perhaps more depleting, behaviors that aim at signaling constant availability (Cristea & Leonardi, 2019). Which is unlikely to reduce the trend of increasing overwork.

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