

A PORTUGUESE BANK AND THE
JOB DEMANDS-RESOURCES MODEL: SHEDDING LIGHT
ON REGIONAL DIFFERENCES THROUGH A
MIXED-METHODS APPROACH

Ana Miguel Peças de Oliveira

Dissertation submitted as partial requirement for the conferral of
Master in Human Resource Management and Organizational Consultancy

Supervisor:

Professor PhD Sílvia A. Silva, Associate Professor, ISCTE Business School,
Department of Human Resources and Organizational Behavior

July 2017

ACKNOWLEDGMENTS

There are several people to whom I owe a big thank you for all their support and help throughout this past year:

To begin, I would like to express my gratitude to my supervisor, Professor Sílvia Silva, for all of her assistance and words of encouragement from the very first day. I truly appreciate the fact that she consistently allowed this thesis to be my own work, based on my own ideas, while never losing track of my progress and always willing to guide me in the right path whenever she felt I needed it.

I would like to acknowledge all the Professors that I had the opportunity to learn from during my Masters. Coming from a different field, my fears of not being able to adapt vanished with each class I took: every one of them, in their own way, made me realize I had done the right choice. Furthermore, I would like to thank all of my colleagues, who quickly became friends, for all of their support and prompt suggestions whenever we discussed our theses.

I wish to express a sincere thank you to the twenty-five men and women who so graciously agreed to participate in my research, from the customer assistants to the administration board. Without them, it would not have been possible to complete this study. I thoroughly enjoyed interviewing each and every one of them during the hot summer days in Alentejo.

Similarly, my gratitude extends to the almost five hundred employees who answered my questionnaire in such a short time. My heartfelt thank you goes to the Human Resource Director who so kindly and expeditiously took the time out of his schedule to consider my request and forward the questionnaire to all agency managers. Unmistakably, it would have also been impossible to develop this study without his help.

A special word of thank you goes to my Mother and Father for their endless support and optimism. Thank you for listening, even when you did not fully comprehend, and for always having a kind word of advice.

Last, but never least, my final note of appreciation goes to António, for standing beside me at all times, for all these years. I am truly grateful for your continuous words of reassurance, for your stress management skills when I used up all of mine, and for listening even when you were tired and it got boring and it was not as interesting nor as fascinating as your molecules. But still you listened. So, for all the love and unconditional support, thank you.

ABSTRACT

The Job Demands-Resources model describes the relations between work characteristics and outcomes, proposing a health impairment process and a motivational process. This work expands upon previous research on this flexible model by using a mixed-methods approach within one Portuguese private bank, and by testing hypotheses regionally. Study 1 consisted of twenty-five interviews conducted in Alentejo that allowed the identification of new job demands and resources related to customer contacts and bank secrecy. In study 2, questionnaires were applied on a national level ($N=476$), in order to confirm if the findings in Alentejo occurred throughout the country. Nine hypotheses were tested to investigate the mediating role of professional satisfaction, and the moderating role of bank secrecy, support from colleagues and support from supervisors on stress and sleeping difficulties. Results show that professional satisfaction mediates the relationships between performance goals and positive customer contacts on stress, and bank secrecy moderates the relation between customers' misbehavior and stress. The results further suggest that both support from colleagues and supervisors moderate performance goal impacts on stress and sleeping difficulties, and support from supervisors moderates the impact of customer contacts after work on stress as well. The hypothesized moderating role of both kinds of support on the relation between customers' misbehavior and stress was not supported, as well as support from colleagues as a moderator of the relation between customer contacts after work and stress and sleeping difficulties. Practical implications and limitations are discussed, and future research possibilities are offered.

Keywords: job demands-resources model; banking sector; Portugal; mixed-methods.

JEL Classification System: I120 Health Behavior; Y4 Dissertations (unclassified).

RESUMO

O modelo Job Demands-Resources descreve as relações entre características de trabalho e efeitos, propondo um processo de health impairment e um processo motivacional. Este trabalho expande a investigação já desenvolvida sobre este flexível modelo através de uma abordagem mista num banco privado português e pelo teste de hipóteses regional. O estudo 1 consistiu em vinte e cinco entrevistas no Alentejo que permitiram a identificação de novas exigências e recursos relacionadas com contactos com clientes e sigilo bancário. No estudo 2, foram aplicados questionários a nível nacional ($N=476$), de forma a confirmar se as descobertas no Alentejo se verificam em todo o país. Foram testadas nove hipóteses para investigar o papel mediador da satisfação profissional e o papel moderador do sigilo bancário, apoio dos colegas e apoio dos supervisores no stress e dificuldades em dormir. Os resultados mostram que a satisfação profissional medeia as relações entre objetivos de desempenho e contactos positivos com os clientes e o stress, e o sigilo bancário modera a relação entre o mau comportamento dos clientes e o stress. Os resultados sugerem ainda que tanto o apoio dos colegas como dos supervisores moderam o impacto dos objetivos de desempenho no stress e dificuldades em dormir, e que o apoio dos supervisores modera também o impacto dos contactos dos clientes depois do trabalho no stress. O papel moderador de ambos os tipos de apoio na relação entre o mau comportamento dos clientes e o stress não foi confirmado, assim como o apoio dos colegas enquanto moderador da relação entre os contactos com clientes depois do trabalho e o stress e as dificuldades em dormir. São discutidas as implicações práticas e limitações, e são oferecidas possibilidades futuras de investigação.

Palavras-chave: modelo job demands-resources; setor bancário; Portugal; métodos mistos.

JEL Classification System: I120 Health Behavior; Y4 Dissertations (unclassified).

INDEX

1. INTRODUCTION	15
2. LITERATURE REVIEW	18
The early Job Demands-Resources model of burnout	20
The revised Job Demands-Resources model	22
The current Job Demands-Resources model.....	24
The Job Demands-Resources model in comparison to other well-known models	29
Model’s limitations and future research avenues	31
Conclusions.....	34
3. QUALITATIVE STUDY	37
Method	38
<i>Participants</i>	38
<i>Procedure and data analysis</i>	39
Result Overview	41
<i>Global results</i>	42
Discussion	49
<i>Job demands</i>	50
<i>Job resources</i>	51
Concluding Remarks.....	51
4. QUANTITATIVE STUDY	53
Method	57
<i>Sample and procedure</i>	57
<i>Measurements</i>	58
<i>Data analysis</i>	62
Results.....	62
<i>Customer relations throughout the country</i>	62
<i>Testing hypotheses globally</i>	63

<i>Testing hypotheses regionally</i>	70
Discussion.....	72
<i>Do customer relationships vary throughout the country?</i>	73
<i>What happens in Portugal?</i>	73
<i>Are all regions the same?</i>	77
Concluding Remarks.....	78
5. GENERAL DISCUSSION	80
Theoretical Contributions	81
Practical Implications	82
Limitations	83
Future Research	84
6. CONCLUSION	87
7. REFERENCES	89
8. ANNEXES	98
Annex 1. Interviewee characterization sheet.....	98
Annex 2. Interview protocol for administrators	100
Annex 3. Interview protocol for direct customer contact positions	103
Annex 4. Interview protocol for all other functions	106
Annex 5. List of all codes and their origin	109
Annex 6. Definitions of original and reversed codes	111
Annex 7. Examples of all used codes.....	113
Annex 8. Questionnaire.....	127
Annex 9. Measures of constructs and reliabilities.....	132
Annex 10. Model coefficients for hypothesis 1	134
Annex 11. Model coefficients for hypothesis 2	134
Annex 12. Results from regression analysis of hypothesis 3	135
Annex 13. Results from regression analysis of hypothesis 4	135

Annex 14. Results from regression analysis of hypothesis 5	135
Annex 15. Results from regression analysis of hypothesis 6	136
Annex 16. Results from regression analysis of hypothesis 7	136
Annex 17. Results from regression analysis of hypothesis 8	136
Annex 18. Results from regression analysis of hypothesis 9	137
Annex 19. Model coefficients for hypothesis 1 in North	137
Annex 20. Model coefficients for hypothesis 1 in Center.....	137
Annex 21. Model coefficients for hypothesis 1 in Metropolitan Region of Lisbon	138
Annex 22. Model coefficients for hypothesis 1 in Alentejo.....	138
Annex 23. Model coefficients for hypothesis 2 in North	138
Annex 24. Model coefficients for hypothesis 2 in Center.....	139
Annex 25. Model coefficients for hypothesis 2 in Metropolitan Region of Lisbon	139
Annex 26. Model coefficients for hypothesis 2 in Alentejo.....	139
Annex 27. Results from regression analysis of hypothesis 3 in all regions	140
Annex 28. Results from regression analysis of hypothesis 4 in all regions	140
Annex 29. Results from regression analysis of hypothesis 5 in all regions	141
Annex 30. Results from regression analysis of hypothesis 6 in all regions	141
Annex 31. Results from regression analysis of hypothesis 7 in all regions	142
Annex 32. Results from regression analysis of hypothesis 8 in all regions	142
Annex 33. Results from regression analysis of hypothesis 9 in all regions	143

INDEX OF TABLES

Table 1. Sample demographic characteristics..... 38
Table 2. Distribution of workers in each branch..... 39
Table 3. Code dictionary excerpt..... 41
Table 4. Most frequently used codes 41
Table 5. Not mentioned codes 42
Table 6. Correlations, means and standard deviations of construct measures..... 61
Table 7. Means and standard deviations for customer-related variables 63
Table 8. Overview of hypotheses results by region, in comparison to global results.... 71

INDEX OF FIGURES

Figure 1. The Job Demands-Resources model 27
Figure 2. Representation of hypothesis 1 54
Figure 3. Representation of hypothesis 2 54
Figure 4. Representation of hypothesis 3 55
Figure 5. Representation of hypotheses 4 to 9..... 56
Figure 6. Plot of the two-way interaction effect of hypothesis 3..... 66
Figure 7. Plot of the two-way interaction effect of hypothesis 4..... 67
Figure 8. Plot of the two-way interaction effect of hypothesis 6..... 68
Figure 9. Plot of the two-way interaction effect of hypothesis 9..... 70

1. INTRODUCTION

Bankers, teachers, or even farmers: everyone feels stressed at some point in their jobs. Whether it is due to performance demands, problems with students, or if the crops have had a bad year, stress can last for a long time and it will inevitably affect the individual.

In a recently published article, Bliese *et al.* (2017) reviewed the history of stress research within the Journal of Applied Psychology since 1917 until nowadays. Unlike expected, it seems that major societal events, like wars, failed to drive research in this area: for the first 50 years analyzed, research on stress and well-being in work contexts was relatively rare. However, more recently, published articles have increasingly tended to reflect the events that occurred in society and their corresponding stressors, such as economic recessions and the uncertainty of employment.

It is maybe due to this that only about 40 years ago the first structured and holistic approach to stress was published by Cox (1978). In this era, which encompasses the years from 1967 to 1996, stress and safety became a hot-topic due to several occupational disasters (Chernobyl, for example), and the establishment of the United States' National Institute for Occupational Safety and Health (Bliese *et al.*, 2017). Cox's taxonomy for work-related stress theories contributed greatly to the development of a theoretically focused discussion around the nature of stress (Leka & Houdmont, 2010). In sum, he proposed that such theories can be divided into the early stimulus and response based models and the contemporary psychological models. The latter can be also divided into two categories: the interactional theories, based on a structural approach, and the transactional theories, focused on processes. It is within the first approach (the interactional theories) that the Job Demands-Resources model (JD-R; Demerouti *et al.*, 2001) fits.

Introduced over 15 years ago, this model has inspired numerous empirical studies that have supported its premises, being applied in thousands of organizations around the world to inform psychosocial education policies and risk assessment approaches (Bakker & Demerouti, 2016). It is based on the distinction between job demands and job resources that the model proposes two different processes: a health impairment process and a motivational process. Considered a highly flexible model, it can be applied to virtually any organization, assuming the possibility of variation of job demands and resources according to the specific context being studied.

Today, the reality is different than it was when stress theories started to emerge. Occupational disasters have decreased dramatically due to an increase in health and safety regulations, and while we have yet to learn how to solve conflicts without starting a war over them, nowadays stress occurs mostly due to a different kind of demands with which we have a hard time coping with.

Modern life and technological evolution brought us something called occupational stress (Manea *et al.*, 2013). It occurs when a discrepancy emerges between the psychological demands imposed upon workers and their perceived inability to either manage or cope with those demands, resulting in a disturbance of their equilibrium (Colligan & Higgins, 2005; Kolbell, 1995). In the last decade, the tertiary sector has grown exponentially, and while a big portion of it is based on a single shopping experience, banking institutions still represent an exception to this, being characterized by on-going customer relationships involving multiple transactions (Sengupta *et al.*, 2015).

In this reasoning, banks are clearly a different organization to study. They establish relationships with customers in a different way than other services do, since they deal with a very private aspect of their customers' lives: money. People choose particular banks for particular reasons, and bankers are interested in knowing their customers, since this allows them to have the tools they need to make better decisions for their institution (for example, whether or not a customer is fit to receive a loan of a high value). The economic crisis that recently occurred also shaped the way customers interact with banks, particularly in Portugal. Customers want to know more about the institution to which they trust their money to, they want to feel safe, and while they want to be sure that their money will not disappear all of a sudden, they also want to apply it in ways that maximize their profit.

All of this puts bankers in a very delicate situation. Not only are they responsible for the image of the institution, for maintaining its profits and avoiding risked decisions that may threaten its existence, but also for reassuring customers that they are doing the right choice. Thus, they are more than bankers: they are public relations, economists, and also psychologists. Based on this, it would be expected that such a popular research model as the JD-R would have been extensively used to study this occupation. However, a quick search in the database *Business Source Complete* shows a lack of studies in this field, with only two articles emerging when crossing the keywords *banking* and *JD-R*. Most articles that do study banking do not base themselves on this model: they analyze a few

variables, and sometimes refer the model as a way to sustain their findings (Ashill *et al.*, 2015).

The present investigation seeks to fill this gap by applying the JD-R model to one private bank in Portugal. The approach will be mixed, through the use of interviews in Alentejo to assess which of the already identified variables are fit to represent this particular setting and if new ones need to be added. Then, questionnaires will be applied to the whole national bank structure, to assess if the findings in Alentejo are also confirmed in the rest of the country. In order to distinguish between different regions of Portugal, hypotheses will be tested with the global sample and also in each NUTS II region (according to Statistics Portugal). In this way, light will be shed in something that often goes unnoticed: it is common to include generalization as a limitation in researches, stating that by conducting research in a single country, one cannot state that in other countries the same outcome will occur. But conducting research in one major city and then stating that the whole country behaves in the same way is an overstatement. The reality within the same country is not equal for everyone, as the intensified competition for trade, talent, and multinational investments has enlarged regional disparities (Turok *et al.*, 2017). Here in Portugal, rural and urban settings vary greatly in terms of companies and work rhythm, so it seemed unfair to treat everyone as alike. Especially since the hypotheses mostly involve customer relations and coworker support, some variance is expected throughout the different regions.

In this way, the current work will begin by a review of the literature mostly related to the JD-R model. Then, the qualitative study will be presented, as well as its results and discussion, followed by the quantitative study and, similarly, its results and discussion. The final chapter includes a general discussion that gathers both studies and their theoretical contribution, proceeded by this study's practical implications, limitations, and future research.

2. LITERATURE REVIEW

Due to the widespread impact of stress, theories about it have been developed for several decades. They share a common framework in describing a process involving environmental components and individual psychological, physiological, and behavioral characteristics (Leka & Houdmont, 2010). Cox (1978) developed a taxonomy of work stress theories, which separates them into early theories, which can be stimulus based or response based, and contemporary theories, that are either interactional or transactional.

Early stimulus based theories see stress as a characteristic of the external environment, something that causes a behavioral and physiological reaction in the individual. On the other hand, response based theories propose stress as a physiological response to a threatening environment. It is in this early period that a classical definition of stress emerged, created by Selye (1950): stress is a state that manifests itself through a specific syndrome, consisting of all non-specific changes within the biologic system. However, these theories failed to account the individual differences, assuming that people would react to stress in a similar way every time.

It was during 1970s that contemporary theories emerged. They suggested an interaction between the individual and his environment, giving the person an active role. In such theories, stress is defined as a negative emotional experience, occurring when individuals perceive themselves to be subject to excessive demands. Interactional and transactional theories vary in terms of where the emphasis is placed and in how active is the individual in determining the overall situation and its outcomes (Leka & Houdmont, 2010). Interactional theories focus on the structure, on the architecture of the situation that generates stress. It is here that theories such as the Job Demand-Control (Karasek, 1998), and the JD-R (Demerouti *et al.*, 2001) lay. Transactional theories are more process-oriented, concerned with cognitive appraisal and coping processes that give the individual a more active role.

Stress decreases the bankers' performance: it can happen due to lack of support from supervisors, work overload, time constrictions, and several other demands (Manea *et al.*, 2013). Taking into consideration its definition presented above, one might think that it would be a simple matter of balancing resources *versus* demands, and stress would vanish. But it is not that easy. Especially in the case of frontline positions, employees' interaction with a great amount of customers leads to higher demands placed upon them, which often exceed their resources (Yavas & Babakus, 2011). These challenging and

unscripted interactions also contribute to frontline workers' stress (Yavas *et al.*, 2013; Zablah *et al.*, 2012).

However, it is important that banks try to help their employees in managing their stress levels, either by reducing them or creating positive counterparts, since they are the people that make or break the institution: “... *if the service organization wants its employees to do a great job with its customers, it must be prepared to do a great job with its employees*” (Yoon *et al.*, 2001: 500). Unlike other customer service occupations that often provide a single experience, bankers have an on-going relationship with their customers involving several transactions (Sengupta *et al.*, 2015). They are the face of the organization, enhance its image, and in branches located in small cities, even their personal life choices can change how customers perceive the bank.

In sum, bank employees are crucial in building relationships with customers while maintaining a good service delivery (Babakus *et al.*, 2009). Their behaviors determine the quality of the service provided to customers, which will impact the organizational performance (Yavas *et al.*, 1997). Due to this, it becomes of paramount importance to maintain their well-being, since satisfied employees are more likely to engage in behaviors that please customers (Yavas *et al.*, 2013; Yoon *et al.*, 2001).

In order to identify which demands and resources are more predominant in the banking sector, their outcomes and what can be done to prevent stress in the workplace and promote well-being (thus reinforcing organizational performance), research was conducted in one Portuguese private bank based on the JD-R model (Demerouti *et al.*, 2001).

This model is preferred above others due to its popularity in occupational health psychology and its flexibility, which allows the identification of new variables, something that is quite useful when studying new contexts. To show its popularity, Taris & Schaufeli (2016) did a quick search in *Google Scholar* to see how many times the three most significant papers on the JD-R model (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004; Demerouti *et al.*, 2001) had been cited. As of January 2015, the total amount of citations was close to 7.000. In January 2017, two years later, replicating that search shows that the same three articles have now been cited close to 12.000 times, almost duplicating the amount of citations in two years.

In summary, the current version of the JD-R model (reviewed by Taris & Schaufeli, 2016, and Bakker & Demerouti, 2016) describes the relations between work characteristics (job demands and job resources), work outcomes and personal

characteristics. It holds two different processes: the health impairment process (in which high job demands lead to high levels of stress and health issues), and a motivational process (where high levels of job resources lead to high levels of motivation and job performance).

Since its publication in 2001, the JD-R model has been continuously expanded and improved, maturing into a theory in itself. New relations between variables have been studied and its flexibility has allowed for its use in completely different work settings, from industry to nursing. In this review, the origin and main expansions of the model will be covered, until the newest, current version. The latest version will be discussed in greater detail, as well as its limitations and future research avenues.

The early Job Demands-Resources model of burnout

Back in 2001, the most influential definition of burnout defined it as a syndrome, which combined three dimensions: emotional exhaustion, depersonalization, and diminished personal accomplishment (Maslach *et al.*, 1996). According to the same authors, emotional exhaustion occurs when emotional resources are depleted, leaving the workers feeling as if they are no longer able to engage in their tasks at a psychological level. The second dimension, depersonalization, is defined by negative attitudes and feelings about one's clients. Lastly, diminished personal accomplishment is related to a tendency of evaluating oneself negatively regarding one's work, which leads to unhappiness and dissatisfaction.

As a form of work-related strain, burnout is a consequence of the accumulation of work-related stress (Halbesleben & Buckley, 2004); that is, whereas stress refers to a temporary adaptation process that is accompanied by mental and physical symptoms, burnout is a breakdown in this adaptation which results in chronic malfunctioning (Maslach & Schaufeli, 1993). However, Demerouti *et al.* (2001) disliked the fact that this influential definition of burnout limited it to something that only happened in human service professions, since the same stressors that led to burnout in human services could be found in other occupations as well. By broadening each dimension's definition, the authors came to the conclusion that burnout could in fact be expanded beyond human service occupations, and that its core dimensions (emotional exhaustion and depersonalization) were likely to be particular manifestations of larger phenomena: exhaustion and disengagement. In this way, the JD-R model was born, with its underlying assumption that “... *burnout develops irrespective of the type of occupation when job*

demands are high and when job resources are limited because such negative working conditions lead to energy depletion and undermine employees' motivation, respectively" (Demerouti *et al.*, 2001: 499).

What are these job demands and resources? According to the same seminal article, the authors based themselves on the distinction between job demands and job resources of Lee & Ashforth's meta-analysis (1996). Job demands were defined as "... *those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs*" (Demerouti *et al.*, 2001: 501). Examples of such job demands include physical environment, time pressure, and demanding contacts with the recipients of one's work. On the other hand, "*Job resources refer to those physical, psychological, social, or organizational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce job demands at the associated physiological and psychological costs; (c) stimulate personal growth and development*" (Demerouti *et al.*, 2001: 501). Thus, resources are important on their own, besides being necessary to cope with job demands (Bakker *et al.*, 2010b; Hakanen *et al.*, 2006). Resources can be located at the organizational level (for example, job security), interpersonal and social relations (supervisor support), work organization (such as participation in decision-making), or at task-level (performance feedback; Bakker *et al.*, 2003 a; Bakker *et al.*, 2003c).

The original JD-R model proposed two processes of burnout development. First, job demands contribute to feelings of exhaustion. Second, lack of job resources leads to difficulties in meeting job demands, which causes disengagement from work. The weight of the job demands and job resources in explaining burnout varies across occupations, since job demands can differ and so does the access to job resources (Demerouti *et al.*, 2001).

In 2001, the Maslach Burnout Inventory (MBI; Maslach *et al.*, 1996) was widely used to assess burnout through its three dimensions (emotional exhaustion, depersonalization, and personal accomplishment), but it was exclusive to human service populations. In an effort to evaluate burnout in occupations outside human services, Demerouti *et al.* (2001) used the Oldenburg Burnout Inventory (OLBI). This instrument includes only two dimensions of burnout: exhaustion and disengagement from work. Exhaustion is defined as "... *a consequence of intensive physical, affective, and cognitive strain...*" (Demerouti *et al.*, 2001: 500). This conceptualization differs from the one used in the MBI, covering both the affective and also physical and cognitive aspects of

exhaustion. Disengagement from work refers to attitudes towards the work task, whereas depersonalization (in the MBI) indicates an emotional dissociation from service recipients (Demerouti *et al.*, 2001).

Comparing both instruments, one of the main distinctions between the MBI and the OLBI is that the latter uses scales that include both positive and negative worded items, which does not happen in the MBI. The OLBI measures burnout independently of the work context, and it could provide an alternative to the MBI that addresses both the wording issues (by featuring questions that balance a positive and negative phrasing), and also expands the domain of burnout beyond the affective component of exhaustion (Halbesleben & Buckley, 2004).

In sum, the JD-R model of burnout began as a parsimonious model including four basic components (job demands, job resources, exhaustion, and disengagement), and allowing for a high degree of flexibility considering the occupation that one chooses to investigate (Demerouti *et al.*, 2001). However, soon researchers found that new relationships existed between these variables, and new processes were added to the model.

The revised Job Demands-Resources model

In 2004, three years after the introduction of the JD-R model of burnout, its basis were reviewed and new constructs were added. In that year, the emerging positive psychology shifted the focus on human weaknesses towards human strengths and optimal functioning (Luthans, 2002; Sheldon & King, 2001). Thus, instead of having a model focused on burnout, engagement also became a possible outcome (Mastenbroek *et al.*, 2014). In this way, the JD-R model was now a comprehensive model used to predict burnout and engagement (two opposites) from job demands and job resources (Schaufeli & Bakker, 2004).

Engagement is defined as a “... *positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption*” (Schaufeli & Bakker, 2004: 295). Work engagement captures the three components of a positive work experience: a stimulating and energetic moment, in which workers feel compelled to devote time and effort (the vigor component); a significant and meaningful pursuit (dedication); and something in which employees are fully concentrated (absorption; Bakker *et al.*, 2011). Organizations need workers that display these characteristics in order to keep up with the competition, as engaged employees are more likely to perform actions that go beyond

their own job tasks and are beneficial for the organization as a whole (Bakker *et al.*, 2014). This same reasoning can be applied to banking: in order to distinguish amongst the competitors, banks need employees who are willing to take a step further, employees that take the time to make customers feel welcome and secure, employees that stay overtime if customers come through the door at the last minute before the branch closes.

Following the same premises that were presented in the early model, the revised JD-R model proposes two processes, now more clearly defined: an health impairment process, in which the presence of high job demands and low job resources lead to a decrease of mental energy (burnout), which has the potential to trigger other health and well-being issues; and a motivational process, in which job resources increase motivation and engagement, both leading to higher performance (Taris & Schaufeli, 2016; Xanthopoulou *et al.*, 2007a).

Related to the motivational process is the idea that job resources lead to higher levels of engagement through two motivational paths: an intrinsic path, through the fulfillment of basic human needs, fostering employees' growth, learning and development (Schaufeli *et al.*, 2009); and an extrinsic path, since resourceful environments encourage one's effort to achieve work goals (Taris & Schaufeli, 2016; Bakker *et al.*, 2011; Bakker & Demerouti, 2007).

In their 2004 article, Bakker *et al.* introduced performance concerns into the JD-R model. Employees engage in two different types of performance: in-role performance, and extra-role performance. In-role performance is “... *defined as those officially required outcomes and behaviors that directly serve the goals of the organization*” (Bakker *et al.*, 2004: 85). Applying this definition to the sector being studied, it includes meeting the bank's goals and serving the customers. Extra-role performance is defined “... *as discretionary behaviors on the part of an employee that are believed to directly promote the effective functioning of an organization...*” (Bakker *et al.*, 2004: 85). This happens when employees help their coworkers and create a friendly relationship with customers, making them feel more comfortable. In their findings, Bakker *et al.* (2004) demonstrated that job demands are the most important antecedents of in-role performance, while job resources are the most important predictors of extra-role performance.

In conclusion, at the heart of the JD-R model lies the assumption that the factors that explain burnout and engagement can be classified in two categories (job demands and job resources), regardless of the occupation that is being studied (Nahrgang *et al.*, 2011). The model can be applied to various professions, being flexible enough to cover

very different job demands and resources. According to the JD-R model, job strain develops when certain job demands are high and when certain job resources are limited; and work engagement is more likely to happen when job resources are high, even if job demands are high as well, meaning that job resources buffer the impact of job demands on burnout (Bakker *et al.*, 2014; Bakker & Demerouti, 2007; Bakker *et al.*, 2005). An example of this buffering effect is the quantitative study of Karatepe *et al.* (2010) on eight private banks in Northern Cyprus, which showed that the availability of supervisor and coworker support (both job resources) lessens customer-related stressors and emotional exhaustion.

The current Job Demands-Resources model

Until 2007, the JD-R model did not consider any other factors besides characteristics of the job and its environment. However, according to psychological theories, human behavior usually results from the interaction of personal and environmental factors (Taris & Schaufeli, 2016). In this way, personal resources were added to the model. Initially defined as “... *aspects of the self that are generally linked to resiliency and refer to individuals’ sense of their ability to control and impact upon their environment successfully*” (Xanthopoulou *et al.*, 2007a: 123), this definition was refined to include the notion of positive self-evaluation, adding that “... *personal resources (a) are functional in achieving goals, (b) protect from threats and the associated physiological and psychological costs, and (c) stimulate personal growth and development*” (Xanthopoulou *et al.*, 2009a: 236).

In the first introduction of personal resources into the model, Xanthopoulou *et al.* (2007a) studied the three fundamental components of individual adaptability: self-efficacy, organizational-based self-esteem, and optimism. Their results showed that personal resources could have various functions within the model, and they were later on summarized in several articles (Taris & Schaufeli, 2016; Schaufeli & Taris, 2014). Until today, there are at least five main ways personal resources can be incorporated into the JD-R model.

First, personal resources can be considered as antecedents of strain and motivation, like job demands and job resources. Considering the definition of personal resources which relates them to resiliency, they can be associated with higher engagement/motivation and lower levels of strain/burnout (Taris & Schaufeli, 2016). Several studies have pointed towards a dynamic interplay of resources and engagement

through time (Xanthopoulou *et al.*, 2009a; Prieto *et al.*, 2008), which suggests the existence of gain and loss spirals (Hobfoll, 2002). That is, the presence/absence of resources leads to higher/lower levels of engagement, leading to even higher/lower levels of resources.

Second, personal resources may be considered as moderators of the relationship between job characteristics and work outcomes. The definition of personal resources suggests that they buffer the negative effects of job demands on burnout and enhance the positive effects of job resources on engagement (Schaufeli & Taris, 2014). Backing this idea are the studies of Van den Broeck *et al.* (2011) and Brenninkmeijer *et al.* (2010), which advance the theory that the adverse effects of high job demands on strain can be mitigated by high levels of personal resources, and the positive effects of high resources on motivation can be enhanced even further through high personal resources.

Third, personal resources may also assume the role of mediators of the relationship between job characteristics and outcomes, meaning that workers in highly resourceful work environments are inclined to feel higher levels of self-efficacy and optimism, which could lead to higher levels of engagement (Taris & Schaufeli, 2016). This mediating role of personal resources has been tested and confirmed several times (Llorens *et al.*, 2007; Xanthopoulou *et al.*, 2007a).

Fourth, personal resources can be considered as antecedents of work characteristics. It has been proposed that personal resources could affect the work environment, by changing the way people perceive and react to it (Taris & Schaufeli, 2016). Consistent with this reasoning is the study of Xanthopoulou *et al.* (2007a) which showed that job resources mediate the relation between personal resources and work engagement.

Lastly, the fifth way to incorporate personal resources into the JD-R model is to consider them as a cofounder of the associations among job demands, job resources, and work outcomes. This hypothesis is based on two of the ideas presented above, meaning that if personal resources affect both work characteristics and work outcomes, they may act as a third variable that explains the relation between both (Schaufeli & Taris, 2014; Bakker *et al.*, 2010a).

In sum, these five ways personal resources can be incorporated into the JD-R model illustrate that they clearly have a role within it. Which one of them, however, is still unclear. The studies shown above suggest that the findings may vary according to

different combinations of personal resources, job demands, job resources, and outcomes, meaning that research on this topic is still desirable.

The early JD-R model assumed a largely reactive role for the employees, confined to what managers decided to be their tasks. However, if that was the case, there would not be such varied working conditions within the same job (Bakker & Demerouti, 2016). Scholars have argued that employees may design their own jobs by choosing tasks, assigning meaning to them (Parker & Ohly, 2008), in a process referred to as job crafting (Wrzesniewski & Dutton, 2001).

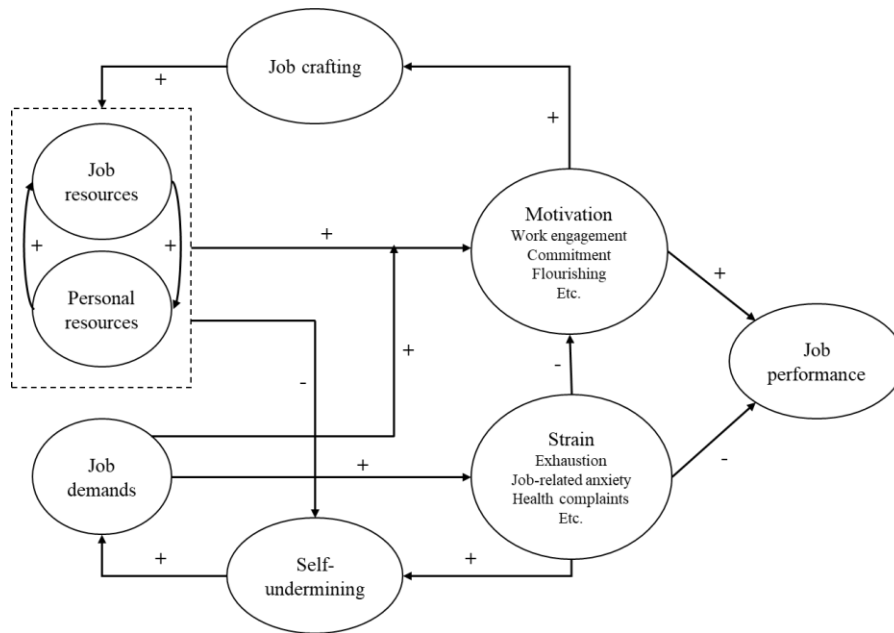
Defined as the physical and cognitive changes individuals make in their tasks and relationships (Bakker *et al.*, 2014), it was redefined in order to consider the JD-R theory: job crafting includes the proactive changes employees make in their job demands and resources to attain and/or optimize their personal work goals (Tims *et al.*, 2012). It can take the form of different behaviors, such as increasing job resources, increasing challenge demands, and decreasing hindrance demands (Bakker & Demerouti, 2014), which allow employees to enhance their work environment. In this reasoning, job crafting was added to the JD-R model, since employees who are motivated by their work are likely to adopt such behaviors, leading to higher levels of job resources, personal resources, and also more motivation (Bakker & Demerouti, 2016).

In an opposite side to job crafting is self-undermining, consisting on an obstacle-creating behavior that may undermine an employee's performance and translate into higher levels of job strain (Bakker & Costa, 2014). As a result of this behavior, individuals make more mistakes and create more conflicts, fueling a vicious cycle where strained employees adopt self-undermining behaviors, which lead to more job demands, and even higher levels of job strain (Bakker & Demerouti, 2016). This reasoning supports that of Zapf *et al.* (1996) who argued that job demands not only cause strain but also lead employees to perceive and create more job demands over time.

The essence of the JD-R model lies in the two processes that it proposes, as explained before: a health impairment process and a motivational process (Schaufeli, 2015). But how can these processes happen in real life? For example, within the banking sector, a health impairment process could arise when an employee is so overwhelmed by the time pressure placed upon him and all the responsibilities that he has (which often does not have the authority to fully fulfill), that he starts to be affected by all these demands. This could lead to negative outcomes, such as psychological strain or sleeping difficulties. On the other hand, the motivational process is sparked by abundant job

resources, such as positive customer contacts or the social climate within the organization, which leads to a higher engagement, and the employee will feel more satisfied with his professional life and feels compelled to engage in extra-role behaviors. Below, Figure 1 presents the current JD-R model, summarizing the reviewed literature, as seen in Bakker & Demerouti (2016: 3).

Figure 1. The Job Demands-Resources model



The empirical support for this model is abundant, as shown by Taris & Schaufeli (2016), who provided an extensive list of references that support different aspects of the JD-R model. There are over 12 articles that support the main effects of job demands and job resources on burnout. For example, Bakker *et al.* (2005) used a higher education institute to assess the buffering role of job resources using *work overload*, *emotional demands*, *physical demands*, and *work-home interference* as job demands, and *social support*, *quality of the relationship with the supervisor*, *autonomy*, and *performance feedback* as job resources. Another example is the research conducted by Xanthopoulou *et al.* (2007b), who studied home care organization employees using four job demands (*emotional demands*, *patient harassment*, *workload*, and *physical demands*), and four job resources (*autonomy*, *performance feedback*, *social support*, and *opportunities for professional development*). As it can be seen by these two studies, these are some of the most commonly researched job demands and resources.

During the last decade, the model has been a theoretical basis for a large body of research. Cross-sectional studies have been conducted within several occupational groups, providing evidence for the model's hypotheses regarding the main effects of demands and resources on strain and motivation. These researches have been replicated throughout the world and in different work settings. All this evidence points towards the confirmation of the model's assumptions, also suggesting that the adverse effects of job demands on work outcomes can be mitigated by high levels of resources. In terms of longitudinal evidence, research has been conducted mainly within Europe, China and Australia, and findings on the same relationship are mixed: there are a number of studies that support the main effects of job demands on strain and job resources on motivation, but there are also studies that find zero or reversed effects.

When it comes to the banking sector, research within the JD-R model is sparse. Using questionnaires as the preferred option to conduct research, authors commonly assess demands and resources that are as applicable to banking as to any other occupation. In some cases, the same sample is used for a number of publications, which is not useful to confirm findings, since they are being tested based on the answers of the same individuals.

One of these cases is a sample from New Zealand, used in 2010 to study the relationships between six organizational resources (*supervisory support, training, servant leadership, rewards, empowerment, and service technology support*), *customer orientation* (a personal resource), and job performance (Yavas & Babakus, 2010). Besides finding that customer orientation impacts job performance, playing an instrumental role in increasing job resources, results also showed that supervisory support was the resource most closely associated with psychological work outcomes. In the following year, supervisory support was found to be the only coping mechanism with significant association with all three components of burnout (Yavas & Babakus, 2011), although authors reduced the amount of job resources analyzed (using only *training, rewards, supervisory support, and service technology support*), and added *role ambiguity, role conflict, and role overload* as job demands. Four years later, authors used only two organizational resources (*training, and service technology support*) and *customer orientation* to investigate the mediating role of person-job fit on the impact of these resources on employees' job performance and turnover intentions (Sengupta *et al.*, 2015). Their findings showed that training and service technology support lead to enhanced job performance by virtue of the level of perceived person-job fit, and once again that

employees with higher customer orientation are motivated to serve customers better and also tend to maintain their jobs.

In the Turkish Republic of Northern Cyprus, Yavas *et al.* (2013) found that burnout is significantly related to bankers' in-role and extra-role performances, with these relationships being moderated by hope. Ashill *et al.* (2015) studied Russian banks to extend the largely Western research on workplace stress, while trying to confirm the JD-R model's assumption of the mediating role of burnout on the negative relationship between job demand stressors and job performance. With results contradicting this assumption, the authors argued that cultural differences across societies are important to understand such variations.

More recently, Metin *et al.* (2016) examined how workplace characteristics (such as *mental and emotional demands, autonomy, opportunities for learning and development, and supervisory support*) are associated with workplace authenticity, a determinant of well-being. Using Dutch banks as their sample, results showed that authenticity was positively linked with job satisfaction, work engagement, and performance, while partially mediating the effects of job resources.

The Job Demands-Resources model in comparison to other well-known models

Taking into consideration the reviewed literature until now, it is clear that the JD-R model has evolved throughout the years (Demerouti *et al.*, 2001; Bakker & Demerouti, 2007; Taris & Schaufeli, 2016). However, it was not a pioneer in exploring stressors and their consequences in the workplace. Before it emerged in 2001, other models were already being investigated, such as the Demand-Control Model (DCM; Karasek, 1979), the Effort-Reward Imbalance model (ERI; Siegrist, 1996), and the Conservation of Resources model (COR; Hobfoll, 1989). The common ground of several models in the occupational health literature is that “... *job strain is the result of a disturbance of the equilibrium between the demands employees are exposed to and the resources they have at their disposal*” (Bakker & Demerouti, 2007: 310). Below, a short presentation of each model's origin will be conducted.

The DCM emerged in 1970s, having a clear concern for the structure of task profiles and their impact on the workers' health (Siegrist, 1996). Its creator, Karasek (1998), stated that the model was developed for work environments where stressors are chronic, assuming that they exist due to organizational decision making. That is, organizations in which stressors are a constant because of human management decisions.

The main hypothesis of the model is that psychological strain happens when psychological demands are high and the workers' decision latitude is low. Conceptually, this hypothesis bears some resemblance to the JD-R model's health impairment process: high job demands (such as time pressure and work overload) and low job resources (like autonomy and job control) have a detrimental impact on stress reactions, leading to depression, anxiety, and burnout (Bakker *et al.*, 2003c). However, while the DCM specifies a process through which control over autonomy may buffer the impact of work overload on stress, the JD-R expands this view: job strain can be predicted by the interaction of different types of both job demands and job resources (Bakker & Demerouti, 2007).

The ERI-model was developed two decades after the DCM, in mid-1990s. Siegrist (1996) proposed that spending high efforts and receiving low rewards (whether they are money, esteem, or status control) will be particularly stressful as this imbalance violates expectations of reciprocity and adequate exchange in a crucial area of social life, such as the occupation. Thus, this model claims that lack of reciprocity between costs and gains will define a "*... state of emotional distress with special propensity to autonomic arousal and associated strain reactions*" (Siegrist, 1996: 29). It can be applied to several occupational arrangements, however, it is most noticeable in segmented groups of labor market, groups that are exposed to structural unemployment and socioeconomic change, and also to professions that involve a highly competitive career development (Siegrist, 1996).

Finally, the COR model was presented in late 1980s, as an alternative to the existing conceptualizations of stress. It is a resource-oriented model, based on the rationale that "*... people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources*" (Hobfoll, 1989: 513). In this model, resources share a somewhat similar definition to the one presented in the JD-R model: they are objects, personal characteristics, conditions, or energies that are valued in their own right, or that are valued due to their role as channels to achieve or protect valued resources (Hobfoll, 2001). According to the COR model, people are motivated to gain resources, even if they are not experiencing stressors. Individuals invest resources in order to enrich their resource pool. If this investment does not provide a compensation, it will be experienced as a loss (Hobfoll, 2001; Hobfoll, 1989). The initial possession of resources is also related to the vulnerability of their loss. People with greater resources are less vulnerable to losing them and more capable of

gaining even more, while individuals with fewer resources are more vulnerable to resource loss and also less capable of resource gain (Hobfoll, 2001). On a final note, the COR theory posits that the amount of resources that a person possesses influence the degree to which he perceives something as threatening, meaning that the coping choices of an individual are largely determined by the resources he has to answer that threat or challenge (Hobfoll, 2002).

In summary, the DCM states that employees who can decide how to meet their job demands do not experience job strain; the ERI-model assumes that job strain results from an imbalance between effort and reward; and the COR theory posits that stress and burnout occur when individuals perceive a threat to their valued resources (Bakker & Demerouti, 2007; Halbesleben & Buckley, 2004). So what differentiates the JD-R model from all of these afore mentioned?

Comparing both the DCM and the ERI-model, a common point between the two is their simplicity. However, they reduce the reality of working organizations to a short amount of variables, leaving no room for the integration of other factors, and with no guarantee that the chosen variables are applicable to all working contexts. Although the JD-R model encompasses and extends both models, it is considerably more flexible and rigorous (Bakker & Demerouti, 2007; Xanthopoulou *et al.*, 2007b), while also satisfying the need for specificity, through the inclusion of job demands and resources that vary according to the occupational context (Bakker & Demerouti, 2007).

The COR theory shares some common ground with the JD-R model. For example, both assume the moderating role of resources in the relationship between demands and negative outcomes (Xanthopoulou *et al.*, 2007a). Due to these shared views, authors have used the COR theory to fine-tune the JD-R model, by combining some of the concepts suggested by Hobfoll (2001; van Woerkom *et al.*, 2016).

Model's limitations and future research avenues

The JD-R model, like any other, is not without its limitations, which will be briefly discussed below. Throughout the years authors regularly point them out, however, for the purpose of this review, only the most recent ones will be addressed (Bakker & Demerouti, 2016).

The first limitation is that the model does not specify the sign of the relationship between job demands and job resources, as this can depend on specific factors related to the occupation being studied (Bakker & Demerouti, 2016). Although authors admit that

it often occurs that high status occupations have a positive correlation between demands and resources (as they have a high amount of both), and in the more mundane jobs this relation tends to be negative, this differentiation is yet to be introduced into the JD-R model.

The second limitation lays on the mixed results regarding the assumed independence of the health impairment process and the motivational process, as some studies have found direct links between variables involved in both processes (Schaufeli & Bakker, 2004). While some of these links may occur due to common method variance in suboptimal research designs (Bakker & Demerouti, 2016), there is the possibility that burnout components (often studied in the health impairment process) have mutual relations, influencing each other. As highlighted by Leiter (1993), although exhaustion and diminished personal accomplishment have distinct predictors for the most part, there are some conditions (for example, coping styles) that appear to contribute to both.

The third limitation that is commonly attributed to the model is the fact that it does not have explanatory mechanisms, relying on other theories to explain why certain work characteristics influence employee well-being (Taris & Schaufeli, 2016). However, authors have defended themselves by stating that theories should build upon each other, as a means to create new knowledge (Bakker & Demerouti, 2016).

The fourth limitation is related to flexibility, as it becomes difficult to decide which findings falsify the model (Bakker & Demerouti, 2016). For example, if a certain demand is proven unrelated to stress, it could simply mean that it is not applicable in that particular occupation, and that would not discredit the model. The final limitation has to do with the fact that most organizations are not interested on the individual level of job demands and resources assessed by the JD-R model, but rather on a team or department-level. However, it is not appropriate to aggregate scores, as the results might be the average of two existing extremes. Thus, it would be important that the model took such levels into consideration.

In sum, the identification of the limitations of the JD-R model is more than pointing out its weaknesses: it is a way to establish new directions, as a means to correct flaws and broaden its scope. Following this rationale, and before discussing commonly addressed future research possibilities, there is one that is particularly relevant to this investigation: the importance of studying new variables. In a model as flexible as the JD-R, there is an overwhelming amount of demands and resources that could be incorporated into it, but researchers seem to study mostly the already identified ones (Schaufeli &

Taris, 2014). This may occur due to a lack of time to develop qualitative studies that allow the identification of new variables relevant to the context being studied but, still, it means that the model is not being explored to its full potential. Especially when investigating under-researched occupations, it is important to assess if there are variables specific to that profession that play an important role to its employees. Otherwise, the JD-R model becomes static like other models, hoping that the chosen variables are applicable to every occupation (Bakker & Demerouti, 2014).

In their latest overview, Taris & Schaufeli (2016) summarized three main future research avenues that should be addressed in the future, in order to improve the model: the nature of demands and resources, demand and resource interactions, and the existence of gain and loss spirals. Below, each of them will be discussed in more detail.

The first possibility for future research rests on the basic assumption of the JD-R model that work characteristics can be divided into two categories (demands and resources). But the conceptual difference between these two constructs is not as clear as it seems. Schaufeli & Taris (2014) give an example of a paradoxical situation: if an employee experiences a lack of resources, this would mean that he needs to put more effort into achieving work goals; and since the model proposes that effort is an indication of job demands, this would mean that lack of resources is in itself a job demand. So, in this same article, the authors propose a redefinition of the concepts, introducing the idea that job demands are negatively valued and job resources are positively valued. This would also address the proposal of Demerouti & Bakker (2011), which stated the need to clarify the role of specific demands within the model, and proposed their differentiation as challenge and hindrance stressors (Crawford *et al.*, 2010). In their meta-analysis, Crawford *et al.* (2010) argued that the JD-R model failed to account for this important distinction between the types of demands in terms of the way they tend to be appraised by employees, meaning that some reduce engagement, while others actually promote it. In this way, they identify challenges as “... *stressful demands that have the potential to promote mastery, personal growth, or future gains*” (Crawford *et al.*, 2010: 836), an example of these could be job responsibility. On the other hand, hindrances “... *tend to be appraised as stressful demands that have the potential to thwart personal growth, learning, and goal attainment*” (Crawford *et al.*, 2010: 836), for example, role ambiguity. The results of their meta-analysis showed that job demands appraised as challenges are positively related to engagement, whereas job demands considered hindrances are negatively related to engagement. Addressing the proposal of Demerouti & Bakker

(2011) would mean that challenges would be conceptualized as resources, due to their positive value, and the model's assumption would still be valid: job resources (including challenging demands) are positively related to engagement and negatively related to burnout; and job demands (excluding challenging demands) are negatively related to work engagement (Schaufeli & Taris, 2014).

When it comes to demand and resource interactions, the present issue is quite simple: although this interaction is central to the JD-R model, the evidence for it is weak. So, from a practical point of view, it is important to assess whether high levels of resources can indeed mitigate high levels of a particular demand, and if it matters which type of resource is offered (Taris & Schaufeli, 2016). Moreover, it would be interesting to assess if the effects of job demands accumulate and interact with each other, as each job demand does not occur in isolation from all others (Bakker & Demerouti, 2016).

Lastly, the final future research possibility is related to the existence of gain and loss spirals (Hobfoll, 2001). They emerge in the context of COR theory, where it is expected that loss spirals will be more impactful than gain spirals, since loss is more dominant than gain: considering that resource loss is stressful, people must invest whatever resources they have left to prevent further loss, and once initial losses occur, individuals become increasingly vulnerable to ongoing loss (loss spiral; Hobfoll, 2001). However, COR theory also suggests that during highly stressful circumstances, “... *resource gain cycles are most likely to emerge as people seek to identify and mobilize resources*” (Hobfoll, 2002: 315). Research within the JD-R model shows that the presence of job resources and the absence of high job demands tends to lead to higher levels of well-being. Since high-resource workers tend to become more engaged over time, and engaged workers collect more resources, this will lead to even higher levels of engagement: it is a gain spiral (Llorens *et al.*, 2007). In the opposite line of thought, low-engagement workers tend to lose job resources, leading to lower levels of engagement: the loss spiral (Prieto *et al.*, 2008). Even though this rationale seems quite simple, it is not clear how these spirals would develop, or even if they exist at all (Taris & Schaufeli, 2016; Xanthopoulou *et al.*, 2009a).

Conclusions

In this review, the birth and development of the JD-R model was covered, from its first appearance in 2001 until the current days. It began as a burnout model (Demerouti *et al.*, 2001), that tried to expand the concept of burnout to all professional occupations.

In this way, the model granted its flexibility: one of its major advantages, but also a limitation. The original model established a relation between job demands, job resources and burnout, in which burnout develops when job demands are high and job resources are limited, since such negative working conditions lead to energy depletion and undermine employees' motivation (Demerouti *et al.*, 2001).

Few years after its introduction, positive psychology led to the incorporation of engagement into the model (Schaufeli & Bakker, 2004). Two different psychological processes were considered to play a role in the development of job strain and motivation: a health impairment process, and a motivational process. The health impairment process is related to high job demands which exhaust employees' mental and physical resources, leading to depletion of energy and possibly health problems. The motivational process assumes that job resources contribute to high work engagement, low cynicism, and excellent performance.

The current model integrates personal resources, job crafting and self-undermining. In terms of personal resources, they are functional in achieving work goals, and stimulate personal growth and development, much like job resources (Schaufeli & Taris, 2014). Research on personal resources has come up with five different ways of consolidating them into the model, showing that more research is needed in this area: (1) personal resources directly impact well-being; (2) personal resources moderate the relation between job characteristics and well-being; (3) personal resource mediate the relation between job characteristics and well-being; (4) personal resources influence the perception of job characteristics; (5) personal resources act as a third variable.

After reviewing the JD-R model, a comparison with previously existing models was conducted, the current model's main limitations were identified and future research possibilities were addressed. Some of the main limitations of the JD-R model are the absence of direct links between demands and resources and the focus on the individual level. When it comes to future research avenues, the three main topics are: the nature of demands and resources, their interactions, and the existence of reciprocal effects (gain or loss spirals).

Taking into consideration the gaps identified in the literature, research was conducted in a Portuguese private bank. Banking is not a common occupation to apply the JD-R model. Several articles focus on two or three specific demands/resources, and then assess their relationships (Yavas & Babakus, 2010; Grizzle *et al.*, 2009). None of the reviewed studies allows room for the identification of new variables, as was done in the

current research, which is important in order to take advantage of the model's flexibility, by showing what fits and what does not fit the specific organizational context under study. Adding to this reasoning, all banking studies only accounted for frontline positions, and their samples were mainly from New Zealand, Northern Cyprus, Romania, and Russia, which makes Portugal a good addition to the research field, since it has not been studied before.

In this way, in order to fill some identified gaps, research began through interviews in an agency in Alentejo. Based on Schaufeli & Taris' (2014) article, which presents a list of concepts that have been identified as job demands, job and personal resources, and outcomes, interviews were conducted to assess which of them apply to this specific context, which ones did not, and what needed to be added to the research. Subsequently, a questionnaire was delivered to all of the bank structure, on a national level, to determine if the findings in Alentejo were confirmed throughout the country. This last step is particularly important since there is often the assumption that an organization shares similarities throughout its whole structure, and that is not always the case. One cannot assume that a bank's headquarters in the capital of Portugal share the same work environment as a branch with only one worker on a remote area of the country. However, companies often give the same set of individual performance goals to all its employees, apparently unaware that they are unachievable in certain areas. So, in this way, the questionnaires will allow an identification of the similarities and differences between distinct geographical areas, which will ultimately facilitate the creation of practical implications useful for the organization.

3. QUALITATIVE STUDY

The generality and flexibility of the JD-R model has led to its use in a broad array of occupations (Schaufeli & Taris, 2014): administrative staff and health care employees (Schaufeli & Bakker, 2004), university students (Llorens *et al.*, 2007), teachers (Prieto *et al.*, 2008), call center employees (Bakker *et al.*, 2003b), and even veterinarians (Mastenbroek *et al.*, 2014). However, there seems to be a lack of research in the banking field: there is not a lot of it, rarely studied qualitatively, and no studies were found that allowed the identification of new variables, exploring the flexibility of the JD-R model.

Nowadays, banks still play a vital role in a country's economy: they provide core banking services to rural and urban customers, such as deposits, loans, and credit (Subashini & Gopalsamy, 2016). In a competitive banking setting, maintaining customer loyalty, retention and satisfaction is crucial to a bank's survival, faced with the threat of new banks chasing customers (Ladeira *et al.*, 2016). While it is true that in urban areas customers are increasingly using the internet to access almost all of their banks' functionalities, it is not so common to do so in Alentejo. With the highest ageing index in Portugal, having almost twice as much elders as young people (according to Pordata), customers are used to go to bank branches weekly to manage their finances. With all the changes in Portuguese economy, this management is not always easy, which justifies why bankers are an interesting population to analyze. Having almost continuous interactions centered on customers' problems, bankers deal with feelings of anger, fear, and despair. Solutions are not always easily obtained, and for the worker who has to handle these situations every day, stress can be emotionally draining and lead to burnout (Maslach *et al.*, 1996).

Having such a specific working context creates an opportunity to test the JD-R model's flexibility. In order to do so, interviews were conducted in one private bank agency in Alentejo, focused on worker's stress and well-being, to explore what they perceive to cause these outcomes. Since the qualitative study is an application of the JD-R model, it includes questions related to work characteristics, work outcomes and also personal resources. In sum, the present study seeks to know the answer to the following question: Does the JD-R model fit the specific context of a small banking institute in Alentejo? In other words, it will assess whether the model is fit to represent the reality that is being studied (thus, confirming the model) and if there are new variables that are yet to be accounted for, taking advantage of the model's flexibility.

Hence, results are expected to confirm the JD-R model, due to its proven flexibility and past extensive research. Moreover, the identification of new variables to this specific context is also anticipated, especially related to positive customer relationships and positive work outcomes, since both are characteristic of this particular setting, in which bankers are known to develop a closer relationship with customers, when compared to other banking institutions and other locations.

Method

Participants

Participants of this study were 25 bankers who work in the same private bank, in Alentejo (Portugal). They work in six different bank branches, one of them located in a small city, three of them in towns, and two of them in villages. This bank has over 40 agencies in Alentejo, all of them having several smaller branches. The sample consists of the agency with the highest amount of branches in Alentejo. The whole structure was interviewed, so the interviewees perform different functions inside the bank. Table 1 summarizes the demographic characteristics of the sample, while Table 2 identifies the distribution of workers throughout the six bank branches. Annex 1 shows the original characterization sheet (in Portuguese) that allowed the collection of the data presented below.

Table 1. Sample demographic characteristics

	<i>n</i>		<i>n</i>
Gender		Number of children	
Male	15	1	11
Female	10	2	10
		3	1
Age (years)		Qualifications	
20-29	2	12 th grade	20
30-39	4	Complementary course	1
40-49	9	Bachelor's Degree	3
50-59	9	Post-Graduation	1
60-69	1		
Marital status		Professional experience (years)	
Single	3	1-9	3
Married/non-marital union	20	10-19	8
Divorced	2	20-29	7
Children		30-39	6
Yes	22	40-49	1
No	3		

Table 2. Distribution of workers in each branch

Branch location	<i>n</i>
City 1	15
Town 1	2
Town 2	3
Town 3	3
Village 1	1
Village 2	1

Procedure and data analysis

The semi-structured interviews were conducted during the months of June and July 2016, after receiving consent from the administration board. The employees were informed and the importance of their collaboration was emphasized through email communication. All the managers and employees of the agency were interviewed, in order to maximize the sample size and obtain a broad range of opinions and perspectives on the different topics.

The interviews were conducted in their workspace, at the end of the workday. The expected duration of the interviews was 30 minutes and that was the average of all interviews. The shortest one lasted 18 minutes, while the longest one lasted 56 minutes. After the interviews, which were all recorded, the participants filled some data related to their sociodemographic characteristics, workplace context and also lunch break habits.

Three interview protocols were created considering three hierarchical levels: one for the administration board (shown in Annex 2), one for customer assistants and branch managers (in Annex 3), and the last one for all the other existent functions (account, credit assistant, commercial coordinator, deputy administrator, human resource manager, internal auditor, technical department; in Annex 4). Due to this, some specific questions were created to capture the thoughts of different participants according to their workplace relations.

The interview protocols were developed considering the literature review concerning the Job Demands-Resources model (Taris & Schaufeli, 2016; Bakker et. al., 2014; Demerouti & Bakker, 2011) and critical incident technique (Chell, 1998). Overall, all three interview protocols share a similar structure: introductory questions about the participants' professional situation, a few questions about workplace well-being (in order to identify job resources), questions about stress and main factors associated to it (job demands), and then the critical incident technique. In this section, participants were asked to recall the most positive event and the worst situation that happened in their workplace

that affected their personal well-being. Follow-up questions were always asked whenever there was a need for them, in order to help the participants develop their thoughts. Due to the overall similarity between the protocols, only one of them was tested on a branch manager to check the clarity and comprehensibility of the questions and also the average duration of the interview. One of the interview protocols has 24 questions, while the other two have 23 questions.

All interviews were transcribed (resulting in 81 pages) and data was analyzed with MaxQDA12 Software and a thematic analysis was performed based on Braun & Clarke (2006), using a semantic segmentation of the data set. Codes were determined through a combination of inductive and deductive approaches, meaning that some codes were set *a priori* based on Schaufeli & Taris (2014), which present an extensive appendix that provides an overview of most used job resources, job demands, personal resources, negative outcomes and positive outcomes. New codes were created throughout the analysis (*a posteriori*), whenever the segment's content was not covered by one of the existing codes. In some cases, code adaptations were made, when there was already an existing code on the opposite side. For example, the authors identified *job insecurity* as a job demand, but *job security* did not exist as a job resource, so it was added. The coding was verified and validated by the supervisor, as a means to obtain feedback regarding the taken analytical options. Annex 5 shows a comprehensive list of all codes and their origin.

It should be noted that two changes were made in the codes proposed by the authors, since their placement in the appendix was contradictory to what was said in the article. Due to this, *safety routine violations* was identified as a job resource, but was used in the analysis as a negative outcome; and *determination to continue* was placed as a negative outcome, but was labeled as a positive outcome.

A code dictionary was created, which presents all the codes used, what is their origin, the definitions of the new codes, and one data extract to serve as an example of each code. An excerpt of it is presented below, on Table 3, and the whole dictionary can be found in Annexes 6 and 7, consisting on the definitions of the codes created for the purpose of this analysis and its examples, respectively.

Table 3. Code dictionary excerpt

Code name	Definition	Example
Positive outcome	Customer's New gifts code Customers give gifts to employees.	"During Christmas every year customers come here and bring us gifts. It is normal. People appreciate what we do for them. Each year we get more gifts. Customers arrive here on Christmas Eve with something, a drink, chocolates... Something. I think that is the proof that what we have here is working well." (Participant 18)

Result Overview

A total of 107 codes were used to analyze the 25 interviews, resulting in 3.128 coded segments throughout all interviews. 22 new codes were created during the analysis, while the remaining 85 had already been identified by Schaufeli & Taris (2014). There are five codes that stand out from the rest, being identified on all 25 interviews: *social climate* (job resource), *team harmony and cohesion* (job resource), *emotional competencies* (personal resource), *adverse events* (negative outcome), and *professional satisfaction* (positive outcome). Table 4 shows the codes observed on over 20 interviews, ordered from the most used to the least. The codes identified with an * are the ones created for this specific context.

Table 4. Most frequently used codes

Job Demands	Job Resources	Personal Resources	Negative Outcomes	Positive Outcomes
- Demanding contacts with customers	- Social climate and cohesion	- Emotional competencies	- Adverse events	- Professional satisfaction*
- Responsibility	- Positive customer contacts	- Intrinsic motivation	- Psychological strain	- In-role performance
- Time pressure	- Quality of the relationship with the supervisor	- Extrinsic motivation	- Psychosomatic health complaints	- Happiness
- Work pressure	- Support from supervisors	- No work-home interference*		- Positive work-home interference
	- Support from colleagues			

There are also codes that were created by Schaufeli & Taris (2014) that were not used in this analysis, since they didn't fit this specific context or were simply not mentioned by the participants. Table 5 shows the codes that were left out of the analysis, exactly as the authors proposed them in their Appendix section.

Table 5. Not mentioned codes

Job Demands	Job Resources	Personal Resources	Negative Outcomes	Positive Outcomes
- Emotional dissonance	- Craftsmanship	- Hope	- Accidents and injuries	- Innovativeness
- Job insecurity	- Supervisory coaching			- Workability
- Harassment by patients				
- Problems planning				
- Qualitative workload				
- Risks and hazards				
- Sexual harassment				
- Work-home conflict				

Global results

After viewing the quantitative results of the interviews, it is important to highlight the qualitative aspects of it. The global results of the interview analysis point towards ten main topics that influence the participants' stress and well-being. These topics are a combination of the most frequently used codes with the newly identified ones, specific to this context. In this section, all those topics will be briefly explained and examples will be given for each situation.

Customer service as close and friendly advice. The main topic that stands out throughout the interviews is the fact that all participants admit that they have a close contact with their customers, sometimes with the contours of an actual friendship. Participant 1 states that his involvement with a particular customer has led him to share private details of his life with the collaborator, even before sharing them with his family: "He is an elderly person whom I have met since I came to this branch. We have 26 years of weekly contact, which is a lot more than what we have with some family members."

The friendliness that employees have towards their customers in this area also leads to an interesting outcome: gifts. It is common for workers to receive gifts from their customers on Christmas, birthdays, Easter, or for no special reason at all. These gifts

usually come from older customers, but are not exclusive to them. Workers receive a variety of gifts, ranging from chocolates, to wine bottles, and even lambs. Participant 18 talks about this subject with no concerns, for the interviewee feels that it is normal and is done as an act of thankfulness: “During Christmas every year customers come here and bring us gifts. It is normal. People appreciate what we do for them. Each year we get more gifts. Customers arrive here on Christmas Eve with something, a drink, chocolates... Something. I think that is the proof that what we have here is working well.”

However, this can also have a negative side. Customers know a lot about the workers' private lives, not only due to this proximity but also to the region that they live in: in small cities or villages everyone knows everybody. Participant 8 recalls some moments that illustrate this overconfidence: “Customers come knock on my door because the ATM doesn't have more money. It has happened many times, especially on Saturdays... My son is sleeping and they start ringing the doorbell like someone's dying. This is a disadvantage, but I believe it is not the worst kind.”

Problematic customers. It would seem like every customer that comes through the door has something nice to say, but that is not always the case. One of the situations that bothers the participants the most is when customers misbehave, mainly because they are not aware that what they are asking for is impossible to grant: “People don't understand that most of the times the decisions that interfere directly with what they want to do are not taken by the person who's sitting in front of them” (participant 2).

Related to this is also the code *demanding contacts with customers*, which is one of the most mentioned codes in terms of job demands. In this case, it is not only about customers misbehaving, but also how challenging can be for an employee to have to deal with someone who intends to compromise their work. “I remember when a man came in and he was in a hurry, but the bank was full of people. I was serving a very deaf and very old lady, who didn't understand anything I was telling her. He was mouthing off all the time. When the lady left, he came next and started telling me that he didn't have to wait for his turn, since he had other things to do... I had to tell him that yes, he would have to wait like any other person would have to until it was his turn, and he would have to wait even longer if the lady continued to not understand what I was telling her” (participant 21).

New manager, new environment. An aspect that stands out on almost all interviews is that participants are quite happy with their new manager, which began functions in the beginning of the year 2016. The codes associated with their satisfaction are mainly job resources, such as *quality of the relationship with the supervisor*, *social climate*, *support from supervisors* and also *trust in management*.

Participant 12 states “Now we have a manager that listens to us and as long as we ask for help he always tries to comply.” There are several examples of their appreciation for the new manager, and some participants even draw a comparison between the current one and the previous: “When we had the previous manager, it was very stressful. The new one is a person with a completely different mentality. He is an open person, a person who trusts us. If we tell him that we won’t return the check because the customer will pay, he believes in us. A year ago would be ‘Sure! We aren’t the Holy House of Mercy! Then if he doesn’t pay you will pay for him!’ And we would hang there, not knowing what to do. Now it is different. This support is very important” (participant 18).

Much more than colleagues. In this agency, colleagues are seen as friends, more than just coworkers. This can be seen by the high amount of coded segments under the codes *social climate*, *support from colleagues* and *team harmony and cohesion* (all of them are job resources).

Participant 3 states that “we have a strong team spirit, group mentality. We talk to each other, help each other.” Also adding that when someone is promoted, the happiness is shared: “All my colleagues congratulated me, I was happy. We were all happy, we are always happy with each other’s promotions because we work as a team and we know we also contributed to the promotion of that colleague.”

This proximity of team members is often highlighted as the greatest advantage of the participants’ job: “The advantages are clear. The great advantage is the proximity that we have with each other, the bond that unites people because they are more willing to it. In a bigger institution there isn’t this closeness, so this is our advantage” (participant 13).

Goals: a motivation or a stress factor? Bank employees are no exception to the reality of performance goals. The workers have a set of personal goals and also collective goals that must be achieved at the end of the year, defined by the management of the bank. Participant 1 clarifies this concept clearly: “The purpose of goals is to set a certain growth that the administration board tries to achieve. If the goals are achieved by the end

of the year there will be a certain growth in the institution, which translates into a certain profit. Basically, it is a way of future planning the growth of an organization.” If they achieve their goals, employees are rewarded in several different ways: they can receive points, which can be traded for cellphones, discounts, household goods and several other types of products; they can receive prizes, which are actual products that can’t be exchanged; or they can receive travels, which are made as a group with other bank members on a national level that have also achieved their rewards, however, they can’t bring any family members.

Taking this into consideration, employees have two main ways of perceiving these performance goals: some see them as a motivation, some see them as a stress factor. Participant 5 is one of the employees that feels motivated by these goals, stating “this year I went to Miami due to the achievement of my goals and I won a vacation week in Algarve, so we have here some incentives for doing our job right. In terms of personal satisfaction, achieving performance goals is always good, but being rewarded for them is even better.” On the other hand, participant 14 doesn’t see the goals in the same way: “Professionally, I get stressed when I can’t achieve the goals. Goals are a pressure and stress factor to the workers.” Participant 23 elaborates a bit more on why he doesn’t feel motivated by goals: “Our incentive system is based mainly on travels. Quite interesting travels that I would very much like to do. But I can’t do them without my family. I never went on one, and I already won three or four. Because of that. I like the people that went, I am friends with them. But I don’t feel motivated to go without my family. They are the basis of all my work.”

It should have been done yesterday: time pressure. Nowadays, bankers work with strict deadlines, whether they are dealing with customers or with back-office paperwork. Participant 11 talks about this subject, stating that he feels “stressed when we have a lot of things to do and I can’t do them in the time that I have to, because we have timings. We have some applications that have a set due date, and that stresses me. But we have to manage it and stay here longer, we do what we have to do to deliver it on time.”

Employees who work directly with customers experience a different kind of time pressure, not so much created by their superiors, but by customers themselves who often arrive at the desk with late requests. “I feel stressed when I see that the customer needs something done and he needs to get it solved, but it should have been done yesterday. And it wasn’t done yesterday. Also because the person didn’t say so. It should have been

done yesterday, but now it is impossible, we try to fix it, but sometimes fixing it is not enough” (participant 3).

Job reorganization: switching places. Participant 4 discusses job changes in his company, as it happened to himself: “I don’t disagree with changing functions every now and then. After a long time in the same position we tend to create habits, addictions, and things need to change. Everything’s dynamic, nothing is static. It is normal and frequent to have job reorganization in the banking sector.” In this analyzed sample, most employees have worked in different branches than the one where they are currently, inside the same bank agency, of course. But some changes were not as peaceful as others. This same participant was assigned new functions, but they were never specified and he was not given a reason for it to happen. “I ceased functions and I walked around lost. I had no defined functions. It is what I consider a pre-shelf: a person is left without a specific function and wanders around the office, lost” (participant 4). After some time, the participant adjusted to his new functions and is now happy with his job.

On the other hand, participant 6 has had a much easier adaptation to his new functions, as they are very clear to him and do not imply such a high amount of stress as before: “In this function I don’t feel pressured by customers or by the administration board, because I am the one assessing the bank’s needs. I am just an observer. I watch what is happening and anticipate what could happen to us. I used to say to my colleagues that now I am a wizard, I try to guess whether the customer will pay or not, what will happen to the insurance rates...”

As seen above, even though job reorganization is a common thing in this agency, recently there has been a change that stood out from the rest. Participants 16 and 17 now work in two different bank branches that open on different days of the week, 25km apart, since March 2016. Each one of them worked in one of the branches, but due to both branches being located in villages the administration board decided to open one of the branches three days per week, and the other one on the remaining two days. While at the time of the interviews they were still adapting to the new work arrangements, participant 16 highlighted one of the inconveniences of this change: “I wake up in the morning, put my feet on the ground and think ‘where am I going today?...’ Customers from village 1 call we are in village 2, there is a check to cash in village 1 we are in village 2... Today a printer was supposed to be installed in village 2 and we are here in village 1. It is exhausting, really wearisome.” Due to the different branch approaches by customers,

which in one branch prefer to call and in the other prefer to show up in person, it is hard for the workers to maintain a close relationship with customers, because they lose track of what they were doing.

Working alone. Some employees have worked alone in the past, meaning that they were the only employee working at the branch, with no colleagues. Participant 17 was one of them: “I have always worked alone until now. I had been working alone for eight years, so I had a big workload but I would get things done.” Participant 20 also experienced the same situation, but accentuates the fact that working alone at a bank is a risk, even for his own safety: “At some point I worked here all alone, performing everyone’s tasks. Our supervisors probably didn’t realize the amount of work that we have here, what mattered to them was that it was done at the end of the day. I had to come up with techniques for it to be done on time, taking risks. Several security risks. Managing the time I had wasn’t easy, I had to do it all alone, with deadlines. Even in terms of physical security, because it is a risk to be working alone.” However, participant 17 highlights a different side to working alone: his own value and work achievements. “At the time it was all me. Everything that showed up done was there because of me, and the branch was as it was because of me. That would value my work. Not just from other people’s perspectives, but for myself, to look at something and think ‘I did this myself!’ That values us. We don’t need other people’s recognition.”

When things go wrong: robberies, frauds and mistakes. Unlike other occupations, bank employees have a few extra concerns regarding robberies, frauds, and misbehaving customers. In this bank, participants recalled two major robberies that happened during nighttime; one participant was tricked into a scam and several others made serious work mistakes, involving credit to the wrong people, misplacing money and cash errors. Participant 1 believes some mistakes are caused by stress, explaining “I can see stress is affecting my colleagues when work mistakes start to happen. It’s very clear. The ones in treasury start to have cash errors, the ones in the back office forget about documents... It happens because they lose focus.”

Participant 6 was responsible for the branches at the time and recalls the major robbery that happened in village 2. By his description it is clear that the participant was bothered by the situation, as he explains what happened that night: “I was sleeping at home and the police called me to go to the branch at 2am. The robbers weren’t there and

neither was the money. One of my functions was to open half of the branches we currently have, so I was the first employee that they saw. They are like my children. It hurt me to see everything broken, the counter was broken, the ATM machine, the vaults missing... It was closed for ten days. It seemed as if a bomb had gone off in there.” And while in some cases the damages are bigger than the values the robbers took, it is still a problem that demands a high amount of time and effort to put everything back together, especially due to the social role of this bank: “We have a social service in these small villages because people need us, there are no other banks there” (participant 6).

Participant 22 was the only one who recalled a fraud that happened to himself: “It was a moment that really bothered me and left me feeling frustrated. A customer came here to deceive me, it was a fraud. He was foreigner and came here to exchange money. The first thing I thought was ‘let me see if the money is real’, afraid that he was trying to trick me with fake money. I ran the money through the machine and they were real. When he left, my boss warned me ‘check your cashier because the other day a colleague was exchanging notes and in between some were stolen’. I checked and I lacked money. 440 euros.” The employee had to repay the stolen money himself, since it was only his fault and not a robbery. Bank employees have several safety procedures that they must comply to in order to minimize the chances of something like this happening. In this particular case, the participant admits to making a mistake: “It took me so long to check if his banknotes were fake that I felt compromised to be doubting him so much. When a customer gives us money, we have to run it through the machine. Even if I give them back to him and he returns them to me again, I still have to do it again. But because I was feeling so compromised, I didn’t do a mandatory safety procedure” (participant 22).

Regarding work mistakes, cash errors are the ones that happen most often. By the end of the day, either shortages or excess, some participants are used to having those mistakes, even though they should not happen: “Lately I have been having some cash errors. They are easily fixable, nothing too serious. I believe it is due to my lack of focus” (participant 17). But some errors are more serious than others. Participant 3 made a mistake while depositing money into an account, and ran the risk of having to pay the sum himself: “Once I made a mistake while inserting a deposit into a customer’s account, placing it in the account of a customer who had financial issues. It was more than a thousand euros, and as soon as she saw the money there she took it all out. After five months, the people who were supposed to have received that deposit came to get it and it wasn’t there. It took almost a full year to solve the situation.”

Keeping things to themselves. Bank secrecy is a requirement that prohibits bank employees of discussing their customers and ongoing procedures with anybody besides their coworkers. Due to this, when participants were asked about their families and if they usually talk about work at home, the most common response was related to this bank secrecy: “We can’t talk about our job at home. When trying to explain certain things, we might violate the bank secrecy policy. So I don’t even talk about the good things” (participant 22). Participant 9 also gave the same answer: “Here we have the bank secrecy, by approaching certain topics we might not be doing the right thing. I keep everything to myself.” Answers like these show how seriously these workers take bank secrecy, by arriving home and giving short answers regarding how their day went.

Such behaviors might be harm the workers’ well-being, considering that they do not talk about their job at home so they have to keep their thoughts to themselves. Especially when dealing with a severe situation, discussing job-related matters at home should allow them to not feel so stressed about those issues.

Discussion

The goal of the present study was to investigate whether the JD-R model could truthfully represent the specific, under-researched context of a bank in a rural area of Portugal. The identification of new variables (job demands and resources) particular to this setting was also expected, taking into consideration the model’s flexibility and the fact that this is a sector not often investigated, meaning that there could be details of its reality that had not been accounted for in the past.

After presenting the results of the interviews with the bankers, it is now possible to respond to the question that brought us here: Does the JD-R model fit the specific context of a small banking institute in Alentejo? The answer to this question seems to be positive, since the results of the interviews illustrate the basic assumptions of the model: job demands and job resources do influence the workers’ well-being, particularly through a health impairment process, in which high job demands lead to strain and health impairment, and a motivational process, in which high job resources lead to increased motivation and higher productivity (Schaufeli & Taris, 2014). Adding to this, the variables previously identified by Schaufeli & Taris (2014) largely fit the sample’s responses. The majority of their list was used to code the interviewees’ answers, with only 14 variables being left out of the analysis, since they did not fit any of the segments.

As presented in the literature review, the JD-R model “... *assumes that relevant demands and resources can vary across jobs, thus enhancing the flexibility and scope of the model*” (Taris & Schaufeli, 2016: 158), while at the same time emphasizing the need to focus on characteristics that are relevant for the population being studied, in order to capture the particularity of the work setting (Xanthopoulou *et al*, 2009b). In the current study, this flexibility was quite useful, as it allowed the identification of 22 new variables, some of which were used in over 20 interviews (for example, *professional satisfaction*). These variables are mainly related to stress outcomes (for example, *sleeping difficulties* and *coping with stress through smoking*), customer interactions (such as *sense of trust* and *customer contacts after work*), and also aspects of jobs in general that had not been taken into consideration before (for example, *training and development* and *low motivation*).

In the following section the previously presented results from the qualitative study will be discussed, grouped in job demands and job resources, in order to have a better understanding of their importance in comparison to what is already known about them.

Job demands

In the model’s seminal article, Demerouti *et al.* (2001) defined job demands as physical, social, or organizational elements of the job that involve a constant physical or mental effort, being therefore associated with physiological and psychological costs. The study’s results that are examples of such job demands include *demanding contacts with customers*, *performance goals*, and *bank secrecy*, all of which were mentioned by the participants when asked about what they perceived as causes for their stress, and to recall negative workplace situations.

This reasoning shows a resemblance to the health impairment process suggested in the JD-R model, in which jobs that present many demands to their workers tend to exhaust them both mentally and physically (Demerouti & Bakker, 2011). Therefore, it can lead bankers to an energy depletion state, mostly associated with feelings of exhaustion, and to health problems. In the interviews, these negative outcomes were also identified by the participants, such as *depression*, and *coping with stress through medication*.

Job resources

Job resources are defined as physical, psychological, social, or organizational elements of the job that may do any of the following: (a) be useful in achieving work goals; (b) reduce the physiological and psychological damage caused by job demands; (c) promote personal growth and development (Demerouti *et al.*, 2001). Examples of these job resources shown in the interviews include *positive customer contacts*, *social climate*, and *goal achievement rewards*. Most job resources were mentioned during interview questions related to well-being and positive workplace situations.

Similar to job demands, the way participants identified job resources can be related to the second process of the JD-R model: the motivational process. According to it, job resources are the most important predictors of work enjoyment, engagement, and motivation (Bakker & Demerouti, 2014). As stated before, this process leads to positive outcomes, which interviewees promptly identified, such as *professional satisfaction*, and *extra-role performance*.

Concluding Remarks

Through this qualitative study it was possible to gain a better understanding of the application of the JD-R model in an under-researched area. The model's flexibility allowed the identification of new variables specific to this rural banking context. Based on Schaufeli & Taris (2014) appendix (which identified the most frequently used job demands, job and personal resources, as well as positive and negative outcomes), it is feasible to state that the model does fit this particular context. Besides the most obvious variables that did not fit the banking sector (for example, *accidents and injuries*), most of the list did apply to this context.

The JD-R model's flexibility allowed the introduction of new variables such as *bank secrecy*, which although it is quite specific to this context, seems to influence the workers' well-being. The quantitative study was proven quite useful to understand the relevance of the newly identified variables in a broader national context.

Overall, the qualitative study provides more empirical evidence to support the JD-R model and its basic assumptions. It expands the model through its application in less frequently studied fields, and adds new variables, something that is usually not performed by researchers in the banking sector.

To confirm the findings of the qualitative study in a larger sample, a quantitative study was also conducted as a way to verify if the newly created variables are also seen

on a national level and what are the interactions amongst the most frequently used ones. In this way, a questionnaire was applied to all national bank structure, in order to assess the accuracy of the data in a broader sample.

4. QUANTITATIVE STUDY

The present study aimed to contribute to an improved understanding of the qualitative study results, by attempting to confirm its findings on a national level. Through the application of a questionnaire on the same Portuguese private bank, this second research had three main goals: (1) to assess if the relationship with customers is equally important throughout the country, (2) to test nine mediation and moderation hypotheses, and (3) to determine if such hypotheses maintain the same results when analyzed in each region.

These goals illustrate the foundations of a second data collection, justifying its purpose. The first goal comes from the main finding of the interviews that is the close relationship that employees and customers establish between themselves: a friendship based on trust that has the interesting outcome of seasonal gifts but also the disadvantage of a blurred line between professional and personal life, meaning that customers feel so comfortable with workers that they do not see anything wrong with knocking on their door to ask for help or to inform them that the ATM ran out of money on a Sunday. Since all participants highlighted this close relationship with customers, it is important to firstly determine if this happens in all Portuguese territory, or if it is exclusive to Alentejo.

The second and third goal include the hypotheses testing on a global level, but also on a regional level, in order to see if the results change according to the region being analyzed. The variables that were included in this second study are some of the most frequently used ones by interviewees and also the ones that were featured in the global results section.

Based on the literature reviewed earlier, the first two hypotheses (illustrated below in Figures 2 and 3) test the degree to which professional satisfaction can mediate stress and sleeping difficulties, in relation to performance goals (hypothesis 1) and positive customer contacts (hypothesis 2). While goal achievement has been found to affect satisfaction, researchers have also found that goal setting has a direct effect on satisfaction (Hamner & Harnett, 1974). Similarly, it is anticipated that having clear goals will increase bankers' professional satisfaction. Related to hypothesis 2 are the studies of Bernhardt *et al.* (2000) and Schneider (1991) that found evidence for the positive correlation between employees' and customers' satisfaction. Moreover, these hypotheses also relate to the COR theory, which proposes that individuals tend to accumulate resources that can be applied to overcome stress (Hobfoll, 1989). Thus, those who perceive the possession of more resources will be in fact less stressed (Hobfoll, 2002). Finally, it is expected that

individuals with higher professional satisfaction are better able to cope with stress and sleeping difficulties, as these two have a negative relation (Fogarty, 1996). Accordingly, it is hypothesized that:

Hypothesis 1: The relation between performance goals and stress and sleeping difficulties is mediated by professional satisfaction.

Hypothesis 2: The relation between positive customer contacts and stress and sleeping difficulties is mediated by professional satisfaction.

Figure 2. Representation of hypothesis 1

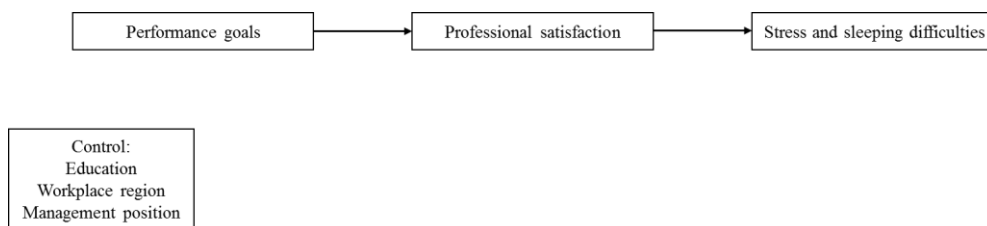


Figure 3. Representation of hypothesis 2



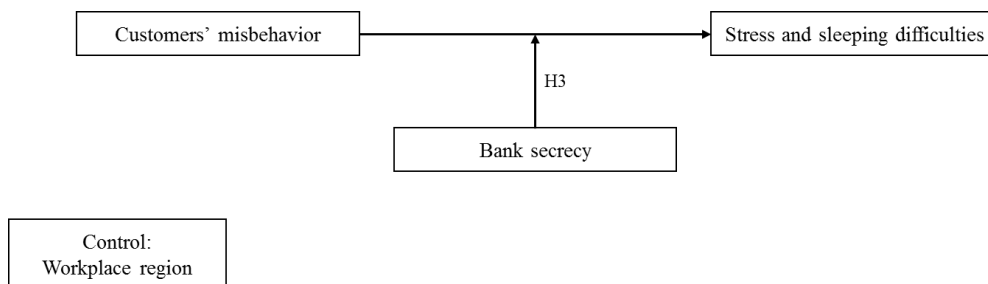
Bank secrecy is a mandatory demand in the banking sector. In sum, legislation states that workers cannot reveal any information regarding their institution and the customers it works with, including their names and bank accounts (according to Portuguese *Ordem dos Advogados*). Qualitative study results showed that some workers take bank secrecy so seriously to the point where they do not discuss any aspect of their work day with their families, not even answering a simple question like “how was your day?”. During interviews, workers also discussed problems with customers, stating that when they do happen they feel high levels of stress, sometimes lasting more than one day.

Following these results, hypothesis 3 (shown in Figure 4 below) seeks to find out if the relation between customers’ misbehavior and stress and sleeping difficulties becomes stronger if the worker has a higher level of bank secrecy. In this way, a worker that does not share any aspect of their day at home, especially when they had a conflict

with a customer, will feel higher levels of stress when compared to a worker that shares a bit more of their work day (not breaking the bank secrecy, but allowing themselves to share their concerns with those who care about them). This reasoning follows the commonly shared assumption of scholars that talking about one's stress improves personal health, through the cathartic disclosure of feelings that leads to health promotion (Afifi *et al.*, 2017). Moreover, no studies were found that investigated the importance of bank secrecy at the individual level, only considering it at the organizational level, in which it is related to offshore tax haven laws (Balakina *et al.*, 2017; Moser, 1995). Hence, the third hypothesis is presented below:

Hypothesis 3: The relationship between customers' misbehavior and stress and sleeping difficulties is moderated by bank secrecy; that is, customers' misbehavior is more strongly positively related to stress and sleeping difficulties for individuals with higher bank secrecy levels.

Figure 4. Representation of hypothesis 3



In line with the reviewed literature, hypotheses 4 to 7 (in Figure 5 below) investigate the buffering role of job resources on the impact of job demands on burnout (Bakker *et al.*, 2005). In their article, the authors propose social support as a potential buffer against job stress, so in the following hypotheses support from colleagues and support from supervisors are used as moderators. Hypothesis 5 and 7 share some similarities with the findings of Karatepe *et al.* (2010), who found that the availability of coworker and supervisor support lessened customer-related stressors.

Accordingly, it is expected that higher levels of both support from colleagues and support from supervisors mitigate the impacts of (low) performance goals and customers' misbehavior on stress and sleeping difficulties. The formulated hypotheses are as follows:

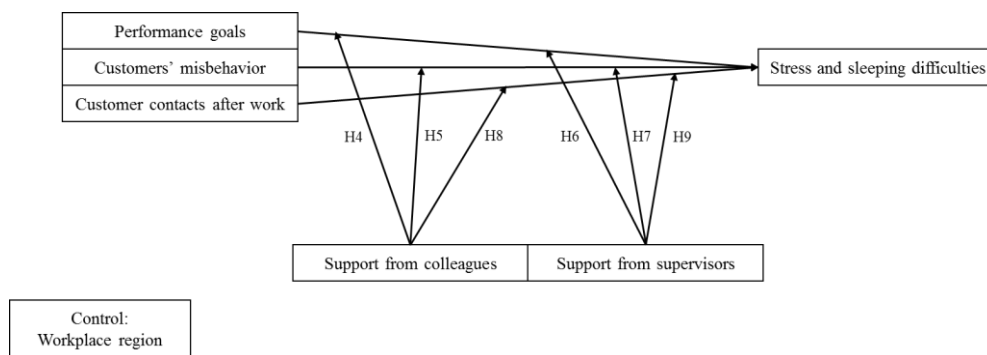
Hypothesis 4: The relationship between performance goals and stress and sleeping difficulties is moderated by support from colleagues; meaning that performance goals are more strongly negatively related to stress and sleeping difficulties for individuals with higher support from colleagues.

Hypothesis 5: The relationship between customers' misbehavior and stress and sleeping difficulties is moderated by support from colleagues; such that customers' misbehavior will be less strongly positively related to stress and sleeping difficulties when support from colleagues is higher.

Hypothesis 6: Support from supervisors moderates the relationship between performance goals and stress and sleeping difficulties. That is, the effect of performance goals on stress and sleeping difficulties will be stronger when support from supervisors is higher.

Hypothesis 7: Support from supervisors moderates the relationship between customers' misbehavior and stress and sleeping difficulties. That is, the effect of customers' misbehavior on stress and sleeping difficulties will be weaker when support from supervisors is higher.

Figure 5. Representation of hypotheses 4 to 9



In their 2011 article, Bakker *et al.* stated that “*Contemporary organizations need employees who are psychologically connected to their work; who are willing and able to invest themselves fully in their roles ...*” (Bakker *et al.*, 2011: 5), but does this mean that they should accept and embrace the growing indiscernible distinction between their job and their personal life? In Alentejo, it seems as if workers are already used to having customers calling them or showing up at their doorstep uninvited, but this also happens due to the rural setting, where everyone knows everybody. Some employees admit that it is a disadvantage, while also being a reflection that their job is well made, at least in what

concerns customer relations. Due to this, it is hard to establish whether customer contacts after work is a positive or negative situation. However, since some interviewees state that this situation causes them some distress, hypothesis 8 and 9 (shown also in Figure 5) propose that a higher level of support from both colleagues and supervisors, considered as before a potential buffer against job stress (Karatepe *et al.*, 2010) will reduce the impact of such demand on stress and sleeping difficulties. Accordingly, it is hypothesized that:

Hypothesis 8: Support from colleagues moderates the relationship between customer contacts after work and stress and sleeping difficulties. That is, the effect of customer contacts after work on stress and sleeping difficulties will be weaker when support from colleagues is high.

Hypothesis 9: Support from supervisors moderates the relationship between customer contacts after work and stress and sleeping difficulties. That is, the effect of customer contacts after work on stress and sleeping difficulties will be weaker when support from supervisors is high.

The aforementioned hypotheses are based on some of the main principles of the JD-R model, combined with what were considered the most interesting findings of the qualitative study conducted earlier. Additional hypotheses were created regarding professional satisfaction as a possible outcome but none of them were confirmed, so they were not included in this study.

Method

Sample and procedure

To achieve the purposes of the present study, data was collected from employees of the same Portuguese private bank interviewed earlier. All bank structure was invited to participate on a national level, in order to achieve a representative sample. Over 650 branches received the questionnaire: the bank employs about 4.000 workers, which according to Leedy's (1997) quantitative sample size requirement for a given population should be represented by 350 answers.

The questionnaires (shown in Annex 8) were created using Qualtrics software, being distributed to the employees via the bank's intranet during the first two weeks of December 2016. The Human Resources Director was approached in order to obtain authorization to conduct the study, and the questionnaire's link was sent to all 83 agency

managers. They were instructed to send the questionnaire to their branch employees, attaching a memo that highlighted its importance and requested their cooperation. The workers received full assurance of confidentiality and were allowed to answer the survey anonymously whether during work hours or at home, as it took about 10 minutes to answer.

By the end of the data collection period, 476 usable surveys were received, which gives a response rate of 11,9%. This value is rather low as the sample was quite large, meaning that a high response rate would be difficult to achieve. However, the number of answers surpasses the reference number given by Leedy (1997). The respondents were not asked to identify their branch as this would allow an easy identification of the institution. Instead, they were asked to identify the district where they work, and the number of responses per district ranged from 2 to 113. In order to simplify the analysis by region, districts were gathered according to NUTS II classification, resulting in five different regions with the number of answers ranging from 7 (in Algarve, which only comprises the district of Faro) to 150. No answers were obtained in Azores or Madeira.

In terms of gender, 55% of the respondents were male. Close to 42% had only secondary education, 40,7% had an undergraduate degree, while the rest had a graduate level. The respondents' age is mostly above 40 years old (about 67%), and only 6,3% of the workers have less than 29 years. Comparing the sample profile to the bank's human resource records shows that it is representative of the workers' population. Some of the most interesting answers include 21 respondents that work alone in a branch, proving that it is still a choice made by administrators in order to maintain branches while reducing costs; 15% of the sample stated that there are no other banks in the location that they work in; and 16 people answered that there are no other services (such as a post office or health care facilities) in their work location. The majority of the sample (83%) stated that they had never used any kind of support to deal with work-related stress.

Measurements

The constructs used in this study were operationalized via scales with multiple items, as can be seen in Annex 9, which presents each item and the variables' internal consistency reliabilities (coefficient α).

Most items were measured using the Copenhagen Psychosocial Questionnaire (COPSOQ) scales, as it is commonly used and already tested several times. The questionnaire has three different versions for different target groups: a short version for

companies, medium for advisory purposes, and a long version for scientific purposes (according to COPSOQ website). In this research, scales were used from both the short and long version.

Customers' misbehavior was measured using four items from the COPSOQ II short version. *Support from colleagues* was measured on a three item scale from the COPSOQ II long version. *Support from supervisors* was measured using a three item scale as well from the COPSOQ II long version. *Stress and sleeping difficulties* was measured on an eight item scale from the long version of COPSOQ II. *Professional satisfaction* was measured on a four item scale from COPSOQ II long version. All these variables provided a five-point answer scale ranging from 1 (never/almost never) to 5 (always). *Performance goals* were measured on a two item scale from COPSOQ II short version, scored on a five-point Likert scale that ranged from 1 (completely disagree) to 5 (completely agree).

The *bank secrecy* scale, the *positive customer contacts* scale, and the *customer contacts after work* scale were developed by the thesis author, as there was no existing scale that allowed an assessment of the intended dimensions. Through the *bank secrecy* construct the impact that this demand has on the worker's life is assessed, as the interviews showed that some employees did not discuss any work-related issues at home due to this requirement. In this way, it is expected that *bank secrecy* (a construct with three items) impacts the individual's stress levels, as he does not share any events from his day at home. On the other hand, *positive customer contacts* (three items) is the variable developed to measure the social dimension that stood out in the interviews in Alentejo, which reflects the positive feelings that both employee and customer share towards each other. This construct reflects the trust and recognition that each worker feels that his customers give to him. Lastly, *customer contacts after work* is a variable measured through two items which reflects a somewhat common situation that was found in Alentejo: the fact that customers feel so close to employees that they see nothing wrong with showing up at their doorstep and asking for help any day of the week. Responses to all self-constructed variables were elicited on a five-point scale ranging from 1 (completely disagree) to 5 (completely agree).

All the items were measured in a way that higher scores consistently indicate higher levels of each variable, the results ranging from 1 to 5. The variables' coefficient α ranges from 0,57 to 0,95, being this 0,57 coefficient the only one below 0,80, already exceeding the 0,70 value suggested by Nunnally (1978).

Below (Table 6) shows the correlations, means and standard deviations of the constructs used in the hypotheses model, as well as the control variables. The composite scores for each variable were calculated by averaging the results of the respective item scores. All the significant relationships between the variables were in the expected direction. Job demands were positively related with stress and sleeping difficulties, while job resources were negatively related with stress and sleeping difficulties. In terms of professional satisfaction, all the statistically significant job resources were positively related with it. In addition, stress and sleeping difficulties are negatively related to professional satisfaction.

The survey was prepared in Portuguese, since one of the advantages of COPSOQ scales is that they are translated in several languages, reducing the probability of translation misunderstandings. Only one scale, *performance goals*, had not been translated to Portuguese, so this was the only variable that needed translation. Prior to the administration of the questionnaire to all sample, it was pre-tested by a branch manager and no changes were deemed necessary.

Table 6. Correlations, means and standard deviations of construct measures

	1	2	3	4	5	6	7	8	9	10	11
1. Bank secrecy	1,00										
2. Customers' misbehavior	-,14**	1,00									
3. Performance goals	,13**	-,06	1,00								
4. Positive customer contacts	,28***	-,07	,13*	1,00							
5. Customer contacts after work	,12*	,11*	,05	,15**	1,00						
6. Support from colleagues	,05	-,03	,24***	,16**	,18***	1,00					
7. Support from supervisors	,12*	,00	,41***	,15**	,13*	,44***	1,00				
8. Stress and sleeping difficulties	,11*	,16**	-,25***	-,08	,08	-,16***	-,13**	1,00			
9. Professional satisfaction	,13**	-,08	,61***	,23***	,06	,37***	,47***	-,32***	1,00		
10. Education level	-,16***	,13**	-,08	-,12*	-,13*	-,05	-,10*	,02	-,12*	1,00	
11. Management position	-,24***	,03	-,17***	-,13*	-,21***	,01	-,03	-,08	-,15**	,11*	1,00
Mean	4,44	1,15	3,97	4,12	2,62	3,57	3,40	2,71	3,70	1,75	1,67
Standard deviation	,59	,35	,74	,59	1,22	,80	,97	,87	,68	0,73	0,47

Note. Correlations significant at the 0,05 level (2-tailed) are identified by an *, correlations significant at the 0,01 level are identified by two **, and correlations significant at the 0,001 level are identified by three ***

Data analysis

The main software used to conduct the analysis of the second study was the *Statistical Package for the Social Sciences 23* (SPSS). To assess the first goal (whether the relationship with customers is equally important across the country) an analysis of variance (ANOVA) was conducted for each dependent variable included in the model that is related with customer interactions, having workplace region as a factor. To test the hypotheses (both globally and regionally), PROCESS macro 2.16.3 was used (Hayes, 2013). This tool allows mediation and moderation analyses, generating direct and indirect effects for the first and conditional effects for the latter.

Several possible control variables were tested for their impact on the mediator and criterion variable using t-tests and ANOVA, but only three of them showed statistically significant impacts. In this way, three different control variables were used in this study: education level, workplace region, and management position. Education level has a 3 point scale (1=12th grade, 2=Undergraduate, 3=Graduate) and management position is a dichotomous variable where 0=No and 1=Yes. Due to its categorical nature, workplace region was recoded into several dummy variables, thus it is not included in Table 6.

To aid the interpretation of the moderations with the full sample, their interaction effects were plotted using the two-way standardized Excel worksheet available in Jeremy Dawson's website (see references). To plot the interactions, procedures by Dawson (2014) and Aiken & West (1991) are used in the worksheets.

Results

In this section, results will be shown according to each goal presented earlier. They will be discussed in greater detail in the following section, in order to maintain the clarity of the facts.

Customer relations throughout the country

To determine if the relationship with customers that stood out in the interviews also occurs in the rest of the country, a one-way analysis of variance (ANOVA) was conducted. Through this reasoning, three variables emerged: *customers' misbehavior*, *positive customer contacts*, and *customer contacts after work*.

ANOVA results showed that the first two variables have no statistically significant differences: *customers' misbehavior* ($F(4;374)=1,22$; $p=0,30$) and *positive customer contacts* ($F(4;381)=2,24$; $p=0,06$) do not vary according to region, both having p-values

higher than 0,05. On the other hand, *customer contacts after work* ($F(4;378)=5,73$; $p<0,001$) did show variance, so Levene's test of homogeneity of variances was conducted for this variable. As the result showed a $\text{Sig.}>0,05$, equal variances can be assumed for this variable and a Scheffe Post-Hoc test was conducted, in order to understand which regions are different amongst themselves.

In Table 7 below are illustrated the results of this analysis.

Table 7. Means and standard deviations for customer-related variables

Dependent variables	North	Center	M. R. Lisbon	Alentejo	Algarve	Total
Customers' misbehavior ($n=379$)	1,11 (0,24)	1,14 (0,32)	1,22 (0,52)	1,13 (0,28)	1,07 (0,12)	1,15 (0,35)
Positive customer contacts ($n=386$)	4,13 (0,48)	4,19 (0,54)	3,96 (0,75)	4,14 (0,57)	4,29 (0,49)	4,12 (0,59)
Customer contacts after work ($n=383$)	2,57 (1,16)	2,50b (1,22)	2,32b (1,22)	3,09a (1,16)	3,43 (0,79)	2,62 (1,22)

Note. Different letters next to the means indicate statistically significant differences at the 0,05 level.

These results show that employees in Alentejo have more frequent contacts with customers outside the banking agency than those in Center or in Metropolitan Region of Lisbon. Although the mean of Algarve is higher, it should be taken into account its' lower standard deviation and the fact that it only has 7 respondents. These results point towards the expected direction that is that these situations where customers contact workers by calling them or going to their house are more frequent in rural settings than in bigger cities, included within the regions mentioned above.

Testing hypotheses globally

As mentioned before, in order to test both mediation and moderation hypotheses, PROCESS macro for SPSS was used, following the procedures suggested by Hayes (2013). Since workplace region (a categorical variable) was used as a control variable in all hypotheses, dummy variables were created. Algarve was used as a baseline against which all others are compared to, due to its lower values.

Testing the hypotheses on the whole sample allows the establishment of a guideline, against which the regional results will be compared to. The current section presents the global results of each hypothesis.

Hypothesis 1. The first hypothesis sought to know if professional satisfaction (PSAT) could mediate the relation between performance goals (PERFG) and stress and sleeping difficulties (STRESS). From a simple mediation analysis conducted using ordinary least squares path analysis, it was found that performance goals indirectly influenced stress and sleeping difficulties through their effect on professional satisfaction, as expected.

As can be seen on Annex 10, employees with a clear definition of their performance goals feel a higher level of professional satisfaction than when compared to those who do not ($a=0,55$), and employees with higher levels of stress and sleeping difficulties feel less professionally satisfied when compared to those who do not feel as stressed ($b=-0,36$). A bias-corrected bootstrap confidence interval for the indirect effect ($ab=-0,20$) based on 1.000 bootstrap samples was entirely below zero ($-0,28$ to $-0,12$). As there is evidence that performance goals reduce stress and sleeping difficulties independent of its effect on professional satisfaction ($c'=-0,13$), this mediation hypothesis has only a partial effect.

Concerning control variables, only management position (MANP) shows statistically significant differences. Education level (EDU) and workplace region (North - NOR, Centre - CEN, Metropolitan Region of Lisbon - LIS, and Alentejo - ALE) are not statistically significant. Management position is a dichotomous variable where 1 means yes, the worker does have a managerial position, and 0 means no, the worker does not have any subordinates. In this way, holding all variables constant, employees who do have a management position tend to have less stress and sleeping difficulties ($g_6=-0,23$) than those who do not have managerial responsibilities.

Hypothesis 2. In this hypothesis professional satisfaction was considered as a mediator of the relation between positive customer contacts (PCC) and stress and sleeping difficulties. Using ordinary least squares path analysis once again, a simple mediation analysis found that positive customer contacts indirectly influenced stress and sleeping difficulties through their effect on professional satisfaction, as expected.

As can be seen on Annex 11, positive customer contacts lead to higher levels of professional satisfaction ($a=0,22$), and employees who feel more satisfied with their job feel less stress and sleeping difficulties than those who are not as satisfied ($b=-0,47$). A bias-corrected bootstrap confidence interval for the indirect effect ($ab=-0,10$) based on 1.000 bootstrap samples was entirely below zero ($-0,18$ to $-0,05$). There was no evidence

that positive customer contacts influenced stress and sleeping difficulties independent of its effect on professional satisfaction ($c'=-0,03$, $p=0,64$), which means that this is a full mediation.

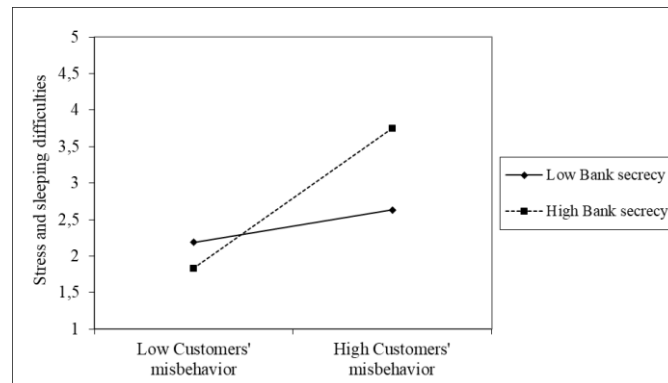
Holding all variables constant, management position is once again the only control variable with statistically significant differences, meaning that workers who have a managerial position have less professional satisfaction than those who do not have subordinates ($f_6=-0,16$).

Hypothesis 3. The third hypothesis proposed that bank secrecy (BSEC) moderates the relation between customers' misbehavior (CMIS) and stress and sleeping difficulties. From a simple moderation analysis conducted using ordinary least squares path analysis, the degree to which an employee perceives bank secrecy does moderate the effect of customers' misbehavior on stress and sleeping difficulties, as expected. This can be seen on Annex 12, where the regression coefficient of the interaction is positive and statistically significant ($b_3=0,37$, $t(359)=2,00$, $p=0,05$), accounting for 1,41% of the variance in stress and sleeping difficulties.

The conditional effect of customers' misbehavior is also statistically significant, meaning that among workers with average bank secrecy levels (as it was mean centered in this analysis) but equal in terms of their workplace region (used as control) two people who differ by one unit in their customers' misbehavior experiences are estimated to differ by $b_1=0,59$ units in their stress and sleeping difficulties. Also statistically significant are the conditional effects of customers' misbehavior on stress and sleeping difficulties on medium and high levels of bank secrecy, as both levels have a bias-corrected bootstrap confidence interval based on 1.000 bootstrap samples entirely above zero (the medium level between 0,10 and 1,09, and the high level between 0,16 and 1,42).

In terms of control variables, none has a statistically significant difference, meaning that workplace region does not influence the moderation.

Figure 6 below shows this interaction, where increases in both customers' misbehavior and bank secrecy are associated with increased levels of stress and sleeping difficulties, and there is a clear influence of high bank secrecy on stress in the presence of frequent customers' misbehavior.

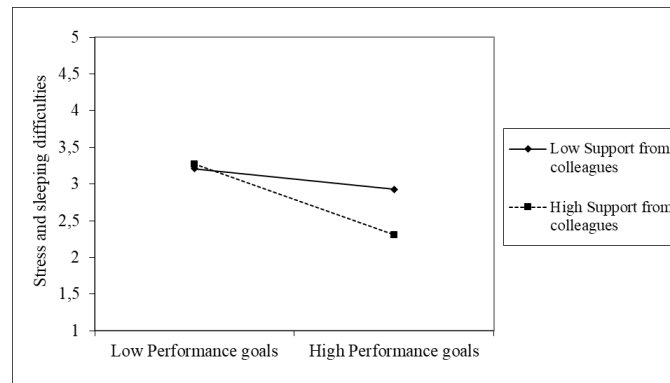
Figure 6. Plot of the two-way interaction effect of hypothesis 3

Hypothesis 4. The fourth hypothesis established support from colleagues (SCOLL) as a moderator of the relationship between performance goals and stress and sleeping difficulties. A simple moderation analysis conducted using ordinary least squares path analysis concludes that the degree to which employees receive support from colleagues does moderate the effect of performance goals on stress and sleeping difficulties, as expected.

Annex 13 shows a significant negative regression coefficient for the interaction between performance goals and support from colleagues ($b_3 = -0,17$, $t(443) = -2,46$, $p = 0,01$), accounting for 1,81% of the variance on stress and sleeping difficulties. The conditional effect of performance goals is also statistically significant, meaning that among employees with average support from colleagues (as it was mean centered) but equal in terms of their workplace region (used as control) two people who differ by one unit in their performance goals clarity are estimated to differ by $b_1 = -0,31$ units in their stress and sleeping difficulties. The conditional effects of performance goals on stress and sleeping difficulties are also statistically significant on all values of support from colleagues, as all levels have a bias-corrected bootstrap confidence interval based on 1.000 bootstrap samples entirely below zero (the lower values between -0,32 and -0,03, the medium values between -0,43 and -0,19, and the higher values between -0,61 and -0,27).

None of the variables controlled for present statistically significant differences, meaning once again that they do not influence this relationship.

Below, Figure 7 shows the described interactions, in which increases in both performance goals and support from colleagues are associated with decreased values of stress and sleeping difficulties.

Figure 7. Plot of the two-way interaction effect of hypothesis 4

Hypothesis 5. The fifth hypothesis presented support from colleagues as a moderator of the relationship between customers' misbehavior and stress and sleeping difficulties. A simple moderation analysis conducted using ordinary least squares path analysis concludes that there is no moderation in this case, unlike what had been hypothesized. Annex 14 shows a non-significant regression coefficient from the interaction between customers' misbehavior and support from colleagues ($b_3=-0,21$, $t(359)=-0,85$, $p=0,40$). Given these results, no other coefficients will be analyzed, as the main interaction that proves moderation is not significant.

Hypothesis 6. In this hypothesis support from supervisors (SSUP) was considered as a moderator of the relation between performance goals and stress and sleeping difficulties. Using ordinary least squares path analysis, a simple moderation analysis concludes that the degree to which employees receive support from their supervisors does moderate the effect of performance goals on stress and sleeping difficulties, as hypothesized and similar to the results of hypothesis 4.

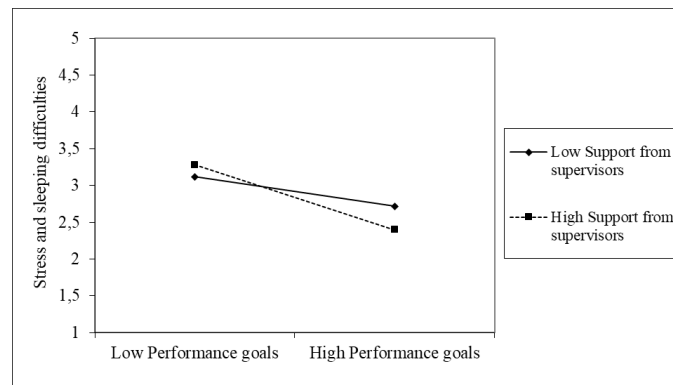
Annex 15 shows a significant negative regression coefficient for the interaction between performance goals and support from supervisors ($b_3=-0,12$, $t(445)=-2,06$, $p=0,04$), accounting for 1,12% of the variance on stress and sleeping difficulties. The conditional effect of performance goals is also statistically significant, meaning that among workers with average support from supervisors (mean centered for this analysis) but equal in terms of their workplace region (used here as control) two people who differ by one unit in their performance goal clarity are estimated to differ by $b_1=-0,32$ units in their stress and sleeping difficulties.

The conditional effects of performance goals on stress and sleeping difficulties are also statistically significant on all values of support from supervisors, since all levels have a bias-corrected bootstrap confidence interval based on 1.000 bootstrap samples entirely below zero (the lower values between -0,35 and -0,07, the medium values between -0,45 and -0,20, and the higher values between -0,62 and -0,25).

None of the control variables present statistically significant differences.

Figure 8 below illustrates this hypothesis' results, in which increases in both performance goals and support from supervisors are associated with a decrease of stress and sleeping difficulties, particularly on high values of the moderator.

Figure 8. Plot of the two-way interaction effect of hypothesis 6



Hypothesis 7. The seventh hypothesis proposes that support from supervisors moderates the relationship between customers' misbehavior and stress and sleeping difficulties. A simple moderation analysis conducted using ordinary least squares path analysis concludes that there is no moderation, unlike what had been hypothesized and similar to the results of hypothesis 5.

Annex 16 shows a non-significant regression coefficient from the interaction between customers' misbehavior and support from supervisors ($b_3 = -0,21$, $t(361) = -0,83$, $p = 0,41$). Taking these results into consideration, no other coefficients will be analyzed, as the main interaction is not significant.

Hypothesis 8. The eighth hypothesis proposes support from colleagues as a moderator of the relation between customer contacts after work (CCAW) and stress and sleeping difficulties. A simple moderation analysis conducted using ordinary least

squares path analysis concludes that there is no moderation, unlike what had been hypothesized.

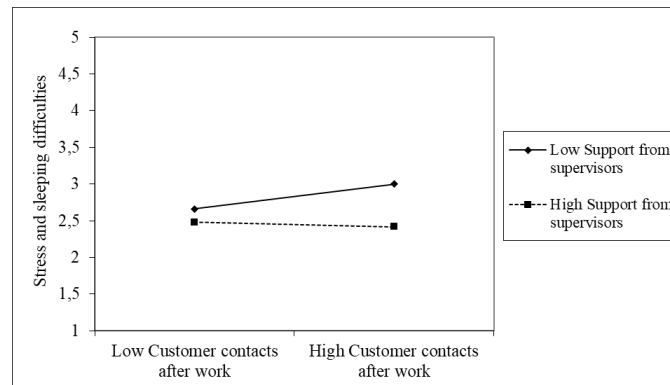
Annex 17 shows a non-significant regression coefficient of the interaction between customer contacts after work and support from colleagues ($b_3=0,02$, $t(360)=0,41$, $p=0,68$). Taking these results into consideration, no other coefficients will be analyzed, as the main interaction is not significant.

Hypothesis 9. The last hypothesis establishes support from supervisors as a moderator of the relationship between customer contacts after work and stress and sleeping difficulties. A simple moderation analysis conducted using ordinary least squares path analysis concludes that the degree to which employees receive support from supervisors does moderate the effect of customer contacts after work on stress and sleeping difficulties, but not in the hypothesized values.

Annex 18 shows a significant negative regression coefficient for the interaction between customer contacts after work and support from supervisors ($b_3=-0,10$, $t(363)=-2,52$, $p=0,01$), accounting for 1,87% of the variance on stress and sleeping difficulties. The conditional effect of customer contacts after work is also statistically significant, meaning that among employees with average support from supervisors (mean centered for this analysis) but equal in terms of their workplace region (used as control) two people who differ by one unit in the amount of customer contacts after work are estimated to differ by $b_1=0,07$ units in their stress and sleeping difficulties.

The conditional effects of customer contacts after work on stress and sleeping difficulties are statistically significant only on lower values, as they have a bias-corrected bootstrap confidence interval based on 1.000 bootstrap samples entirely above zero (between 0,06 and 0,27), meaning that having low support from supervisors impacts the relation by increasing stress and sleeping difficulties. Unlike expected, the conditional effects show that having a high level of support from supervisors does not moderate the impact of customer contacts after work on stress and sleeping difficulties. This can be seen on Figure 9, where only low values of support from supervisors increase stress levels when confronted with frequent customer contacts after work.

Once again, none of the control variables has a statistically significant difference in this hypothesis.

Figure 9. Plot of the two-way interaction effect of hypothesis 9

Testing hypotheses regionally

After testing all the hypotheses using the full sample, the third goal of this study included testing the same nine hypothesis in each individual region, in order to assess if the results changed. The detailed results of this analysis are presented from Annex 19 to Annex 33, as a way to simplify this section and for it not to become so exhaustive.

The analysis of these hypotheses was conducted in the same way that the previous one was, using PROCESS macro for SPSS (Hayes, 2013). Through ordinary least squares path analysis, simple mediation and moderation analysis were conducted. Bias-corrected bootstrap confidence intervals based on 1.000 bootstrap samples were used, and workplace region as a control variable was eliminated, as it made no sense to maintain it since this analysis already separated the results by region.

Below, Table 8 shows an overview of the most important results of all the conducted analyses: the direct effect coefficient (D. E. Coeff.), and the indirect effect coefficient (I. E. Coeff.) as well as its bootstrap confidence interval for the first two mediation hypotheses, and the interaction coefficient (Int. Coeff.) and variance percentage of the moderation hypotheses (explained by the interaction, r^2 -change).

All regions were tested except Algarve as it only had 7 answers, not allowing a truthful examination of its results. The sample size of the tested regions is included below each one. The global results (presented earlier) were included in the second column to facilitate a better understanding of the comparisons. None of the control variables used for hypothesis 1 and 2 showed statistical significance, so they are not represented in the table.

Table 8. Overview of hypotheses results by region, in comparison to global results

	Globally <i>n</i> =474	North <i>n</i> =96	Center <i>n</i> =150	M. R. Lisbon <i>n</i> =128	Alentejo <i>n</i> =93
Hypothesis 1	Partial mediation	No mediation	Full mediation	Full mediation	Full mediation
D. E. Coeff.	-0,13*	-0,23	-0,10	-0,02	-0,25
β_i Coeff.	-0,20	-0,10	-0,31	-0,21	-0,16
β_i Interval	-0,28; -0,12	-0,26; 0,06	-0,48; -0,12	-0,37; -0,09	-0,32; -0,20
Hypothesis 2	Full mediation	No mediation	No mediation	Full mediation	Full mediation
D. E. Coeff.	-0,03	-0,59**	0,11	-0,09	0,18
β_i Coeff.	-0,10	-0,04	-0,05	-0,13	-0,20
β_i Interval	-0,18; -0,05	-0,26; 0,03	-0,19; 0,08	-0,26; -0,04	-0,44; -0,07
Hypothesis 3	Moderation (medium and high values)	No moderation	Moderation (all values)	No moderation	No moderation
Int. Coeff.	0,37*	0,05	0,54*	0,20	0,19
Variance	1,41%	0%	1,48%	1,33%	0,13%
Hypothesis 4	Moderation (all values)	Moderation (high values)	No moderation	No moderation	No moderation
Int. Coeff.	-0,17**	-0,38*	-0,13	-0,10	-0,18
Variance	1,81%	4,69%	0,57%	1,05%	2,08%
Hypothesis 5	No moderation	No moderation	No moderation	No moderation	No moderation
Int. Coeff.	-0,20	-0,46	0,14	-0,28	0,72
Variance	0,41%	0,72%	0,14%	1,72%	2,37%
Hypothesis 6	Moderation (all values)	No moderation	No moderation	No moderation	No moderation
Int. Coeff.	-0,12*	-0,20	-0,06	0,03	-0,23
Variance	1,12%	2,67%	0,21%	0,12%	4,91%
Hypothesis 7	No moderation	No moderation	No moderation	No moderation	No moderation
Int. Coeff.	-0,21	0,04	0,13	-0,48	0,46
Variance	0,40%	0,01%	0,09%	5,51%	1,78%
Hypothesis 8	No moderation	No moderation	No moderation	No moderation	No moderation
Int. Coeff.	0,02	-0,05	0,01	0,04	0,09
Variance	0,06%	0,25%	0%	0,18%	1%
Hypothesis 9	Moderation (low values)	Moderation (low values)	No moderation	No moderation	No moderation
Int. Coeff.	-0,10**	-0,28***	-0,06	-0,15	0,02
Variance	1,87%	15,07%	0,49%	5,10%	0,08%

Note. Correlations significant at the 0,05 level (2-tailed) are identified by an *, correlations significant at the 0,01 level are identified by two **, and correlations significant at the 0,001 level are identified by three ***.

As can be seen above, most hypotheses lose support when compared to the total sample results. While out of the nine hypotheses tested globally only three were not supported, only two hypotheses per region are supported. Only hypothesis 5, hypothesis 7 and hypothesis 8 maintain the same results throughout all regions: the first two are never supported, meaning that neither support from colleagues nor from supervisors ever moderate the relationship between customers' misbehavior and stress and sleeping difficulties; and hypothesis 8 shows that support from colleagues does not moderate the relation between customer contacts after work and stress and sleeping difficulties in any region. Besides these three, few regions share the same results with the global sample: hypothesis 2 maintains the same result in Metropolitan Region of Lisbon, and Alentejo, not being supported anywhere else; and hypothesis 9 is also moderated on low values in the North, not supported in any other region.

There are a few hypotheses that do not share exactly the same results with global sample but that have some support. Hypothesis 1 only has a partial mediation on the global results, becoming a full mediation in all regions except North (where it is not supported). Hypothesis 3 is a moderation on medium and high values of the moderator (bank secrecy), being a moderation on all values in the Center, and not supported anywhere else. Finally, hypothesis 4 is a moderation on all values in the global sample, but a moderation on only high values in the North (not supported in any other region). Hypothesis 6 is the only hypothesis where a moderation on all values of the moderator (support from supervisors) is never supported on any other region.

In the following section, all the results presented will be discussed, relating them to the reviewed literature and to previously conducted research.

Discussion

The second data collection consisted on a questionnaire applied to all bank agencies of the same Portuguese private bank used in the first study (interviews). Through this questionnaire, several variables that stood out in the qualitative study were assessed, in order to verify if the findings in Alentejo also occurred throughout the country.

The current study had three main goals: (1) to determine if the relationship with customers is equally important throughout the country, (2) to test nine hypotheses, and (3) to assess if these hypotheses maintain the same results when analyzed in each region. In this section, results will be discussed according to each goal, in order to have a clearer understanding of their meanings.

Do customer relationships vary throughout the country?

The first goal emerged from the interest in finding out if the customer relations that interviewees spoke so extensively about also occurred in the rest of the country. Considering the customer-related variables included in the model (*customers' misbehavior, positive customer contacts, and customer contacts after work*) regional variations were expected especially in the last one, since having both problems and positive contacts with customers is not unusual in a banking setting, but having customers come to the workers' door on a Sunday morning is something more peculiar.

The answer to this goal's question seems to be positive, to some degree. Results showed that customers' misbehavior and positive customer contacts do not vary between any regions, but customer contacts after work do vary significantly between Alentejo and Center, and between Alentejo and Metropolitan Region of Lisbon, with Alentejo having more frequent contacts than both other regions.

As briefly mentioned before, these results are a potential illustration of the differences between the regions of our country, brought by deindustrialization and privations that enlarged social and regional inequalities (Turok *et al.*, 2017). Out of the analyzed regions, Center and Metropolitan Region of Lisbon are two of the most urban areas, including cities that have had a great development in the past years, such as Lisbon, and Coimbra. On the other hand, Alentejo is still a mostly rural region, filled with small towns and villages, with a much closer communal living. It is not that workers are handing out their phone numbers and addresses, but in small settings people know where everyone lives, and if they do not know it is fairly easy to find out. This potentiates this goal's findings, since in bigger cities it is harder to have contacts with customers outside work, since workers often live far from where they work and customers do not feel as comfortable to approach them in that way. Moreover, employees in bigger cities deal with more customers, so it becomes harder to create a close connection with all of them.

What happens in Portugal?

The second goal of the current study consisted on the test of nine hypothesized relationships using the whole sample, as a way to establish a baseline against which the hypotheses will then be compared when tested by region.

Similar to what happened when the hypotheses were introduced, they will be discussed in groups gathered by their theoretical similarities, in order to simplify the discussion and avoid unnecessary repetitions.

Professional satisfaction as a mediator. The first two hypotheses placed professional satisfaction as a mediator of the relation between both performance goals (hypothesis 1) and positive customer contacts (hypothesis 2) and stress and sleeping difficulties. It was expected that having higher levels of professional satisfaction would diminish the feelings of stress and sleeping difficulties, since there are several studies that have found negative relationships between job satisfaction and stress (Lourel *et al.*, 2009; Babakus *et al.*, 1999; Bacharach *et al.*, 1991).

The results showed that there is only a partial mediation in the first hypothesis, meaning that having higher levels of performance goals leads to lower stress and sleeping difficulties, regardless of professional satisfaction levels. However, the second hypothesis is fully supported, as having positive customer contacts does not lead to stress and sleeping difficulties in itself, but instead leads to higher levels of professional satisfaction which in turn lead to less stress and sleeping difficulties. When it comes to control variables, only management position had a significant impact, influencing both workers' professional satisfaction and stress and sleeping difficulties. These results support the claims of COR theory (Hobfoll, 2002) where the accumulation of resources reduces the impact of stress, while also proving the possibility of the model's application according to the specific set of demands and resources relevant for the setting in which employees are working (Brenninkmeijer *et al.*, 2010), due to the use of an original variable scale.

Bank secrecy's influence on employees' stress levels. Hypothesis 3 proposed that customers' misbehavior would be more strongly positively related to stress and sleeping difficulties when bank secrecy levels are higher. This was expected to happen based on the rationale that individuals who attribute a higher importance to bank secrecy, thus not disclosing any detail of their work day, will feel more stress and sleeping difficulties when faced with customers' misbehavior during their work day. This rationale is also reflected by Hobfoll (2002) who states that social support helps individuals to improve their mental health and stress resistance, whether it is provided by family or friends. In this reasoning, workers who do not discuss their work day with anyone do not receive such social support, having to deal with customers' problems all by themselves.

The third hypothesis was fully supported by its results, showing that on average levels of bank secrecy, customers' misbehavior is more strongly related to stress and sleeping difficulties, and higher levels of bank secrecy (namely medium and high levels) lead to more stress and sleeping difficulties as well. Although interactions between

demands are uncommon to study, they are proposed by Bakker & Demerouti (2016) as possible research avenues within the JD-R model. In this way, the current hypothesis represents an effort in investigating the accumulation of job demands and their impact on bankers' stress levels.

Concluding, it seems that bank secrecy does moderate the relationship between customers' misbehavior and stress, having a plausible explanation that when not receiving social support (due to bank secrecy demands) in order to handle customer-related problems more easily, individuals feel higher levels of stress and sleeping difficulties.

The buffering role of support from colleagues and supervisors. Hypotheses 4 to 7 assess the buffering role of job resources on the impact of job demands on stress (Bakker *et al.*, 2005). Since the same article identifies social support as the most well-known variable proposed as a buffer against job stress, these hypotheses use support from colleagues and support from supervisors as moderators. In this way, hypotheses 4 and 5 use support from colleagues as a moderator. The first proposes a stronger negative relationship between performance goals and stress and sleeping difficulties when individuals have higher support from colleagues, the latter proposes that customers' misbehavior will be less strongly positively related to stress and sleeping difficulties when support from colleagues is higher. The other two hypotheses use support from supervisors as a moderator: hypothesis 6 states that the effect of performance goals on stress and sleeping difficulties will be stronger when support from supervisors is higher, and hypothesis 7 proposes that the effect of customers' misbehavior on stress and sleeping difficulties will be weaker when support from supervisors is higher.

Following the reasoning of Bakker *et al.* (2005), and as it can be seen from the hypotheses formulation, it is expected that higher levels of the moderator will buffer the negative impacts of the demands on stress, similar to what was found by Bakker *et al.* (2003c). Hypotheses' results showed that both hypotheses 4 and 6 are fully supported, with both support from colleagues and support from supervisors moderating the negative relation between performance goals and stress and sleeping difficulties on all values of the moderator. However, hypotheses 5 and 7 were not supported, with neither support from colleagues nor from supervisors moderating the relation between customers' misbehavior and stress and sleeping difficulties. This shows that not all job resources buffer all job demands: only some resources will be able to buffer the impact of specific demands (Hakanen *et al.*, 2005).

While hypotheses 4 and 6 support the JD-R model assumption, the other two seem to go against it, since no kind of support buffers the impact of customers' misbehavior on stress and sleeping difficulties. Karatepe *et al.* (2010) conducted a research with some similarities to the current one, in which was found that although supervisor support does alleviate the impact of customer verbal aggression on emotional exhaustion, coworker support does not. In the present case, none of them do. A possible explanation for this is that employees may not ask for support at all, from any of the parts. Customers' misbehavior has the lowest mean (1,15) and standard deviation (0,35) out of all variables, which means that it is something that does not happen often. So when it does, workers may assume that it is a one-time event, so they do not need help to cope with it, even if it does generate stressful feelings at the time.

Customer contacts outside work hours. The last two hypothesis proposed that the effect of customer contacts after work on stress and sleeping difficulties would be weaker when support from colleagues (hypothesis 8) and support from supervisors (hypothesis 9) is higher.

Hypothesis 8 was not supported at any levels of the moderator, meaning that unlike what was expected based on the research conducted by Karatepe *et al.* (2010), support from colleagues does not reduce stress levels created by contacts with customers outside work hours. Besides the possible explanation that workers simply do not seek help from colleagues to deal with this kind of stress-related issues, and considering the results from hypothesis 9, it could be that receiving support from colleagues is less important and less helpful to workers than receiving it from their supervisors. This supports the rationale of Dormann & Zapf (1999) who added that supervisor support has a bigger buffering potential than colleague support, since the supervisor is the only one with enough power to change the whatever working situation that may be disturbing the worker. Moreover, Schreurs *et al.* (2012) proposed that support from colleagues may not have a stress-reducing effect as this can lead to comparisons between workers, which may be detrimental to their relationship. In this case, if one employee does not receive such contacts but perceives them as something positive, while another employee receives them frequently but sees them as a negative outcome, discussing them may do more harm than good. The first may leave the conversation wondering what the other is doing different from him which results in this extra attention from customers, and the latter may leave upset that he is the only one to be bothered by customers outside work.

Based on the research of Bakker *et al.* (2005) and also the previously discussed suggestions, it would be expected that supervisor support helped workers to cope with these contacts, so having more of it would mean lower stress levels. However, analysis outcomes showed mixed results concerning this hypothesis: while initially support from supervisors does seem to decrease stress and sleeping difficulties, conditional effects showed that there were no levels of support that could significantly decrease stress. Instead, only low levels of support from supervisors were significant, leading in fact to an increase in stress and sleeping difficulties.

This could mean that while workers are aware of the fact that being supported by their supervisor will not stop customers from reaching out to them outside work hours, thus increasing their stress and sleeping difficulties, having a supervisor that does not take interest in their concerns will not help them to decrease their stress levels either.

Are all regions the same?

The third and final goal had the purpose of determining if the hypotheses discussed above would maintain the same results when analyzed in each region of the country. Based on the known realities of Portugal, it was expected that some degree of variation would occur amongst the regions, since the work settings throughout the country are not equal. A variable that has higher importance in one region might not have it in another, and it was anticipated that that would contribute to changes in the hypotheses' results.

Answering this goal's question as to whether results change according to the region in which they are studied, the answer seems to be yes, the hypotheses' results do change. The main conclusion that can be taken from analyzing the summary table is that most hypotheses lose support when tested in each region, and only half of them maintain the global outcome in at least one region.

Hypothesis 2 maintains its full mediation in both Metropolitan Region of Lisbon and Alentejo, but losing it everywhere else, meaning that in North and Center professional satisfaction does not mediate the relation between positive customer contacts and stress and sleeping difficulties. This could happen due to the fact that employees in this region do not place so much importance on professional satisfaction as other regions, thus having higher or lower levels of it never influences their stress levels.

As had occurred in the global results, hypotheses 5 and 7 are never moderated in any region. This supports the plausible explanation presented before where it was stated

that neither support from colleagues nor support from supervisors moderate the relation between customers' misbehavior and stress and sleeping difficulties due to workers not asking for help, considering problems with customers a one-time event. Similarly, hypothesis 8 is also never supported in any region, contributing to the rationale proposed earlier, in which support from colleagues tends to be less helpful than support from supervisors.

Lastly, hypothesis 9 is also moderated on low values of support from supervisors in the North, similar to what happened in the global results. However, it is not supported in any other region, meaning that support from supervisors is not a moderator of the relation between customer contacts after work and stress and sleeping difficulties. This could have multiple meanings: one of the possible explanations is that workers do not experience contacts with customers outside work, thus not seeking support for something that they do not feel; or they understand that having support does not change the contacts outside work, which means that workers accept them as they are and, once again, do not seek help from their supervisors.

Concluding Remarks

The second data collection consisted on a quantitative study consisting on the application of a questionnaire to the whole national bank structure of the same Portuguese private bank interviewed in the qualitative study. The main purpose of this study was to broaden the sample, assessing if the findings in Alentejo were found throughout the country as well. In order to do so, this research was divided into three goals.

The first goal consisted on determining if customer relations varied according to different country regions. After conducting an analysis of variance, results showed that both customers' misbehavior and positive customer contacts do not vary regionally, but customer contacts after work do present variation among Alentejo and Center, and Alentejo and Metropolitan Region of Lisbon.

The second goal was related to the test of nine hypotheses using the whole sample, in order to produce a baseline against which results of the third goal would be compared. Most hypotheses were supported and in the expected direction, with only three of them not being supported by results. The third goal consisted on the testing of these hypotheses using different samples according to the respondents region, and results showed that most of the hypotheses lose support when tested in this way. Only a few maintained the same

results as the global baseline, and the three hypotheses that had not been supported earlier were not supported in any region.

In the following section the results of both qualitative and quantitative study will be discussed together, followed by the identification of this research's limitations, its practical implications, as well as possible future research directions.

5. GENERAL DISCUSSION

The current research consisted on two data collections (qualitative and quantitative) which have been previously discussed in each of their respective chapters. In the present section they will be discussed jointly, as a way to summarize and provide an overview of the meaning of the main results.

The first main goal that drove this investigation sought to understand if the JD-R model was fit to represent the specific reality of a small banking institution in Alentejo. Resting on the claims presented by several authors that this model is highly flexible, adapting to the reality that one choses to investigate (Schaufeli & Taris, 2014), the conducted interviews allowed the identification of new variables specific to this context and also showed that the JD-R model could indeed illustrate the setting of this organization. Some of the main findings that came out of this research were the importance of customer relations (both positive – job resources; and negative – job demands), the support that workers received from colleagues and supervisors (job resources), and the role that bank secrecy (job demand) played in the employees' personal life.

Based on these findings, a quantitative data collection was conducted through a questionnaire sent to the whole bank structure on a national level. This second research had three main goals, which tried to assess if the findings in Alentejo were also confirmed throughout the country, or if some situations were specific to the setting of that region.

The first goal of the quantitative study was to discover if customer relations had an equally important role in different regions of the country. Authors have frequently highlighted the importance of positive customer relations to a bank's performance (Babakus *et al.*, 2009, and Yavas *et al.*, 1997), including not only the direct effect of having more customers (through positive word-of-mouth), but also due to the fact that positive customer relations reduce the likelihood of complaints (Ladeira *et al.*, 2016). Results showed that both customers' misbehavior and positive customer contacts do not vary regionally, while customer contacts after work varies between Alentejo and Metropolitan Region of Lisbon, and Alentejo and Center. This shows that the bank's corporate mission and core values are being followed by most agencies, since long-term relationships with customers and proximity play a big part in their message, while also proving that contacts after work are indeed specific to Alentejo and its rural setting that promotes a more open and friendly relationship that loses the boundaries of work hours.

The second goal of the quantitative study was to test two mediation hypotheses and seven moderations, and third goal was to test them once again in each region, to assess result variation. Overall, results showed that only three hypotheses were not supported, and most of them lost support when tested regionally.

The following sections will focus on both studies, providing a critical analysis of all research conducted. The theoretical contributions of this investigation will be highlighted, as well as its practical implications that management should take into consideration. Finally, no study is without its limitations, so they will be also discussed here, followed by possible future research avenues.

Theoretical Contributions

At first sight, this investigation would appear to be just another JD-R model research, proving that its flexibility does indeed allow its use in virtually any occupation, but it is more than that. As stated earlier, there is a gap within the banking sector: it is not often researched, most of the times only frontline positions are chosen (while this investigation includes workers who perform different functions within the bank's hierarchy), and none of the reviewed studies allow the identification of new variables, meaning that concepts identified *a priori* in different contexts are being used in a reality that is not analogous to them.

The main theoretical contribution of this investigation is the fact that two different data collections were conducted, through two sequential studies. The use of interviews and questionnaires allowed the identification of important variables that were then used in the second research, in order to discover if they vary throughout the country or not. A strength of this quantitative study is that the used sample is representative of the population being studied, which was proved by a comparison of its characteristics to the bank's human resource reports.

The introduction of the newly created variables into the model was also beneficial, as they were supported when tested in the hypotheses: it was found that bank secrecy plays a moderating role in the relationship between customers' misbehavior and stress and sleeping difficulties, and that customer contacts after work are related to stress and sleeping difficulties.

Finally, one important theoretical contribution that this study provided is the fact that regions were taken into consideration, through the assessment of customer relations throughout the country and the test of hypotheses according to each NUT II region. This

is rather important as it is often a neglected aspect, which has the potential to lead to false generalizations: countries are not equal throughout their territory. Conducting a study in the biggest city of a country and then stating that the whole country behaves in the same way may be deceiving, as the work environment settings can change dramatically according to the region in which an employee works. As Turok *et al.* (2017) have stated, the increasing openness of territorial boundaries and global market integration reward highly skilled-groups in well-positioned regions, which in Portugal translated to coastal regions receiving the most attention, with high paying jobs but also a high cost of living, while the country side has predominantly medium to low paying jobs, which do not require so many skills, and a lower cost of living.

Practical Implications

This research provided useful insights that bank managers should take into consideration in order to decrease stress in their employees, promoting a better workplace environment. The main suggestion is that investment should be made in increasing job resources, since decreasing job demands is often not an option, as it entails financial costs (Schaufeli, 2015). For example, a way to decrease job demands would be to hire more workers, in order to split the workload amongst them, but in current economy this goes against most measures being taken: several Portuguese banks are closing branches in order to reduce costs, leaving workers unemployed. Taking this into consideration, increasing job resources seems a more reasonable path to reduce stress amongst employees, as results showed that both support from colleagues and support from supervisors can indeed buffer the impact of job demands on stress and sleeping difficulties, as proposed by the JD-R model (Bakker *et al.*, 2007).

Following the previous reasoning, as a means to increase the researched job resources, managers should arrange specific training programs focused on the importance of support from colleagues and supervisors. As noted by Karatepe *et al.* (2010), these two types of support are extremely important, as they allow the employee to effectively cope with stressors and strains. In this way, these training programs should reassure workers regarding the events in which it is important that they ask for support, whether it is from colleagues or supervisors, promoting a friendly environment within the agency. Similarly to what was found in Alentejo, having good relationships with supervisors (which is often harder to achieve than with equals) leads to positive feelings amongst employees: in interviews, employees stated that they felt at ease with their supervisors, they felt that

they could approach them to discuss their concerns, instead of being afraid to share what they felt due to fear of being penalized for it.

A different way to reduce bankers' stress levels could be through the promotion of recovery strategies. Recovery is a process of unwinding and restoration during which a person's strain levels that have increased due to a stressful experience return to its prestressor levels (Meijman & Mulder, 1998; Craig & Cooper, 1992). Studies have shown that recovery strategies are negatively associated with strain symptoms and positively associated with well-being indicators, and they can be performed during work breaks, free evenings, and weekends (Sonnetag *et al.*, 2017). Recovery can occur through recovery activities, that is, what people do outside work (reading, meeting with friends, exercise), and recovery experiences, which comprise psychological detachment from work, relaxation-oriented and mastery-oriented strategies, and the experience of control (Sonnetag & Fritz, 2007). Since there is evidence that these recovery processes can be influenced through intervention programs, such as training (Sonnetag *et al.*, 2017), managers can encourage these behaviors as a way to promote employees' well-being.

Lastly, another important suggestion that emerged from the research with new variables is that managers should discuss bank secrecy with their employees. As results showed, bank secrecy does affect the employees' stress and sleeping difficulties, which could indicate that employees who keep every detail of their day to themselves are promoting an increase in their stress levels. Secrecy is presented to bankers as a demand: they must not discuss work-related issues with people outside work, but no boundaries are drawn regarding the extent of what can and cannot be discussed. So this final suggestion seeks to improve the definition of bank secrecy, by discussing it with employees, explaining to them what they can (and should, if they feel the need to) discuss with their family and friends, in order to reduce the stress and sleeping problems that emerge from not sharing problematic events that occurred at work.

Limitations

Although the reported results are insightful, the findings must be tempered by some limitations. The first limitation is the fact that all variables used in the quantitative study were measured by the same instrument, using self-reported data, in a single point in time, as happens with several other studies (for example, Yavas & Babakus, 2010). According to Podsakoff *et al.* (2012), this makes data vulnerable to common method variance. Since one of the main causes for common method bias is to obtain measures for

both predictor and criterion variables from the same individual (Podsakoff *et al.*, 2003), authors suggest measuring one of the variables through another source, such as a supervisor. However, self-reports are the appropriate way to assess psychological concepts related to well-being and perceived job characteristics (Conway & Lance, 2010), so this seemed the proper way to gather the most accurate results. Besides, Spector (2006) claims that the arguments for common method variance are exaggerated to some extent, especially when it comes to questionnaires. Still, as a way to minimize data vulnerability to common method effects in the current investigation, participants were reassured of confidentiality and that there were no right or wrong answers before they began to answer the questionnaire.

The second limitation is that this study focuses on a single organization, in a specific sector, within one country. This limitation is also quite common, and can be seen for example in Babakus *et al.* (2009). Of course, conducting a study within these limits reduces generalizations beyond this specific context. However, it provides the advantage of minimizing possible contingencies that can happen in multi-firm studies (Lewin & Sager, 2007), while also providing better control for contextual effects that could occur from inter-firm and inter-industry differences (Singh *et al.*, 1994).

The third limitation is related to the fact that three of the variables used in the quantitative study were developed for this investigation, so their items were not previously validated by other authors. While it would have been desirable to use pre-existing scales, none were applicable to the context being analyzed, so the development of new scales was deemed necessary. Even though most of these variables' coefficient α is above the reference value, indicating their internal consistency reliability, there is still room for improvement in the future.

The last limitation is the simplicity of the tested models, which include only one mediation or moderation at a time. This simple analysis can suppress results that would have appeared if more complex analyses were conducted.

Future Research

Future research avenues are tied to the limitations presented above. In order to verify the accuracy of these findings, suggestions include mostly the reduction of limitations in order to improve the strengths of this research area.

First, it is important that data for future studies is collected from multiple sources, to minimize the potential problem of common method bias, as was also suggested in the

studies of Yavas *et al.* (2013). Although, as previously stated, it is hard to collect these variables from other sources different than the individual, constructs can be adapted to allow information to be given by workers' supervisors and colleagues.

Second, the fact that the cross-sectional nature of this research does not allow causal inferences is a limitation that can be prevented through the adoption of a longitudinal design in future studies, as it would also help to determine conclusive generalizations.

Third, the sample for this study was collected within one specific Portuguese private bank. To expand the database and allow for broader generalizations of the tested relationships, future research should be conducted in other countries, within banking institutions that share similar characteristics to the one analyzed here. It is easier for researchers to identify such institutions when they are located in their own country, since these characteristics are not displayed in the banks' websites, but instead are known by people that experience that reality. It would be important to maintain regional differentiation, for reasons mentioned before. The replication of this study in other occupations would not be very useful, as it includes variables that are specific to the banking sector. Thus, it would be interesting to assess the impact of newly created variables such as bank secrecy and customer contacts after work in other countries.

Forth, it would be interesting to further develop researches in which the relationship between the workers' well-being and the community's is investigated, mainly when they are characterized by a large percentage of elders. As shown in the qualitative study, this bank seems to play a social role in small rural settings, through its employees' care and patience towards elderly people, and also due to the fact that it is frequently the only one who places branches in villages, providing populations with access to an ATM without having to drive to the nearest city. In the future it would be important to deeply understand the contours of this relationship and well-being exchanges between workers, customers, and communities.

Last, data for this investigation was gathered from one private bank, and no distinction was made between branch sizes since it was thought that asking for that information would make participants reluctant to answer the questionnaire, for fear of being identified. However, in future research, it would be enlightening to include branch size and public banks as this could impact most variables assessed here, as stated by Yavas *et al.* (2013). Hence, investigating the impact of branch size and bank type on the

relationships here hypothesized is worthy of future research, providing surely more rigorous outcomes.

In this way, additional research on the intriguing issues presented above would be valuable for a better understanding of the banking reality.

6. CONCLUSION

The present study contributes to the JD-R model literature, providing an insight to the Portuguese banking sector and regional differences that exist within the country. It emerged as an attempt to fill the research gap within the JD-R theory (Bakker & Demerouti, 2014) through its application in a private bank, using a mixed-methods approach.

A small branch in Alentejo was the chosen setting for conducting interviews, as a way to assess which of the variables already identified by Schaufeli & Taris (2014) were fit to represent this specific workplace reality, and whether new variables should be created to illustrate such setting. Although some specific variables were created, findings showed that the model's flexibility did allow its application in the banking sector (Taris & Schaufeli, 2016). Overall, most interviews highlighted the importance of customer relations, of receiving support from both colleagues and supervisors, as well as a relevant, under-researched role of bank secrecy.

Based on the qualitative study findings, questionnaires were applied to all bank structure on a national level to check if the findings in Alentejo were also confirmed throughout the country, through hypotheses tested both globally and regionally. Results supported most hypotheses, and when tested regionally their results present some variation, supporting the claim that regions do not behave in similar ways.

Taking into consideration the findings of both data collections, the contribution of this research rests on its support of the health impairment process proposed in the JD-R model (Bakker & Demerouti, 2016), and the verified importance of support as a buffer against stress discussed by Karatepe *et al.* (2010). Furthermore, it appears that bank secrecy does play a role in promoting stress and sleeping difficulties, being suggested as a possible research avenue, as a way to explore its full impact.

In sum, the importance of the current investigation is that it allowed the application and extension of the JD-R model, through the test and support of newly created variables in a representative sample of the employees of one private bank in Portugal. By testing the hypotheses in each region of Portugal, this research has also drawn attention to the regional differences that exist within the country, showing that the same variables do not present the same outcome in all regions, meaning that their importance varies throughout the country.

The worldwide expansion of free trade and financial deregulations brought not only growth but also a downside effect of economic volatility and financial instability

(Turok *et al.*, 2017). The economic crises that have affected Europe led to several of its countries asking for financial assistance from the International Monetary Fund. However, not even those loans have prevented the collapse of banks and the general anxiety that even more institutions will follow the same path. In Portugal, seven of its major banks have closed over 200 branches from 2014 to 2015, and in recent news one of these banks intends to close 180 branches until 2020, meaning that 2.200 bankers will no longer have a place to work. And while unemployment has the potential to create stress, so does the fear of losing ones' job or ones' savings.

The current economic context leads to stressed bankers and stressed customers. Stress shapes the relations between them, which become filled with concerns and much more cautious. But in a setting in which openness is desired from both parts, how can one put aside their own anxiety and trust the other, with all that is shown in the press?

Using the JD-R model to investigate the banking sector allows the identification of what promotes and what prevents stress from occurring. If such results are taken into consideration by the institution, managers can attempt to reduce their workers' stress levels, so that they can focus on their tasks, promoting positive customer contacts. Through the establishment of a friendly, open relationship with their customers, based on trust, bankers are able to reassure them of their decisions, tranquilizing them. In this way, bank interactions have the potential to become a stress-free experience for both parts, perhaps even with the contours of an actual friendship.

7. REFERENCES

- Afifi, T. D., Shahnazi, A. F., Coveleski, S., Davis, S., & Merrill, A. 2017. Testing the ideology of openness: The comparative effects of talking, writing, and avoiding a stressor on rumination and health. *Human Communication Research*, 43: 76-101.
- Aiken, L. S., & West, S. G. 1991. *Multiple regression: Testing and interpreting interactions*. London: Sage.
- Ashill, N. J., Rod, M., & Gibbs, T. 2015. Coping with stress: A study of retail banking service workers in Russia. *Journal of Retailing and Consumer Services*, 23: 58-69.
- Babakus, E., Cravens, D. W., Johnston, M., & Moncrief, W. C. 1999. The role of emotional exhaustion in sales force attitude and behavior relationships. *Journal of the Academy of Marketing Sciences*, 27(1): 58-70.
- Babakus, E., Yavas, U., & Ashill, N. J. 2009. The role of customer orientation as a moderator of the job demand-burnout-performance relationship: A surface-level trait perspective. *Journal of Retailing*, 85(4): 480-492.
- Bacharach, S. B., Bamberger, P., & Conley, S. 1991. Work-home conflict among nurses and engineers: Mediating the impact of role stress on burnout and satisfaction at work. *Journal of Organizational Behavior*, 12: 39-53.
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. 2011. Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1): 4-28.
- Bakker, A. B., Boyd, C. M., Dollard, M., Gillespie, N., Winefield, A. H., & Stough, C. 2010a. The role of personality in the job demands-resources model. A study of Australian academic staff. *Career Development International*, 15(7): 622-636.
- Bakker, A. B., & Costa, P. 2014. Chronic job burnout and daily functioning: A theoretical analysis. *Burnout Research*, 1: 112-119.
- Bakker, A. B., & Demerouti, E. 2016. Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, advance online publication: <http://dx.doi.org/10.1037/ocp0000056>.
- Bakker, A. B., & Demerouti, E. 2014. Job demands-resources theory. In P. Y. Chen & C. L. Cooper (Eds.), *Work and wellbeing: Wellbeing: A complete reference guide*: 1-28. John Wiley & Sons, Inc.
- Bakker, A. B., & Demerouti, E. 2007. The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3): 309-328.

- Bakker, A. B., Demerouti, E., de Boer, E., & Schaufeli, W. B. 2003a. Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62: 341-356.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. 2005. Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10(2): 170-180.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. 2014. Burnout and work engagement: The JD-R approach. *The Annual Review of Organizational Psychology and Organizational Behavior*, 1: 389-411.
- Bakker, A. B., Demerouti, E., & Schaufeli, W. 2003b. Dual processes at work in a call centre: An application of the job demands-resources model. *European Journal of Work and Organizational Psychology*, 12(4): 393-417.
- Bakker, A. B., Demerouti, E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. G. 2003c. A multigroup analysis of the job demands-resources model in four home care organizations. *International Journal of Stress Management*, 10(1): 16-38.
- Bakker, A. B., Demerouti, E., & Verbeke, W. 2004. Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1): 83-104.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. 2007. Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2): 274-284.
- Bakker, A. B., van Veldhoven, M., & Xanthopoulou, D. 2010b. Beyond the demand-control model. Thriving on high job demands and resources. *Journal of Personnel Psychology*, 9(1): 3-16.
- Balakina, O., D'Andrea, A., Masciandaro, D. 2017. Bank secrecy in offshore centres and capital flows: Does blacklisting matter? *Review of Financial Economics*, 32: 30-57.
- Bernhardt, K. L., Donthu, N., & Kennett, P. A. 2000. A longitudinal analysis of satisfaction and profitability. *Journal of Business Research*, 47: 161-171.
- Bliese, P. D., Edwards, J. R., & Sonnentag, S. 2017. Stress and well-being at work: A century of empirical trends reflecting theoretical and societal influences. *Journal of Applied Psychology*, 102(3): 389-402.
- Braun, V., & Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3: 77-101.
- Brenninkmeijer, V., Demerouti, E., le Blanc, P. M., & van Emmerik, I. J. H. 2010. Regulatory focus at work. The moderating role of regulatory focus in the job demands-resources model. *Career Development International*, 15(7): 708-728.

- Chell, E. 1998. Critical incident technique. In G. Simon & C. Cassel (Eds.), *Qualitative methods and analysis in organizational research*: 51-72. London: Sage.
- Colligan, T. W., & Higgins, E. M. 2005. Workplace stress: Etiology and consequences. *Journal of Workplace Behavioral Health*, 21(2): 89-97.
- Conway, J. M., & Lance, C. E. 2010. What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business Psychology*, 25: 325-334.
- Copenhagen Psychosocial Questionnaire; National Research Centre for the Working Environment;
<http://www.arbejdsmiljoforskning.dk/en/publikationer/spoergeskemaer/psykisk-arbejdsmiljoe>; 02-04-2014.
- Cox, T. 1978. *Stress*. London: Macmillan.
- Craig, A., & Cooper, R. E. 1992. Symptoms of acute and chronic fatigue. In A. P. Smith, & D. M. Jones (Eds.), *Handbook of Human Performance*: 289-339. London: Academic Press.
- Crawford, E. R., LePine, J. A., & Rich, B. L. 2010. Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5): 834-848.
- Dawson, J. F. 2014. Moderation in management research: What, why, when and how. *Journal of Business Psychology*, 29: 1-19.
- Demerouti, E., & Bakker, A. B. 2011. The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology*, 37: art. #974.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. 2001. The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3): 499-512.
- Dormann, C., & Zapf, D. 1999. Social support, social stressors at work, and depressive symptoms: Testing for main and moderating effects with structural equations in a three-wave longitudinal study. *Journal of Applied Psychology*, 84(6): 874-884.
- Fogarty, T. J. 1996. An examination of job tension and coping in the relation between stressors and outcomes in public accounting. *Journal of Managerial Issues*, 8(3): 269-285.
- Grizzle, J. W., Zablah, A. R., Brown, T. J., Mowen, J. C., & Lee, J. M. 2009. Employee customer orientation in context: How the environment moderates the influence of customer orientation on performance outcomes. *Journal of Applied Psychology*, 94(5): 1227-1242.
- Hakanen, J. J., Bakker, A. B., & Demerouti, E. 2005. How dentists cope with their job demands and stay engaged: The moderating role of job resources. *European Journal of Oral Sciences*, 113: 479-487.

- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. 2006. Burnout and work engagement among teachers. *Journal of School Psychology*, 43: 495-513.
- Halbesleben, J. R. B., & Buckley, M. R. 2004. Burnout in organizational life. *Journal of Management*, 30(6): 859-879.
- Hamner, W. C., & Harnett, D. L. 1974. Goal setting, performance and satisfaction in an interdependent task. *Organizational Behavior and Human Performance*, 12: 217-230.
- Hayes, A. F. 2013. *Introduction to mediation, moderation, and conditional process analysis. A regression-based approach*. New York: The Guilford Press.
- Hobfoll, S. E. 2002. Social and psychological resources and adaptation. *Review of General Psychology*, 6(4): 307-324.
- Hobfoll, S. E. 2001. The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50(3): 337-421.
- Hobfoll, S. E. 1989. Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3): 513-524.
- Jeremy Dawson; Interpreting interaction effects;
<http://www.jeremydawson.co.uk/slopes.htm>; 21-06-2017.
- Karatepe, O. M., Yorganci, I., & Haktanir, M. 2010. An investigation of the role of job resources in mitigating customer-related social stressors and emotional exhaustion. *Services Marketing Quarterly*, 31: 72-88.
- Karasek, R. A. 1998. Demand/control model: A social, emotional, and physiological approach to stress risk and active behavior. In J. M. Stellman (Ed.), *Encyclopaedia of occupational health and safety*: 34.06-34.14. Geneva: ILO.
- Karasek, R. A. 1979. Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2): 285-308.
- Kolbell, R. M. 1995. When relaxation is not enough. In L. R. Murphy, J. J. Hurrell Jr., S. L. Sauter, & G. P. Keita (Eds.), *Job stress interventions*: 31-43. Washington, DC: American Psychological Association.
- Ladeira, W. J., Santini, F. O., Sampaio, C. H., Perin, M. G., & Araújo, C. F. 2016. A meta-analysis of satisfaction in the banking sector. *International Journal of Bank Marketing*, 34(6): 798-820.
- Lee, R. T., & Ashforth, B. E. 1996. A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2): 123-133.
- Leedy, P. D. 1997. *Practical research: Planning and design*. New Jersey: Prentice-Hall, Inc.

- Leiter, M. P. 1993. Burnout as a developmental process: Consideration of models. In W. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research*: 237-250. Washington: Taylor & Francis.
- Leka, S., & Houdmont, J. (Eds.) 2010. *Occupational Health Psychology*. United Kingdom: Wiley-Blackwell.
- Lewin, J. E., & Sager, J. K. 2007. A process model of burnout among salespeople: Some new thoughts. *Journal of Business Research*, 60: 1216-1224.
- Llorens, S., Schaufeli, W. B., Bakker, A. B., & Salanova, M. 2007. Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behavior*, 23: 825-841.
- Lourel, M., Ford, M. T., Gamassou, C. E., Guéguen, N., & Hartmann, A. 2009. Negative and positive spillover between work and home. Relationship to perceived stress and job satisfaction. *Journal of Managerial Psychology*, 24(5): 438-449.
- Luthans, F. 2002. The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23: 695-706.
- Manea, C., Salceanu, C., Chiper, C., & Chiper, I. 2013. Occupational stress and tolerance of bank employees. *Procedia – Social and Behavioral Sciences*, 92: 495-500.
- Maslach, C., Jackson, S. E., & Leiter, M. P. 1996. *Maslach burnout inventory manual*. Palo Alto: Consulting Psychologists Press.
- Maslach, C., & Schaufeli, W. B. 1993. Historical and conceptual development of burnout. In W. B. Schaufeli, C. Maslach & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research*: 1-16. Washington, DC: Taylor & Francis.
- Mastenbroek, N. J. J. M., Jaarsma, A. D. C., Scherpbier, A. J. J. A., van Beukelen, P., & Demerouti, E. 2014. The role of personal resources in explaining well-being and performance: A study among young veterinary professionals. *European Journal of Work and Organizational Psychology*, 23(2): 190-202.
- Meijman, T. F., & Mulder, G. 1998. Psychological aspects of workload. In P. J. D. Drenth, & H. Thierry (Eds.), *Handbook of Work and Organizational Psychology*: 5-33. England: Psychology Press.
- Metin, U. B., Taris, T. W., Peeters, M. C. W., van Beek, I., & Van den Bosch, R. 2016. Authenticity at work: A job demands-resources perspective. *Journal of Managerial Psychology*, 31(2): 483-499.
- Moser, M. 1995. Switzerland: New exceptions to bank secrecy laws aimed at money laundering and organized crime. *Case Western Reserve Journal of International Law*, 27(2): 321-358.

- Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. 2011. Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1): 71-94.
- Nunnally, J. C. 1978. *Psychometric theory*. New York, NY: McGraw-Hill.
- Ordem dos Advogados; Regime geral do sigilo bancário;
http://www.oa.pt/Conteudos/Artigos/detalhe_artigo.aspx?idsc=13747&ida=13771; 20-03-2017.
- Parker, S. K., & Ohly, S. 2008. Designing motivating jobs. In R. Kanfer, G. Chen, & R. Pritchard (Eds.), *Work motivation: Past, present, and future*. SIOP Organizational Frontiers Series. London: Psychology Press.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5): 879-903.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. 2012. Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63: 539-569.
- Pordata; Índice de envelhecimento segundo os Censos;
<http://www.pordata.pt/Municipios/%C3%8Dndice+de+envelhecimento+segundo+os+Censos-348>; 15-03-2017.
- Prieto, L. L., Soria, M. S., Martínez, I. M., & Schaufeli, W. B. 2008. Extension of the job demands-resources model in the prediction of burnout and engagement among teachers over time. *Psicothema*, 20(3): 354-360.
- Schaufeli, W. B. 2015. Engaging leadership in the job demands-resources model. *Career Development International*, 20(5): 446-463.
- Schaufeli, W. B., & Bakker, A. B. 2004. Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25: 293-315.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. 2009. How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30: 893-917.
- Schaufeli, W. B., & Taris, T. W. 2014. A critical review of the job demands-resources model: Implications for improving work and health. In G. F. Bauer & O. Hämmig (Eds.), *Bridging occupational, organizational and public health: A transdisciplinary approach*: 43-68. Dordrecht: Springer Science+Business Media.
- Schneider, B. 1991. Service quality and profits: Can you have your cake and eat it too? *Human Resource Planning*, 14(2): 151-157.

- Schreurs, B. H. J., Van Emmerik, I. J. H., Gunter, H., & Germeys, F. 2012. A weekly diary study on the buffering role of social support in the relationship between job insecurity and employee performance. *Human Resource Management*, 51(2): 259-280.
- Selye, H. 1950. *Stress*. Montreal: Acta Incorporated.
- Sengupta, A. S., Yavas, U., & Babakus, E. 2015. Interactive effects of personal and organizational resources on frontline bank employees' job outcomes. The mediating role of person-job fit. *International Journal of Bank Marketing*, 33(7): 884-903.
- Sheldon, K. M., & King, L. 2001. Why positive psychology is necessary. *American Psychologist*, 56(3): 216-217.
- Siegrist, J. 1996. Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, 1(1): 27-41.
- Singh, J., Goolsby, J. R., & Rhoads, G. K. 1994. Behavioral and psychological consequences of boundary spanning burnout for customer service representatives. *Journal of Marketing Research*, 31: 558-569.
- Sonnentag, S., & Fritz, C. 2007. The recovery experience questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology*, 12(3): 204-221.
- Sonnentag, S., Venz, L., & Casper, A. 2017. Advances in recovery research: What have we learned? What should be done next? *Journal of Occupational Health Psychology*: 1-16.
- Spector, P. E. 2006. Method variance in organizational research. Truth or urban legend? *Organizational Research Methods*, 9(2): 221-232.
- Statistics Portugal; NUTS 2013: As novas unidades territoriais para fins estatísticos; https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=230205992&PUBLICACOESmodo=2&xlang=en; 20-04-2017.
- Subashini, R., & Gopalsamy, V. 2016. A review of service quality and customer satisfaction in banking services: global scenario. *Journal of Internet Banking and Commerce*, 21(5): 1-9.
- Taris, T. W., & Schaufeli, W. B. 2016. The job demands-resources model. In S. Clarke, T. M. Probst, F. Guldenmund & J. Passmore (Eds.), *The Wiley Blackwell handbook of the psychology of occupational safety and workplace health*: 157-175. New Jersey: John Wiley & Sons, Ltd.
- Tims, M., Bakker, A. B., & Derks, D. 2012. Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80: 173-186.

- Turok, I., Bailey, D., Clark, J., Du, J., Fratesi, U., Fritsch, M., Harrison, J., Kemeny, T., Kogler, D., Lagendijk, A., Mickiewicz, T., Miguelez, E., Usai, S., & Wislade, F. 2017. Global reversal, regional revival? *Regional Studies*, 51(1): 1-8.
- Van den Broeck, A., Van Ruysseveldt, J., Smulders, P., & De Witte, P. 2011. Does an intrinsic work value orientation strengthen the impact of job resources? A perspective from the job demands-resources model. *European Journal of Work and Organizational Psychology*, 20(5): 581-609.
- Van Woerkom, M., Bakker, A. B., & Nishii, L. H. 2016. Accumulative job demands and support for strength use: Fine-tuning the job demands-resources model using conservation of resources theory. *Journal of Applied Psychology*, 101(1): 141-150.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. 2009a. Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74: 235-244.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. 2009b. Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82: 183-200.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. 2007a. The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2): 121-141.
- Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., & Schreurs, P. J. G. 2007b. When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, 22(8): 766-786.
- Yavas, U., & Babakus, E. 2011. Job demands, resources, burnout, and coping mechanism relationships. *Services Marketing Quarterly*, 32: 199-209.
- Yavas, U., & Babakus, E. 2010. Relationships between organizational support, customer orientation, and work outcomes. A study of frontline bank employees. *International Journal of Bank Marketing*, 28(3): 222-238.
- Yavas, U., Babakus, E., & Karatepe, O. M. 2013. Does hope moderate the impact of job burnout on frontline bank employees' in-role and extra-role performances? *International Journal of Bank Marketing*, 31(1): 56-70.
- Yavas, U., Bilgin, Z., & Shemwell, D. J. 1997. Service quality in the banking sector in an emerging economy: a consumer survey. *International Journal of Bank Marketing*, 15(6): 217-223.
- Yoon, M. H., Beatty, S. E., & Suh, J. 2001. The effect of work climate on critical employee and customer outcomes. An employee-level analysis. *International Journal of Service Industry Management*, 12(5): 500-521.

- Wrzesniewski, A., & Dutton, J. E. 2001. Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2): 179-201.
- Zablah, A. R., Franke, G. R., Brown, T. J., & Bartholomew, D. E. 2012. How and when does customer orientation influence frontline employee job outcomes? A meta-analytic evaluation. *Journal of Marketing*, 76: 21-40.
- Zapf, D., Dormann, C., & Frese, M. 1996. Longitudinal studies in organizational stress research: A review of the literature with reference to methodological issues. *Journal of Occupational Health Psychology*, 1(2): 145-169.

8. ANNEXES

Annex 1. Interviewee characterization sheet



Esta ficha de dados sociodemográficos serve apenas para fins académicos, no âmbito da realização de dissertação para obtenção do grau de mestre em Gestão de Recursos Humanos e Consultadoria Organizacional, pelo ISCTE Business School.

Procura-se que esta ficha seja um complemento à entrevista, através da caracterização dos participantes.

Ficha de caracterização do participante

Dados sociodemográficos

Sexo: Feminino Masculino **Idade:** _____

Estado Civil: _____

Tem filhos? Sim Não **Se sim, nº de filhos:** _____

Habilitações literárias: _____

Anos de experiência profissional: _____

Localidade onde trabalha: _____

Encontra-se deslocado da zona de residência da família? Sim Não

Antiguidade na instituição: _____ anos/meses (riscar o que não interessa)

Função: _____

A quantas pessoas reporta? _____

Tem cargo de Chefia? Sim Não **Se sim, quantas pessoas chefia?** _____

Já utilizou informação ou apoio externo (médicos) à instituição para lidar com o stress no trabalho? Sim Não

Contexto do local de trabalho

Como é o seu dia habitual? Hora de chegada: _____ Hora de saída: _____

Lida com clientes? Sim Não

No local onde habitualmente desempenha funções, encontra-se isolado ou acompanhado? Isolado Acompanhado

Existem outros colegas no seu local de trabalho? Sim Não

Como comunica maioritariamente com os seus colegas?

Pessoalmente Telefone Correio eletrónico

Pausa para almoço

Normalmente, quanto tempo tem para almoçar?

Menos de 30 minutos 30 minutos 1h 1:30h 2h Mais de 2h

Onde almoça habitualmente?

Casa Local de trabalho Restaurantes Outro: _____

Com quem almoça na maior parte dos dias?

Sozinho Família Colegas Outro: _____

Ana Miguel Peças de Oliveira

Telemóvel: 966150493

Correio eletrónico: anoliveira6@hotmail.com

Annex 2. Interview protocol for administrators



Mestrado em Gestão de Recursos Humanos e Consultoria Organizacional

Guião de entrevistas individuais

Conselho de Administração

Introdução

Bom dia/Boa tarde. Quero desde já agradecer a sua presença e por ter aceitado participar neste estudo. O meu nome é Ana Oliveira e sou aluna do mestrado de Gestão de Recursos Humanos e Consultoria Organizacional do ISCTE Business School.

O presente estudo procura explorar o stress ou bem-estar no seu local de trabalho.

Estamos interessados em saber a sua opinião sobre este assunto de acordo com as suas experiências pessoais e profissionais.

Antes de mais, gostaria de pedir-lhe autorização para gravar esta entrevista, para que as suas respostas fiquem registadas na totalidade. Será garantido o anonimato de todos os seus comentários, respostas e sugestões. O seu nome e a instituição que representa nunca serão mencionados nem associados às suas respostas.

Vou dar-lhe o termo de consentimento informado. Peço que leia com atenção e que assine, caso concorde em participar na entrevista. Se tiver alguma questão, pode colocá-la em qualquer momento.

Tem alguma questão, antes de darmos início à entrevista?

Perguntas

Questões introdutórias

Explorar situação profissional, clarificar subentendidos. Colocar o entrevistado à vontade.

1. O que gosta mais na sua instituição?
2. O que gosta mais no seu trabalho? O que gosta menos?

Bem-estar

Explorar os aspetos positivos identificados pelo entrevistado acerca do seu trabalho e quais os seus resultados.

3. Como vê o papel do seu trabalho no seu bem-estar?
4. O que salienta como maior benefício que retira do seu trabalho?
5. Considera que o seu trabalho contribui positivamente para a sua vida familiar?

Stress

Explorar o que o entrevistado pensa serem os principais fatores associados ao stress e as suas consequências.

6. Na sua função, é comum sentir stress?
7. Em que situações costuma sentir stress?
8. Quais são as principais causas? O que faz com que o seu stress aumente?
9. Do seu ponto de vista, quais são as consequências do stress?
10. Como costuma lidar com o stress? Por exemplo, quando existem problemas relacionados com a organização do trabalho (sobrecarga, falta de comunicação...) ou relacionados com a sua saúde física ou psicológica (sentir-se demasiado cansado, triste, ansioso, excesso de stress...), o que faz? Recorre a alguém para pedir ajuda?
11. Como vê o stress nos seus subordinados? É comum?

Técnica dos incidentes críticos

É importante ter tempo para esta parte, se necessário cortar nas outras perguntas. Explicar a técnica sucintamente e prosseguir com as questões relativamente ao momento positivo.

12. Recorde uma situação muito positiva no seu trabalho que tenha afetado a sua vida pessoal (contribuindo para o bem-estar). Por exemplo, um dia que correu extraordinariamente bem, em que se tenha sentido mesmo muito bem com o seu trabalho...

Esclarecer subentendidos e prosseguir com as questões.

13. O que aconteceu? Esse tipo de situação é comum?
14. Quais foram as consequências? (Para si, para os seus subordinados e família)

15. Na sua opinião, quais pensa terem sido as causas dessa situação? (O que levou a que esta situação se proporcionasse.)

Explicar que será agora realizado o mesmo exercício pela negativa.

16. Peço-lhe que recorde agora uma situação negativa no seu trabalho que tenha também afetado a sua vida pessoal (stress). Por exemplo, alguma situação que o tenha feito sentir-se fisicamente ou psicologicamente mal, de tal modo que não conseguia parar de pensar no assunto, não conseguia dormir, extremamente preocupado...

Esclarecer subentendidos e prosseguir com as questões.

17. O que aconteceu? Este tipo de situação acontece muitas vezes?
18. Quais foram as consequências? (Para si, para os seus subordinados e família)
19. Na sua opinião, quais foram as causas desta situação? O que acha que aconteceu?
20. Como foi resolvida a situação?
21. O que correu bem? O que correu mal?
22. O que o ajudou a ultrapassar essa situação?

Sugestões para o estudo

Sugestões que o entrevistado queira apresentar para o projeto.

23. Tem sugestões ou informação adicional que pretenda acrescentar ou gostaria de referir alguma coisa que não tenha sido abordada?

Final

Esta foi a última questão. Mais uma vez agradeço a sua participação no estudo. Todas as respostas serão muito relevantes para a dissertação. Há alguma questão que ache pertinente e que queira ver esclarecida ou que queira abordar?

Obrigada pela sua disponibilidade. Continuação de um bom dia.

Annex 3. Interview protocol for direct customer contact positions



Mestrado em Gestão de Recursos Humanos e Consultoria Organizacional

Guião de entrevistas individuais

Responsável de Balcão/Assistente de Cliente

Introdução

Bom dia/Boa tarde. Quero desde já agradecer a sua presença e por ter aceitado participar neste estudo. O meu nome é Ana Oliveira e sou aluna do mestrado de Gestão de Recursos Humanos e Consultoria Organizacional do ISCTE Business School.

O presente estudo procura explorar o stress ou bem-estar no seu local de trabalho.

Estamos interessados em saber a sua opinião sobre este assunto de acordo com as suas experiências pessoais e profissionais.

Antes de mais, gostaria de pedir-lhe autorização para gravar esta entrevista, para que as suas respostas fiquem registadas na totalidade. Será garantido o anonimato de todos os seus comentários, respostas e sugestões. O seu nome e a instituição que representa nunca serão mencionados nem associados às suas respostas.

Vou dar-lhe o termo de consentimento informado. Peço que leia com atenção e que assine, caso concorde em participar na entrevista. Se tiver alguma questão, pode colocá-la em qualquer momento.

Tem alguma questão, antes de darmos início à entrevista?

Perguntas

Questões introdutórias

Explorar situação profissional, clarificar subentendidos. Colocar o entrevistado à vontade.

1. O que gosta mais na sua instituição?
2. O que gosta mais no seu trabalho? O que gosta menos?

Bem-estar

Explorar os aspetos positivos identificados pelo entrevistado acerca do seu trabalho e quais os seus resultados.

3. Como vê o papel do seu trabalho no seu bem-estar?
4. O que salienta como maior benefício que retira do seu trabalho?
5. Considera que o seu trabalho contribui positivamente para a sua vida familiar?

Stress

Explorar o que o entrevistado pensa serem os principais fatores associados ao stress e as suas consequências.

6. Na sua função, é comum sentir stress?
7. Em que situações costuma sentir stress?
8. Quais são as principais causas? O que faz com que o seu stress aumente?
9. Do seu ponto de vista, quais são as consequências do stress?
10. Como costuma lidar com o stress? Por exemplo, quando existem problemas relacionados com a organização do trabalho (sobrecarga, falta de comunicação...) ou relacionados com a sua saúde física ou psicológica (sentir-se demasiado cansado, triste, ansioso, excesso de stress...), o que faz? Recorre a alguém para pedir ajuda?
11. A sua chefia costuma ajudá-lo a aliviar o stress? De que forma?
12. Na sua experiência de trabalho em equipa, sente que o stress afeta os seus colegas? De que forma?

Técnica dos incidentes críticos

É importante ter tempo para esta parte, se necessário cortar nas outras perguntas. Explicar a técnica sucintamente e prosseguir com as questões relativamente ao momento positivo.

13. Recorde uma situação muito positiva no seu trabalho que tenha também afetado a sua vida pessoal (contribuindo para o bem-estar). Por exemplo, um dia que correu extraordinariamente bem, em que se tenha sentido mesmo muito bem com o seu trabalho...

Esclarecer subentendidos e prosseguir com as questões.

14. O que aconteceu? Esse tipo de situação é comum?

15. Quais foram as consequências? (Para si, para os seus colegas e família)
16. Na sua opinião, quais pensa terem sido as causas dessa situação? (O que levou a que esta situação se proporcionasse.)

Explicar que será agora realizado o mesmo exercício pela negativa.

17. Peça-lhe que recorde agora uma situação negativa no seu trabalho que tenha também afetado a sua vida pessoal (stress). Por exemplo, alguma situação que o tenha feito sentir-se fisicamente ou psicologicamente mal, de tal modo que não conseguia parar de pensar no assunto, não conseguia dormir, extremamente preocupado...

Esclarecer subentendidos e prosseguir com as questões.

18. O que aconteceu? Este tipo de situação acontece muitas vezes?
19. Quais foram as consequências? (Para si, para os seus colegas e família)
20. Na sua opinião, quais foram as causas desta situação? O que acha que aconteceu?
21. Como foi resolvida a situação?
22. O que correu bem? O que correu mal?
23. O que o ajudou a ultrapassar essa situação?

Sugestões para o estudo

Sugestões que o entrevistado queira apresentar para o projeto.

24. Tem sugestões ou informação adicional que pretenda acrescentar ou gostaria de referir alguma coisa que não tenha sido abordada?

Final

Esta foi a última questão. Mais uma vez agradeço a sua participação no estudo. Todas as respostas serão muito relevantes para a dissertação. Há alguma questão que ache pertinente e que queira ver esclarecida ou que queira abordar?

Obrigada pela sua disponibilidade. Continuação de um bom dia.

Annex 4. Interview protocol for all other functions

ISCTE  Business School
Instituto Universitário de Lisboa

Mestrado em Gestão de Recursos Humanos e Consultoria Organizacional

Guião de entrevistas individuais

Auditoria/Análise de Crédito/Coordenador Comercial/Adjunto da Administração/
Contabilidade e Recursos Humanos/IFAP

Introdução

Bom dia/Boa tarde. Quero desde já agradecer a sua presença e por ter aceitado participar neste estudo. O meu nome é Ana Oliveira e sou aluna do mestrado de Gestão de Recursos Humanos e Consultoria Organizacional do ISCTE Business School.

O presente estudo procura explorar o stress ou bem-estar no seu local de trabalho.

Estamos interessados em saber a sua opinião sobre este assunto de acordo com as suas experiências pessoais e profissionais.

Antes de mais, gostaria de pedir-lhe autorização para gravar esta entrevista, para que as suas respostas fiquem registadas na totalidade. Será garantido o anonimato de todos os seus comentários, respostas e sugestões. O seu nome e a instituição que representa nunca serão mencionados nem associados às suas respostas.

Vou dar-lhe o termo de consentimento informado. Peço que leia com atenção e que assine, caso concorde em participar na entrevista. Se tiver alguma questão, pode colocá-la em qualquer momento.

Tem alguma questão, antes de darmos início à entrevista?

Perguntas

Questões introdutórias

Explorar situação profissional, clarificar subentendidos. Colocar o entrevistado à vontade.

1. O que gosta mais na sua instituição?
2. O que gosta mais no seu trabalho? O que gosta menos?

Bem-estar

Explorar os aspetos positivos identificados pelo entrevistado acerca do seu trabalho e quais os seus resultados.

3. Como vê o papel do seu trabalho no seu bem-estar?
4. O que salienta como maior benefício que retira do seu trabalho?
5. Considera que o seu trabalho contribui positivamente para a sua vida familiar?

Stress

Explorar o que o entrevistado pensa serem os principais fatores associados ao stress e as suas consequências.

6. Na sua função, é comum sentir stress?
7. Em que situações costuma sentir stress?
8. Quais são as principais causas? O que faz com que o seu stress aumente?
9. Do seu ponto de vista, quais são as consequências do stress?
10. Como costuma lidar com o stress? Por exemplo, quando existem problemas relacionados com a organização do trabalho (sobrecarga, falta de comunicação...) ou relacionados com a sua saúde física ou psicológica (sentir-se demasiado cansado, triste, ansioso, excesso de stress...), o que faz? Recorre a alguém para pedir ajuda?
11. A sua chefia costuma ajudá-lo a aliviar o stress? De que forma?

Técnica dos incidentes críticos

É importante ter tempo para esta parte, se necessário cortar nas outras perguntas. Explicar a técnica sucintamente e prosseguir com as questões relativamente ao momento positivo.

12. Recorde uma situação muito positiva no seu trabalho que tenha afetado a sua vida pessoal (contribuindo para o bem-estar). Por exemplo, um dia que correu extraordinariamente bem, em que se tenha sentido mesmo muito bem com o seu trabalho...

Esclarecer subentendidos e prosseguir com as questões.

13. O que aconteceu? Esse tipo de situação é comum?
14. Quais foram as consequências? (Para si, para os seus colegas e família)

15. Na sua opinião, quais pensa terem sido as causas dessa situação? (O que levou a que esta situação se proporcionasse.)

Explicar que será agora realizado o mesmo exercício pela negativa.

16. Peço-lhe que recorde agora uma situação negativa no seu trabalho que tenha também afetado a sua vida pessoal (stress). Por exemplo, alguma situação que o tenha feito sentir-se fisicamente ou psicologicamente mal, de tal modo que não conseguia parar de pensar no assunto, não conseguia dormir, extremamente preocupado...

Esclarecer subentendidos e prosseguir com as questões.

17. O que aconteceu? Este tipo de situação acontece muitas vezes?
18. Quais foram as consequências? (Para si, para os seus colegas e família)
19. Na sua opinião, quais foram as causas desta situação? O que acha que aconteceu?
20. Como foi resolvida a situação?
21. O que correu bem? O que correu mal?
22. O que o ajudou a ultrapassar essa situação?

Sugestões para o estudo

Sugestões que o entrevistado queira apresentar para o projeto.

23. Tem sugestões ou informação adicional que pretenda acrescentar ou gostaria de referir alguma coisa que não tenha sido abordada?

Final

Esta foi a última questão. Mais uma vez agradeço a sua participação no estudo. Todas as respostas serão muito relevantes para a dissertação. Há alguma questão que ache pertinente e que queira ver esclarecida ou que queira abordar?

Obrigada pela sua disponibilidade. Continuação de um bom dia.

Annex 5. List of all codes and their origin

Key:

A. Codes developed from Schaufeli & Taris (2014: 64-65)

A.1 *A priori* codes

A.2 *A priori* codes adapted for the specific context

A.3 *A priori* codes representing a different meaning, thus requiring a new label

B. *A posteriori* codes – developed for the new context found in the interviews

Job Demands

Bank secrecy^B
 Bureaucracy^B
 Centralization^{A.1}
 Customers' misbehavior^{A.2}
 Cognitive demands^{A.1}
 Commute expenses^B
 Complexity^{A.1}
 Computer problems^{A.1}
 Demanding contacts with customers^{A.2}
 Downsizing^{A.1}
 Emotional demands^{A.1}
 Interpersonal conflict^{A.1}
 Less opportunities for professional development^{A.3}
 Low decision-making power^{A.3}
 Negative spillover from family to work^{A.1}
 Performance demands^{A.1}
 Performance goals^B
 Physical demands^{A.1}
 Remuneration^{A.1}
 Reorganization^{A.1}
 Responsibility^{A.1}
 Role ambiguity^{A.1}
 Role conflict^{A.1}
 Telephone assistance^B
 Time pressure^{A.1}
 Unfavorable work conditions^{A.1}
 Unfavorable work schedule^{A.2}
 Work overload^{A.1}
 Work pressure^{A.1}

Job Resources

Advancement^{A.1}
 Appreciation^{A.1}
 Autonomy^{A.1}
 Commute to relax^B

Personal Resources

Emotional competencies^{A.1}
 Extraversion^{A.1}
 Extrinsic motivation^{A.3}
 Intrinsic motivation^{A.1}
 Low neuroticism^{A.1}
 Need satisfaction^{A.1}
 No work-home interference^B
 Optimism^{A.1}
 Organization-based self-esteem^{A.1}
 Regulatory focus^{A.1}
 Resilience^{A.1}
 Self-efficacy^{A.1}
 Value orientation^{A.1}

Negative Outcomes

Absenteeism^{A.1}
 Adverse events^{A.1}
 Coping with stress through medication^B
 Coping with stress through smoking^B
 Coping with stress through therapy^B
 Customer contacts after work^B
 Depression^{A.1}
 Low motivation^B
 Negative work-home interference^{A.1}
 Panic/anxiety attack^B
 Physical ill health^{A.1}
 Psychological strain^{A.1}
 Psychosomatic health complaints^{A.1}
 Safety routine violations^{A.1}
 Sleeping difficulties^B
 Turnover intention^{A.1}
 Unsafe behaviors^{A.1}
 Work mistakes^B

Financial rewards^{A.1}
Goal achievement rewards^B
Goal clarity^{A.1}
Good work schedule^{A.3}
Health benefits^B
Information^{A.1}
Innovative climate^{A.1}
Job challenge^{A.1}
Job security^{A.3}
Knowledge^{A.1}
Leadership^{A.1}
Opportunities for professional development^{A.1}
Participation in decision-making^{A.1}
Performance feedback^{A.1}
Positive customer contacts^{A.2}
Positive spillover from family to work^{A.1}
Procedural fairness^{A.1}
Professional pride^{A.1}
Quality of the relationship with the supervisor^{A.1}
Safety climate^{A.1}
Skill utilization^{A.1}
Social climate^{A.1}
Strategic planning^{A.1}
Stress as motivation^B
Support from colleagues^{A.2}
Support from supervisors^{A.2}
Task variety^{A.1}
Team harmony and cohesion^{A.2}
Training and development^B
Trust in management^{A.1}

Positive Outcomes
Customers' gifts^B
Determination to continue^{A.1}
Extra-role performance^{A.1}
Happiness^{A.1}
In-role performance^{A.1}
Life satisfaction^{A.1}
Organizational commitment^{A.1}
Perceived health^{A.1}
Positive work-home interference^{A.1}
Professional satisfaction^B
Sense of trust^B
Service quality^{A.1}
Team sales performance^{A.1}

Annex 6. Definitions of original and reversed codes

Job Demands	Bank secrecy	Organizational policy that prohibits bank staff from talking about the customers that they serve.
	Bureaucracy	Employees have to deal with several forms in order to accomplish an otherwise easy and quick task.
	Commute expenses	The bank does not compensate the employees for their commute expenses, so whether they work in the same city that they live in, or if they work far away, they still have to pay the travel costs.
	Less opportunities for professional development	Banks that work in the inner regions of the country have a very different market than those on the urban areas.
	Low decision-making power	Bank employees do not have full autonomy to make their own decisions related to a customer. They have to ask permission to their supervisors.
	Performance goals	Workers need to achieve certain goals to receive rewards and have a bigger chance of getting promoted.
	Telephone assistance	There are customers that prefer to call the bank instead of going there personally, so workers have to deal with both types of customers at the same time.
Job Resources	Commute to relax	The inner regions of the country have little to no traffic at all, so commutes are a relaxing moment, where workers can unwind.
	Goal achievement rewards	Workers receive rewards for achieving their performance goals. These can be in points to trade for products, actual products or trips.
	Good work schedule	Some bank employees consider that their schedule is a good one, since it gives them enough time for other activities.
	Health benefits	Bank workers belong to a private health system, which enables them to access private hospitals, as well as their family members.
	Job security	Workers feel secure in their job, without being concerned about whether they can be dismissed.
	Stress as motivation	Workers can perceive stress as a motivation, considering that it pressures them to work harder in order to achieve their goals.

	Training and development	The institution allows workers to attend undergraduate courses and also training centers, in order to develop their capabilities and enhance their chances of promotion.
Personal Resources	Extrinsic motivation	Extrinsic motivation is when a person performs a certain activity expecting to receive an external reward, whether it is physical or psychological.
	No work-home interference	Employees prefer not to talk about work at home, keeping their work life and family life completely separate.
Negative Outcomes	Coping with stress through medication	Employees that take medication or have taken medication at some point in their lives to deal with stress-related problems.
	Coping with stress through smoking	Some workers admit to smoke more in order to relieve work-related stress.
	Coping with stress through therapy	Workers attend or have attended therapy in order to learn how to cope with stress.
	Customer contacts after work	Some customers, mainly elderly people, tend to rely on bank employees because they feel like they can trust them.
	Low motivation	Employees feel demotivated due to external and internal factors.
	Panic/anxiety attack	Employees that have suffered a panic/anxiety attack due to work overload.
	Sleeping difficulties	Workers have trouble sleeping at night because they are concerned with issues they have at work.
	Work mistakes	Stressed workers tend to have more work mistakes because they lose focus on their tasks.
Positive Outcomes	Customers' gifts	Customers give gifts to employees (during Christmas, on their birthdays, or just because).
	Professional satisfaction	Workers feel satisfied with their professional live.
	Sense of trust	Employees feel like their customers trust them.

Annex 7. Examples of all used codes

Job Demands	Bank secrecy	“We can’t talk about our job at home. When trying to explain certain things, we might violate the bank secrecy policy. So I don’t even talk about the good things.” (Participant 22)
	Bureaucracy	“The most annoying part is the bureaucracy: papers, reports... I deal well with it, even though its weight is increasing and it occupies us a lot of time. But with the banking crisis, they require us to have more papers, more information for the customers, more reports and more transparency. So it is understandable.” (Participant 5)
	Centralization	“I see the branch managers more stressed and they often have difficulties in selecting issues and decentralizing. They should know how to do it better. But they are afraid of mistakes, so they decentralize, but then check everything by themselves. That is a waste of time.” (Participant 14)
	Customers’ misbehavior	“A customer came from another bank branch and demanded that I gave him a service that I knew I couldn’t. He insisted again and again... He even asked me for the complaints book.” (Participant 19)
	Cognitive demands	“I get stressed when someone asks me something for which I don’t know the answer. There are topics that I don’t master. I take it with ease, if I don’t know now I am sure that will learn in the next minute, because someone will explain it to me, but I still don’t like it. I feel stressed because I have the feeling that I should know how to answer the question. But I am always honest and admit that I don’t know. It is the only way we can evolve.” (Participant 21)
	Commute expenses	“My commute is about 70km per day. It was my choice, but I have been in other branches of the bank and had no economical compensation either. That demotivates me. The company should take that into consideration.” (Participant 20)
	Complexity	“Generally speaking, the banking sector is getting more stressful. The amount of information that we have available is much bigger, the set of tasks associated with a worker is much larger, and to be successful we have to work a lot harder than we did back then.” (Participant 13)

Computer problems	“What stresses me is when the machines don’t work, and it happens a lot. When it is three o’clock and we want to close the branch and the certifier does not work, the printer does not work... And we just want to hurry. Generally it is always on Fridays.” (Participant 21)
Demanding contacts with customers	“When I am not ready to answer a question from a customer I feel stress. It happens because we have a ton of different products and paperwork, and I am afraid that the customer notices that I don’t feel comfortable with the topic. I take a deep breath... I can’t show him that I don’t know the answer. We are not working at a place where the customer can feel our insecurity. We have to show that we are trustworthy.” (Participant 16)
Downsizing	“I don’t know why they moved me... Maybe because of the branch I was working on. They told me it was a less profitable branch, much smaller than the others, it is a village branch...” (Participant 16)
Emotional demands	“I shouldn’t cry. I know I should control myself, but I just can’t. I try, I really do, but I always end up crying.” (Participant 17)
Interpersonal conflict	“It was the fear of being much closer to a person who I consider very hard to deal with. Coming here meant being with her every single day. I can’t complain about her, she is the reason why I am here. But she was someone very complicated. She was temperamental, it was very hard to deal with her.” (Participant 12)
Less opportunities for professional development	“Sometimes we are conditioned. If we have a goal to achieve, that is easily fulfilled in a big city, it is not possible to achieve in a small town. How are we going to achieve a goal to which we don’t have a market for? They want us to sell 500 cards a year. If I sell 500 this year, another 500 next year, on the other year I will have no one to sell them to.” (Participant 18)
Low decision-making power	“Sometimes our stress is generated because we don’t have the ability to solve a situation. People have different opinions on the same subject. Ten years ago I would be mad if I lost a customer, but as the years go by we learn to accept it. That sometimes we just can’t because the management doesn’t allow us to.” (Participant 24)

Negative spillover from family to work	“Sometimes things go less well here because I am worried about family issues. I feel that it affects me. It happens more than I would like to. If something positive happens in my family life it doesn’t affect me much here. But if it is something negative, then it does. I can’t avoid it.” (Participant 23)
Performance demands	“When we are serving customers, which are mainly elderly people in this branch, we have to have a lot of patience... I do, fortunately. But there are days where they all come in asking about the same thing because they all received some promotional letter... It becomes stressful.” (Participant 19)
Performance goals	“Professionally, I get stressed when I can’t achieve the goals. Goals are a pressure and stress factor to the workers.” (Participant 14)
Physical demands	“What bothers me the most is this two-branch situation. Now we are travelling cashiers. We are constantly moving from one branch to another and it is very tiring.” (Participant 16)
Remuneration	“The disadvantages have to do with remuneration. In another city, a bigger one, I would receive much more.” (Participant 15)
Reorganization	“They moved me here. I was working in village 2. I liked it there, I was fine there. But when I came here, because I was forced to, I didn’t feel comfortable.” (Participant 12)
Responsibility	“It is a great responsibility, because people are dependent of these aids. I feel responsible for the possibility of involuntarily delaying the payments of our customers. I always question if I did everything right. I feel bad for not being able to do it perfectly, but I try to do my best.” (Participant 4)
Role ambiguity	“I ceased functions and I walked around lost. I had no defined functions. It is what I consider a pre-shelf: a person is left without a specific function and wanders around the office, lost.” (Participant 4)
Role conflict	“I enjoy doing INGAs (National Institute of Agricultural Intervention and Warranty), I do them with pleasure. But during that time I know I injure my productivity, because I can’t serve customers.” (Participant 24)

Telephone assistance	“There are days where the phone doesn’t stop ringing while we are serving the customers.” (Participant 22)	
Time pressure	“I feel stressed when we have a lot of things to do and I can’t do them in the time that I have to, because we have timings. We have some applications that have a set due date, and that stresses me. But we have to manage it and stay here longer, we do what we have to do to deliver it on time.” (Participant 11)	
Unfavorable work conditions	“What I like the least is the few contact I have with customers. I come from the commercial area, it was completely different. Maybe in that time I would say ‘I wish I was back there’, but now I miss it. I feel isolated. I wish I was accompanied, I am the only one performing my functions as an internal auditor. I miss the contact with customers, where I created bonds, empathies with them.” (Participant 9)	
Unfavorable work schedule	“When you like what you do, work is from 8:30am to 4:30pm. That’s a lie. It is not. Today at five minutes to 8am I was already here. And until 5:30pm, six o’clock, I will still be here.” (Participant 23)	
Work overload	“I don’t like that fact that it is concentrated in three months. Even though there is an annual monitoring, the application period is always between February and April, so it is a big load and it is hard to manage. The deadlines should be more disperse, in a way that it was more continuous and with less workload.” (Participant 4)	
Work pressure	“In every situation, mainly when there are issues to solve immediately and to which I don’t have an immediate solution, and I have to come up with a fast one, I feel pressured. Because the pressure sometimes doesn’t even come from our supervisors, I don’t feel pressured by them. But it comes from other entities related to the bank, namely in Lisbon. Even though it is on paper or in the computer, we feel the pressure in the way they write things.” (Participant 7)	
Job Resources	Advancement	“The happiest day was when I was called into the administration and they gave me a promotion by merit. It wasn’t because I had to be promoted that year, it was because someone recognized that I had worked a lot.” (Participant 17)
	Appreciation	“Today a new customer came in and told my colleague that I was very friendly and that I always served him professionally. We get a lot of compliments frequently, and they are nice to hear. I feel appreciated by my colleagues and customers.” (Participant 21)

Autonomy	“I am in a position where I have a certain autonomy, which is completely different than having to ask my superior for everything. Sometimes it is not the fact that I have to ask, is that I have to explain why I am asking.” (Participant 18)
Commute to relax	“Driving helps me relax. For me, it’s not negative to be away from home. It’s about 50km, half an hour. As I used to say, in the morning it’s the agenda, in the afternoon it’s the summary. It’s my moment, alone, with my thoughts. Us here, without traffic, have this advantage. It’s relaxing, the scenery...” (Participant 4)
Financial rewards	“Financially, I know we have a great benefit in comparison to other jobs and relatives of ours whom we know that work from dawn to dusk and don’t have the benefits that we do.” (Participant 18)
Goal achievement rewards	“It is important to win the trips. First because they are good ones, I have been to Dubai, Iceland, Russia, Miami... And besides, we get to know our colleagues from across the country.” (Participant 18)
Goal clarity	“Now my goals are clearly defined, and everything went well. My job starts here and ends there, it is assessed and there is interest in its existence.” (Participant 4)
Good work schedule	“I always have the weekends to be with my family, and come home early during the week. Which gives me a certain freedom to be with my family.” (Participant 3)
Health benefits	“Our health system (SAMS) is very good, and I have a small child... It is beneficial to my family.” (Participant 8)
Information	“My job is to control, and I like that area. It is not because I control anything whatsoever, it is because I have access to so many information. It motivates me to have this knowledge.” (Participant 9)
Innovative climate	“I’ve been working in the banking sector for almost thirty years, and I enjoy it very much. There are always new things coming up, new products and new accounts.” (Participant 1)

Job challenge	“Nowadays credit is a much more complex area, in terms of norms, contents and information. But I still like it. Complexity motivates me, I like challenges, changing. I don’t enjoy those dull times. We’ve always been evolving, new laws, new legislation, new rules... I like to learn and to change.” (Participant 11)
Job security	“When I came here I did an internship for a year and ended up staying with a contract. I think it motivates us, makes our personal and professional life easier. I felt quite happy, because at the time my son was already two or three months old, and having this job security made it very carefree.” (Participant 8)
Knowledge	“My job contributes to my satisfaction in terms of the knowledge I gain. All the doors that it opens, the learning we do every day... Ultimately, all the people we get to meet, whether they are co-workers or customers.” (Participant 1)
Leadership	“My job in the institution has to do with control and supervision. What I enjoy the most is to be able to make decisions that will meet people’s needs. We try, as a group, to solve the problems that people have in their daily lives. It is important for me to be able to help others.” (Participant 15)
Opportunities for professional development	“I don’t regret taking the course due to its workload, because I know it can help my professional development. It might help me grow inside the institution.” (Participant 8)
Participation in decision-making	“I was happy to be able to do this construction here at the bank. It was an ambition that I had, to renovate the whole space. I have a little bit of myself here. There were several factors that had to be put together in order to make this happen, and fortunately they all did.” (Participant 6)
Performance feedback	“I felt really happy when we had an audit and were praised for our performance here.” (Participant 10)
Positive customer contacts	“I believe our institution is unlike any other. We know our customers from top to bottom. When we have a new customer we need to ask for some information, and we usually joke saying ‘you need to identify yourself, for now we just need your ID and later we will need your blood pressure, diabetes, cholesterol and shoe size’. This is the relation that I believe is worth maintaining. People are not goals to us. We call them by their names, ask about their wife, husband, children. We have a personal relationship with them.” (Participant 3)

Positive spillover from family to work	“My family life always influences my presence in the workplace positively. I can be here, not worrying about them, totally committed to my job because I know that at home everything is ok.” (Participant 1)
Procedural fairness	“They ended up giving me the same that the offer proposed. They gave a car to each of us in the town 3 branch, because I told them to give one to everyone, to be fair. What I want for myself I also wish for others.” (Participant 18)
Professional pride	“It is the recognition that people have of me and the institution that I represent, and that has an impact on society. I often feel proud to represent this institution.” (Participant 6)
Quality of the relationship with the supervisor	“We have an administrator that is always here with us, and that gives us some security. When there are sensitive issues or something of a higher decision level, we always have here someone to talk to. It is a very thoughtful person, who is always available to help us.” (Participant 2)
Safety climate	“What I like the most about my institution is the workplace and the working conditions.” (Participant 1)
Skill utilization	“My job also helps my family in terms of financial advice. With the knowledge I gain here I am able to advise my family on what is best for them. So this knowledge is important, because I can also use it outside. It makes me feel useful.” (Participant 20)
Social climate	“We know people from all over the country, I have friends from Algarve to Douro, and that would never happen if I didn’t have this job. If I have any professional problem, I am able to talk to someone I already know, whether they are the group managers or insurance company administrators.” (Participant 5)
Stress as motivation	“Sometimes I consider that stressed employees are a positive thing. If we realize that they are stressed because they have a goal to achieve, and they are trying to... If stress is that, being pressured and concerned about achieving a goal, then I believe it is a positive thing.” (Participant 15)

Strategic planning	“For me it is important to know what are the aspirations of our employees, what they think about the work we do and the way it is being done. As a member of the administration board, we try to use this information to place our workers in the places they prefer to be in.” (Participant 15)	
Support from colleagues	“All my colleagues congratulated me, I was happy. We were all happy, we are always happy with each other’s promotions because we work as a team and we know we also contributed to the promotion of that colleague.” (Participant 3)	
Support from supervisors	“Since my supervisor is a person with a large experience, with many years of customer contact, he has some defense mechanisms on how to deal with tough situations. He is able to teach me so I don’t take these situations so personally.” (Participant 2)	
Task variety	“I work on two different areas: accounting and human resources. The one I like the most is human resources, because we are able to help people when they have problems.” (Participant 7)	
Team harmony and cohesion	“We have a strong team spirit, group mentality. We talk to each other, help each other.” (Participant 3)	
Training and development	“Right now I am studying at ISGB (Superior Institute of Banking Management), taking an undergraduate course on Banking Management. It was the bank that invited me and I am at the end of my first year.” (Participant 2)	
Trust in management	“Now I trust them. Before I didn’t. When we had the previous manager, it was very stressful. The new one is a person with a completely different mentality. He is an open person, a person who trusts us. If we tell him that we won’t return the check because the customer will pay, he believes in us. A year ago would be ‘sure! We aren’t the Holy House of Mercy! Then if he doesn’t pay you will pay for him!’ And we would hang there, not knowing what to do. Now it is different. This support is very important.” (Participant 18)	
Personal Resources	Emotional competencies	“I try to manage my emotions in order to not show that my adrenaline levels are rising.” (Participant 2)

Extraversion	“I don’t like being isolated. I am a person that can’t be in the same place for a long time. I like to relate to people, talk to everyone... I have a hard time being confined to an office for several hours.” (Participant 14)
Extrinsic motivation	“When we are praised for our performance we feel more motivated to work in order to be promoted again in the future. It’s a cycle.” (Participant 3)
Intrinsic motivation	“As some colleagues say, it is the contact with customers that allows us to move forward. Nobody comes here to tell us how to do this, we are the ones that need to assure the well-being of this branch, which is also our own well-being. If this sinks, we were the ones who contributed for it. If we are successful, we were the ones responsible for it.” (Participant 3)
Low neuroticism	“I don’t feel stress peaks. I can’t identify a time where I felt really stressed. There is workload, I have things to do, ways to solve problems, but I am an extremely calm person in terms of stress. I feel it, but I think I can manage it quite well.” (Participant 9)
Need satisfaction	“I am satisfied with our customers’ satisfaction. Here we deal with customers with mid-range incomes, with the dream of having a home, a car... We have to facilitate things because we know our country’s situation. These things are very important to people, and I feel satisfied by knowing that we contributed with this facilitation, in order for them to have what they wish. I feel happy to have to opportunity to help others.” (Participant 5)
No work-home interference	“Usually I don’t talk about work at home. I’d rather suffer alone. I admit it would be better if I shared my thoughts with someone, but I don’t want to worry other people, especially my family, so I end up keeping everything to myself and solving my problems alone.” (Participant 7)
Optimism	“I think I deal well with stress. I always see things on the bright side, there are always things that could be worse than they are. I consider myself a positive person.” (Participant 15)
Organization-based self-esteem	“Just the fact of belonging to the banking sector, even though it’s no big deal, gives us a certain... I don’t really like to talk this way because I don’t believe in these things. But status is still useful for some things, even though we don’t feel it that

		<p>way. It is different. Even my son in school, when he says his mom is a branch manager... I see he says it proudly.” (Participant 18)</p>
	Regulatory focus	<p>“Sometimes I feel my colleagues are stressed and I always try to calm them, to help them in the sense of preventing in them a situation like the one I had (panic attack).” (Participant 1)</p>
	Resilience	<p>“For them to give us this task is because we can do it. I don’t know if that is what they thought, I don’t know if they see it the way I think they did. But I like to think of it this way, that they gave this mission to us by merit, because we can handle it.” (Participant 17)</p>
	Self-efficacy	<p>“I know I have the abilities to solve situations, so I don’t ask for help. Only one day when I see I can’t do it I will ask for support. When people ask for help is because they can’t do it on their own.” (Participant 20)</p>
	Value orientation	<p>“I enjoy that people recognize me on the streets. I guide my life through values and some of them are related to that, people’s recognition. Being able to talk to anyone, no matter what stereotype we might associate with them. It is important to me.” (Participant 25)</p>
Negative Outcomes	Absenteeism	<p>“The rest of the day was hard for my colleague because I had to leave. I couldn’t be there working, the only thing I could do was cry.” (Participant 2)</p>
	Adverse events	<p>“It was a moment that really bothered me and left me feeling frustrated. A customer came here to deceive me, it was a fraud. He was foreigner and came here to exchange money. The first thing I thought was ‘let me see if the money is real’, afraid that he was trying to trick me with fake money. I ran the money through the machine and they were real. When he left, my boss warned me ‘check your cashier because the other day a colleague was exchanging notes and in between some were stolen’. I checked and I lacked money. 440 euros.” (Participant 22)</p>
	Coping with stress through medication	<p>“Every now and then we have to ask for help. To calm myself in those stressful times I always take medication. On the outside I might look calm, but inside I am boiling up. I went to the doctor and he prescribed them to me.” (Participant 4)</p>

Coping with stress through smoking	“Smoking helps me de-stress. I don’t know why. I used to say that when it’s hot I smoke to cool down and when it’s cold I smoke to keep warm. When I am stressed I smoke a lot more.” (Participant 6)
Coping with stress through therapy	“Lately I have been asking for help. I did some therapy sessions. I still do one per month, because it helps me to release the stress.” (Participant 5)
Customer contacts after work	“I like that customers trust me, but it is a heavy burden. I try to avoid that they do not become dependent of me. I have customers that come here to ask the time. They will wait an hour for me, even if there are other colleagues available, they want me to tell them the time. When I return from vacations, the first two days its houseful. Sometimes it is meaningless things, but they think that only I know the answer.” (Participant 23)
Depression	“I am the most stressful one. I had some health issues, such as depressions, also due to my family life. That defined me somehow.” (Participant 22)
Low motivation	“I felt demotivated. Betrayed by the customer, whom I trusted.” (Participant 9)
Negative work-home interference	“Those days I was a different person around the house. I was very concerned so I didn’t had a lot of patience to talk to my family. I had to explain to them what was happening and they understood. In those times I can be watching TV but if you ask me what they just said I have no idea. My thoughts are focused on trying to find a solution to my problem.” (Participant 7)
Panic/anxiety attack	“In a calm period I had what the doctor told me it was called a panic attack. Sweat and vomiting... I had to go to the ER.” (Participant 1)
Physical ill health	“A few years ago I went through some stressful times, demanding contacts with customers... When I got home at the end of the day, took a shower and started doing house chores, some huge red spots would start to appear all over my body. I went to the hospital, they did some tests and nothing showed up. I thought it was very strange, because they only appeared at the end of the day. I booked an appointment to a dermatologist and he told me it was a nervous reaction, because I was feeling so stressed out. I took some medication for half a month and they disappeared.” (Participant 18)

Psychological strain	“I couldn’t get him to listen to me. I wasn’t able to calm his anger in order to listen to what I had to say. In order for me to explain myself. It was terrible.” (Participant 2)
Psychosomatic health complaints	“I was feeling stressed, nervous, depressed... Wouldn’t sleep, wouldn’t eat properly... So I went to a psychiatrist to see if there was anything I could do. When he started to ask me questions he says ‘you work at a bank...’ –‘I do’ –‘That’s interesting.’ I asked him why he said that. –‘For nothing. It’s just that for the past week almost all my patients work at banks. I don’t know what is going on but bankers are all going mad’.” (Participant 18)
Safety routine violations	“The money was missing and we checked the surveillance tapes. It took me so long to check if his banknotes were fake that I felt compromised to be doubting him so much. When a customer gives us money, we have to run it through the machine. Even if I give them back to him and he returns them to me again, I still have to do it again. But because I was feeling so compromised, I didn’t do a mandatory safety procedure.” (Participant 22)
Sleeping difficulties	“It was very frustrating and unpleasant. I was a fool. I thought about how could I let myself be deceived like that... I was stupid. I went home and I couldn’t sleep, I felt anxious...” (Participant 22)
Turnover intention	“I was about to give them my resignation letter. But then things calmed down and they asked me to stay. They ended up apologizing to me, in some way.” (Participant 11)
Unsafe behaviors	“At some point I worked here all alone, performing everyone’s tasks. Our supervisors probably didn’t realize the amount of work that we have here, what mattered to them was that it was done at the end of the day. I had to come up with techniques for it to be done on time, taking risks. Several security risks. Managing the time I had wasn’t easy, I had to do it all alone, with deadlines. Even in terms of physical security, because it is a risk to be working alone.” (Participant 20)
Work mistakes	“I can see stress is affecting my colleagues when work mistakes start to happen. It’s very clear. The ones in treasury start to have cash errors, the ones in the back office forget about documents... It happens because they lose focus.” (Participant 1)

Positive Outcomes	Customers' gifts	“During Christmas every year customers come here and bring us gifts. It is normal. People appreciate what we do for them. Each year we get more gifts. Customers arrive here on Christmas Eve with something, a drink, chocolates... Something. I think that is the proof that what we have here is working well.” (Participant 18)
	Determination to continue	“When I start to feel stress, I recall what happened and begin to feel anxious. But in most times, I get over it and move on.” (Participant 5)
	Extra-role performance	“I often tell my colleagues that my office seems like a psychological support center. Customers feel at ease with us. We've had situations where a couple gets divorced, so the wife comes in crying, leaves, then after two hours the husband comes in, also crying, asking what do they need to do now, with the accounts, the loans... The widows also come in whimpering... They don't come here to complain, they come to ask for information. But in order to create empathy with them, we know they will feel better if they talk about it, so sometimes we end up knowing more than we wished to.” (Participant 18)
	Happiness	“I am really happy with my job. When I applied to ISGB this was my goal. I didn't come here because I gain more money... I really enjoy my work. I feel accomplished, which motivates me. I always try to help, to learn as much as I can, to grow inside the company. Our job is to help people.” (Participant 8)
	In-role performance	“Since this is a small branch, we know all the customers, there is always some small talk. We know that by asking about their day, how they feel, the customer feels more comfortable and bonds with us. This extra attention that we try to give to each customer contributes to the close relationship we have with them, which is gratifying.” (Participant 22)
	Life satisfaction	“As long as we are doing what we love, we are much happier with our lives, whether it is on a professional level or personal level. Having a job that we like contributes to our well-being outside these doors.” (Participant 19)
	Organizational commitment	“In this institution I feel that everybody has a commitment to the organization, and somehow they have all been responding positively to the challenges we propose to them.” (Participant 13)
	Perceived health	“The stress that other banking employees feel has nothing to do with ours. This is a paradise. Without a doubt. We feel stress, but not on an internal level. And that exists on other banks.” (Participant 7)

Positive work-home interference	“When we are happy we come home happier. That reflects on our patience, on our availability to listen and to put up with them, especially when having two small children.” (Participant 2)
Professional satisfaction	“I like working here, I enjoy the work that I do here in the bank. I love the job that I have. If I could go back in time I would do it all again.” (Participant 11)
Sense of trust	“Customers trust us naturally. I go to the ATM countless times to pay for services with cards from other banks. I have seen thousands of pin numbers. But sometimes I am afraid, they trust me so much... I am afraid that at some point some other person shows up and they trust them the same and things go wrong.” (Participant 23)
Service quality	“The people’s recognition. Because we work for the customers, and if they are happy with us, we must be doing something right. To be acknowledged by our efforts is important in every job.” (Participant 21)
Team sales performance	“If I achieve my goals it means that they also achieved theirs, and they also win the trips, points or prizes, they are assessed and rewarded for their effort.” (Participant 5)

Annex 8. Questionnaire

Questionário

Bom dia. O meu nome é Ana Oliveira e estou neste momento a desenvolver a minha tese de mestrado em Gestão de Recursos Humanos e Consultoria Organizacional no ISCTE Business School. Estou a realizar um estudo sobre stress e bem-estar no local de trabalho, nomeadamente no setor bancário. Gostaria de contar com a sua participação.

Este estudo respeitará todos os requisitos de qualquer processo de investigação, sendo o seu anonimato totalmente assegurado assim como a confidencialidade dos dados obtidos.

Neste questionário não existem respostas certas ou erradas, apenas pretendo conhecer a sua opinião e perceção sobre alguns aspetos relacionados com a sua atividade profissional. A duração estimada para o seu preenchimento é de cerca de 10 minutos.

Se desejar receber mais informações acerca deste estudo poderá contactar-me diretamente: anoliveira6@hotmail.com.

A sua participação é muito importante.

Muito obrigada pela sua colaboração neste trabalho.

Informo que li e compreendi o consentimento informado e pretendo participar neste questionário: Sim

I. As primeiras questões são relacionadas com o seu trabalho no seu todo.

Para cada afirmação indique a opção que mais se adequa à sua resposta.

Em relação ao seu trabalho em geral, quão satisfeito está com...

- As suas perspetivas de trabalho?
- As condições físicas do seu local de trabalho?
- A forma como as suas capacidades são utilizadas?
- O seu trabalho de uma forma global?

[1- Nunca/quase nunca; 2- Raramente; 3- Às vezes; 4- Frequentemente; 5- Sempre]

Indique o seu grau de concordância com as seguintes afirmações:

- O meu trabalho tem objetivos claros.
- Sei exatamente o que é esperado de mim no meu trabalho.

[1- Discordo completamente; 2- Discordo; 3- Nem discordo nem concordo; 4- Concordo; 5- Concordo completamente]

Considere o sigilo bancário e a relação que estabelece com ele:

- O sigilo bancário é muito importante no meu trabalho.
- Sempre que falo com alguém penso que não posso abordar todos os assuntos.
- Evito falar sobre o meu dia com a minha família devido ao sigilo bancário.

[1- Discordo completamente; 2- Discordo; 3- Nem discordo nem concordo; 4- Concordo; 5- Concordo completamente]

II. As próximas quatro questões referem-se aos seus colegas e supervisores diretos.

Apoio de supervisores:

- Com que frequência o seu superior imediato fala consigo sobre como está a decorrer o seu trabalho?
- Com que frequência tem ajuda e apoio do seu superior imediato?
- Com que frequência é que o seu superior imediato fala consigo em relação ao seu desempenho laboral?

[1- Nunca/quase nunca; 2- Raramente; 3- Às vezes; 4- Frequentemente; 5- Sempre]

Apoio de colegas:

- Com que frequência tem ajuda e apoio dos seus colegas de trabalho?
- Com que frequência os seus colegas estão dispostos a ouvi-lo sobre os seus problemas de trabalho?
- Com que frequência os seus colegas falam consigo acerca do seu desempenho laboral?

[1- Nunca/quase nunca; 2- Raramente; 3- Às vezes; 4- Frequentemente; 5- Sempre]

III. As próximas questões relacionam-se com o seu contacto com os clientes.

Caso não se aplique à sua função, avance para a secção seguinte.

Pense nos seus clientes e nos contactos que estabelece com os mesmos. Indique o seu grau de concordância com as seguintes afirmações:

- Sinto que os clientes gostam do meu atendimento.
- Os clientes têm um elevado nível de confiança em mim.

- Os clientes demonstram reconhecimento pelo meu trabalho.
 - Os clientes batem à minha porta de casa.
 - Os clientes contactam-me aos fins-de-semana, feriados e enquanto estou de férias.
- [1- Discordo completamente; 2- Discordo; 3- Nem discordo nem concordo; 4- Concordo; 5- Concordo completamente]

Pense na sua relação com os clientes que atende. Nos últimos 12 meses, no seu local de trabalho:

- Tem sido alvo de insultos ou provocações verbais?
 - Tem sido exposto a assédio sexual indesejado?
 - Tem sido exposto a ameaças de violência?
 - Tem sido exposto a violência física?
- [1- Nunca/quase nunca; 2- Raramente; 3- Às vezes; 4- Frequentemente; 5- Sempre]

IV. As questões finais estão relacionadas com o stress e problemas em dormir.

Com que frequência durante as últimas 4 semanas sentiu...

- Dificuldades em relaxar?
 - Irritado?
 - Tenso?
 - Ansioso?
 - Dificuldade em adormecer?
 - Dormiu mal e de forma sobressaltada?
 - Acordou demasiado cedo e depois teve dificuldade em adormecer novamente?
 - Acordou várias vezes durante a noite e depois não conseguia adormecer novamente?
- [1- Nunca/quase nunca; 2- Raramente; 3- Às vezes; 4- Frequentemente; 5- Sempre]

V. Peça-lhe agora que preencha as seguintes questões acerca do seu contexto do local de trabalho.

Lida com clientes? Sim Não

No local onde habitualmente desempenha funções (a sua secretária/gabinete), encontra-se isolado ou acompanhado? Isolado Acompanhado

Existem outros colegas no seu local de trabalho (ou trabalha sozinho num balcão)?
Sim Não

Como comunica maioritariamente com os seus colegas?

Pessoalmente Telefone Correio eletrónico

Existem outros bancos na localidade onde trabalha? Sim Não

Existem outros serviços básicos na localidade onde trabalha (posto de correios, centro de saúde...)? Sim Não

VI. Para terminar, gostaria de saber mais algumas informações sobre si. Serão utilizadas para fins exclusivamente estatísticos, pelo que é importante que responda às questões.

Sexo: Feminino Masculino

Idade: -20 20-29 30-39 40-49 50-59 60-69 +70

Habilitações literárias: 12º ano Curso complementar Licenciatura Pós-graduação Mestrado Doutoramento

Distrito onde trabalha: [se possível, apresentar em listagem] Aveiro Beja Braga Bragança Castelo Branco Coimbra Évora Faro Guarda Leiria Lisboa Portalegre Porto Santarém Setúbal Viana do Castelo Vila Real Viseu R.A. Madeira R.A. Açores

Local onde trabalha: Cidade Vila Aldeia

Encontra-se deslocado da zona de residência da família? Sim Não

Antiguidade na instituição (anos): 1-9 10-19 20-29 30-39 40-49 +50

Já trabalhou noutro banco? Sim Não

Função: Administração Assistente de cliente Auditoria Crédito Comercial Contabilidade Departamento técnico Presidente Recursos Humanos Responsável de balcão Outro Qual? ____

A quantas pessoas reporta? 0 1-4 5-9 10-14 15-20 +20

Tem cargo de chefia? Sim Não **Se sim, quantas pessoas chefia?** 1-4 5-9 10-14 15-19 20-24 +25

Já utilizou informação ou apoio externo (médicos) à instituição para lidar com problemas de natureza psicológica (como stress, depressão, ansiedade...) no trabalho? Sim Não

Caso pretenda fazer algum comentário ou sugestão, poderá fazê-lo aqui:

Muito obrigada pela sua colaboração.

A sua participação é muito importante.

Se desejar receber mais informações acerca deste estudo poderá contactar-me diretamente: anoliveira6@hotmail.com.

Annex 9. Measures of constructs and reliabilities

Bank secrecy ($\alpha = 0,57$)

1. O sigilo bancário é muito importante no meu trabalho.
2. Sempre que falo com alguém penso que não posso abordar todos os assuntos.
3. Evito falar sobre o meu dia com a minha família devido ao sigilo bancário.

Customers' misbehavior ($\alpha = 0,82$)

1. Tem sido alvo de insultos ou provocações verbais?
2. Tem sido exposto a assédio sexual indesejado?
3. Tem sido exposto a ameaças de violência?
4. Tem sido exposto a violência física?

Performance goals ($\alpha = 0,85$)

1. O meu trabalho tem objetivos claros.
2. Sei exatamente o que é esperado de mim no meu trabalho.

Positive customer contacts ($\alpha = 0,86$)

1. Sinto que os clientes gostam do meu atendimento.
2. Os clientes têm um elevado nível de confiança em mim.
3. Os clientes demonstram reconhecimento pelo meu trabalho.

Customer contacts after work ($\alpha = 0,85$)

1. Os clientes batem à minha porta de casa.
2. Os clientes contactam-me aos fins-de-semana, feriados e enquanto estou de férias.

Support from colleagues ($\alpha = 0,83$)

1. Com que frequência tem ajuda e apoio dos seus colegas de trabalho?
2. Com que frequência os seus colegas estão dispostos a ouvi-lo sobre os seus problemas de trabalho?
3. Com que frequência os seus colegas falam consigo acerca do seu desempenho laboral?

Support from supervisors ($\alpha = 0,91$)

1. Com que frequência o seu superior imediato fala consigo sobre como está a decorrer o seu trabalho?
2. Com que frequência tem ajuda e apoio do seu superior imediato?
3. Com que frequência é que o seu superior imediato fala consigo em relação ao seu desempenho laboral?

Stress and sleeping difficulties ($\alpha = 0,95$)

1. Dificuldades em relaxar?
2. Irritado?
3. Tenso?
4. Ansioso?
5. Dificuldade em adormecer?
6. Dormiu mal e de forma sobressaltada?
7. Acordou demasiado cedo e depois teve dificuldade em adormecer novamente?
8. Acordou várias vezes durante a noite e depois não conseguia adormecer novamente?

Professional satisfaction ($\alpha = 0,85$)

1. As suas perspetivas de trabalho?
2. As condições físicas do seu local de trabalho?
3. A forma como as suas capacidades são utilizadas?
4. O seu trabalho de uma forma global?

Annex 10. Model coefficients for hypothesis 1

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>	
<i>X</i> (PERFG)	<i>a</i>	0,55	0,04	<0,001	<i>c'</i>	-0,13	0,07	0,04
<i>M</i> (PSAT)		---	---	---	<i>b</i>	-0,36	0,07	<0,001
<i>C</i> ₁ (EDU)	<i>f</i> ₁	-0,04	0,04	0,27	<i>g</i> ₁	0,01	0,05	0,82
<i>C</i> ₂ (NOR)	<i>f</i> ₂	0,24	0,20	0,23	<i>g</i> ₂	-0,16	0,30	0,59
<i>C</i> ₃ (CEN)	<i>f</i> ₃	0,17	0,20	0,38	<i>g</i> ₃	0,10	0,30	0,73
<i>C</i> ₄ (LIS)	<i>f</i> ₄	0,12	0,20	0,56	<i>g</i> ₄	-0,15	0,30	0,63
<i>C</i> ₅ (ALE)	<i>f</i> ₅	0,21	0,20	0,29	<i>g</i> ₅	0,04	0,30	0,89
<i>C</i> ₆ (MANP)	<i>f</i> ₆	-0,07	0,06	0,20	<i>g</i> ₆	-0,23	0,08	0,01
Constant	<i>i</i> ₁	1,53	0,28	<0,001	<i>i</i> ₂	4,966	0,435	<0,001
R ² =0,38				R ² =0,15				
<i>F</i> (7,438)=39,03; <i>p</i> <0,001				<i>F</i> (8,437)=9,81; <i>p</i> <0,001				

Annex 11. Model coefficients for hypothesis 2

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>	
<i>X</i> (PCC)	<i>a</i>	0,22	0,06	<0,001	<i>c'</i>	-0,03	0,07	0,64
<i>M</i> (PSAT)		---	---	---	<i>b</i>	-0,47	0,07	<0,001
<i>C</i> ₁ (EDU)	<i>f</i> ₁	-0,04	0,05	0,40	<i>g</i> ₁	-0,01	0,06	0,91
<i>C</i> ₂ (NOR)	<i>f</i> ₂	-0,01	0,24	0,98	<i>g</i> ₂	-0,13	0,30	0,67
<i>C</i> ₃ (CEN)	<i>f</i> ₃	-0,08	0,23	0,75	<i>g</i> ₃	0,12	0,30	0,69
<i>C</i> ₄ (LIS)	<i>f</i> ₄	-0,19	0,24	0,43	<i>g</i> ₄	-0,11	0,30	0,73
<i>C</i> ₅ (ALE)	<i>f</i> ₅	-0,10	0,24	0,69	<i>g</i> ₅	0,09	0,30	0,77
<i>C</i> ₆ (MANP)	<i>f</i> ₆	-0,16	0,07	0,03	<i>g</i> ₆	-0,15	0,09	0,11
Constant	<i>i</i> ₁	3,21	0,38	<0,001	<i>i</i> ₂	4,84	0,52	<0,001
R ² =0,08				R ² =0,15				
<i>F</i> (7,363)=4,32; <i>p</i> <0,001				<i>F</i> (8,362)=7,67; <i>p</i> <0,001				

Annex 12. Results from regression analysis of hypothesis 3

		Coeff.	SE	<i>t</i>	<i>p</i>
Constant	i_1	2,60	0,31	8,45	<0,001
X' (CMIS)	b_1	0,59	0,25	2,37	0,02
M' (BSEC)	b_2	0,19	0,07	2,66	0,01
$X'M'$ (interaction)	b_3	0,37	0,19	2,00	0,05
C_1 (NOR)	b_4	-0,05	0,33	-0,15	0,88
C_2 (CEN)	b_5	0,19	0,32	0,59	0,55
C_3 (LIS)	b_6	0,11	0,32	0,32	0,75
C_4 (ALE)	b_7	0,23	0,32	0,70	0,48

$R^2=0,07$, $MSE=0,72$
 $F(7,359)=2,96$; $p=0,005$

Annex 13. Results from regression analysis of hypothesis 4

		Coeff.	SE	<i>t</i>	<i>p</i>
Constant	i_1	2,93	0,25	11,55	<0,001
X' (PERFG)	b_1	-0,31	0,06	-5,22	<0,001
M' (SCOLL)	b_2	-0,14	0,06	-2,36	0,02
$X'M'$ (interaction)	b_3	-0,17	0,07	-2,46	0,01
C_1 (NOR)	b_4	-0,34	0,27	-1,29	0,20
C_2 (CEN)	b_5	-0,06	0,26	-0,23	0,81
C_3 (LIS)	b_6	-0,29	0,26	-1,11	0,27
C_4 (ALE)	b_7	-0,15	0,27	-0,57	0,57

$R^2=0,11$, $MSE=0,68$
 $F(7,443)=7,06$; $p<0,001$

Annex 14. Results from regression analysis of hypothesis 5

		Coeff.	SE	<i>t</i>	<i>p</i>
Constant	i_1	2,73	0,29	9,33	<0,001
X' (CMIS)	b_1	0,41	0,20	2,06	0,04
M' (SCOLL)	b_2	-0,22	0,07	-3,39	<0,001
$X'M'$ (interaction)	b_3	-0,21	0,24	-0,85	0,40
C_1 (NOR)	b_4	-0,18	0,31	-0,57	0,57
C_2 (CEN)	b_5	0,04	0,31	0,13	0,90
C_3 (LIS)	b_6	-0,11	0,31	-0,36	0,72
C_4 (ALE)	b_7	0,10	0,31	0,33	0,75

$R^2=0,08$, $MSE=0,71$
 $F(7,359)=3,81$; $p<0,001$

Annex 15. Results from regression analysis of hypothesis 6

		Coeff.	SE	t	p
Constant	i_1	2,88	0,25	11,63	<0,001
X' (PERFG)	b_1	-0,32	0,06	-4,99	<0,001
M' (SSUP)	b_2	-0,04	0,05	-0,89	0,38
$X'M'$ (interaction)	b_3	-0,12	0,06	-2,06	0,04
C_1 (NOR)	b_4	-0,32	0,26	-1,22	0,22
C_2 (CEN)	b_5	0,02	0,26	0,07	0,94
C_3 (LIS)	b_6	-0,23	0,26	-0,88	0,38
C_4 (ALE)	b_7	-0,10	0,26	-0,38	0,70

$R^2=0,10$, $MSE=0,69$
 $F(7,445)=6,68$; $p<0,001$

Annex 16. Results from regression analysis of hypothesis 7

		Coeff.	SE	t	p
Constant	i_1	2,66	0,29	9,32	<0,001
X' (CMIS)	b_1	0,41	0,19	2,20	0,03
M' (SSUP)	b_2	-0,16	0,05	-3,11	0,002
$X'M'$ (interaction)	b_3	-0,21	0,25	-0,83	0,41
C_1 (NOR)	b_4	-0,14	0,30	-0,47	0,64
C_2 (CEN)	b_5	0,15	0,30	0,50	0,62
C_3 (LIS)	b_6	-0,03	0,30	-0,11	0,92
C_4 (ALE)	b_7	0,16	0,30	0,54	0,59

$R^2=0,07$, $MSE=0,72$
 $F(7,361)=3,71$; $p<0,001$

Annex 17. Results from regression analysis of hypothesis 8

		Coeff.	SE	t	p
Constant	i_1	2,67	0,28	9,71	<0,001
X' (CCAW)	b_1	0,09	0,04	2,32	0,02
M' (SCOLL)	b_2	-0,26	0,07	-3,99	<0,001
$X'M'$ (interaction)	b_3	0,02	0,05	0,41	0,68
C_1 (NOR)	b_4	-0,14	0,29	-0,47	0,64
C_2 (CEN)	b_5	0,12	0,29	0,43	0,67
C_3 (LIS)	b_6	-0,00	0,29	-0,01	0,99
C_4 (ALE)	b_7	0,12	0,29	0,42	0,68

$R^2=0,08$, $MSE=0,72$
 $F(7,360)=4,20$; $p<0,001$

Annex 18. Results from regression analysis of hypothesis 9

		Coeff.	SE	t	p
Constant	i_1	2,64	0,26	10,15	<0,001
X' (CCAW)	b_1	0,07	0,04	1,89	0,06
M' (SSUP)	b_2	-0,19	0,05	-3,81	<0,001
$X'M'$ (interaction)	b_3	-0,10	0,04	-2,52	0,01
C_1 (NOR)	b_4	-0,12	0,28	-0,44	0,66
C_2 (CEN)	b_5	0,20	0,27	0,75	0,45
C_3 (LIS)	b_6	0,04	0,28	0,13	0,90
C_4 (ALE)	b_7	0,16	0,28	0,58	0,56

$R^2=0,07$, $MSE=0,73$
 $F(7,363)=4,59$; $p<0,001$

Annex 19. Model coefficients for hypothesis 1 in North

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	p	Coeff.	SE	p	
X (PERFG)	a	0,51	0,09	<0,001	c'	-0,23	0,16	0,16
M (PSAT)		---	---	---	b	-0,19	0,17	0,25
C_1 (EDU)	f_1	-0,06	0,08	0,47	g_1	-0,00	0,13	0,99
C_2 (MANP)	f_2	0,08	0,13	0,57	g_2	-0,40	0,20	0,06
Constant	i_1	1,70	0,48	<0,001	i_2	4,88	0,81	<0,001

$R^2=0,28$ $R^2=0,10$
 $F(3,88)=11,40$; $p<0,001$ $F(4,87)=2,35$; $p=0,06$

Annex 20. Model coefficients for hypothesis 1 in Center

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	p	Coeff.	SE	p	
X (PERFG)	a	0,59	0,06	<0,001	c'	-0,10	0,13	0,48
M (PSAT)		---	---	---	b	-0,52	0,14	<0,001
C_1 (EDU)	f_1	-0,01	0,06	0,86	g_1	0,05	0,10	0,60
C_2 (MANP)	f_2	-0,01	0,09	0,88	g_2	-0,06	0,15	0,69
Constant	i_1	1,41	0,30	<0,001	i_2	5,16	0,55	<0,001

$R^2=0,39$ $R^2=0,17$
 $F(3,140)=29,91$; $p<0,001$ $F(4,129)=7,07$; $p<0,001$

Annex 21. Model coefficients for hypothesis 1 in Metropolitan Region of Lisbon

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>	
X (PERFG)	<i>a</i>	0,54	0,06	<0,001	<i>c'</i>	-0,02	0,11	0,89
M (PSAT)		---	---	---	<i>b</i>	-0,39	0,13	0,002
<i>C</i> ₁ (EDU)	<i>f</i> ₁	-0,08	0,06	0,20	<i>g</i> ₁	-0,07	0,09	0,43
<i>C</i> ₂ (MANP)	<i>f</i> ₂	-0,17	0,12	0,18	<i>g</i> ₂	-0,26	0,17	0,13
Constant	<i>i</i> ₁	1,94	0,39	<0,001	<i>i</i> ₂	4,69	0,58	<0,001
R ² =0,44				R ² =0,13				
F(3,113)=29,42; <i>p</i> <0,001				F(4,112)=4,28; <i>p</i> =0,003				

Annex 22. Model coefficients for hypothesis 1 in Alentejo

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>	
X (PERFG)	<i>a</i>	0,53	0,09	<0,001	<i>c'</i>	-0,25	0,14	0,08
M (PSAT)		---	---	---	<i>b</i>	-0,31	0,15	0,04
<i>C</i> ₁ (EDU)	<i>f</i> ₁	-0,02	0,09	0,80	<i>g</i> ₁	0,13	0,12	0,31
<i>C</i> ₂ (MANP)	<i>f</i> ₂	-0,25	0,13	0,05	<i>g</i> ₂	-0,32	0,18	0,07
Constant	<i>i</i> ₁	2,09	0,48	<0,001	<i>i</i> ₂	5,23	0,71	<0,001
R ² =0,38				R ² =0,21				
F(3,81)=16,29; <i>p</i> <0,001				F(4,80)=5,39; <i>p</i> <0,001				

Annex 23. Model coefficients for hypothesis 2 in North

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>	
X (PCC)	<i>a</i>	0,16	0,15	0,30	<i>c'</i>	-0,59	0,22	0,01
M (PSAT)		---	---	---	<i>b</i>	-0,26	0,17	0,13
<i>C</i> ₁ (EDU)	<i>f</i> ₁	0,01	0,11	0,94	<i>g</i> ₁	0,02	0,15	0,87
<i>C</i> ₂ (MANP)	<i>f</i> ₂	-0,01	0,15	0,96	<i>g</i> ₂	-0,42	0,22	0,06
Constant	<i>i</i> ₁	3,12	0,73	<0,001	<i>i</i> ₂	6,57	1,14	<0,001
R ² =0,02				R ² =0,16				
F(3,71)=0,39; <i>p</i> =0,76				F(4,70)=3,29; <i>p</i> =0,02				

Annex 24. Model coefficients for hypothesis 2 in Center

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	p	Coeff.	SE	p	
X (PCC)	<i>a</i>	0,08	0,11	0,68	<i>c'</i>	0,11	0,14	0,43
M (PSAT)		---	---	---	<i>b</i>	-0,57	0,12	<0,001
<i>C</i> ₁ (EDU)	<i>f</i> ₁	-0,03	0,08	0,68	<i>g</i> ₁	0,07	0,11	0,53
<i>C</i> ₂ (MANP)	<i>f</i> ₂	-0,02	0,11	0,89	<i>g</i> ₂	-0,03	0,16	0,85
Constant	<i>i</i> ₁	3,49	0,54	<0,001	<i>i</i> ₂	4,39	0,85	<0,001
R ² =0,01 F(3,129)=0,34; p=0,79				R ² =0,16 F(4,128)=5,91; p<0,001				

Annex 25. Model coefficients for hypothesis 2 in Metropolitan Region of Lisbon

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	p	Coeff.	SE	p	
X (PCC)	<i>a</i>	0,28	0,11	0,01	<i>c'</i>	-0,09	0,12	0,43
M (PSAT)		---	---	---	<i>b</i>	-0,46	0,12	<0,001
<i>C</i> ₁ (EDU)	<i>f</i> ₁	-0,04	0,11	0,71	<i>g</i> ₁	-0,19	0,11	0,10
<i>C</i> ₂ (MANP)	<i>f</i> ₂	-0,46	0,18	0,01	<i>g</i> ₂	-0,12	0,19	0,52
Constant	<i>i</i> ₁	3,32	0,61	<0,001	<i>i</i> ₂	5,23	0,75	<0,001
R ² =0,18 F(3,72)=5,39; p=0,002				R ² =0,22 F(4,71)=5,12; p=0,001				

Annex 26. Model coefficients for hypothesis 2 in Alentejo

Antecedent		Consequent						
		M (PSAT)			Y (STRESS)			
		Coeff.	SE	p	Coeff.	SE	p	
X (PCC)	<i>a</i>	0,39	0,12	0,001	<i>c'</i>	0,18	0,16	0,26
M (PSAT)		---	---	---	<i>b</i>	-0,52	0,14	<0,001
<i>C</i> ₁ (EDU)	<i>f</i> ₁	-0,18	0,10	0,08	<i>g</i> ₁	0,12	0,13	0,36
<i>C</i> ₂ (MANP)	<i>f</i> ₂	-0,30	0,14	0,04	<i>g</i> ₂	-0,21	0,18	0,26
Constant	<i>i</i> ₁	2,86	0,57	<0,001	<i>i</i> ₂	4,12	0,82	<0,001
R ² =0,21 F(3,75)=6,84; p<0,001				R ² =0,17 F(4,74)=3,90; p=0,01				

Annex 27. Results from regression analysis of hypothesis 3 in all regions

	North				Center				Metropolitan Region of Lisbon				Alentejo			
	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p
Constant	2,52	0,11	23,91	<0,001	2,80	0,08	36,39	<0,001	2,71	0,14	19,15	<0,001	2,81	0,09	30,30	<0,001
X' (CMIS)	0,41	0,52	0,79	0,43	0,94	0,18	5,19	<0,001	0,24	0,94	0,26	0,80	0,80	0,42	1,89	0,06
M' (BSEC)	0,05	0,18	0,25	0,80	0,22	0,13	1,71	0,09	0,20	0,16	1,21	0,23	0,20	0,17	1,17	0,25
X'M' (interaction)	0,05	1,04	0,05	0,96	0,54	0,23	2,36	0,02	0,20	0,62	0,33	0,74	0,19	0,65	0,29	0,78
	R ² =0,01, MSE=0,81 F(3,71)=0,26; p=0,85				R ² =0,11, MSE=0,79 F(3,129)=12,00; p<0,001				R ² =0,04, MSE=0,63 F(3,68)=0,57; p=0,64				R ² =0,09, MSE=0,63 F(3,75)=3,76; p=0,01			

Annex 28. Results from regression analysis of hypothesis 4 in all regions

	North				Center				Metropolitan Region of Lisbon				Alentejo			
	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p
Constant	2,57	0,09	29,47	<0,001	2,88	0,08	37,87	<0,001	2,67	0,08	34,83	<0,001	2,77	0,09	31,25	<0,001
X' (PERFG)	-0,24	0,15	-1,63	0,11	-0,39	0,13	-3,04	0,003	-0,23	0,11	-2,08	0,04	-0,32	0,15	-2,15	0,03
M' (SCOLL)	-0,11	0,11	-0,95	0,35	-0,26	0,12	-2,09	0,04	-0,07	0,11	-0,60	0,55	-0,12	0,12	-1,01	0,31
X'M' (interaction)	-0,38	0,15	-2,46	0,02	-0,13	0,19	-0,69	0,49	-0,10	0,11	-0,85	0,40	-0,18	0,17	-1,06	0,29
	R ² =0,08, MSE=0,72 F(3,90)=3,29; p=0,02				R ² =0,14, MSE=0,77 F(3,140)=5,03; p=0,002				R ² =0,06, MSE=0,60 F(3,115)=1,98; p=0,12				R ² =0,13, MSE=0,79 F(3,82)=4,24; p=0,008			

Annex 29. Results from regression analysis of hypothesis 5 in all regions

	North				Center				Metropolitan Region of Lisbon				Alentejo			
	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p
Constant	2,53	0,10	24,43	<0,001	2,81	0,09	32,25	<0,001	2,65	0,09	30,17	<0,001	2,80	0,09	30,18	<0,001
X' (CMIS)	0,52	0,36	1,47	0,15	0,75	0,58	1,29	0,20	0,01	0,30	0,04	0,97	0,91	0,58	1,57	0,12
M' (SCOLL)	-0,14	0,14	-0,97	0,34	-0,17	0,14	-1,27	0,21	-0,40	0,12	-3,45	0,001	-0,22	0,14	-1,54	0,13
$X'M'$ (interaction)	-0,46	0,54	-0,84	0,40	0,14	0,75	0,18	0,86	-0,28	0,27	-1,04	0,30	0,72	1,15	0,63	0,53
	$R^2=0,03, MSE=0,79$ $F(3,71)=2,11; p=0,11$				$R^2=0,10, MSE=0,80$ $F(3,128)=1,92; p=0,13$				$R^2=0,20, MSE=0,54$ $F(3,68)=5,10; p=0,003$				$R^2=0,15, MSE=0,74$ $F(3,76)=2,67; p=0,05$			

Annex 30. Results from regression analysis of hypothesis 6 in all regions

	North				Center				Metropolitan Region of Lisbon				Alentejo			
	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p
Constant	2,55	0,10	26,79	<0,001	2,87	0,07	38,65	<0,001	2,63	0,09	29,93	<0,001	2,82	0,10	28,94	<0,001
X' (PERFG)	-0,31	0,14	-2,19	0,03	-0,29	0,13	-2,24	0,03	-0,22	0,13	-1,74	0,08	-0,40	0,14	-2,87	0,005
M' (SSUP)	0,04	0,09	0,49	0,63	-0,30	0,11	-2,85	0,01	0,05	0,09	0,61	0,54	0,05	0,09	0,53	0,60
$X'M'$ (interaction)	-0,20	0,15	-1,33	0,19	-0,06	0,12	-0,55	0,58	0,03	0,10	0,35	0,74	-0,23	0,13	-1,75	0,08
	$R^2=0,06, MSE=0,74$ $F(3,90)=3,07; p=0,03$				$R^2=0,16, MSE=0,75$ $F(3,142)=6,17; p<0,001$				$R^2=0,05, MSE=0,60$ $F(3,116)=1,75; p=0,16$				$R^2=0,16, MSE=0,61$ $F(3,81)=4,21; p=0,008$			

Annex 31. Results from regression analysis of hypothesis 7 in all regions

	North				Center				Metropolitan Region of Lisbon				Alentejo			
	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p
Constant	2,52	0,11	23,57	<0,001	2,80	0,08	35,67	<0,001	2,67	0,10	27,53	<0,001	2,80	0,09	30,57	<0,001
X' (CMIS)	0,39	0,52	0,74	0,46	0,73	0,30	2,43	0,02	0,19	0,36	0,54	0,59	0,73	0,42	1,72	0,09
M' (SSUP)	-0,01	0,11	-0,11	0,91	-0,28	0,10	-2,65	0,01	-0,21	0,11	-2,00	0,05	-0,10	0,10	-1,01	0,31
$X'M'$ (interaction)	0,04	0,68	0,05	0,96	0,13	0,31	0,41	0,69	-0,48	0,37	-1,30	0,20	0,46	0,68	0,68	0,50
	$R^2=0,01, MSE=0,81$ $F(3,71)=0,23; p=0,88$				$R^2=0,14, MSE=0,77$ $F(3,130)=4,78; p=0,003$				$R^2=0,11, MSE=0,60$ $F(3,69)=1,52; p=0,22$				$R^2=0,10, MSE=0,62$ $F(3,75)=1,82; p=0,15$			

Annex 32. Results from regression analysis of hypothesis 8 in all regions

	North				Center				Metropolitan Region of Lisbon				Alentejo			
	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p
Constant	2,52	0,11	22,61	<0,001	2,82	0,08	35,04	<0,001	2,66	0,09	29,33	<0,001	2,80	0,09	29,91	<0,001
X' (CAAW)	0,16	0,11	1,50	0,14	0,10	0,07	1,48	0,14	0,04	0,08	0,43	0,67	0,06	0,09	0,68	0,50
M' (SCOLL)	-0,18	0,15	-1,24	0,22	-0,24	0,14	-1,77	0,08	-0,45	0,13	-3,57	<0,001	-0,24	0,14	-1,71	0,09
$X'M'$ (interaction)	-0,05	0,14	-0,38	0,71	0,01	0,11	0,05	0,96	0,04	0,10	0,35	0,73	0,09	0,12	0,72	0,47
	$R^2=0,05, MSE=0,80$ $F(3,72)=0,99; p=0,40$				$R^2=0,05, MSE=0,84$ $F(3,128)=1,88; p=0,14$				$R^2=0,18, MSE=0,54$ $F(3,70)=4,61; p=0,01$				$R^2=0,07, MSE=0,65$ $F(3,74)=1,64; p=0,19$			

Annex 33. Results from regression analysis of hypothesis 9 in all regions

	North				Center				Metropolitan Region of Lisbon				Alentejo			
	Coeff.	SE	<i>t</i>	<i>p</i>	Coeff.	SE	<i>t</i>	<i>p</i>	Coeff.	SE	<i>t</i>	<i>p</i>	Coeff.	SE	<i>t</i>	<i>p</i>
Constant	2,60	0,10	26,42	<0,001	2,81	0,08	37,88	<0,001	2,67	0,09	28,88	<0,001	2,81	0,10	29,07	<0,001
<i>X'</i> (CCAW)	0,14	0,09	1,63	0,11	0,08	0,07	1,19	0,24	-0,02	0,08	-0,32	0,75	0,03	0,09	0,32	0,75
<i>M'</i> (SSUP)	-0,13	0,09	-1,38	0,17	-0,33	0,10	-3,22	0,002	-0,24	0,11	-2,10	0,04	-0,07	0,10	-0,70	0,48
<i>X'M'</i> (interaction)	-0,28	0,07	-3,89	<0,001	-0,06	0,08	-0,75	0,46	-0,15	0,09	-1,67	0,10	0,02	0,11	0,21	0,83
	R ² =0,18, MSE=0,69 <i>F</i> (3,71)=5,91; <i>p</i> =0,001				R ² =0,10, MSE=0,80 <i>F</i> (3,130)=5,00; <i>p</i> <0,001				R ² =0,12, MSE=0,60 <i>F</i> (3,72)=1,74; <i>p</i> =0,17				R ² =0,01, MSE=0,70 <i>F</i> (3,73)=0,23; <i>p</i> =0,88			