

**DEVELOPING A FRENCH VERSION OF THE OVERWORK  
CLIMATE SCALE (OWCS): PSYCHOMETRIC  
PROPERTIES AND RELATIONSHIPS WITH WORKING  
HARD**

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## **Abstract**

This research presents the validation of a French version of Mazzetti, Schaufeli, Guglielmi and Depolo's Overwork Climate Scale (OWCS) – 2016, which consists of two specific subscales, namely overwork endorsement and lacking overwork rewards. After undergoing a process of translation and back-translation, the questionnaire was evaluated by a bilingual and bicultural committee and tested with a pilot trial on five employees. The final version of the survey was answered by 198 volunteers.

Exploratory and Confirmatory Factor Analysis were used to evaluate the structure of the French version of the OWCS, while its reliability was estimated by computing Cronbach's  $\alpha$ .

Differently from our expectations, results from the Confirmatory Factor Analysis showed that a one-factor model (i.e. overwork endorsement, 6 items) adequately represents the data and has a substantially better fit than the two-factor model proposed in the literature.

The second part of this study used Correlation and Hierarchical Regression Analysis to investigate the relationship between overwork climate and two different forms of working hard, namely work engagement and workaholism. No significant association could be evidenced between overwork climate and work engagement. Conversely, workaholism and overwork climate showed a positive association, which remained significant even after controlling for psychological job demands. This study represents one of the first attempts to investigate in the French context the impact of a work environment which promotes overwork, and its consequences in terms of fostered workaholism and lowered work engagement.

**Keywords:** Workaholism, Work engagement, Overwork, France

**JEL Classification:** M1 Business Administration; M5 Personnel Economics.

## **O resumo**

Esta pesquisa apresenta a validação de uma versão francesa da escala Overwork Climate Scale (OWCS) de Mazzetti, Schaufeli, Guglielmi e Depolo - 2016, que consiste em duas subescalas específicas, ou seja, incitamento do excesso de trabalho e falta de recompensas pelo excesso de trabalho. Depois de passar por um processo de tradução e retradução, o questionário foi avaliado por um comitê bilíngüe e bicultural e testado num teste-piloto com cinco trabalhadores. A versão final do questionário foi respondida por 198 voluntários.

A avaliação da estrutura da versão francesa do OWCS foi realizada através da análise fatorial exploratória e confirmatória, enquanto sua fiabilidade foi estimada pelo cálculo do  $\alpha$  de Cronbach. Ao contrário do que era esperado, os resultados da Análise Fatorial Confirmatória mostraram que um modelo de um fator (ou seja, incitamento do excesso de trabalho, 6 itens) representa adequadamente os dados e tem um ajuste substancialmente melhor do que o modelo de dois fatores proposto na literatura.

A segunda parte deste estudo usou a Análise de Correlação e Regressão Hierárquica para investigar a relação entre o clima de excesso de trabalho e duas formas diferentes de trabalho árduo, ou seja, work engagement e workaholism.

Não foi encontrada uma associação significativa entre o clima de excesso de trabalho e o work engagement. Por outro lado, foi encontrada uma associação positiva entre workaholism e o clima de excesso de trabalho. Este último permaneceu significativo mesmo depois de se controlar as exigências do trabalho psicológico. Este estudo representa uma das primeiras tentativas de investigar no contexto francês o impacto de um ambiente de trabalho que promove o excesso de trabalho e as suas conseqüências em termos de incentivo ao trabalho e menor engagement no trabalho.

**Palavras-chave:** Workaholism, Work Engagement, Excesso de trabalho, França

**Classificação JEL:** M1 Business Administration; M5 Economia do Pessoal.



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## CHAPTER 1

**General Introduction****1.1 Introduction**

Overtime remains a significant issue in working time across Europe. Eurofound (2013) reports how, in 2010, long working hours concerned 11% of the European workforce and how about 50% of the workers reporting long hours also declared to frequently work during their free time. In Eurofound collected data (2013), long hours appeared to be more frequent among men (20%) and more related to specific occupations, such as to legislators, senior officials and managers (26%), and to machine operators and assemblers (25%). Excessive working hours have also been found to be one of the greatest causes of dissatisfaction among European workers, both in terms of work-life balance and working hours (Matilla-Santander *et al.*, 2017).

Overall, overtime remains a strategic matter in the European Union, being considered by many employees as a key criterion in advancing their careers, or, sometimes, as a source of extra outcome; and by many employers as a leading element in achieving greater flexibility. In fact, overtime may translate in the ability for businesses to deal with bottlenecks, busy periods, or cover of absences, without having to hire new staff. Furthermore, businesses actively sought to obtain greater flexibility; yet, in some areas, overtime regimes have also become a key element in flexible systems, aiming to integrate the need of a more efficient work with a higher quality of life. In this optic, many forms of reduction in weekly hours, of flexible starting and finishing times, job sharing and opportunities to work from home, have recently emerged, to help employees better navigate both their professional and personal lives.

The regulation of overtime is, nevertheless, rapidly changing in several countries, as a result of either EU policies, trade union actions or, in fewer cases, of government concerns in reducing working time (Eurostat, 2018). It is the case of France. Actually, France remains the only European country where government legislated to impose a collective reduction in working time; in fact, with “Aubry 1” and “Aubry 2”, promulgated respectively in 1998 and 2000, the French government lowered the standard weekly working time from 39 to 35 hours (i.e. 1607 hours per year) (Fagnani and Letablier, 2004). The aim of these regulations was to increase employment through a considerable and immediate reduction in employees’ hours; at the same time promoting a trade-off of fewer weekly hours for greater flexibility for employers to schedule work at their best interest (Berg *et al.*, 2004). In practice, workers could still do

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overtime work, working up to 39 hours per week, but the accumulated overtime had to be converted in days off. Actually, what became inflexible with the “Aubry” laws was the annual maximal duration of 1607 hours. Yet, overtime had to be always adequately compensated, up to a 50% increase of the hourly salary, depending on the company’s size and on the number of overtime hours worked.

The study conducted in France by Bouffartigue and Boutellier (2002) showed how about 75% of the employed population worked under a full-time permanent contract; yet, among them, only the very small percentage of 26,7% declared to have an “habitual duration” at work and not to regularly exceed the weekly legal workhours. Moreover, as measured in the Labour Force Survey (LFS), French workers counted for an average of 55 hours of overtime per year and, among the wage-earning population, 48% have been found to be doing overtime work (Eurofound, 2003). This percentage was significantly higher than the respective statistics from Portugal (7.7%), Denmark (13,8%), Norway (21%), UK (26,1 %) or Austria (26,5%), even though some data variations has to be expected when aligning the sample population in terms of part-timers included or not and of company size.

Besides, the debate over the regulation of overtime in France has never ceased over the years. While the “Aubry” laws are still actual, with the passing years and the succession of different governments, the quota hours for overtime has been progressively increased, in response to multiple complaints from employers aiming at lowering the rigidity de-facto introduced by the legislation.

More recent statistics show a general reduction in the number of overtime hours worked by full-time employees in France, with a trimestral average of 10.4 hours in the first three months of 2019 (DARES, 2019). Yet, this data should be interpreted with caution. In fact, it is believed to be an underestimate of the overtime present situation in France. This is because of different reasons. Firstly, data was gathered based on businesses’ declarations; thus, it may not totally correspond to the real situation. Secondly, the average was calculated regardless of the company’s size, with small enterprises - which declare a greater number of overtime hours - being underrated by those with 500 employees or more. Consistently, 96% of the enterprises in France are small businesses with less than 10 employees (INSEE, 2019). Finally, overtime hours are expected to further increase due to the freshly introduced tax incentives, which apply starting from the beginning of 2019 and, therefore, could not be yet estimated. This expectation is in line with the needs of many business leaders, who have been arguing for the need to work more hours in order to remain competitive in today economy (Burke, 2008).

Indeed, overtime remains a critical issue at either the political, social and economic level in France: overtime is, and will continue to be, a major matter of interest for both employers and employees. Where employers seek to achieve greater flexibility to stand in an everyday more competitive economy, employees experience the world of work rapidly changing; therefore, having to acquire new knowledge, build extended social networks and face increasing competition (Van Beek *et al.*, 2012). Moreover, internet and computer-based working have also modified the world of work, blurring the line between time and space to work and having deep consequences on one's private life (Dettmers and Biemelt, 2018; Duxbury and Smart, 2010; Frese, 2008). Taken together these elements have pushed employees to work harder than before (Shimazu *et al.*, 2012) and organizations to reward those employees who do so, putting all their effort into their careers (Blair-Loy and Jacobs, 2003); thus, fostering the development of an overwork climate.

Under these circumstances, the current research further investigates in the French context the concept of psychological climate for overwork, defined as “the employees’ perceptions of a work environment demanding for overwork and do not allocating any rewards for the employees’ additional effort” (Mazzetti *et al.*, 2016: 880). Following Mazzetti *et al.*'s (2016) work on overwork climate, the first part of this study aims to assess the psychometric properties of the French version of the Overwork Climate Scale, whilst the second part investigates its relationship with two different expressions of working hard, namely workaholism and work engagement.

This subject is considered to be of great relevance and actuality. In fact, in today economy, which is characterized by high competitiveness and growing levels of job insecurity, employees have to keep demonstrating proactive behaviors and initiative, to be highly committed to their organization and to dedicate an increasing amount of time and effort into their work; therefore, fostering the presence of overwork within organizations (Mazzetti *et al.*, 2014). The high occurrence rate of overwork has encouraged scholars to investigate this phenomenon and its outcomes; their findings undoubtedly indicate that overwork has a detrimental impact on the employees’ well-being (e.g. Albertsen *et al.*, 2008; Burke, 2008; Dembe, 2008).

Despite of the proven relevance of investigating overwork, only one study has followed Mazzetti *et al.*'s (2016) indication to confirm their findings in different contexts. Piotrowski and Jurek (2019) successfully validated Mazzetti *et al.*'s (2016) Overwork Climate Scale in Poland; nonetheless, the call for further studies to guarantee a full validation of the scale remains vivid. In the light of the above, and considering that, to present knowledge, no other

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study has investigated the perception of an overwork climate in France, this thesis aims at filling this gap by providing a valid measure of the construct.

Moreover, this study aims at analyzing the associations between overwork and two types of working hard: a positive form, i.e. work engagement, and a negative one; i.e. workaholism (Schaufeli, Taris and Van Rhenen, 2008; Mazzetti *et al.*, 2014). Work engagement refers to a positive, fulfilling, work-related state of mind, consisting of three dimensions: vigor, dedication and absorption (Schaufeli *et al.*, 2002), while workaholism to the tendency to work excessively as a result of a compulsive pulsion implying the neglect of family or of other responsibilities (Oates, 1971; Schaufeli, Taris and Bakker, 2008).

Considering that both engaged employees and workaholics tend to work beyond what it is normally required (Schaufeli, Taris and Bakker, 2006) and that employees' engagement contributes to the organizations both in terms of productivity and well-being (e.g. high levels of in-role and extra-role performance and better mental and physical health) (Shantz *et al.*, 2016), while workaholism negatively relates to several work outcomes and indicators of employees' well-being (e.g. low job satisfaction and higher level of exhaustion) (Caesens *et al.*, 2014), investigating the relationship between an overwork climate and working hard seem strategic to identify effective business strategies aiming at enhancing engagement while limiting workaholism. This study represents the first attempt to investigate the relationship between these concepts in France, hoping to provide a theoretical framework which could help practitioners designing effective policies and procedures to maximize organizational positive outcomes.

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**Theoretical background****2.1 Overwork and overtime: two interrelated concepts**

Overwork refers to working too hard, too much, or too long. Moreover, overwork refers to the behavior of all those employees who devote an unreasonable amount of time to their work, so excessive to “entail escalating risks or harms beyond those associated with normal, standard agreed-upon hours” (Golden and Altman, 2008: 6). Thus, overtime is a critical component to overwork. This is in accordance with Crouter *et al.*'s (2001) conceptualization of overwork as working hours beyond the required average.

Overtime is also critical to flexibility. Yet, time flexibility has been better documented in terms of the increasingly important role of part-time jobs in the work world, and of the appearance of flexible-hours contracts, including shift working, evening and weekend working, and time sharing (Wallace, 2003). Wallace (2003) shows how European Union countries allow a great deal of flexibility according to the workers' perspective; yet, whether it is to be considered as “good” or “bad” still varies according to the employees' control over work and to their job satisfaction. Flexibility associated to job satisfaction, higher wages and control over working hours has been mainly found to pertain to Western countries, where a trend towards an employee-led kind of flexibility could be, as a matter of fact, depicted.

The European Commission (EC, 2005) believes flexibility to be vital to effectively address the profound impacts of hastened processes of globalization, of increased competition and of quick shifts in the demand and supply dynamics. In the European Union, both the “worker-oriented high flexibility” and “firm-oriented high flexibility” types of companies can be identified. The first typology is best represented by Nordic countries and, in particular, by Sweden, Finland and Denmark. The second one, instead, by France, Czech Republic and Belgium, with the corresponding French percentage (29%) being significantly higher than the European average (20,6%) (Kerkhofs *et al.*, 2008).

Long workhours may be either a consequence of an individual's choice, of the firm's demand or, again, of worker-firm bargaining agreements over the issue (Hart, 2004). As a matter of fact, organizations may foster excessive work hours to enhance their flexibility and to remain competitive in today economy, to deal with work overload without having to hire new employees, or, again, to determine an indicator on whether to boost or not one's career.

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Overtime may be, in fact, considered by management as a marker of the employees' dedication and of their commitment to the job (Mazzetti *et al.*, 2016). Employees, on the other hand, found themselves to face a world characterized by an always increasing complexity and a work environment which is everyday more demanding; in fact, global competition and swift innovation led to a disbanding of the unity of time and space related to work (Dettmers and Biemelt, 2018; Frese, 2008), while technology made it possible to work at anytime and anywhere, encouraging employees to work harder and for longer hours (Caesens *et al.*, 2014; Shimazu *et al.*, 2012).

Whether this strategy should be considered effective or counterproductive is still a matter of debate in the literature. Burke and Fikensenbaum (2008) believe long work hours to be a response to the unceasingly demanding and competitive work world, which, on its behalf, prompts job insecurity and pressure; thus, they consider extended work hours as a job demand in accordance to Karasek's job demands-control model (1979; 1998). Coherently, Dettmers and Biemelt (2018) demonstrate that extended availability is positively associated with impaired well-being. In particular, workers exposed to extended availability would experience higher levels of emotional exhaustion and cognitive irritation. However, Haines *et al.* (2012) point out how this vision should be pondered; in fact, many authors have previously misjudged long hours with time pressure. Furthermore, the authors argue for long work hours to be considered as a distal work condition, that is long work hours represent the increased time in which a worker is open and susceptible to other workplace stressors (Haines *et al.*, 2012). Thus, long work hours would represent the degree to which employees' experience job demands at work. This outlook is consistent with the line of research showing a correlation with individual distress and family tensions (Burke and Fikenbaum, 2008).

Nevertheless, decision latitude is found to significantly mediate the association between long hours and psychological distress, suggesting that employees working long hours would benefit from the organizations' endowment of more intrinsic rewards. This finding is in line with Brett and Stroh's research (2003), who found that, among male managers, both extrinsic and intrinsic rewards were related to the propensity to work extended hours. Yet, Tucker and Rutherford (2005) found no evidence that commitment to one's own work, job maintenance, pressure, control of overtime and of contracted hours would act as moderators between weekly hours and health. Interestingly, these factors became significant when associated to social support.

Nonetheless, the association between long work hours - an average of 12 or more hours per day - and impaired health seems consolidated, with numerous studies confirming a

correlation with increased risks of injuries, fatigue, stress, as well as with the tendency to suffer from medical ailments, such as hypertension, diabetes, cancer, and heart disease (Dembe, 2008). Consistently, Burke (2008) found long work hours and overtime to be associated with sleep deprivation, which, in turn, emerges to be positively related to an increase in on-the job and off-the-job accidents, and to reduced job performance. Moreover, long work hours and overwork have been found to relate to lower work-life balance (Albertsen *et al.*, 2008) and negative family functioning (Burke, 2008), while individuals reporting time affluence also recounted for increased autonomy and competence, as well as for devoting more time connecting with others and enhancing their personal fitness; all of the above, helped satisfying their psychological needs, benefitting their overall level of well-being (Kasser and Sheldon, 2009).

Härmä (2006) expanded overwork research by identifying two psychosocial work factors, namely employees' control over overtime work and compensation for overwork, fostering the correlation between overtime and lessened employees' well-being. Berg *et al.* (2004: 331-332) define employee control over working time as "the ability of individual workers to increase or decrease their working hours and to alter their work schedule"; hence, referring to both the control of the duration and of the timing of work. Involuntary work appears then to be associated with lower levels of job satisfaction, poorer recovery, and greater work-home interference. This association becomes even stronger when overwork takes place in low-reward jobs (Mazzetti *et al.*, 2016).

## **2.2 Toward a definition of overwork climate**

Nowadays, there is wide acceptance that climate is an experientially-based description of a situation, a representation of an environment as the individuals "see" it. Hence, climate can be considered as an abstraction of the environment grounded on either employees' perceptions, feelings and behaviors (Ostroff *et al.*, 2013). Nonetheless, numerous definitions of climate exist in the literature, as a consequence of its different conceptualizations at different levels: organizational, group or individual (i.e. organizational climate, collective climate and psychological climate) (James *et al.*, 2008).

Psychological climate refers to the set of individual's psychological representations of the work environment (D'Amato and Zijlstra, 2008) and it is believed to comprise several dimensions, including organizational structures, processes and events, as well as job characteristics, supervision, top-management and co-workers (Parker *et al.*, 2003).

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Psychological climate is also believed to help employees in the interpretation of what happens in the workplace, and in the prediction of possible outcomes (Jones and James, 1979). What is distinctive for psychological climate is that the individual is the correct level of measurement and analysis (Parker *et al.*, 2003); thus, defining a clear distinction with the concepts of organizational climate and culture, which are, in fact, group-level constructs that can be measured aggregating psychological climate individual representations (Parker *et al.*, 2003). Organizational climate may be defined as “the shared meaning organizational members attach to events, policies, practices, and procedures they experience and the behaviors they see being rewarded, supported and expected” (Schneider *et al.*, 2013: 362); while organizational culture as the “set of values and beliefs that characterize organizations as transmitted by the socialization experiences newcomers have, the decisions made by management, and the stories and myths people tell and re-tell about their organizations” (Schneider and Barbera, 2014: 10).

Employees climate perceptions are critical determinants for individuals’ behavior at work and for organizational outcomes, with employees first perceiving and interpreting their environment and then responding to it in the way they consider most appropriated (Carr *et al.*, 2003; Parker *et al.*, 2003). Parker *et al.* (2003) report how employees’ perceptions of their work environment relate at the individual level to job satisfaction, burnout, job involvement, organizational citizenship behavior, and job performance; while, at the organizational level, to accident rates, customer satisfaction, and financial performance.

Following the original conceptualization of psychological climate as a molar concept indicating the meaning that individuals attribute to their work environment (Parker *et al.*, 2003), different models have been proposed to better frame this construct. Among them, two models are worth recalling. First, Jones and James’ (1979) measure of psychological climate organizes employees’ perceptions of their work environment according to situational referents. These situational referents rely on the authors’ literature review and include *job characteristics*, such as autonomy and challenge; *role characteristics*, such as ambiguity and overload; *leadership characteristics*, such as support and goal emphasis; *work group and social environment characteristics*, such as cooperation and warmth; and *organizational and subsystem attributes*, such as innovation and management awareness. Second, Ostroff (1993) presented a taxonomy which categorized climate dimensions into three categories: affective, cognitive and instrumental. The affective dimension relates to the interpersonal and social relations among workers, the cognitive facet to the individuals’ psychological involvement, while the instrumental dimension to getting things done in the organization, that is someone’s task involvement. This model takes into account environmental and personal variables, their



interaction, and their association with job outcomes; yet, these categories are to be analyzed at the organizational and not at the individual level. Therefore, even though this model significantly contributed to the development of climate research (Carr *et al.*, 2003), it seems not to adequately respond to the psychological climate analytical needs. Jones and James' (1979) model still provides a better fit for the individual level of analysis requested by the definition of psychological climate.

Understanding psychological climate appears of great significance, both in terms of individual and organizational outcomes (Parker *et al.*, 2003). For instance, Parker *et al.* (2003) analyze the effects of individual-level climate perceptions on work attitudes, psychological well-being, motivation, and performance. In particular, the authors expect the effects of psychological climate (i.e. perceptions on job, role, leader, work group, and organization) on performance to be mediated by work attitudes (i.e. job satisfaction, job involvement and commitment). And the relationship between work attitudes and performance to be at least partially mediated by motivation. Their meta-analytic results indicate that psychological climate perceptions are more strongly related to employees' work attitudes and psychological well-being, than to employees' motivation and performance; with the climate effects on these formers being mediated by employees work attitudes (Parker *et al.*, 2003). Moreover, climate perceptions relative to the employees' leader, work group, and organization have the strongest effects on work attitudes, while their perceptions of job and leader on psychological well-being.

Expanding on the relationship between psychological climate and outcomes, Carr *et al.* (2003) suggested that the analysis and the evaluation of climate would mediate the relationship with organizational outcomes. D'Amato and Zijlstra (2008) advocate that their study's results confirm Carr *et al.*'s (2003) proposition. Their model aimed at investigating the effects of individual and organizational variables on both the employee and the work environment. In their study work behavior becomes a "central regulative mechanism" (D'Amato and Zijlstra, 2008: 34), which determines, and is determined by, concepts pertaining to both the individual (i.e. self-efficacy and burnout) and the organizational (i.e. psychological climate and performance) domains. The authors found that organizational citizenship behavior mediates the relationship between psychological climate and self-efficacy on the one hand, and performance and burnout on the other hand (D'Amato and Zijlstra, 2008). Moreover, they found that individual and contextual factors interact in producing work outcomes, and that the path connecting climate and organizational citizenship behaviors results stronger than the one connecting self-efficacy and behavior (D'Amato and Zijlstra, 2008). Therefore, while other studies already investigated the effects of climate on the individuals' well-being (e.g. Carr *et*

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*al.*, 2003), D'Amato and Zijlstra's (2008) results also suggest that contextual factors have a stronger effect than the individual ones in producing such outcomes (e.g. burnout and performance).

Throughout the years, this molar concept of psychological climate was expanded to include a more specific focus (Schneider, 2000), following Schneider's "call for something". While molar models included different climate dimensions, focusing on broader aspects of the work environment; specific models deeply narrowed their area of investigation. Strategic (e.g. safety climate) and process climates (e.g. justice climate) began to be studied in this "focused climate approach" (Schneider *et al.*, 2017).

Following this rationale, several studies have contributed to the definition of a safety climate and its characteristics. For instance, Zohar (2000) showed how perceptions of supervisory safety behaviors successfully predicted "microaccidents" on the workplace, while Barling, Loughlin, and Kelloway (2002) studied the role of overload and transformational leadership in predicting safety behaviors mediated by safety climate.

Investigating justice climate, Simons and Roberson (2003) found that organizations revealing a justice climate showed higher organizational commitment, lower turnover rates and higher customer satisfaction. Moreover, justice climate moderated the relationship between commitment to supervisor and organizational citizenship behaviors, and proactive personality and organizational citizenship behaviors (Schneider *et al.*, 2017).

The cited literature on safety and justice climates exemplifies the success that the notion of focused strategic climates has gained among researchers. Other examples include studies on climate for service, sexual harassment, diversity, racial bias, innovation and creativity, citizenship behavior, ethics, empowerment, voice and excellence (Ostroff *et al.*, 2013). The existing research demonstrate the variety of the existing climate facets; moreover, this strategic approach to climate compensates the limitations of the more generic approach, which Schneider believes to be "too amorphous, inclusive, and multifaceted to be useful" (as cited in Ostroff *et al.*, 2013: 653). In fact, by linking a "climate for" to a specific strategic outcome which reflects an organizational goal (Ostroff *et al.*, 2013), and by operationalizing both predictor and criterion variables at the same level of specificity, the results appear to demonstrate stronger validity (Schneider as cited in Ostroff *et al.*, 2013).

Facet-specific climate research has deepened the understanding of the effects of work climates on commensurate and specific outcomes; yet, this came to a cost. In fact, this branch of research tends to consider one specific climate at the time; thus, limiting the ability to investigate if and how different climates interact with each other. Moreover, by neglecting

broad factors within the analysis, due to its characteristic narrow focus, a focused-climate approach seems not to aptly describe individuals' experiences within the organization (Kuenzi, 2008), as opposite to a global approach which is able to provide a picture of the ways the whole organization functions (Patterson *et al.*, 2005).

However, Patterson *et al.* (2005) argue that it is worthy to consider the global and the domain-specific approaches to climate as both valid, and to favor one approach or another depending on the purposes of the investigation on work environment perceptions. Consistently, Mazzetti *et al.* (2016) decide to adopt the facet-specific climate approach in order to investigate the specific domain of overwork climate. It is in this optic that the authors develop a valid measure of overwork climate, determining a greater understanding of employees' perceptions about organizational requirements related to overwork (Mazzetti *et al.*, 2016). To present knowledge, their work represents the first attempt to investigate into the perception of a work environment in which managers, supervisors and colleagues believe to be normal to dedicate an extraordinary amount of time to work, without being adequately rewarded.

Bearing in mind that research has associated psychological climate variables with work-related outcomes (e.g. job satisfaction, job involvement and job performance) (Baltes, 2001), studying the impact of overwork climate deems imperative. Following this rationale, the definition of a measure operational in different work contexts seems significant and full of practical implications. To present knowledge, no other studies have essayed to validate an overwork climate measure in France; despite the theme being particularly sensitive at either the economic, political and social level. The role of France as a significant context for this study will be further elaborated in the following sections.

*In the light of the above considerations, the first purpose of the present thesis is to develop and evaluate the psychometric properties of the French version of the questionnaire proposed by Mazzetti et al. (2016) to assess employees' perceptions of overwork climate.*

### **2.3 Impact of overwork climate on working hard**

In view of the findings presented in the previous section, overwork appears to be a concept with several practical implications. Organizations may encourage overwork to deal with overload, to increase their flexibility and competitiveness without having to hire new employees, and to advance one's career; yet, overwork remains significantly associated to the two opposite forms of working hard. According to previous research, working hard can present

itself in two different forms, either a good or a bad one, namely work engagement and workaholism (Caesens *et al.*, 2014; Mazzetti *et al.*, 2014; Schaufeli, Shimazu and Taris, 2009).

In the literature both workaholism (Burke, 1999; Burke, 2001; Spence and Robbins, 1992; Taris *et al.*, 2005) and work engagement (Bakker *et al.*, 2011) have been associated to overwork. Taken this correlation into account, it seems relevant to assess individuals' perceptions of a work environment which requires them to perform overwork and its relationship with the presence or absence of an adequate rewards' strategy. Furthermore, investigating the impact of an overwork climate on working hard, both in the form of workaholism and work engagement, may prove useful in understanding how employees' perceptions about overwork influence their own behavior at work. Indeed, both workaholics and work engaged employees devote an extraordinary amount of time to work (Consiglio *et al.*, 2018; Schaufeli, Taris and Bakker, 2006); yet, as it will be explained, the underlying motivation to this choice differs significantly between the two groups.

Consequently, overwork climate may have a different impact on these two work-related conditions: while workaholism may be fostered when employees believe that overwork is necessary to pursue their career goals (Van Wijhe's *et al.* 2011), the same kind of overwork climate may overshadow work engagement, which is prompted by employees' intrinsic motivation (Van Beek *et al.*, 2012). In the light of the above considerations, such assessment may prove a valuable asset in identifying business intervention strategies to prevent possible negative outcomes of overwork climate.

### **2.3.1 Workaholism: the negative side of working hard**

Oates (1971:11) defines workaholism as the “compulsion or the uncontrollable need to work incessantly”. From there onwards, the concept founding father's definition was extended to include multiple facets and characteristics.

In 1992, Spence and Robbins propose three dimensions identifying workaholism, the so-called workaholic triad. In fact, they believe this concept to assume the traits of work involvement, drive and work enjoyment; the first dimension refers to being highly committed to work and to dedicate a lot of time to it, the second involves inner pressures compelling to work, while the last dimension, work enjoyment, entangles a pleasant and satisfying work experience. Different combinations of these elements result in different types of workaholics; those who are high in involvement and drive but low in enjoyment are categorized as “non-enthusiastic workaholics”, and diverge from the “enthusiastic workaholics”, who score high in

all the three dimensions. Finally, the “happy hard workers” (Buelens and Poelmans, 2004) are those characterized by high levels of involvement and enjoyment but low levels of drive. They are known as the “work enthusiasts”. As it clearly emerges from Spence & Robbins’ (1992) perspective over time, workaholism has not always been considered as negative, as it clearly was in its original connotations.

Drawing from their classification, McMillan and O’Driscoll (2004) found “enthusiastic workaholics” to function relatively well, showing fewer psychosomatic symptoms than many other workers. In their classification, the authors present both bad and good forms of workaholism, and, on the same path are positioned the works of Naughton (1987) and Keichel (1989), who distinguish respectively between good and job-involved, and bad compulsive workaholics, and between happy and dysfunctional workaholics; differentiated in terms of compulsion to work and work commitment.

In contrast, others have seen workaholism as a positive concept, as a purely good facet of working hard. Korn *et al.* (1987) claim its benefits at the organizational level, considering workaholics as high performers. Consistently, Schaufeli, Taris and Bakker (2006) found workaholism to be positively associated to extra-role performance. Yet, in Gorgievsky and Bakker’s (2010) review, no evidence showing that workaholism would benefit organizational performance could be found. Similarly, Porter (2004) questions the positive association between workaholism and productivity, depicting workaholics as rigid thinkers with perfectionist attitudes, unable to delegate being convinced that none else could be able, or willing to, to do the job the right way, hence hindering others from growing professionally; workaholics would consequently limit the potential for future organizational success.

In defining workaholism, this paper follows the constructs’ original conceptualization (Oates, 1971) and adopts the definition proposed by Schaufeli, Shimatzu and Taris (2009: 322): workaholism refers to “the tendency to work excessively hard and being obsessed with work, which manifests itself in working compulsively”. Workaholism is in fact connected to “obsessive passion”, a concept which refers to the excessive commitment to an activity, so excessive that it ends up taking a disproportionate space in one’s identity, causing conflicts with other life domains (Gorgievsky and Bakker, 2010). Furthermore, this study considers workaholism an addition, which implies the neglect of family or of other responsibilities (Oates, 1971; Schaufeli, Taris and Bakker, 2008); therefore, it excludes the existence of a good form of workaholism (Schaufeli, Taris and Bakker, 2008).

Building on self-determination theory, Van Beek *et al.* (2014) demonstrate that workaholics use avoidance strategies, being sensitive to the absence or presence of negative

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outcomes. Overall, what is being suggested is that workaholics work compulsively hard to avoid the insurgence of negative feelings, including shame or anxiety, or to attain ego enhancements, like a sense of pride related to their operate. Workaholics are motivated by a significant need to prove themselves, in response to feelings of insecurity and low self-worth, and not by material or social rewards, or by threats of punishments. Hence, workaholics seems to be motivated by introjected, but not external, regulation (Van Beek *et al.*, 2014). This proposal is supported by Van Wijhe *et al.*'s (2011) study results. Workaholics work compulsively beyond their job descriptions and for longer hours than required to meet self-imposed goals. When they fail in meeting their own expectations, they may feel incompetent and low-worth and feel compelled to work even harder to pursue their career goals and a sense of personal pride.

Being workaholism a complex phenomenon, its causes are to be traced in the interaction of individual and organizational factors which concur in the development of such addiction (Consiglio *et al.*, 2018). In the literature, two different perspectives on how to categorize the antecedents of workaholism can be found.

On the one hand, Andreassen *et al.* (2019) propose a broad differentiation between individual and situational antecedents of workaholism. The former comprises personality factors (e.g. neuroticism, narcissism and perfectionism), upbringing and family factors, and demographics (e.g. age); while the latter includes both work and organizational variables (e.g. overwork climate and high job demands) (Andreassen *et al.*, 2019). Andreassen *et al.*'s (2019) study contributes to this categorization by further exploring the relationship between workaholism and some of its situational antecedents. In particular, the authors found high job demands, role conflict and negative acts at work to significantly foster workaholism (Andreassen *et al.*, 2019).

These positive associations may have several explanations. First, in the context of high demands, employees tend to invest greater time and energy in order to meet job requirements; thus, being driven to work excessively in order to gain appraisal and success (Andreassen *et al.*, 2019). Moreover, excessive job demands may cause anxiety to the employees, as they may fear not to be able to meet work expectations; this situation encourages employees to keep thinking about their job and prompts compulsive work behaviors (Gillet *et al.*, 2017). Finally, in the presence of high demands, the highest workaholism scores concerned those employees reporting the highest levels of job control. Even though this association may seem surprising, it can be explained by the detrimental effect demands and control may cause in the long run (Andreassen *et al.*, 2019). Finally, role conflict may foster workaholism, pushing employees to

work particularly hard in order to meet incompatible requirements between intra or inter-roles (Andreassen *et al.*, 2019); whilst negative acts at work may foster workaholism when obsessive working becomes a way to cope with negative acts, including being ignored, humiliated, excluded, or closely monitored at work. However, negative acts from colleagues may also be enhanced by heavy work investment, as workaholics experience a lack of time to interact with their coworkers, as well as a general difficulty in communicating and socializing with them, if not in an excessively competitive manner (Andreassen *et al.*, 2019).

On the other hand, other authors have proposed narrower classifications. For instance, Ng *et al.* (2007) and Liang and Chu (2009) believe workaholism to derive from three sources, respectively dispositional traits, sociocultural experiences and behavioral reinforcements, and personality traits, personal inducements and organizational inducements. Personal traits, including type A personality, obsessive-compulsive personality, need for achievement (Clark *et al.*, 2014; Ng *et al.*, 2007), perfectionism (Van Beek *et al.*, 2014), narcissism (Andreassen *et al.*, 2012), neuroticism (Schaufeli, 2016) and conscientiousness (Liang and Chu, 2009) may promote workaholic behaviors, being long hours believed to be the most reliable way to realize work goals (Ng *et al.*, 2007). For instance, the high level of scrupulosity and perseverance, characterizing conscientious and perfectionist individuals, fosters individuals' need for control; also resulting in workaholics unwillingness to delegate to others. In fact, workaholics believe other employees not to perform at the set standards due to either unwillingness or inability (Mazzetti *et al.*, 2014). Furthermore, ambition, impatience, hostility, competitiveness and achievement striving, which characterize individuals with type A personality, become predisposing factors in developing a work addiction (Andreassen, 2013; Ng *et al.*, 2007). Likewise, individuals scoring high on neuroticism are particularly vulnerable and insecure and tend to experience a greater negative emotionality and minor control of their emotions; thus, being more subjected to a continuous anxiety related to their job (Andreassen, 2013). Finally, Ng *et al.* (2007: 125) showed that "individuals scoring higher on self-efficacy in work-related activities than in non-work activities are more likely to become workaholics". In fact, they may devote most of their time to their work in order to avoid extra work activities in which they may result less skilled.

With regard to personal inducements, two elements may be highlighted. First, those who manifest the desire in using initiative to gain responsibility and to face challenges at work (i.e. intrinsic work values), instead of looking for more material priorities (e.g. holidays and pay), have a greater chance to become workaholics. This is because their choice reflects their desire to be achievement-oriented, ambitious and influential, characteristics often associated with

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workaholism (Liang and Chu, 2009). As with intrinsic work values, the observation of an addictive work behavior of others may predispose an individual to becoming a workaholic himself (Ng *et al.*, 2007).

Finally, organizational inducements. Organizations may induce and sustain workaholic behaviors to improve the performance of the employees. Moreover, they may recognize those who work long hours, who are considered dedicated and committed employees, with, for instance, positive performance evaluations or higher incomes and compensations (Liang and Chu, 2009). Likewise, organizations characterized by a competitive and masculine culture, as well as by an arrive-early-and-leave-late environment, may also foster workaholism (Ng *et al.*, 2007). In such competitive, power-hungry and fearful of failures cultures, employees are encouraged to prioritize work to their personal life and face fewer, if not inexistent, constraints for the adopted excessive behaviors (Ng *et al.*, 2007). Besides, workaholics tend to increment their own workload - making their tasks more difficult than necessary -, are unwilling to delegate and impose unrealistic deadlines to themselves (Schaufeli, Taris and Bakker, 2008). Consistently, high demands and role conflicts also predict workaholism, driving employees to work excessively in order to gain appraisal and success, or making someone so immerse in his own work not to be able to detach from it (Andreassen *et al.*, 2019). Role clarity was negatively, but not strongly, associated to workaholism, with individuals having to work excessively to face unclarity while meeting others' expectations (Andreassen *et al.*, 2019).

Besides an organizational culture which can either foster or condone work addictive behaviors, another element enhancing workaholism at the organizational level appears when role models (e.g. mentors, supervisors or managers) work excessive hours and neglect personal life; thus, stimulating imitative behaviors in their subordinates (Ng *et al.*, 2007). Likewise, a laissez-faire leadership style was also found to encourage workaholism. That is, an absent and avoidant leader may stimulate followers to work excessively to compensate the stress and the ambiguity they are subjected to, or as a way to gather their leader's attention and feedback (Andreassen *et al.*, 2019).

In the light of the above, investigating the relationship between workaholism and climate appears of great interest. Yet, not many studies have been conducted on this topic. Mazzetti, Schaufeli and Guglielmi (2014) investigated the interaction between overwork climate and person characteristics in fostering workaholism. Their study provided evidence of a positive association between overwork climate and workaholism, with their results being more significant for employees scoring high on achievement motivation, perfectionism, conscientiousness, and self-efficacy (Mazzetti *et al.*, 2014). Moreover, Mazzetti *et al.*'s (2014)



results showed that, while achievement motivation and perfectionism significantly related to workaholism, the effects of conscientiousness and self-efficacy on workaholism were not significant. Nonetheless, the interaction with these former person characteristics and overwork climate appeared to significantly enhance workaholism; thus, suggesting that they act as antecedents of workaholism only in the presence of a perceived overwork climate (Mazzetti *et al.*, 2014). According to Attraction-Selection-Attrition theory, which states that different types of organizations tend to attract and retain different types of people, the employees who display individual characteristics enhancing workaholism may not be influenced by the surrounding environment but instead have chosen those organizations which matched their compulsions in the first place. Mazzetti *et al.*'s (2014) study furthers this interpretation, suggesting that interventions to modify the work environment could significantly curb the level of workaholism among employees.

In another study, Mazzetti *et al.* (2016) investigated the relationship between overwork climate and workaholism. The authors demonstrated that the perception of a work environment which expects employees to perform overtime work significantly enhances workaholism (Mazzetti *et al.*, 2016). In line with this, Johnstone and Johnston (2005) demonstrate that a climate characterized by strong work pressure fosters the inner drive which compels employees to work ceaselessly. Moreover, Mazzetti *et al.* (2016) found a weak association between lacking overwork rewards and workaholism, endorsing the idea that workaholics are motivated by introjected regulation and, therefore, less influenced by the lack of external recognition (Van Beek *et al.*, 2014).

Finally, Gillet *et al.* (2017) investigated the relationship between workaholism and psychological safety climate, defined as the ensemble of all “policies, practices, and procedures for the protection of worker psychological health and safety” (Dollard and Bakker, 2010:580). Organizations believing employees’ psychological health and safety to be fundamental for productivity were found to negatively correlate with job demands (Bailey *et al.*, 2015). In fact, as they establish procedures to effectively manage workload, they are expected to reduce workaholism among employees (Schaufeli *et al.*, 2009a). Nonetheless, Gillet *et al.* (2017) were not able to demonstrate the association between the perceptions of a psychosocial safety climate and low levels of working compulsively and excessively.

Following this rationale, further investigating overwork climate appears of substantial significance and full of practical implications: in fact, workaholism remains detrimental in its outcomes at the individual level and should be therefore adequately constrained. The literature shows how workaholism is negatively related to several work outcomes and indicators of

employees' well-being (Caesens *et al.*, 2014). Among them, it is important to recall low job satisfaction (Van Beek *et al.*, 2014), poorer social relationship outside work (Schaufeli, Taris and Van Rhenen, 2008), reduced life satisfaction (Shimazu *et al.*, 2012), difficulties in disengaging from work and consequent difficulties in recovery and higher levels of exhaustion (Taris *et al.*, 2005), increased risks of burnout (Schaufeli *et al.*, 2009b; Schaufeli, Taris and Bakker, 2008) and, in general, more health complaints.

### **2.3.2 Work engagement: the positive face of working hard**

As discussed in the previous chapter, in the literature many authors have defined workaholism as a positive concept, denoting great dedication and productivity. Spence and Robbins' (1992) description of work enthusiasts mirrors this vision. Yet, according to Schaufeli, Taris and Bakker (2006), the identified characteristics for the good workaholics match those characterizing engaged employees. Hence, work engagement can be considered as an alternative explanation to workaholism for employees' propensity to work hard.

Furthermore, work engagement has been conceptualized in many more ways. Consulting companies define work engagement in terms of organizational commitment, that is the emotional attachment to the organization and the desire to stay there to work, and of extra-role behavior, or rather the discretionary behavior to perform beyond the formal lines to benefit the effectiveness of the organization (Schaufeli, 2012). Yet, according to these conceptualizations, the more recent definition of work engagement simply represents a blend of two existing psychological concepts. Schaufeli (2012) also reports how in the literature work engagement has also been considered as an opposite construct to burnout. Its dimensions of energy, involvement and efficacy would, in fact, counteract the burnout dimensions of exhaustion, cynicism, and reduced accomplishment.

However, the most widespread conceptualization refers to work engagement as to an autonomous construct, independent from burnout (Consiglio *et al.*, 2018; Schaufeli, Taris and Van Rhenen, 2008). This study follows this conceptualization defining work engagement as “a positive, fulfilling, work-related state of mind characterized by vigor, dedication and absorption” (Schaufeli *et al.*, 2002: 72). Vigor is shown by “high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties” (Schaufeli *et al.*, 2002: 74). Dedication refers to being highly involved in, enthusiastic about, and inspired from, one's work (Schaufeli *et al.*, 2002); hence, work engagement appears to be positively associated to intrinsic motivation (Van Beek *et al.*, 2012).

Finally, absorption refers to being so fully concentrated on one's work that time goes by really quickly and the employee has difficulties in disconnecting from work (Schaufeli *et al.*, 2002).

From this definition, it may seem that engaged employees and workaholics may not differ that much one from the other. Nonetheless, whereas workaholics and work engaged employees share the behavioral dimension of working excessively hard, they substantially differ for the underlying motivation (Schaufeli, Shimazu and Taris, 2009). In fact, engaged employees do not experience that inner and compulsive drive pushing them to work. They like what they do and that drives their behavior, in this case work is not an addiction. Otherwise said, engaged employees are connected to their work, love what they do but do not feel guilty if they are not working (Schaufeli, Taris and Van Rhenen, 2008). In fact, work engagement may be associated to "harmonious passion", meaning that the thrilling activity takes a fundamental part in one's life; yet, it is not overpowering other life domains (Gorgievsky and Bakker, 2010).

Work engagement may be important to whole teams and organizations. Significantly, Bakker *et al.* (2006) found evidence that work engagement may crossover within teams. In fact, engaged employees seem to create a positive team climate by communicating optimism and pro-active behaviors to their colleagues, facilitating then the exchange of energy and enthusiasm with team members. Furthermore, over time, work engagement may directly crossover from followers to leaders (Wirtz *et al.*, 2017). This finding can be explained in several ways, including leaders attributing their followers' engagement to their leadership success or not having to worry about their performance, thus being able to focus more on their own tasks.

Employees' engagement contributes to the organizations both in terms of productivity and well-being (Shantz *et al.*, 2016). In fact, engaged employees show higher levels of job satisfaction and lower turnover intentions (Schaufeli, Taris and Van Rhenen, 2008), and demonstrate higher levels of in-role and extra-role performance (Schaufeli, Taris and Bakker, 2006). Moreover, they experience better mental and physical health (Schaufeli, Taris and Van Rhenen, 2008), and better life satisfaction (Shimazu *et al.*, 2012). Likewise, work engagement is negatively associated to burnout and other psychosomatic health complaints (Schaufeli and Bakker, 2004).

Work engagement and the associated positive work-related feelings may also crossover among working couples, from husband to wife and vice versa; accordingly, dedication and vigor expressed by one partner were found to influence the other, spreading the positive state of mind and attitude (Bakker *et al.*, 2005), with communication quality having a significant moderating effect (Tian *et al.*, 2016). Yet, in accordance with the Conservation of Resources

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(COR) theory (Hobfoll, 1988), work engagement was also found to contribute to work interference with family. In fact, employees may experience difficulties in balancing multiple roles, especially given the elevated amount of energy and resources they dedicate to their work; still, conscientiousness was found to be a moderating resource to this negative outcome of work engagement (Halbesleben *et al.*, 2009).

An upward spiral has also been identified between job resources and employees' engagement; while engagement would be enhanced by a resourceful work environment, engaged employees would be able to create their own job resources, particularly increasing their level of self-efficacy (Bakker and Bal, 2010).

Engaged employees demonstrate proactive behaviors, show initiative, are able to collaborate with others, take responsibility for their professional growth and, finally, assure high performance standards; therefore, they become a critical asset to organizations' success (Bakker and Schaufeli, 2008). On their behalf, organizations may also foster employees' engagement. Cooper-Thomas *et al.* (2018) found two strategic resources predicting engagement, namely the company's willingness to invest in its employees' knowledge and skills' development and its clear definition of a vision and purpose. Furthermore, by reinforcing employees' self-efficacy, perceived organizational support was also found to increase employees' interest in their tasks; thus, fostering their level of engagement (Caesens and Stinglhamber, 2014).

Finally, when considering personality traits as possible predictors of work engagement, it appears that neuroticism is negatively related to work engagement; as opposite to extraversion, conscientiousness, agreeableness and openness, which show a positive association with the construct (Schaufeli, 2016). Furthermore, openness appears to have the highest correlation (Schaufeli, 2016).

As far as the authors know, few studies (e.g. Mazzetti *et al.*, 2016; Schaufeli, 2016) have investigated the relationship between organizational climate and work engagement. Mazzetti *et al.* (2016) assessed the impact of overwork climate on work engagement. The authors' results showed that overwork endorsement was not significantly associated to work engagement; yet, there was a negative correlation with lacking an adequate compensation for overwork (Mazzetti *et al.*, 2016). Schaufeli (2016) investigated the joint impact of organizational climate and personality on this form of heavy work investment. Focusing on employee growth climate, defined as the "organizational policies, practices, and procedures that encourage employee's personal and professional growth and development" (Schaufeli, 2016: 1060), the author

hypothesizes a positive impact on employee engagement, as they increase job resources in the work place; however, no significant interaction could be found in the study.

*In light of all the above, the second purpose of this thesis is to employ the French version of the Overwork Climate Questionnaire to assess the different impact of overwork climate on working hard. In particular, on workaholism and work engagement, two opposite types of working hard.*

Furthermore, this study aims at exploring the relationship between overwork climate and working hard, when controlling for psychological job demands. Psychological job demands may be defined as “the extent to which the work pace is high and the availability of sufficient time to execute the required work” (Demerouti *et al.*, 2001: 281), that is the extent to which the job load is excessive, the job rhythm is high-paced and employees have to work overtime to accomplish their tasks. Consequently, high psychological job demands are related to overwork climate. In fact, they may foster such climate encouraging employees to work overtime in order to accomplish the great amount of demanding work they are requested to perform.

Moreover, high psychological job demands are associated to workaholism. In fact, employees tend to devote greater time and energy to their work in order to meet their job requirements; thus, fostering the behavioral dimension of the construct (i.e. work excessively) (Schaufeli, Shimazu, and Taris, 2009). Additionally, excessive job demands may also foster the cognitive component of workaholism. As a matter of fact, they may provoke anxiety to the employees with regard to their ability of meeting all the imposed requirements; this anxiety may, in turn, prevent employees from stop brooding about their work, thus leading to the affirmation of compulsive work behaviors (Gillet *et al.*, 2017).

Even though the JD-R model should not theoretically assume any direct association between job demands and work engagement (Schaufeli and Bakker, 2004), some empirical studies have come to different results. For instance, Podsakoff *et al.* (2007) presented a meta-analysis of job demands and job satisfaction, and divided the first into challenges (e.g. workload, pressure to complete tasks, and time urgency) and hindrances (e.g. role conflict, role ambiguity and role overload). The authors found that challenges were positively related to job satisfaction, as opposed to the negative association characterizing hindrances and job satisfaction. In the light of these findings, Inoue *et al.* (2012) argue that psychological job demands may be considered as challenges and expect a positive association with work engagement. Their prospective study’s results demonstrated a significant association with work

engagement at the one-year follow-up. Consistently, Mauno *et al.*'s (2007) longitudinal study on Finnish healthcare personnel showed that time demands (i.e. having too much to do in a limited amount of time) predicted higher scores on the absorption component of work engagement. Apparently, high (but not excessive) demands seem to operate as a “motivation-promoting job resource” (Mauno *et al.*, 2007: 167); employees experience feelings of self-respect and a sense of contribution to their workplace, which, in turn, enhance their level of work engagement (Mauno *et al.*, 2007).

*In view of the above, the third purpose of this thesis is to investigate the relationship between overwork climate and working hard (i.e. workaholism and work engagement), when controlling for psychological job demands.*

### **2.4 France: a case study for overwork**

In France, changes with workhours and their regulations, also exposed by the appearance of different and irregular work schedules, incite the interrogation about worktime and overwork, as a main issue at either the political, social and economic level. With the “Aubry” laws the French government essayed to address this issue: by considerably reducing working hours, they aimed at fostering employment in the country (Berg *et al.*, 2004) while improving employers' flexibility over work schedule, thanks to the modulation of the working time, which allowed companies not to pay for overtime in times of high demands and not to apply to temporary lay-offs in times of low demands (Estrade and Ulrich, 2002). Kerkhofs *et al.* (2008) show how, among the European countries, France is the one with the greatest percentage of firms arranging time in a highly flexible way in their own interest, while Bunel (2006) emphasizes how time modulation has become one of the most employed tool in the companies subjected to the “Aubry” laws.

Work time flexibility corresponds to two French legal categories. First, workers may have flexible work hours based on the employers' choice or on the firms' needs; this happens typically on a weekly basis for the tertiary sector and on a monthly basis for the manufacturing. Second, employers may also change the number of work days from a week to another, with this type of flexibility mostly affecting middle managers (Askenazy and Caroli, 2010). Yet, both types of flexibility seem to positively correlate with greater time pressure and mental strain, with workers experiencing difficulties in carrying out their tasks and not feeling they have

enough time to do one's job properly (Askenazy and Caroli, 2010). So, with a general degradation of work conditions.

Likewise, Askenazy (2005) emphasizes how the deterioration of work conditions is associated to work intensification, tasks multiplication and to lack of time to perform all of the above, and how workers are more than ever forced to accept this new condition due to greater fear of job insecurity and unemployment. Moreover, even with the reduction in the number of work hours, there has been an increase in the number of work accidents (Askenazy, 2005).

Also investigating the relationship between the French legal reduction of working hours and health, Sánchez (2017) found a negative association, as opposed to Taris *et al.* (2006), who found shorter work hours to be positively associated with health due to the greater workers' possibility to recover. The rationale behind Sanchez's (2017) results is that firms use overtime as a measurable indicator of dedication and hard working; thus, as a criterion to select candidates for promotion. According to the author, a mandatory restriction in overtime would then result in lower probabilities for promotion, affecting the income pattern and having consequently a negative impact on the individuals' health (Sanchez, 2017).

Nonetheless, overtime remained an important matter in France. The investigation on work conditions promoted by the French ministries of Economy and of Labor in 2005 highlighted how only 37% of the employed population believed to have a habitual work schedule, with two out of three employees working during atypical hours (DARES, 2009). Moreover, an employee out of ten claimed that the main time constraints they have to face resulted from the length of their workday and to its unpredictability. They were mainly managers and directors, who work at least 40 hours per week and have to face strong time pressure; yet, who are mostly able to rearrange their schedule at their convenience (DARES, 2009). More recently, another investigation registered an average of 39.1 weekly workhours (INSEE, 2018).

At the social level, the diversification of local norms, together with the development of irregular workhours, promotes a change in the way employees perceive and account for their working time (Bouffartigue and Boutellier, 2002). Working time appears also to be a critical component in the definition of work satisfaction: even though France stands in the European average, its levels of work satisfaction are still significantly lower than those of Denmark, Germany, the Netherlands and even of Great Britain. This relative dissatisfaction of French workers seems to originate from salary, which employees perceive as insufficient to compensate the increasing efforts they are demanded, and from the lack rewards or even of acknowledgment for the work done (Askenazy *et al.*, 2009). Consequently, France seems to

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be an interesting context in which to investigate overwork climate, defined as a work environment which requires employees to do overwork without allocating any rewards for the extra effort demanded.



## CHAPTER 3

**Developing a French version of the Overwork Climate Scale (OCWS)****3.1 The OWCS**

According to Mazzetti *et al.* (2016), the OWCS was proposed to create a valid measure of a psychological climate for overwork; that is to what extent employees perceive their workplace to expect them to do overwork in order to complete their tasks without an adequate compensation. Initially, 24 items were designed to represent overwork climate's core characteristics (i.e. the diffusion of an overwork climate in response to management expectations and the lack of adequate rewards for the employees' extra efforts). Content validity was guaranteed using a panel of five judges and assessed for both the items (I-CVI) and the overall scale (S-CVI). Typically, the acceptable concordance index among the committee would be of .80 or more (De Souza *et al.*, 2017); however, Lynn (as cited in Mazzetti *et al.*, 2016) argues for a I-CVI of 1.00 in the presence of five or fewer judges. Accordingly, Mazzetti *et al.* (2016) included in the scale only the variables showing full agreement among the committee members, for both clarity of language and relevance of the question for the overwork climate construct (i.e. items with I-CVIs equal to 1.00). At the end of the process, 11 items were maintained. S-CVI indicated excellent content validity (S-CVI equal to 1.00), as it resulted from the average all I-CVI's.

Drawing on data from two independent samples, the authors were able to analyze the 11-item scale and to identify two factors, either referring to the fostering of overwork in response to management expectations or to the lack of rewards associated with overwork (Mazzetti *et al.*, 2016). Consistently, the first factor was labelled "overwork endorsement" and assessed the level to which overwork is prompted and valued at work, while the second one "lacking overwork rewards" assessed the absence of an adequate compensation for the extra effort put in place by the employees (Mazzetti *et al.*, 2016). Cronbach's alphas were ideal for both factors (De Souza *et al.*, 2017), being equal to .80 and .70 for overwork endorsement and lacking overwork rewards, respectively.

Convergent validity (i.e. items indicating a specific construct should share a high proportion of variance) may be assessed by evaluating factorial loads, with higher factorial loads indicating convergent validity (De Souza *et al.*, 2017). De Souza *et al.* (2017) argue for factor loadings to be at least equal to .50. Mazzetti *et al.*'s (2016) factor loadings matched this

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requirement with only one exception (i.e. “It is difficult to take a day off or paid holidays”), whose factor loading was .32. Still, research argues for factor loading of .32 (i.e. 10% overlapping variance) or higher to be interpretable, being relevant for the particular factor (Tabachnick and Fidell, 2001).

To present knowledge, only one study has explored the validity of Mazzetti *et al.* 's (2016) scale in a context different from the Italian one. Piotrowsky and Jurek (2019) were able to validate the Overwork Climate Scale in Poland; nevertheless, further research is still needed in order to guarantee a full validation of this scale (Piotrowsky and Jurek, 2019). This study aims at responding to this need by proposing a French version of the OWCS and at assessing its validity in the context of France. In fact, the French translation may prove particularly useful in a country where the majority of the population does not speak English (European Commission, 2012).

### **3.2 Method: part I**

#### **3.2.1 Procedure**

To develop a French version of the OWCS, the OWCS has been necessarily translated from English to French. To do so, the questionnaire underwent a translation-back-translation procedure, as recommended by Brislin (1980); consistently, four bilingual translators were consulted throughout the process to guarantee about content and conceptual equivalence of the drafted translation.

Data was collected through an internet survey system, through which confidentiality and anonymity were guaranteed to the respondents. On the presentation page, participants were informed about the research general context and its general aim; at the same time, the respect of confidentiality was assured, and the questionnaires' anonymity was emphasized. Participants were invited to take part to the study through a linked shared through professional social networks, and Human Resources Managers and Directors were directly invited to share the link with their teams; in general, all the participants were also welcomed to share the link with their own work connections. The internet survey system was set to not allow missing values; therefore, respondents had to answer to all the questions. All items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Finally, all the collected data were computed in SPSS.

### 3.2.2 Participants

To develop and evaluate the psychometric properties of the French version of Mazzetti *et al.* (2016) OWCS, data was gathered based on the responses of 198 participants to the study. In this paragraph, only main descriptive statistics will be presented; anyways, a full description of the participants is reported in Table 1.

In this study, participants were employees and workers from different organizations and different work sectors, with the majority of the respondents working in the insurance and banking sector (35,30%), followed by the industry (19,70%). In the group, participants were almost evenly distributed across sex, being the respondents 52,5% women and 47,5% men. The respondents' age ranged from 18 to 70 years, with the mean age being of 34,76 and the median of 31 years. The youngest participant was 18 years old at the time of answering, while the eldest 70 years old. Over 65% were either employees or workers, while nearly 30% held a managerial position at the time of answering; moreover, master was the most represented degree among the sample. Permanent full-time contract represented 75% of the sample, while the average seniority was of 9 years. Furthermore, participants' contracted hours ranged from a minimum of 10 hours (for participants on interim or part-time contracts) to a maximum of 50 hours per week (in the industry sector); whilst hours averagely worked per week ranged from a minimum of 10 to a maximum of 96. Overall, the median of the declared contract hours was 38 hours per week, but, on average, responders declared to weekly work 40 hours.

**Table 1**

*Description of the participants to the Study*

---

<b><i>Gender</i></b>	
Men	47,20%
Women	52,80%
<b><i>Age</i></b>	
Mean (SD)	34,76 (SD= 10,67)
<b><i>Work sector</i></b>	
Adminstration	3%
Bank/ Insurance	35,30%
Commerce	10,10%

*Continue*

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**Table 1** (continued)

<b><i>Work sector</i></b>	
Industry	19,70%
Public	6,10%
Service Industry	8,60%
Tourism	2%
Others	15,20%
<b><i>Work role</i></b>	
Employees & Workers	65,70%
Supervisors	3,50%
Managers & Executives	29,80%
Store manager	1%
<b><i>Educational level</i></b>	
Secondary school	3,50%
Vocational certificate obtained two years after the 8th grade	9,60%
High school	8,10%
Two-year technical degree (Bac+2)	22,70%
Bachelor degree	24,80%
Master degree	29,80%
PHD	1,50%
<b><i>Work contract</i></b>	
Full-time permanent contract	75,20%
Part-time permanent contract	8,60%
Full-time fixed-term contract	10,1%
Part-time fixed-term contract	1%
Interim	5,10%
<b><i>Seniority (years)</i></b>	
Mean (SD)	9,40 (SD = 9,76)
<b><i>Weekly working hours by contract</i></b>	
Min	10
Max	50
Mean (SD)	36,57 (SD = 5,72)
<b><i>Weekly effective working hours</i></b>	
Min	10
Max	96
Mean (SD)	40,97 (SD = 8,69)

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*Note.* n=198

### 3.2.3 Analysis

After having run an initial descriptive analysis, which is necessary in order to understand the group under study, Exploratory Factor Analysis was run in order to test whether the (sub)scales in the population under study matched those found in the literature of Overwork Climate. At this regard several assumptions were considered and performed, as it follows. First, principal axis factoring, or common factor analysis, and - when possible - oblimin rotation have been used to identify item groupings. According to Chiorri (2008), principal axis factoring becomes the most suitable extraction method when latent dimensions are supposed to underlying the data generating process; similarly, oblimin rotation assumes that underlying scales are correlated. Pattern matrix have been thenceforth considered to analyze the structure. Then, Reliability Analysis employing the Cronbach Alpha criterion (Cronbach, 1951) has been used. A general rule of thumb (Tavakol and Dennick, 2011) indicates acceptable or higher levels of internal consistency if the scale's  $\alpha$  is higher than 0.7 (70%). In practice, reliability analysis indicates how closely related a set of items are as a group. Finally, Confirmatory Factor Analysis was run in order to verify the results obtained with the Exploratory Factor Analysis. In this study, variables were computed using the items' mean value.

## 3.3 Results: part I

In the following sections, results from Exploratory and Confirmatory Factor Analysis will be detailed. Cronbach's  $\alpha$  will also be presented in the next paragraph, being a key indicator of whether or not the OWCS is fit for purpose in France (i.e. showing scale reliability).

### 3.3.1 Results from the Exploratory Factor Analysis

In order to cross-validate the findings of Mazzetti *et al.* (2016) and to determine the validity of the French version of the OWCS, Exploratory Factor Analysis was used to test whether the two-factor structure (i.e. overwork endorsement and lacking overwork rewards) found by the authors could also be replicated with our data in France (n=198).

First, with the SPSS software package, principal axis factoring and oblim rotation were used to identify item groupings. By running the analysis, an initial three-factor solution was found; yet, the third factor only related to one item (i.e. "Dans mon travail, il est considéré comme normal pour les employés de ramener leur travail à la maison"). Since it is not currently

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supported by enough items, it is to be dropped from the interpretation and the results (Raubenheimer, 2004). Results from the Exploratory Factor Analysis are reported in Table 2.

**Table 2**

*Exploratory Factor Analysis results of the Overwork Climate Scale (OWCS)*

<i>Items</i>	M	SD	<i>Factor loadings</i>	
			Factor 1	Factor 2
1. Au travail, on s'attend à ce que je fasse des heures supplémentaires	3.22	1.26	.71	-.10
2. La Direction encourage ses salariés à faire des heures supplémentaires	2.78	1.25	.72	
3. Dans mon travail, la plupart des employés font des heures supplémentaires	3.46	1.26	.57	
4. Au travail, faire des heures supplémentaires est important pour être promu	2.74	1.28	.54	
5. Dans mon travail, il est considéré comme normal de travailler le weekend	2.40	1.52	.53	.26
6. Au travail, il est difficile de prendre un jour férié ou des vacances	2.24	1.32	.60	.16
7. Dans mon travail, les heures supplémentaires sont compensées par plus de vacances ou par d'autres avantages (R)	2.34	1.31	.11	.41

*Continue*

**Table 2** (continued)

<i>Items</i>	M	SD	<i>Factor loadings</i>	
			Factor 1	Factor 2
8. Dans mon travail, les heures supplémentaires sont rémunérées (R)	2.45	1.63	<i>.46</i>	<i>.66</i>
9. Au travail, presque personne n'a besoin de faire des heures supplémentaires non payées / (Almost) nobody needs to do unpaid overtime work (R)	2.70	1.30		<i>.46</i>
10. Au travail, un règlement existe pour restreindre les heures supplémentaires / A policy exists to restrict overtime work (R)	2.50	1.32		<i>.38</i>
Eigenvalue			2.71	1.12
% of Variance			30.73	14.84
Cronbach's $\alpha$			<i>.78</i>	<i>.52</i>

**Note.** n =198. M = Mean; SD = Standard Deviation. Items with loadings higher of .32 or higher were considered (Tabachnick and Fidell, 2001) and are reported in italic. But item loadings are not characterized by statistical significance. In a similar way, eigenvalues, % of variance and Cronbach's  $\alpha$  are not associated to any statistical significance.

The remaining results show how overwork climate stems from the combination of two different dimensions. The first factor, explaining 30,73 percent of the total variance, consists of six items and refers to the employees' perceptions that overwork would be closely related to a management that encourages and values employees to perform overwork. Cronbach alpha for this first factor is of .78. The second factor, instead, explains 14,84 percent of the variance with its four items, and mainly refers to the perception of lacking an adequate compensation for the employees' overwork. Even though its Cronbach alpha for the given dataset is poor (.52), Dell'Oglio *et al.* (2010) claim that a Cronbach alpha of .50 or more may still be considered legitimate and acceptable in short scales (i.e. with few items). Hence, the two identified factors seem generally consistent to those identified in the literature, and in particular the first one

appears to be related to “overwork endorsement”, while the second one to “lacking overwork results”.

Yet, some cautions should be taken when comparing the present results to those obtained by Mazzetti *et al.* (2016). First of all, even though a two-factor structure could be replicated, data provided evidence only for a 10-item scale, while Mazzetti *et al.*'s (2016) original scale included eleven items. This is because the item “Dans mon travail, il est considéré comme normal pour les employés de ramener leur travail à la maison” had to be taken out from the current analysis. Factor loadings in both studies were greater than .32, showing that all variables were relevant for the particular factor (Tabachnick and Fidell, 2001). Nonetheless, Mazzetti *et al.*'s (2016) factor loadings were generally greater than those found in this study, with the majority representing a strong relevance of the variable to the factor (i.e. factor loadings higher than .60). A significant exception to this statement is represented by the item “Au travail, il est difficile de prendre un jour férié ou des vacances”, having a weak loading of .32 in Mazzetti *et al.*'s (2016) and a strong loading (.60) in this study. Furthermore, the total variance explained by the two factors is somehow consistent among the two studies, being equal to 32.10% and 18.56% in Mazzetti *et al.*'s (2016), and to 30.73% and 14.84% in the current study. Finally, the measure of internal consistency is satisfactory in Mazzetti *et al.*'s (2016), being greater than .70; but not for Factor 2 in this study, being of .52.

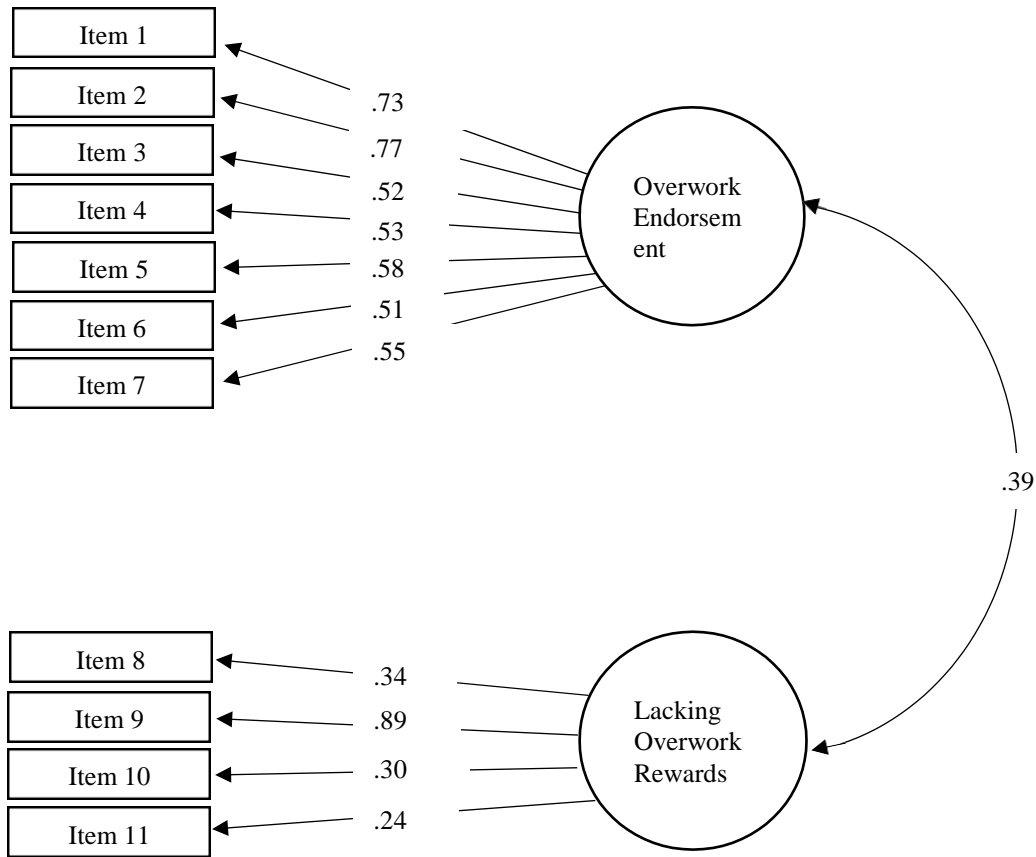
### 3.3.2 Results from the Confirmatory Factor Analysis

In order to verify the findings obtained with the Exploratory Factor Analysis, a Confirmatory Factor Analysis has also been run with the Amos software package included in SPSS. The  $\chi^2$  goodness-of-fit statistic, the Tucker-Lewis Index (TLI), the comparative fit index (CFI) and the root mean square error of approximation (RMSEA) were considered to assess model fit. According to Byrne (2001), the Tucker-Lewis Index (TLI) and the comparative fit index (CFI) indicate an acceptable fit for values of .90 or higher, while the root mean square error of approximation (RMSEA) for values of .08 or lower.

The two-factor model, represented in Figure 1, depicts the two dimensions of overwork endorsement and lacking overwork rewards obtained in the Exploratory Factor Analysis. By analyzing both Figure 1 and Table 3, with the latter indicating the Goodness-of-Fit of the model for the Overwork Climate Scale, it deems evident that the proposed two-factor model does not provide a good fit to the study's data.



In fact, both the Tucker-Lewis Index (0.76) and the comparative fit index (.84) are lower than .90, considered to indicate an acceptable fit (Byrne, 2001).



**Figure 1.** Two-factor structure of the Overwork Climate Scale.

**Table 3**

*Goodness-of-Fit Indicators of model for Overwork Climate Scale (N=198)*

<i>Model</i>	$X^2$	<i>df</i>	$X^2/df$	<i>CFI</i>	<i>TLI</i>	$\lambda_{min}$	$\lambda_{max}$
	111.90***	43	2.60	.84	0.76	.24	.89

*Note.* \*\*\*  $p < .001$

Overall, if in Mazzetti *et al.*'s (2016) study the two-factor model showed a good fit in the analyzed sample ( $\chi^2$  (df.43) = 112.70;  $p < .001$ ; TLI = 0.90; CFI = .92, and RMSEA = .06), thus, sustaining their previous findings, the data in the present study seemed not to be adequately represented in the two-factor model ( $\chi^2$  (df.43) = 111.90;  $p < .001$ ; TLI = 0.76; CFI = .84).

Drawing on the Overwork Climate Scale proposed by Mazzetti *et al.* (2016), the first part of this study aimed at performing an initial adaptation and validation of the Overwork Climate Scale in France. In line with Mazzetti *et al.*'s (2016) analysis, an Exploratory Factor Analysis was run to provide evidence of the reliability of the French version of the OWCS, while a Confirmatory Factor Analysis was operated to validate the first results.

To present knowledge, only another study was designed to validate the OWCS in a context different from the Italian one. This is Piotrowsky and Jurek's (2019) study, which introduced a Polish version for the Overwork Climate Scale. As in Mazzetti *et al.*'s (2016) and in Piotrowsky and Jurek's (2019), this study found evidence for a two-factor theoretically-interpretable scale. The first factor assessed the extent to which overwork is valued in the workplace (i.e. overwork endorsement), while the second factor measured the absence of adequate rewards for the extra-time spent at work (i.e. lacking overwork rewards).

However, this study only provided evidence for a 10-item scale, as opposed to the 11-item scale proposed by Mazzetti *et al.* (2016) and validated by Piotrowsky and Jurek (2019), being the first factor composed by six items as opposed to the seven of the other studies. Moreover, Cronbach's  $\alpha$  for lacking overwork rewards was found to be acceptable yet unsatisfactory ( $\alpha = .52$ ), especially when compared with the values found by Mazzetti *et al.* (2016) ( $\alpha = .70$ ) and by Piotrowsky and Jurek (2019) ( $\alpha = .74$ ). Confirmatory Factor Analysis for both the Italian and Polish study confirmed that the two-factor model adequately represents the data, having a better fit than a one-factor solution. Yet, Confirmatory Factor Analysis did not provide the same results in the present study, where indicators of the Goodness-of-Fit of the model for Overwork Climate Scale were unsatisfactory. Overall, these results suggest that the Overwork Climate Scale, as presented by Mazzetti *et al.* (2016), cannot be successfully validated in France.

### **3.4 Proposing a short version of the Overwork Climate Scale**

Due to the unsatisfactory results obtained when analyzing the Overwork Climate Scale proposed by Mazzetti *et al.* (2016), further analyses were performed to test whether a short

version of the scale would better fit in the French context. In particular, Exploratory and Confirmatory Factor Analysis were run to determine what would be the best fit for the data. Apart from the two-factor solution presented in the previous chapter, two further options were investigated: a one-factor solution with seven items and a one-factor solution with six items. In both cases, the factor investigated related to overwork endorsement. Yet, as it will be shown in the following paragraphs, the latter solution proved to be the best for these data.

### 3.4.1 Results from the Exploratory Factor Analysis

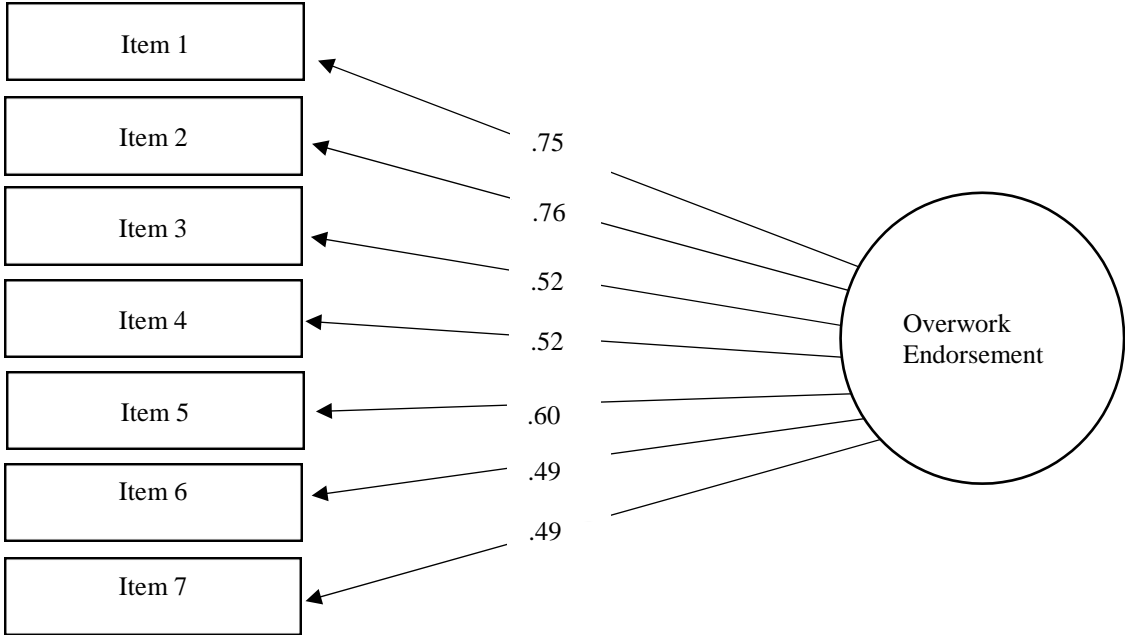
Exploratory Factor Analysis was used to test whether the one-factor structure (i.e. overwork endorsement) would prove a better fit in France (n=198). Two options were tested: a one-factor solution with seven items (1), corresponding to the Overwork endorsement factor proposed by Mazzetti *et al.* (2016) and one-factor solution with six items (2), also based on the overwork endorsement dimension, yet excluding an item (i.e. “Au travail, il est difficile de prendre un jour férié ou des vacances”). In both cases, principal axis factoring was used to identify item groupings with the SPSS software package; the solution could not be rotated.

In the first case (1), a one-factor solution explaining 45,35 percent of the total variance and consisting of seven items representing overwork endorsement (e.g. Au travail, on s’attend à ce que je fasse des heures supplémentaires”) is found. The relative Cronbach alpha is of .79. Results from the Exploratory Factor Analysis (1) are reported in Annex B.

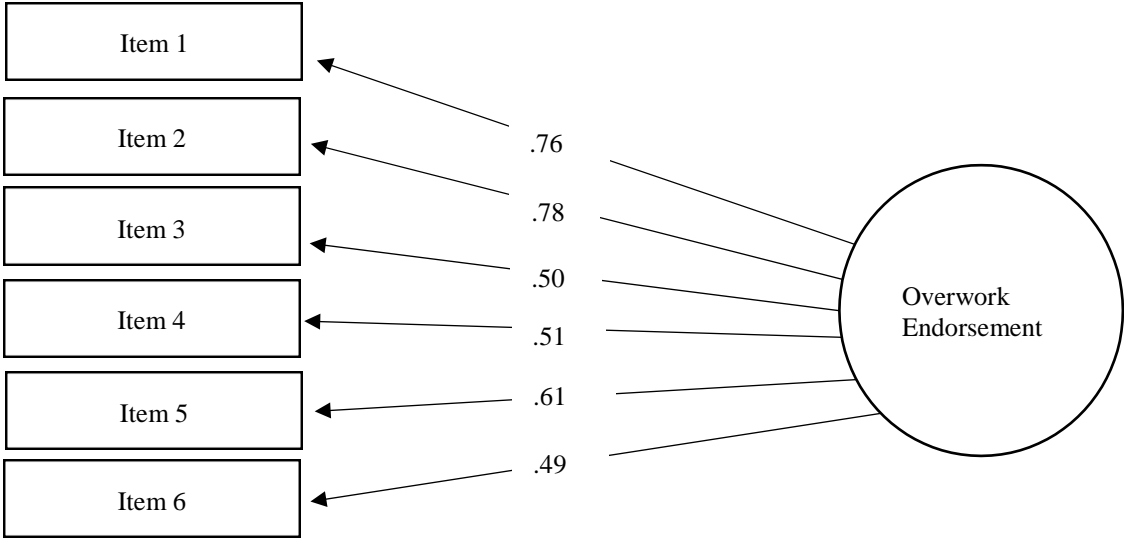
In the second case (2), a one-factor solution was found to explain 47,54 percent of the total variance and consisted of six items relating to overwork endorsement (e.g. “Au travail, on s’attend à ce que je fasse des heures supplémentaires”). The relative Cronbach alpha is of .77. Results from the Exploratory Factor Analysis (2) are reported in Annex C.

### 3.4.2 Results from the Confirmatory Factor Analysis

To verify the findings of the Exploratory Factor Analysis and test which model would better fit the data, a Confirmatory Factor Analysis has been run with the Amos software package. In both cases, several indices have been examined to assess the model fit (i.e. the  $\chi^2$  goodness-of-fit statistic, the Tucker-Lewis Index, the comparative fit index and the root mean square error of approximation). Figure 2 and Figure 3 represent the one-factor structure with, respectively, seven and six items.



**Figure 2.** One-factor structure of the seven-item version of the Overwork Climate Scale (1).



**Figure 3.** One-factor structure of the six-item version of the Overwork Climate Scale (2).

Table 4 reports the Goodness-of-Fit indicators for the one-factor models with, respectively, seven and six items.

**Table 4**

*Goodness-of-Fit Indicators of model for the seven (1) and the six-item (2) OWCS (N=198)*

<i>Model</i>	$X^2$	<i>df</i>	$X^2/df$	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	$\lambda_{\min}$	$\lambda_{\max}$
<i>Model 1</i>	43.61*	14	3.12	.91	0.87	.10	.49	.76
<i>Model 2</i>	17.28*	9	1.92	.97	0.95	.07	.49	.78

*Note.* \*  $p < .05$ ; \*\*\*  $p < .001$

Both the one-factor solutions appear to have a better fit compared to the initially proposed two-factor solution; yet, the six-item version seems to best represent the data of this study. In fact, this latter showed a good fit in the study:  $\chi^2(df.9) = 17.28$ ;  $p < .05$ ;  $TLI = 0.95$ ;  $CFI = .97$ , and  $RMSEA .07$ ; while the seven-item solution showed some weaknesses both in terms of  $TLI (< .90)$  and  $RMSEA (> .08)$ . Moreover, all items loaded significantly on the latent variables, with coefficients ranging from .49 to .78 (all  $p$ 's  $< .001$ ). Hence, the six-item one-factor model adequately represents the data and fits markedly better than the two-factor model and the seven-item model.

### 3.5 Discussion

As evidenced in the beginning of this chapter, the Overwork Climate Scale proposed by Mazzetti *et al.* (2016) could not be validated in the French context. In fact, the two-factor structure constituting the original version of the OWCS, which included the dimensions of overwork endorsement and lacking overwork rewards, could not be corroborated with the given data.

Therefore, a shorter version of the Overwork Climate Scale has been here proposed. Exploratory and Confirmatory Factor Analyses provided evidence for a theoretically interpretable six-item scale composed by one-factor. The six items refer to the employees' perceptions that overwork is strictly related to a management that encourages and values employees to perform overwork (i.e. overwork endorsement).

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Overall, these results suggest that for the French context a one-factor scale for Overwork Climate provides a better fit than the two-factor solution proposed by Mazzetti *et al.* (2016) and validated in Poland (Piotrowski and Jurek, 2019). In particular, the six-item scale showed internal consistency and factorial validity; thus, proving to be a valuable measure of the way overwork climate is regarded at work. Even though the proposed shorter version of the Overwork Climate Scale demonstrates good psychometric properties, further research will be needed to validate these findings in France; thus, improving their generalizability. In fact, “similar results under different conditions illustrate the robustness of the finding” (Firestone, 1993:17).

## CHAPTER 4

### **Investigating the relationship between overwork climate and opposite forms of working hard**

#### **4.1 Purpose and hypotheses**

Following the study carried out by Mazzetti *et al.* (2016), the second part of this study investigates the relationship between overwork climate and two opposite types of working hard: work engagement and workaholism.

Many studies found work engagement to be positively associated to business outcomes. For instance, Harter *et al.* (2002) successfully related engagement to business results. Similarly, Motyka's (2018) literature review confirmed a statistically significant association between work engagement and different categories of performance. For example, the author found that work engagement positively relates to contextual performance in terms of, among all, organizational citizenship behavior, extra-role behavior, innovative behavior, employee retention, organizational and career commitment, knowledge sharing and proactivity; and, negatively, to absence intention (Motyka, 2018); and that engagement relates to both financial (e.g. revenue and profit) and nonfinancial (e.g. customer satisfaction and safety level) performance (Motyka, 2018).

There may be several reasons for which work engagement positively relates to work outcomes. For instance, work engagement has been defined as a positive, fulfilling, work-related state of mind (Schaufeli *et al.*, 2002), and related to greater job satisfaction (Schaufeli, Taris and Van Rhenen, 2008) and to better mental and physical health (Schaufeli, Taris and Van Rhenen, 2008). Hence, it seems reasonable to posit that these positive work-related emotions and experiences would also result in positive work outcomes (Saks, 2006).

Taking into account the noteworthy outcomes of work engagement at both the individual and organizational level, research on its antecedents, and on the motivations why individuals respond to these precursors with variable degrees of engagement, seems critical. Social Exchange Theory (SET) seems to provide a solid rationale in this sense. SET argues that, for relationships to evolve over time into trusting, loyal, and mutual commitments, the parties have to abide by certain "rules" of exchange (Cropanzano and Mitchell, 2005); among them, reciprocity is probably the most known (Cropanzano and Mitchell, 2005). Considering that work engagement may be described as a two-way street between employer and employee

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(Robinson *et al.*, 2004; Rama Devi, 2009), SET proves particularly useful for its explanation. In fact, it can be inferred that, when receiving economic or socioemotional resources from the organization, employees feel obliged to somehow repay their workplace (Cropanzano and Mitchell, 2005). This is in accord with the reciprocity rule. To repay their organization, employees may engage at different levels, according to the resources they received in the first place. Saks (2006) believes employees to be more likely to repay their organization with greater engagement than, for instance, by adjusting their performance's level, as the latter is often used as an indicator for administrative decisions (e.g. compensation) and, thus, more difficult to adapt.

As engaged employees demonstrate a high involvement into their work, devoting to it an extraordinary amount of time (Consiglio *et al.*, 2018; Schaufeli, Taris and Bakker, 2006), the presence of rewards for employees' working hard may be expected to foster an overwork climate within the organization.

Rewards may be either intrinsic or extrinsic; while the former are psychological rewards, the latter are tangible rewards mainly of financial nature (Ram and Prabhakar, 2011). Employees having access to intrinsic rewards, including growth opportunities, acknowledgement, self-esteem, autonomy and responsibility, were found to remain engaged and satisfied with their job, producing significant results for their organization (Mahaney and Lederer, 2006). Additionally, acknowledgement and other forms of intrinsic rewards have been proven essential in recognizing individual, team, or groups' work within organizations (Hoole and Hotz, 2016). Instead, extrinsic rewards include pay raises, bonuses and benefits, and are known for their critical role in attracting top talents (Goldsmith *et al.*, 2000; Stajkovic and Luthans, 2001) and in valuing employees' contributions, mostly at the financial level. If several studies have demonstrated that extrinsic rewards lead to higher levels of engagement (Gill, Dugger and Norton, 2014; Hulkko-Nyman *et al.*, 2014), Ram and Prabhakar (2011) found that extrinsic rewards play a major role in workplaces with more bureaucratic and routine jobs. Moreover, research has highlighted how extrinsic rewards become less important when individuals settle down in a job, being then mostly driven by intrinsic rewards (Ram and Prabhakar, 2011). Bussin (2016) even argues for disadvantages associated to monetary rewards, including a loss in the employees' intrinsic motivation to accomplish work tasks.

Even though some research has argued in favor of intrinsic rewards (Bussin, 2016; Jacobs *et al.*, 2014), the use of extrinsic rewards should not be overlooked to ensure employees engagement. In fact, many still argue for a total rewards system, a holistic approach combining both intrinsic and extrinsic rewards, to be a better solution to increase levels of work



engagement among employees (Ram and Prabhakar, 2011; Victor and Hoole, 2017; WorldatWork, 2010).

In light of all the above, it may be concluded that both intrinsic and extrinsic rewards play an important role in fostering work engagement and overwork. In fact, employees may perceive their hard working as particularly valued by the organization, being encouraged to keep on working more and more. However, over time this relation may become detrimental, being long work hours associated to poorer psychical and psychological health and work-life balance (e.g. Albertsen *et al.*, 2008; Burke, 2008; Dembe, 2008). Moreover, the detrimental effects associated to excessive overwork are expected to be enhanced when employees perceive that the compensation for their hard work is inadequate.

The expectation for which lacking overwork rewards may lead to withdrawing and disengaging behaviors is consistent with the Job Demands-Resources (JD-R) model (Demerouti *et al.*, 2001). In fact, through the motivational process, job resources (e.g. social support and performance feedback) boost employees' engagement which, in turn, results in higher commitment and performances. Job resources may either reduce job demands and the relative physical and psychological costs, facilitate the achievement of work goals, or stimulate personal growth, learning and development (Bakker, 2011). Moreover, resources are believed to play both an intrinsic motivational role, as they foster employees' growth, learning and development, and an extrinsic motivational role, as they are essential for dealing with work demands and for the achievement of work goals (Bakker, 2011).

Overall, it seems evident that over time overwork is not sustainable and that it will negatively affect the employees' level of engagement. Therefore, the following hypothesis has been tested:

*H1. The perception of an overwork climate is negatively associated with work engagement. Employees exposed to a greater overwork endorsement in their workplace experience lower levels of engagement (Mazzetti et al., 2016:886).*

While work engagement can be considered as a positive involvement and a strong dedication to work, workaholism can be depicted as a negative type of commitment to one's job. Over the years, a wide range of research has evidenced how workaholism is associated to several negative outcomes, being problematic for everyone involved: from workaholics to employers, to families, and to society as a whole (Robinson, 2000). For instance, at the organizational level, Clark *et al.* (2014) report how workaholics tend to distrust their colleagues,

believed to be either unwilling or unable to perform a task at their standards, and to engage in an excessive competition with them; thus, engendering counterproductive behaviors. While some authors believe workaholics to be productive and to experience career success, due to their long work hours often interpreted as a sign of commitment and dedication to the job (Ng *et al.*, 2007); many others have questioned such a conviction, suggesting that workaholics would rather create busy and complicated tasks for themselves, in response to their need to work continuously. But it is not only the organization which may suffer from this form of working hard. Workaholism highly affects one's family, both in terms of poor family functioning and greater work-life conflict (Clark *et al.*, 2014) and the individuals themselves. In fact, research evidences how workaholics are likely to largely experience job stress (Clark *et al.*, 2014). Likewise, workaholism appears to positively relate to burnout and negatively to life satisfaction, emotional and mental health, and physical health (Clark *et al.*, 2014).

The underlying motivation pushing workaholics to work compulsively beyond their job description and for longer hours is that of meeting self-imposed goals, of avoiding the insurgence of negative feelings, including shame or anxiety, or of attaining ego enhancements, such as a sense of pride related to their operate. Therefore, workaholics seem to be more motivated by a need to prove themselves, in response to feelings of insecurity and low self-worthy, and less by material or social rewards, or by threats of punishments: hence, workaholics seem to be more motivated by introjected regulation than by external motivation (Van Beek *et al.*, 2012).

Even though external motivation seems to play a smaller role in prompting workaholic behaviors, organizational factors still make a substantial contribution in fostering and sustaining workaholism in the workplace (Ng *et al.*, 2007) and, thus, are also worth investigating. In fact, having defined workaholism as an addiction (Andreassen and Pallesen, 2016), it can be assumed that such behaviors will be enhanced by either positive reinforcements (e.g. salary raise, career advancement, or verbal praise by others) or by the lack of punishments for the above. Consistently, research suggests that workaholism shall be predominant in workplaces with a masculine culture, which incites competitiveness among employees and exasperates fear of failure; otherwise stated, in organizations promoting a “winner takes it all” or “star” reward system which may sponsor workaholic behaviors by recompensating or not limiting such work habits (Ng *et al.*, 2007). Ng *et al.* (2007) further exemplify how organizational factor may foster workaholic behaviors; it is, for example, the case of a work culture in which employees believe that rewards are more allocated on the basis of input, such as attendance or overtime, than output, or of a company which provides its employees with attractive offices and services,

including gyms or restaurants, inducing workers to stay longer in the workplace than necessary. Similarly, it may be expected that organizations with executives, managers and supervisors encouraging overtime work, and expecting personnel to comply with it, support workaholism by acknowledging or rewarding employees for their excessive work behavior (Van Wijhe *et al.*, 2010). Moreover, overwork endorsement is believed to strengthen the workaholics' association between working excessively hard and level of self-worth to the point that self-worth becomes dependent on extreme working hours (Van Wijhe *et al.*, 2010). In view of the above, this second hypothesis has been tested:

*H2: The perception of an overwork climate in the workplace is positively associated with workaholism. The occurrence of workaholism is expected to be higher when employees work in organizations characterized by greater overwork endorsement (Mazzetti et al., 2016:887).*

Furthermore, following the rationale of Mazzetti *et al.* (2016: 887), the present study also investigates the relationship between overwork climate and working hard, when controlling for psychological job demands. Considering that an overload of psychological job demands occurs when the job load is excessive and irregular, and when the consequently imposed job rhythm is high-paced and the employees have to work overtime in order to accomplish their tasks, its association with overwork climate is easily established. But psychological job demands seem to be associated with work engagement and workaholism as well. In fact, on the one hand, time pressure and greater job responsibilities may be perceived by some employees as challenges which could, in turn, promote personal and professional growth; these challenges demand a positive and problem-solving attitude to be overcome, consequently enhancing work engagement (Mazzetti *et al.*, 2016). On the other hand, an overload in psychological job demands may also result in workaholism, because the excessive number of tasks to be completed may foster the tendency to work excessively (Mazzetti *et al.*, 2016). In light of the above, psychological job demands may have a significant impact on both forms of working hard and, thus, are worth investigating as a control variable in association to the others. Hence, in line with Mazzetti *et al.*'s (2016) propositions, the following hypotheses have also been tested:

*H3. The negative association between overwork climate and work engagement remains significant after controlling for psychological job demands (Mazzetti et al., 2016:887).*

*H4. The positive association between overwork climate and workaholism remains significant after controlling for psychological job demands (Mazzetti et al., 2016:887).*

### **4.2 Method: part II**

#### **4.2.1 Procedure**

To test *H1* and *H2* a Correlation Analysis has been performed; the correlation matrix indicates where correlations are significant for the given level of significance established at 5 %. Finally, to assess the impact of an overwork climate on working hard (i.e. work engagement and workaholism) when controlling for job demands (i.e. *H3* and *H4*), Hierarchical Regression Analyses have been performed. According to Mazzetti *et al.*'s (2016) study, in these last analyses only the global variables of workaholism and work engagement have been considered.

#### **4.2.2 Measures**

In the second part of this study, the following variables and measures were used.

*Overwork climate* was assessed using the French scale reported in the first part of the study (i.e. short version of the Overwork Climate Scale) and based on Mazzetti *et al.*'s (2016) previous work on overwork climate. This scale evaluates the extent to which employees perceive their work environment to expect them to perform overwork (i.e. working long hours, taking work home or working during weekends or holidays) in order to finish their tasks and to have access to career advancements or to other benefits. It comprises one factor (i.e. overwork endorsement) with six items (e.g. “La Direction encourage ses salariés à faire des heures supplémentaires” or “Dans mon travail, la plupart des employés font des heures supplémentaires”). All items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Cronbach's  $\alpha$  was .77. The short version of the OWCS is available in Annex C.

*Work engagement* was measured using the nine-item version of the Utrecht Work Engagement Scale (Schaufeli, Bakker and Salanova, 2006). Yet, within the given data, no subscales could be found. Therefore, a one-factor solution was initially retained. Items included

in the analysis were, for example, “Je suis enthousiaste à propos de mon travail” or “À mon travail, je me sens plein d'énergie”. All items were measured on a seven-point rating scale ranging from 1 ((almost) never) to 6 ((almost) always). Corresponding Cronbach alpha was excellent ( $\alpha = .92$ ). Detailed results from the Exploratory Factor Analysis are available in Annex D. Despite the results of the Exploratory Factor Analysis, in this study we decided to adopt the three-factor (i.e. vigor, dedication, and absorption) structure proposed in the literature (Schaufeli, Bakker and Salanova, 2006) for ease of comparison with Mazzetti *et al.*'s (2016) study. Each subscale included three items: for instance, “Quand je me reveille le matin, je suis content d'aller au travail” (vigor); “Je suis enthousiaste à propos de mon travail” (dedication); and “Je me sens épanoui quand je travaille intensément” (absorption).

*Workaholism* was assessed using the ten-item Dutch Work Addiction Scale (Schaufeli, Shimazu and Taris, 2009) which includes two subscales: working compulsively and working excessively. In the given data set, a two-factor structure was found. The first factor was represented by two items, whilst the second one included eight items. All items were rated on a four-point frequency scale ranging from 1 ((almost) never) to 4 ((almost) always). Cronbach's  $\alpha$  was .84 for the first factor and .79 for the second one. Results from this Exploratory Factor Analysis are reported in Annex E. Despite these results of the Exploratory Factor Analysis, which somehow mirrored the two-factor structure proposed in the literature (Schaufeli, Shimazu and Taris, 2009), this study adopted workaholism's original subscales (i.e. working excessively and working compulsively).

Finally, *Psychological job demands* were measured with the 9-item scale taken from the Job Content Questionnaire (Karasek *et al.*, 1998). A two-factor solution was retained after running the analysis. The first factor included items such as “Mon travail est très « bousculé »” and “On me demande d'effectuer une quantité de travail excessive” and had a Cronbach  $\alpha$  of .76. The second factor, instead, comprised two items “Mon travail nécessite de travailler très vite” and “Mon travail nécessite de travailler intensément” and had a Cronbach  $\alpha$  of .75. All items were rated on a four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). Results from this Exploratory Factor Analysis are reported in Annex F. Despite the results of the Exploratory Factor Analysis, Psychological Job Demands have been considered as of one-factor, for ease of comparison with Mazzetti *et al.*'s (2016) study.

### 4.3 Results: part II

In the following sections, results from Correlation and Hierarchical Regression Analysis will be presented. Correlation analysis was performed in order to identify the strength of the relationships between overwork climate and working hard (i.e. workaholism and work engagement), while Hierarchical Regression Analysis to investigate the impact of overwork climate on working hard when controlling for psychological job demands.

#### 4.3.1 Descriptive results for the Correlation Analysis

To test the association between overwork and, respectively, work engagement and workaholism, Correlation Analyses were conducted. Correlations and descriptive statistics for the variables investigated are reported in Table 5 and 6, correspondingly.

As it can be noticed, overwork climate, investigated in terms of overwork endorsement (six items), did not to significantly correlate to work engagement ( $r = .12$ , ns). Yet, when examining its correlations with work engagement subscales, this analysis deems true for vigor ( $r = .47$ , ns) and dedication ( $r = .11$ , ns), but not for absorption ( $r = .18$ ,  $p < .05$ ). In light of the above results, *HI* could not be verified in this study. This result seems coherent with Mazzetti *et al.*'s (2016), who could not demonstrate a negative association between overwork endorsement and work engagement.

**Table 5***Correlations of the study variables*

Variables	<i>r</i>									
	1	2	3	4	5	6	7	8	9	
1. OWCS-6 items	—									
2. Psychological Job Demands	.23**	—								
3. Workaholism	.33**	.55**	—							
4. Working excessively	.40**	.61**	.76**	—						
5. Working compulsively	.23**	.41**	.93**	.48**	—					
6. Work Engagement	.12	-.02	-.03	.12	-.11	—				
7. Vigor	.47	-.07	-.08	.03	-.12	.88*	—			
8. Dedication	.11	-.04	-.09	.08	-.17*	.95**	.77**	—		
9. Absorption	.18*	-.06	-.08	.22**	-.02	.92**	.67**	.82**	—	

*Note.* n=198; \* p < .05; \*\* p < .01

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**Table 6**

*Descriptive Statistics of the study variables (N=198)*

	Minimum	Maximum	Range	Mean	Standard Deviation
1. OWCS – 6items	1.00	5.00	1-5	2.78	0.89
2. Psychological Job Demands	1.56	4.00	1-4	2.82	0.51
3. Workaholism	1.06	4.00	1-4	2.28	0.69
4. Working Excessively	1.13	4.00	1-4	2.33	0.57
5. Working Compulsively	1.00	4.00	1-4	2.23	1.01
6. Work Engagement	1.00	6.00	1-6	4.42	0.99
7. Vigor	1.00	6.00	1-6	4.54	0.99
8. Dedication	1.00	6.00	1-6	4.40	1.13
9. Absorption	1.00	6.00	1-6	4.33	1.12

*Note.* n=198



With regard to *H2*, overwork climate was found to significantly correlate with workaholism ( $r = .33, p < .01$ ); thus, verifying our hypothesis. Furthermore, overwork endorsement positively correlated with working excessively ( $r = .40, p < .01$ ) and with working compulsively ( $r = .23, p < .01$ ). These results are in line with those found by Mazzetti *et al.* (2016), who found overwork endorsement to be significantly related to workaholism.

#### 4.3.2 Results from the Hierarchical Regression Analysis

To test whether overwork climate explained work engagement and workaholism when controlling for job demands, Hierarchical Regression Analysis have been conducted. The results of the Hierarchical Regression Analysis predicting work engagement are detailed in Table 7, which also presents standardized coefficients ( $\beta$ ) and t-statistics value ( $t$ ). In Step 1, Job demands were included into the model as the control variable; then, in Step 2, overwork climate (i.e. overwork endorsement - 6 items) was included as the predictor.

**Table 7**

*Results of the hierarchical regression analysis on Work Engagement controlling Job Demands*

	<i>Step 1</i>		<i>Step 2</i>	
	$\beta$	$t$	$\beta$	$t$
Job Demands	-.02	-.23	-.05	-0.64
Overwork climate – 6 items			.13	1.84
R <sup>2</sup> adj	-.01		.01	

As evidenced in Table 7, overwork climate was non significantly associated with work engagement after controlling for Job demands ( $\beta = .13, ns$ ). The tested regression model explained 1% of the employees' work engagement variance ( $R^2_{Adjusted} = .01; F(2, 197) = 1.73; ns$ ). Hence, the negative association between overwork climate and work engagement after controlling for psychological job demands could not be verified. Similarly, Mazzetti *et al.*'s

(2016) found a non-significant association between the overwork endorsement dimension and work engagement.

Results of the Hierarchical Regression predicting workaholism are instead presented in Table 8, which also reports standardized coefficients ( $\beta$ ) and t-statistics value ( $t$ ).

**Table 8**

*Results of the hierarchical regression analysis on Workaholism controlling Job Demands*

	<i>Step 1</i>		<i>Step 2</i>	
	$\beta$	$t$	$\beta$	$t$
Job Demands	.55***	9,21	.50***	8.41
Overwork climate – 6 items			.22***	3.71
R <sup>2</sup> adj	.30***		.34***	

**Note.** \*\*  $p < .01$ ; \*\*\*  $p < .001$

As reported in Table 8, overwork climate was positively associated with workaholism after controlling for Job demands ( $\beta = .22$ ,  $p < .001$ ). The tested regression model explained 34% of the employees' workaholism variance ( $R^2_{\text{Adjusted}} = .34$ ;  $F(2, 197) = 52.06$ ;  $p < .001$ ). Hence,  $H4$  was fully supported. These results match those found by Mazzetti *et al.* (2016), who found a positive and significant association between the two dimensions.

#### 4.4 Discussion

This second part of the study aimed at investigating the relationship between the perception of an overwork climate and two opposite forms of working hard, i.e. work engagement and workaholism, throughout a careful analysis of the data collected in France ( $n=198$ ).

With regard to the association between overwork climate and work engagement, results indicate that the overwork endorsement dimension, defined as the extent to which overwork is

prompted and valued at work, is not significantly correlated to employees' engagement. This finding is in line with Mazzetti *et al.*'s (2016) results and may have several explanations.

First, engaged employees appear to be driven by self-determined intrinsic motivation (Van Beek *et al.*, 2012), which occurs when an employee endorses a behavior and experiences both volition and choice. In other words, engaged employees perform an activity because they perceive it as interesting and enjoyable, and because it satisfies their psychological needs for either competence, autonomy or relatedness. Hence, engaged employees are strongly connected to their work, they experience what they do as enjoyable and satisfying and, therefore, they are motivated to do it, often dedicating to their job extra time and efforts. Following this rationale, engaged employees will be hardly influenced by the external environment.

Second, Mazzetti *et al.*'s (2016) research shows how the negative association between overwork climate and work engagement depends on the lacking overwork rewards' dimension: dimension which could not be investigated in the present study due to the different measure of overwork climate adopted. In fact, while the presence of intrinsic and extrinsic rewards was found to enhance the employees' level of engagement (e.g. Gill, Dugger and Norton, 2014; Hoole and Hotz, 2016; Hulkko-Nyman *et al.*, 2014; Mahaney and Lederer, 2006); the lack of an adequate compensation for their extra effort is expected to lower it (Mazzetti *et al.*, 2016).

Besides, this study also postulated that the perception of an overwork climate would be positively associated with workaholism; this hypothesis proved particularly true for overwork endorsement. Overall, this finding supports the results found by Mazzetti *et al.* (2016) and is consistent with those by Johnstone and Johnston's (2005), who realized that individuals experiencing their work environments as highly pressured would further develop the drive component of workaholism.

Finally, the latest purpose of this thesis was to investigate the relationship between the perception of an overwork climate and the two dimensions of working hard, when controlling for psychological job demands. On the one hand, overwork climate did not significantly predict work engagement when controlling for job demands; therefore, the hypothesized negative relationship between the two after controlling for job demands could not be corroborated. This result confirms Mazzetti *et al.*'s (2016) findings for overwork endorsement. However, the authors were able to further investigate this association, finding that engagement was negatively associated to the lack of adequate rewards, regardless of the workload placed on the employees (i.e. psychological. job demands) (Mazzetti *et al.*, 2016). On the other hand, this study also suggests that overwork climate (i.e. overwork endorsement) would be positively associated with workaholism, regardless of psychological job demands. These results are consistent with

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Mazzetti *et al.*'s (2016), who found that controlling for psychological job demands only affected the association between workaholism and the lacking overwork rewards dimension.

## CHAPTER 5

**Conclusion****5.1 General discussion**

The general aim of the present thesis was threefold: to validate a French version of the Overwork Climate Scale originally proposed by Mazzetti *et al.* (2016), to investigate its relationship with two different forms of working hard, namely work engagement and workaholism, and to explore these associations when controlling for psychological job demands. In light of the above and following the footprints of Mazzetti *et al.* (2016), a two-part study was conducted.

The first part made clear that the 11-item scale proposed by Mazzetti *et al.* (2016) to measure overwork climate and composed of two factors (i.e. overwork endorsement, 7 items, and lacking overwork rewards, 4 items) could not be replicated in the present analysis. Despite its factorial structure has been also validated in Poland (Piotrowsky and Jurek, 2019), this study found that a one-factor scale (i.e. overwork endorsement) with six items would prove the best solution in France, being a factorially valid and an internally consistent measure of an overwork climate at work. In fact, although the choice of employing a different measure compared to Mazzetti *et al.* (2016) may have impacted its ease of comparison, the removal of the lacking overwork rewards dimension seemed advisable due to the poor statistics resulting from both Exploratory and Confirmatory Factor Analysis. The reasons (e.g. sample equivalence) which may have led to such distinction will be deepened in the following section.

Results from the second part of this study, instead, indicated that overwork endorsement was not significantly associated with work engagement; on the contrary, a strong positive association was found between overwork endorsement and workaholism. Finally, this study did not find evidence of a negative association between overwork climate and work engagement, even after controlling for the impact of an excessive workload (i.e. psychological job demands); whereas the positive association between overwork climate and workaholism was proven despite the introduction of the control variable.

To present knowledge this study represents the first attempt to validate Mazzetti *et al.*'s (2016) results in the investigation of the association between the presence of an overwork

climate and working hard: overall, these results support the authors' findings (Mazzetti *et al.*, 2016).

### **5.2 Study limitations and suggestions for future research**

The current study has some limitations which should be noted. First of all, despite the positive and high response rate from the employees contacted through professional social networks, which was somehow reassuring, the sample remains of a questionable size and would undeniably benefit from being bigger. Hence, some complications which have been encountered throughout the study, and which will be highlighted in this section, may relate to the sample size of this study, even though Comrey and Lee (1992) still argue for a sample size of 200 to be fair.

In regard to the first purpose of the study, that is the validation of a French version of the Overwork Climate Scale proposed by Mazzetti *et al.* (2016), the observed difference in the factorial structure could derive from several methodological or cultural causes. Schaffer and Riordan (2003) outline multiple causes potentially leading to a difference in the factorial structure of a cross-cultural study. Among them is the equivalence of the sample. Sample variation could have also become a source of variation in the first part of this study. Indeed, the overall population for the validation of an Overwork Climate Scale was of 395 individuals (Mazzetti *et al.*, 2016). Even though, in this study, the diversity of the participants, in terms of work sector, work role and other demographic variables, mirrors enough the sample described by the authors of the OWCS; the substantially lower number could have still led to some differentiation. For instance, despite the diversity of the participants to the study, the presence of some dominant groups could be detected: nearly 80% of the participants reported a high level of education (third level of education) while over a third were working in the bank sector at the time of answering. This limitation becomes even more evident in the second part of this study, where to an original sample of 791 employees is opposed a sample of 198 individuals, with again differences in the participants' distribution (e.g. among work sectors). Moreover, this methodological limitation turns out to be potentially significant in explaining differences in the other scales' factorial structures. Differences which have been highlighted throughout the research. In light of all the above, future research shall be expected to validate these findings in France, due to this study's small sample size and to the resulting low level of representativeness.

Differences in factor structure may also originate on cultural grounds; therefore, certain precautions were put in place to minimize their potential impact on factorial structure. To guarantee content and conceptual equivalence three measures were employed. Firstly, all questionnaires underwent a translation-back-translation procedure, as recommended by Brislin (1980); secondly, a pilot trial was planned with five people representing the targeted sample and, finally, “insiders and outsiders” (Schaffer and Riordan, 2003) perspectives were considered when developing the instruments. The latter consists in having “bilingual and bicultural researchers from each culture working together in a team environment” (Schaffer and Riordan, 2003: 190). Having taken into account all of the above precautions, the risks of bias due to the translation of English idiomatic expressions which could be misunderstood by French speakers has been reduced, still not eliminated. This study aimed to validate a French version of the OWCS proposed by Mazzetti *et al.* (2016). However, as it has been highlighted, differences in the structure have been found. As previously discussed, these differences can be explained by problems of psychometric order, but they may have also been strengthened by cultural factors, for which only hypotheses can be formulated.

Besides, the current study undergoes some more limitations which should be hereby addressed. First, all data were cross-sectional, therefore no inference about changes overtime in the outcomes of overwork climate could be done. To present knowledge, no studies have addressed this issue; therefore, further investigations using a longitudinal design is needed to fill this gap in the literature.

Second, data was gathered from self-report questionnaires; consequently, some further limitations shall be considered. While answering the survey, in fact, participants may encounter the so-called *social-desirability bias*, that is not responding truthfully to a question, especially in the presence of sensitive questions, but in a socially acceptable way. Other potential associated issues are the *response biases*: someone’s tendency to answer in a certain manner regardless of the question. We define *acquiescent response bias* the tendency to answer yes, no matter the content of the questions, and *nonacquiescent bias*, the tendency to always answer no. However, even though this risk exists, results from the Correlation Analysis suggest that participants discriminated the study variables. In fact, correlations were either positive or negative, and more or less statistically significant (as evidenced in Table 5). If response biases were to be significant in the study, correlations would have been much more similar to each other.

Finally, another problem which could have been faced when using self-report questionnaires may relate to items’ clarity: in fact, questions may be interpreted differently by

different individuals. However, this issue seemed only to pertain to the lacking overwork rewards dimension, which showed poor measure of internal consistency; therefore, by removing the subscale, this limitation should have been avoided. Nonetheless, further research is recommended to investigate the impact of lacking overwork rewards on working hard.

Finally, in order to develop a greater understanding on how employees' overwork perceptions influence their own behavior at work, scholars should follow and expand this line of research integrating into the model different mediators and/or moderators. For instance, it would be interesting to assess the impact of training on the relationship between overwork climate and working hard. Since both workaholics and engaged employees tend to devote an extraordinary amount of time to work (Consiglio *et al.*, 2018; Schaufeli, Taris and Bakker, 2006), time and stress management trainings could have an interesting influence on these heavy work investment behaviors. Indeed, research argues for training to be an important predictor of work engagement (e.g. Rothmann and Rothmann Jr, 2010; Salanova *et al.*, 2005) and for workaholism to be characterized by the tendency to take on more work that can be handled, accepting new tasks without having completed the others (Van Wijhe *et al.*, 2010). In view of the above, investigating the moderating effect of time and stress management trainings on the overwork climate – working hard relationship seems particularly interesting and full of practical implications.

### **5.3 Practical implications**

Although the above-mentioned limitations of the present study render it an early investigation of overwork climate and of its impact on working hard, it still provides several important implications for practice.

Overwork refers to the behavior of all those employees who work excessive hours, so excessive to mount risks beyond what is normally associated with standard and contracted (Golden and Altman, 2008); yet, overwork has become increasingly observable in today work organizations. In addition to the individuals' effects, which include emotional exhaustion (De Croon *et al.*, 2004), stress, and burnout, overwork has spillover effects on the social well-being outcomes for both the employees and their families (Mariappanadar and Aust, 2017). HRM practices fostering work intensification, i.e. overwork, are therefore to be constrained to avoid the insurgence of issues at the individual level and on the employee-family and the employee-society relations (Mariappanadar and Aust, 2017). Moreover, effectively limiting an “always



on” approach to work is expected to result in greater mental clarity, faster decisions and fewer mistakes; thus, increasing organizations’ productivity levels.

Furthermore, this research shows how creating an overwork climate is not only harmful for employees, organizations and society; but it also influences the development of a negative work behavior. In fact, an organizational climate endorsing overwork was found to enhance workaholism. Even though in Western society hard work is usually supported and valued, there is a growing consensus that practitioners should pay more attention to the risks associated to workaholism (Van Wijhe *et al.*, 2013). In fact, workaholism has been associated to low job and life satisfaction (Shimazu *et al.*, 2012; Van Beek *et al.*, 2014), poorer social relationship outside work (Schaufeli, Taris and Van Rhenen, 2008), higher levels of exhaustion (Taris *et al.*, 2005) and increased risks of burnout (Schaufeli *et al.*, 2009b; Schaufeli, Taris and Bakker, 2008).

Despite workaholics tend to work more in response to a sense of low-worthiness and insecurity, and to be driven by an inner pulsion compelling to work particularly hard, an environment characterized by high and irregular demands was found to foster their compulsion. In light of the above, HRM should pay increasing attention to develop a supportive and sustainable work climate, which does not pressure employees to work excessively long hours, in order to reduce the chances of promoting obsessive work behaviors among employees.

In order to create such a supportive climate, instead of an overwork environment, practices, policies and procedures need to be changed in the first place. Kopelman *et al.* (1990) argue that for a climate change to be effective, it is necessary to modify such practices and to reward the desired behaviors; thus, inducing a change of the employees’ perceptions of the organization’s goals and expectations. Moreover, for climate change to be effective, it is critical to engage managers and executives. In fact, they should act as role models and their behavior is expected to reflect organizational expectations (Ostroff *et al.*, 2003). For instance, to promote a climate which discourages workaholism, management may encourage work-life balance by respecting scheduled hours and avoiding answering work-related emails or calls after leaving the office. Finally, it is to be considered that workaholics tend to take on more work that they can handle (Van Wijhe *et al.*, 2010) and that, in order to satisfy their need for more and more work, they may consciously or unconsciously prefer to extend and not to finish their tasks (Porter, 1996). This attitude has important implications in terms of employees’ productivity, both for workaholics and the colleagues they interact with (Porter, 2001). Organizations should address this issue by promoting a climate of smart, instead of hard, working; in this sense, managers’ positive feedbacks for efficient work and trainings on time management may prove strategic solutions.

**Final note**

Overall, the empirical findings discussed in this thesis recommend caution in presence of an overwork climate and support the promotion of a “work-smart-not-hard” climate, which does not induce employees to dedicate an extraordinary amount of time to their work but encourages employees to perform more efficiently, promoting greater work-life balance.

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**Annex A: Overwork Climate Scale (OWCS)**

1. Au travail, on s'attend à ce que je fasse des heures supplémentaires  
*Almost everybody expects that employees perform overtime work*
2. Management encourage overtime work  
*La Direction encourage ses salariés à faire des heures supplémentaires*
3. It is considered normal to take work home  
*Dans mon travail, il est considéré comme normal pour les employés de ramener leur travail à la maison*
4. Most employees work beyond their official work hours  
*Dans mon travail, la plupart des employés font des heures supplémentaires*
5. Performing overwork is important for being promoted  
*Au travail, faire des heures supplémentaires est important pour être promu*
6. It is considered normal to work on weekends  
*Dans mon travail, il est considéré comme normal de travailler le weekend*
7. It is difficult to take a day off or paid holidays  
*Au travail, il est difficile de prendre un jour férié ou des vacances*
8. Overtime work is fairly compensated by extra time off work or by other perks (R)  
*Dans mon travail, les heures supplémentaires sont compensées par plus de vacances ou par d'autres avantages (R)*
9. Working overtime is fairly compensated financially (R)  
*Dans mon travail, les heures supplémentaires sont rémunérées (R)*
10. (Almost) nobody needs to do unpaid overtime work (R)  
*Au travail, presque personne n'a besoin de faire des heures supplémentaires non payées (R)*
11. A policy exists to restrict overtime work (R)  
*Au travail, un règlement existe pour restreindre les heures supplémentaires (R)*

**Annex B: Exploratory Factor Analysis results of the seven-item version of the  
Overwork Climate Scale (OWCS)**

**Table B1**

*Exploratory Factor Analysis results of the seven-item version of the Overwork Climate Scale (OWCS)*

<i>Items</i>	M	SD	<i>Factor Loadings</i>
1. Au travail, on s'attend à ce que je fasse des heures supplémentaires	3.22	1.26	.46
2. La Direction encourage ses salariés à faire des heures supplémentaires	2.78	1.25	.47
3. Dans mon travail, il est considéré comme normal pour les employés de ramener leur travail à la maison	2.07	1.26	.27
4. Dans mon travail, la plupart des employés font des heures supplémentaires	3.46	1.26	.24
5. Au travail, faire des heures supplémentaires est important pour être promu	2.74	1.28	.32
6. Dans mon travail, il est considéré comme normal de travailler le weekend	2.40	1.52	.29
7. Au travail, il est difficile de prendre un jour férié ou des vacances	2.24	1.32	.31
Eigenvalue			3.18
% of Variance			45.35
Cronbach's $\alpha$			.79

*Note.* n =198. M = Mean; SD = Standard Deviation.



**Annex C: Exploratory Factor Analysis results of the six-item version of the Overwork Climate Scale (OWCS)**

**Table C1**

*Exploratory Factor Analysis results of the six-item version of the Overwork Climate Scale (OWCS)*

<i>Items</i>	M	SD	<i>Factor Loadings</i>
1. Au travail, on s'attend à ce que je fasse des heures supplémentaires	3.22	1.26	.45
2. La Direction encourage ses salariés à faire des heures supplémentaires	2.78	1.25	.47
3. It is considered normal for employees to take work home	2.07	1.26	.27
4. Dans mon travail, la plupart des employés font des heures supplémentaires	3.46	1.26	.21
5. Au travail, faire des heures supplémentaires est important pour être promu	2.74	1.28	.32
6. Dans mon travail, il est considéré comme normal de travailler le weekend	2.40	1.52	.20
Eigenvalue			2.85
% of Variance			47.54
Cronbach's $\alpha$			.77

*Note.* n = 198. M = Mean; SD = Standard Deviation.

**Annex D: Exploratory Factor Analysis results of the Utrecht Work Engagement Scale  
(UWES)**

**Table D1**

*Exploratory Factor Analysis results of the Utrecht Work Engagement Scale (UWES)*

<i>Items</i>	M	SD	<i>Factor</i>
			<i>Loadings</i>
			Factor 1
1. À mon travail, je me sens plein d'énergie	4.75	0.99	.56
2. À mon travail, je me sens fort et vigoureux	4.51	1.12	.56
3. Je suis enthousiaste à propos de mon travail	4.54	1.18	.67
4. Quand je me réveille le matin, je suis content d'aller au travail	4.37	1.31	.63
5. Mon travail est une source d'inspiration pour moi	3.91	1.51	.67
6. Je me sens épanoui quand je travaille intensément	4.21	1.35	.57
7. Je suis fier du travail que je fais	4.74	1.20	.61
8. Je suis plongé dans mon travail	4.89	1.12	.46
9. Je me sens transporté par mon travail	3.88	1.52	.62
Eigenvalue			5.57
% of Variance			61.90
Cronbach's $\alpha$			.92

*Note.* n =198. M = Mean; SD = Standard Deviation.

**Annex E: Exploratory Factor Analysis results of the Dutch Work Addiction Scale  
(DWAS)**

**Table E1**

*Exploratory Factor Analysis results of the Dutch Work Addiction Scale (DWAS)*

<i>Items</i>	M	SD	<i>Factor loadings</i>	
			Factor 1	Factor 2
1. J'ai l'impression d'être pressé au travail et de courir après le temps	2.87	0.89	.66	-.35
2. Je continue à travailler alors que mes collègues se sont arrêtés	2.37	0.87	.67	-.27
3. Je suis occupé par beaucoup des projets en cours	2.84	0.92	.55	-.23
4. Je passe plus de temps au travail, au lieu d'être avec mes amis, de pratiquer mes hobbies ou de faire d'autres loisirs	2.29	1.01	.51	-.39
5. Il m'arrive de me retrouver à faire plusieurs choses en même temps, comme déjeuner, écrire des notes et parler au téléphone	2.32	0.96	.68	-.30
6. Il est important pour moi de travailler dur même si je n'aime pas ce que je fais	2.23	1.08	.38	-.92
7. Je ressens à l'intérieure de moi une force que me pousse à travailler dur	2.78	0.89	.47	-.33

*Continue*

**Table E1** (Continued)

<i>Items</i>	M	SD	<i>Factor loadings</i>	
			Factor 1	Factor 2
8. Je me sens obligé de travailler dur même si ça ne me plaît pas	2.23	1.10	<i>.55</i>	<i>-.80</i>
9. Je me sens coupable quand je suis en congé	1.52	0.84	<i>-.45</i>	<i>-.21</i>
10. C'est difficile pour moi de me relaxer quand je ne suis pas en train de travailler	1.62	0.81	<i>.51</i>	<i>-.25</i>
Eigenvalue			3.04	2.19
% of Variance			38.34	12.18
Cronbach's $\alpha$			<i>.79</i>	<i>.84</i>

**Note.** n =198. M = Mean; SD = Standard Deviation. Items with loadings higher of 0.32 or higher were considered (Tabachnick and Fidell, 2001) and are reported in italic. But item loadings are not characterized by statistical significance. In a similar way, eigenvalues, % of variance and Cronbach's  $\alpha$  are not associated to any statistical significance.

**Annex F: Exploratory Factor Analysis results of Psychological Job Demands in the Job Content Questionnaire (JCQ)**

**Table F1**

*Exploratory Factor Analysis results of Psychological Job Demands in the Job Content Questionnaire (JCQ)*

<i>Items</i>	M	SD	<i>Factor loadings</i>	
			Factor 1	Factor 2
1. Mon travail nécessite de travailler très vite	2.96	0.77	<i>.37</i>	<i>-.96</i>
2. Mon travail nécessite de travailler intensément	3.09	0.67	<i>.54</i>	<i>-.64</i>
3. On me demande d'effectuer une quantité de travail excessive	2.78	0.84	<i>.79</i>	<i>-.45</i>
4. Je dispose du temps nécessaire pour exécuter mon travail	2.50	0.87	<i>.50</i>	<i>-.22</i>
5. Je reçois des ordres contradictoires de la part d'autres personnes	2.37	0.93	<i>.51</i>	<i>-.18</i>
6. Mon travail nécessite de longues périodes de concentration intense	2.91	0.73	<i>.41</i>	<i>-.17</i>
7. Mes tâches sont souvent interrompues avant d'être achevées, nécessitant de les reprendre plus tard	3.17	0.78	<i>.55</i>	<i>-.29</i>
8. Mon travail est très « bousculé »	2.87	0.84	<i>.69</i>	<i>-.34</i>
9. Attendre le travail de collègues ou d'autres départements ralentit souvent mon propre travail	2.70	0.95	<i>.51</i>	<i>-.22</i>
Eigenvalue			2.78	1.89
% of Variance			39.17	12.25
Cronbach's $\alpha$			<i>.76</i>	<i>.75</i>

*Note.* n =198. M = Mean; SD = Standard Deviation. Items with loadings higher of 0.32 or higher were considered (Tabachnick and Fidell, 2001) and are reported in italic. But item loadings are not characterized by statistical significance. In a similar way, eigenvalues, % of variance and Cronbach's  $\alpha$  are not associated to any statistical significance.