

UNIVERSITÉ DU QUÉBEC À MONTRÉAL

PERFORMANCE OF ACADEMICS: HOW SURFACE ACTING, EMOTIONAL
EXHAUSTION AND JOB AUTONOMY AFFECT THEIR WORK

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PERFORMANCE DES PROFESSEURS: COMMENT LA SIMULATION DES
ÉMOTIONS, L'ÉPUISEMENT ÉMOTIONNEL ET L'AUTONOMIE
PROFESSIONNELLE AFFECTENT LEUR TRAVAIL

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COMME EXIGENCE PARTIELLE
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À ma grand-maman Ginette
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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	4
DEDICATION	6
LIST OF FIGURES	9
LIST OF TABLES.....	10
SUMMARY	11
RÉSUMÉ	13
CHAPTER I	15
GENERAL INTRODUCTION	15
1.1 Purpose of the Doctoral Project	7
1.2 Theoretical Context.....	8
1.2.1 Job Demands-Resource Model and Conservation of Resources Theory.....	8
1.3 Empirical Evidence for the Proposed Model.....	11
1.3.1 Emotional Labor and Performance.....	11
1.3.2 Emotional Exhaustion as a Mediator.....	12
1.3.5 Job autonomy as a Moderator.....	14
1.5 Ethics.....	18
CHAPTER II.....	20
PERFORMANCE OF ACADEMICS: HOW SURFACE ACTING, EMOTIONAL EXHAUSTION AND AUTONOMY AFFECT THEIR WORK	20
Abstract.....	22
Theoretical Perspective on Emotional Labor, Emotional Exhaustion and Performance....	25
The Moderating Role of Job Autonomy.....	28
Method	31
Participants and procedure	31
Measures	32
Data Analysis.....	34
Results.....	34
Preliminary analyses, descriptive statistics and correlational analyses.....	34
Mediation Analysis.....	36
Moderated mediation analysis.....	38
Implications.....	49
Limitations	51
Conclusion.....	52
References	53
CHAPTER III.....	38
GENERAL DISCUSSION.....	38
3.1 Implications for Research	68
3.2 Practical Implications.....	69

3.3 Study Limitations and Directions for Future Research	73
3.4 Conclusion	74
APPENDIX A	66
A.1 Confirmation of Ethics Committee	76
A.2 Information and Consent Form (French Version)	77
A.3 Information and Consent Form (English Version)	82
APPENDIX B	76
B.1 Questionnaire (French Version)	88
B.2 Questionnaire (English Version)	95
REFERENCES	88

LIST OF FIGURES

Figure		Page
Figure 1.1	Proposed moderated mediation model	17
Figure 2.1	Proposed moderated mediation model	31
Figure 2.2	Moderated role of autonomy in the relationship between emotional exhaustion and administrative activities	45
Figure 2.3	Moderated role of autonomy in the relationship between emotional exhaustion and assessment and review activities	46

LIST OF TABLES

Table		Page
Table 2.1	Descriptive statistics and correlations among study	39
Table 2.2	Mediation analysis of the association between surface acting and performance outcomes through emotional exhaustion	41
Table 2.3	Conditional indirect effect of surface acting on performance outcomes via emotional exhaustion for values of autonomy	43

SUMMARY

Professors have a demanding job requiring the deployment of a considerable amount of energy in the performance of tasks of various kinds (e.g., teaching, research, etc.). Since professors' performance is highly dependent on others, they must regularly do emotional labor in the form of surface acting, which is defined as, the expression of emotions that are not really felt. As this strategy depletes the resources professors need to do their jobs, this can lead to emotional exhaustion, which can in turn affect their job performance. However, professors, also have resources that can counter the negative effects of certain demands of their work, including emotional labor. In fact, professors have a great deal of professional autonomy that allows them, among other things, to organize their work schedules and to prioritize certain tasks. Professional autonomy has a twofold role: it can protect professors by giving them flexibility in the performance of certain tasks, but it can also hinder teachers' performance by allowing teachers to spend less time on certain tasks. Based on the Job Demands-Resources Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) and the Conservation of Resources theory (Hobfoll, 1989) this research project aims to better understand the dynamics between emotional labor, emotional exhaustion and professional autonomy in predicting job performance among professors.

The first objective of this doctoral essay is to examine the mediating role of emotional exhaustion in the relationship between surface acting and professors' performance. Moreover, being a resource that professors constantly use, the second objective of this essay is to examine the moderating role of professional autonomy within the mediation named above. More specifically, this essay aims to show the dual role that professional autonomy can have by offering on the one hand a flexibility to professors while being able to hinder their performance in certain facets of their work. To this end, an individual assessment of seven aspects of professors' performance will be made because of the unique nature of each facet.

The sample of this study is made up of 1,021 professors (453 men and 568 women) between the ages of 28 and 81 ($M = 48.5$, $SD = 9.3$) from 11 French- and English-speaking universities in the province of Quebec, Canada. They were asked to complete an online questionnaire assessing (1) faculty requirements, performance and well-being, as well as (2) individual and environmental factors that may facilitate their performance and well-being.

The results of the moderated mediation analyses indicate that surface acting negatively predicts professors' performance in two aspects of their job (administrative activities as well as assessment and review activities) by fostering emotional exhaustion, particularly when professional autonomy is high. The overall results of this study lead to reflect on how professors can protect themselves from the demands of their work such as simulating emotions while using the resources at their disposal. More specifically, despite the fact that autonomy is an important resource, it could be detrimental to teachers as a high level of autonomy exacerbates the effect of emotional exhaustion in the negative relationship between emotional exhaustion and their performance with respect to the administrative tasks and assessment and review activities. In addition, autonomy has not significantly moderated the relationship between surface acting, emotional exhaustion and the other five components of performance: (1) research funding, (2) publications, (3) research dissemination, (4) teaching activities and (5) research supervision. One possible explanation would be that administrative tasks and assessment and review activities are tasks that are more often neglected. Professional autonomy would therefore allow professors to choose to allocate their time to a task other than these.

Theoretically, this study contributes to research on professors' performance by providing a better understanding of the relationship between emotional labor, resources, and performance. In addition, this study offers an explanation as to the mechanisms that can increase or decrease the performance of teachers. In practical terms, this study could allow them to become aware of the consequences of the emotional labor they feel at work and then to evaluate how they use their autonomy to cope with this requirement.

Keywords: professors, emotional labor, emotional exhaustion, performance, job autonomy.

RÉSUMÉ

Les professeurs occupent un emploi exigeant nécessitant le déploiement d'une quantité d'énergie considérable dans l'accomplissement de tâches de diverses natures (p.ex., l'enseignement, la recherche, etc.). Puisque la performance des professeurs dépend beaucoup d'autrui, les professeurs doivent régulièrement effectuer du travail émotionnel sous forme de simulation des émotions, c'est-à-dire, la feinte des émotions qui ne sont pas réellement ressenties. Comme cette stratégie épuise les ressources dont les professeurs ont besoin pour faire leur travail, ceci peut mener à l'épuisement émotionnel, ce qui peut affecter à son tour leur performance en emploi. Par contre, les professeurs possèdent également des ressources qui peuvent contrer les effets négatifs de certaines exigences de leur travail, notamment le travail émotionnel. En effet, les professeurs disposent d'une grande autonomie professionnelle qui leur permet entre autres, d'organiser leurs horaires de travail et de prioriser certaines tâches. L'autonomie professionnelle occupe un double rôle, soit de protéger les professeurs en leur offrant une flexibilité dans l'accomplissement de certaines tâches, mais peut aussi nuire à la performance des professeurs en permettant à ces derniers d'investir moins de temps dans certaines tâches. En se basant sur la théorie des exigences et des ressources au travail (*Job Demands-Resources model*) (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) ainsi que la théorie de conservation des ressources (*Conservation of Resources theory*) (Hobfoll, 1989), ce projet de recherche vise à mieux cerner la dynamique existant entre le travail émotionnel, l'épuisement professionnel et l'autonomie professionnelle dans la prédiction de la performance en emploi chez les professeurs.

Le premier objectif de cet essai doctoral est d'examiner le rôle médiateur de l'épuisement émotionnel dans la relation entre la simulation des émotions et la performance chez les professeurs. Par ailleurs, étant une ressource que les professeurs utilisent constamment, le deuxième objectif de cet essai est d'examiner le rôle modérateur de l'autonomie professionnelle au sein de la médiation nommée précédemment. Plus précisément, cet essai vise à montrer le double rôle que peut avoir l'autonomie professionnelle en offrant d'une part une flexibilité aux professeurs tout en pouvant nuire à leur performance dans certaines facettes de leur travail. À cet effet, une évaluation individuelle de sept aspects de la performance des professeurs sera effectuée en raison de la nature unique propre à chacune de ces facettes.

L'échantillon de cette étude est composé de 1 021 professeurs (453 hommes et 568 femmes) âgés entre 28 et 81 ans ($M = 48.5$, $SD = 9.3$) provenant de 11 universités francophones et anglophones de la province du Québec, au Canada. Ils ont été invités

à remplir un questionnaire en ligne en lien évaluant (1) les exigences propres à la fonction des professeurs, leur performance et leur bien-être, ainsi que (2) les facteurs individuels et environnementaux qui peuvent faciliter leur performance et leur bien-être.

Les résultats des analyses de médiation modérée indiquent que la simulation des émotions prédit négativement la performance des professeurs dans deux volets de leur fonction (les activités administratives ainsi que les activités d'évaluation et de révision) en favorisant l'épuisement professionnel, particulièrement lorsque l'autonomie professionnelle est élevée. L'ensemble des résultats de cette étude mène à réfléchir sur la façon dont les professeurs peuvent se protéger des exigences de leur travail comme la simulation des émotions tout en utilisant les ressources à leur disposition. Plus précisément, malgré le fait que l'autonomie soit une ressource importante, celle-ci pourrait causer préjudice aux professeurs étant donné qu'un haut niveau d'autonomie exacerbe l'effet de l'épuisement émotionnel dans la relation négative entre la simulation des émotions et leur performance en ce qui a trait aux volets administratifs et d'évaluation et de révision. Par ailleurs, l'autonomie n'a pas significativement modéré la relation entre la simulation des émotions, l'épuisement professionnel et les cinq autres volets de la performance, soit : (1) les subventions de recherche détenues, (2) les publications, (3) la diffusion de la recherche, (4) l'enseignement et (5) la supervision de la recherche. Une explication possible serait que les activités administratives et les activités d'évaluation et de révision sont des tâches qui sont plus souvent négligées. L'autonomie professionnelle permettrait donc aux professeurs de choisir d'allouer leur temps à une tâche autre que celles-ci.

Au plan théorique, cette étude contribue à la recherche sur la performance des professeurs en permettant une meilleure compréhension de la relation entre le travail émotionnel, les ressources, et la performance. De plus, cette étude offre une explication quant aux mécanismes qui peuvent accentuer ou diminuer la performance chez les professeurs. Au plan pratique, cette étude pourrait d'abord permettre à ceux-ci de prendre conscience des conséquences du travail émotionnel ressenti au travail et ensuite d'évaluer la façon dont ils utilisent leur autonomie pour faire face à cette exigence.

MOTS CLÉS : Professeurs, travail émotionnel, simulation des émotions, épuisement émotionnel, performance, autonomie professionnelle.

CHAPTER I
GENERAL INTRODUCTION

University professors are tasked with shaping the workforce of tomorrow. A professor's day to day schedule is paved with a number of different undertakings, including teaching, research dissemination, research supervision, as well as administrative, institutional and executive activities. Professors' performance is thus evaluated according to these different aspects of their job. Teaching in higher education requires a variety of skills. Professors are asked to build or redesign courses, to adapt different methods of teaching, to deal with students with different levels of learning abilities and to use communication technology, such as slideshow presentations or online platforms used to convey class-related information and to inspire students in order to conceptualize a phenomenon (Ramsden, 2003). Furthermore, a central aspect of a professor's job revolves around research. Publishing scientific articles is a complicated process in which a researcher must contribute to scientific knowledge through innovative studies (Gordon, 1986). A professor can spend approximately 20% of his/her time on research and scholarly writing, but that does not take into consideration the time spent applying for research grants, and planning or adjusting research papers according to peer reviews (Peterson & Wiesenberg, 2006). The research project itself is based on innovation and can take up much of a professor's time depending on the magnitude of the project (Denning, 1997). Conducting research has been said to be the main source of stress among academics (Abouserie, 1996). As the merit associated with a publication depends on the journal in which it is published (e.g. peer-reviewed journals), professors often feel pressured to be published in renowned journals (Larivière, Vignola-Gagné, Gélinas, & Gingras, 2011; Miller, Taylor, & Bedeian, 2011). Furthermore, as the publication field is highly competitive, an atmosphere of competition can often be found amongst colleagues from a same department or discipline (Abouserie, 1996). In this vein, concerns regarding the number of publications often outweigh concerns regarding the quality of the research projects (Sax, Hargedorn, Arredondo, & DiCrisi, 2002). In this sense, research productivity is essential in order to perform as it plays a role in career advancement, financial rewards and professional recognition (Miller et al., 2011). Moreover,

professors are often asked to present their results at conferences or symposiums, give interviews and develop media relations (Peterson & Wiesenber, 2006). It must be mentioned that they seldom work alone during the research process, which can lead to added work tasks. Indeed, professors must often supervise their students or research staff (Leder, 1995). In addition to this, professors take on administrative roles in which they contribute to the development of their department or institution (Newmann & Terosky, 2007). All these aspects are taken into account when evaluating professors' overall performance. As the culture of performance amongst this population is very present (Rawat & Meena, 2014), professors can feel pressure to attain ambitious goals in many of their work areas (e.g., teaching, research), even though these areas are difficult to conciliate (Miller et al., 2011).

Overall, professors have many demands related to their job that can affect their performance. Job demands are physical, psychological, social and organizational aspects of one's job which require sustained physical or psychological effort and imply physical or psychological costs (Schaufeli & Bakker, 2004). For example, professors are judged by students according to their teaching skills, which in turn impacts their overall performance as academics. This is an example of a situation that can increase professors' emotional labor (Glomb, Kammeyer-Mueller, & Rotundo, 2004), which creates pressure to manage one's emotions in order to maintain good ratings (Mahoney, Buboltz, Buckner, & Doverspike, 2011). Emotional labor is a job demand defined as the effort, planning and control needed to display appropriate emotions which conform to the organization's expectations (Hochschild, 1983; Morris & Feldman, 1996; Ogbonna & Harris, 2004).

There are three main categories of emotional labor strategies: (1) surface acting, where a person simulates emotions that are not actually felt (i.e., faking), (2) deep acting, where a person modifies felt emotions in order to display what others want them to display (i.e., suppressing; Hochschild, 1983), and (3) genuine display of emotions which

can also create emotional labor as a person must consciously make an effort to ensure that their emotions coincide with expectations of the organization (Ashforth & Humphrey, 1993; Diefendorff, Croyle, & Gosserand, 2005). Many studies including a meta-analysis (Bono & Vey, 2005) have shown that surface acting, in comparison to the other emotional labor strategies, shows the strongest relationship with emotional exhaustion as it is hard to sustain (Hoffman, 2016; Hulsheger & Schewe, 2011; Mahoney et al., 2011; Xanthopoulou, Bakker, Oerlemans, & Koszucka, 2018). Taking into consideration these past findings, the present project will solely take into account this particular emotional labor strategy.

The display of emotions in the workplace tends to be dictated by emotional display rules or expectations, which are used to facilitate the attainment of other work goals (Ashforth & Humphrey, 1993; Cropanzano, Weiss, & Elias, 2004; Gosserand & Diefendorff, 2005). Therefore, in a given situation, an employee will compare his/her emotions with the display rules of the organization (Gosserand & Diefendorff, 2005). If there is a discrepancy between one's emotional display and that of the organization's, a person will then use emotional regulation strategies to adjust their emotions to the organization's expectations (Gosserand & Diefendorff, 2005). This adjustment depletes a person's individual resources and can lead to emotional exhaustion (Bakker et al., 2004; Gosserand & Diefendorff, 2005), which can subsequently lead to a decrease in their overall performance at work (Cropanzano, Rupp, & Byrne, 2003; Demerouti, Bakker, & Leiter, 2014; Mahoney et al., 2011; Moon & Hur, 2011; Ogbonna & Harris, 2004). Emotional exhaustion is defined as a chronic feeling of emotional, cognitive and physical fatigue (Bakker, Demerouti, & Verbeke, 2004). However, even though professors face many demands, they are equipped with job resources that can help influence the extent to which they are affected by these demands. Resources are defined as the physical, psychological, social and organizational aspects of one's job that helps them (1) achieve their goals, (2) reduce job demands and their psychological or physiological impacts, or (3) foster personal

growth or development (Bakker et al., 2004). One particularly important resource is job autonomy. Job autonomy is defined as independence from others while completing tasks as well as the freedom of decision regarding work content, pace and phases (Bakker, Demerouti, & Euwema, 2005). University professors have a certain degree of freedom and flexibility regarding their tasks, schedules and the organization of their day (Ward & Wold-Wendel, 2004), which facilitates goal attainment. Job autonomy has been found to mitigate the negative effect of demands, as it offers the possibility to take control over one's tasks and schedule (Bakker & Demerouti, 2007; Bakker et al., 2005; Schaufeli, Bakker, & Van Rhenen, 2009).

Emotional labor is a concept that has been studied greatly in a wide variety of populations such as customer service representatives, call center representatives and teachers (Grandey, Fisk, & Steiner, 2005; Holman, Chissick, & Totterdell, 2002; Sutton, 2004). However, few studies have examined emotional labor in academics. These few studies, however, mention that emotional labor is very common amongst academics (Bellas, 1999; Mahoney et al., 2011; Meier, 2009) and can affect three main aspects of their job. The first aspect is teaching. As professors spend a lot of time in front of groups, it is essential that they are able to regulate their emotions. Furthermore, interactions with students can take up a certain amount of time. Studies have shown that these long interactions with students increase the effort needed to maintain proper emotional displays (Mahoney et al., 2011; Morris & Feldman, 1996; Zapf, 2002). Moreover, according to Sutton (2004), emotional regulation is necessary for successful teaching as it allows the adaptation to many different situations that could occur in a classroom. Furthermore, there is a certain level of emotional involvement regarding student misbehavior or academic failure which would both trigger negative emotions in professors (Mahoney et al., 2011).

The second aspect is administrative, executive and institutional activities. Institutional activities, such as service, require favorable interactions between faculty members and

students, alumni, potential donors or sponsors, administrators and legislators in order to help the promotion of the institution (Bellás, 1999). It is an important part of an academic's professional life as it promotes networking which facilitates research collaborations and can enhance one's career (Bellás, 1999). Thus, surface acting occurs when professors must interact with others to promote the institution when they do not feel like doing so (Bellás, 1999). In fact, due to the display rule of expressing positive emotions for service work, it can be difficult for professors to do so if they are not in a positive mood. Another institutional activity is committee meetings, which refers to meetings that professors must attend to discuss matters relating to the department or institution to which they are affiliated with. The level of emotional labor in committee work will depend on the individuals attending the meetings, the issues involved and the consensus amongst the members (Bellás, 1999). As the emotional display rules require that these meetings take place in a cordial, respectful setting, the regulation of one's feelings is thus necessary in order to comply with the norms established by the institution (Bellás, 1999). Moreover, professors often deal with administrative and executive tasks. Professors have to supervise subordinates and report to people in higher positions. Doing this can create emotional labor as they have to convey certain information, which at times can be difficult or delicate (Bellás, 1999). Furthermore, those who do not conform to the expected behavioral and emotional norms can face poor evaluations or sanctions (Bellás, 1999). Thus, it could be in their best interest to display positive emotions even if they do not feel them.

The third aspect is research-related activities, such as research funding, publications, research dissemination through conferences, interviews in the media, research supervision, or assessment and review activities. Depending on the type of research conducted, emotional labor can have an impact on professors. Research requires absolute neutrality to avoid any interference with the studied topic. However, remaining neutral can be difficult if the researcher is studying something emotionally charged (e.g., pedophilia, conjugal violence, etc.) (Bellás, 1999). Furthermore,

researchers can become involved in their subjects' lives as interviews can elicit powerful emotions that must be controlled to preserve the neutrality of the study (Bellás, 1999). Moreover, researchers tend to be emotionally invested in their research projects due to the effort put into, and the interest for, the topic and must regulate their emotions to remain neutral for the interpretation of the data (Bellás, 1999). Emotional labor affects professors in other areas of research, such as through communication with research assistants (Bellás, 1999). Researchers must care for their motivation and offer the appropriate training, which can create conflict at times (Bellás, 1999). Moreover, communication skills are essential for professors as they have to network and self-promote to facilitate co-authorship and collaborations, which in themselves can create emotional labor (Bellás, 1999). Furthermore, professors often attend conferences to present their research projects or data. As a poor presentation can affect their reputation, they must replace their fear and anxiety with calm and confident manners (Bellás, 1999).

1.1 Purpose of the Doctoral Project

The main purpose of this doctoral project is to determine how surface acting affects the performance of university professors through emotional exhaustion and how job autonomy influences this sequence.

This doctoral project will have significant theoretical and practical contributions. First, the proposed model combines sequences that derive from two theoretical models: (1) using the Job Demands-Resources model (JD-R) (Demerouti et al., 2001) to explain the mediating role of emotional exhaustion in the relationship between emotional demands and performance and (2) using the Conservation of Resources theory (COR) (Hobfoll, 1989) to explain the moderating role of job autonomy in the relationship between emotional exhaustion and performance. Doing so will offer in-depth insight

into the interplay between job demands, job resources, emotional exhaustion and performance. Second, to our knowledge, the proposed model has never been tested before amongst university professors. Indeed, although the interplay of these variables has been tested separately on a variety of workers holding different positions, including construction workers, industrial workers, transportation workers, nurses and service workers (Bakker et al., 2004; Brotheridge & Grandey, 2002; Goodwin, Groth, & Frenkel, 2011) this will be the first study to test the combined model amongst academics. Given that very few studies have focused on university professors' performance (Gulbrandsen & Smeby, 2005; Peterson & Wiesenbergs, 2006; Ogbonna & Harris, 2004), this study will provide insight into the work-related and individual factors that can either promote or hinder this performance. Furthermore, the few studies that have focused on the performance of professors have investigated this variable in a narrow manner. These studies have merely focused on obtained research funding, teaching and service to the community. In the present study, seven indicators will be assessed in order to obtain an encompassing view of performance of professors: (1) obtained research funding, (2) publications and research or scholarly outputs, (3) research dissemination through conferences, interviews and media relations, (4) teaching, (5) research supervision, (6) administrative, institutional and executive activities and (7) assessment and review activities.

1.2 Theoretical Context

1.2.1 Job Demands-Resource Model and Conservation of Resources Theory

The JD-R model (Demerouti et al., 2001) was designed to provide insight into the antecedents of employee functioning, including burnout, work engagement and job performance (Bakker & Demerouti, 2017). A central assumption of the model is that

even though job characteristics can vary greatly from one job to the next, there are two main categories that characterize every job, which are job demands and job resources (Demerouti et al., 2001). This model can thus be applied to any organizational context, regardless of the particular demands and resources unique to its environment (Bakker & Demerouti, 2007). The JD-R model proposes two distinct processes through which job characteristics (demands and resources) influence employee well-being. First, job demands activate a depletion process by requiring employees to invest a sustained effort in order to overcome these demands, which comes at a physical or psychological cost (Crawford, LePine, & Rich, 2010). This sustained investment drains employees' individual resources, resulting in energy depletion (i.e., exhaustion; Demerouti et al., 2001) and feelings of being worn out (Crawford et al., 2010). Second, resources activate a motivational process by fostering professional growth and development and satisfying employees' needs for autonomy, competence and relatedness (Crawford et al., 2010). This increases the employee's desire to dedicate more effort to the task, which translates into improved performance (Crawford et al., 2010).

Regarding job demands, Crawford and colleagues (2010) subsequently added that job demands can be divided into two categories: challenges or hindrances. A demand perceived as a challenge will be stressful but will promote mastery or future gains, for example, high job responsibility (Crawford et al., 2010). However, when demands are perceived as hindrances, they generate stress and can hinder the attainment of work goals by generating negative emotions or passive emotional styles of coping, for example, role ambiguity or emotional labor (Crawford et al., 2010; Mahoney et al., 2011). According to the JD-R model and the challenge-hindrance framework, job hindrances are likely to negatively affect performance (LePine, Podsakoff, & LePine, 2005). This can be explained by the fact that when facing a hindrance, employees tend to withdraw from the situation and are less willing to invest themselves to respond to the demand because they feel unable to adequately do so (Crawford et al., 2010).

A particularly important job hindrance for professors is surface acting. It has been shown that university professors report high levels of surface acting due to their interaction with students and other colleagues (Mahoney et al., 2011; Meier, 2005; Ogbonna & Harris, 2004). Surface acting requires considerable effort to sustain a specific emotional state, which can lead to emotional exhaustion (Mahoney et al., 2011) and reduce work performance (Mahoney et al., 2011; Ogbonna & Harris, 2004). In fact, according to Demerouti et al. (2004), surface acting depletes the necessary individual resources needed to perform adequately.

Although the JD-R model explains that contextual resources such as job autonomy can buffer the negative impact of job demands on work outcomes (e.g., Bakker et al., 2004; Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007), Conservation of Resources theory (COR; Hobfoll, 1989) offers valuable insight into how previous and future resources can have an impact on a person's ability to benefit from these resources. At the basis of COR theory is the idea that human beings seek to acquire new resources as well as retain, foster and protect their current resources (Hobfoll, 2001). The types of resources (e.g., objects, states, conditions, energies, personal characteristics, etc.) can vary amongst individuals as they can vary in importance. There are several principles that underlie COR theory. First is the primacy of resource loss (Hobfoll, 1998). This implies that the loss of resources is disproportionately more salient than resource gain (Hobfoll, 1998). Studies have shown that the loss of resources in a work setting often leads to strain in the form of burnout (Shirom, 1989). In order to avoid this, employees tend to engage in behaviors that will allow them to protect and conserve their current resources or by investing their current resources to acquire new ones. This relates to another COR theory principle. By investing in new resources, individuals can protect themselves against—or recover from—resource loss (Hobfoll, 2001). For example, by expressing genuine positive emotions (i.e., an emotional resource) at work, professors can protect themselves against future emotional exhaustion (Mahoney et al., 2011). Building on these principles, Hobfoll (1998, 2001) added corollaries to extend the

knowledge surrounding COR theory. The first corollary refers to the resource spiral. The resource spiral refers to how employees equipped with resources can more easily acquire new resources (Hobfoll, 2001). On the other hand, the loss spiral refers to how employees with little resources are more prone to losing these resources. In line with this, it has been proposed that the loss of resources leads to attempts to protect and conserve remaining resources (Hobfoll, 2001). In other words, when individuals lose resources, they will modify their behavior to protect the resources they have left.

1.3 Empirical Evidence for the Proposed Model

1.3.1 Emotional Labor and Performance

According to the JD-R model, employees rely on resources in order to perform and when resources are depleted, this leads to a decrease in performance (Bakker & Demerouti, 2007). Therefore, based on JD-R, surface acting should be negatively related to performance as emotional labor adds a considerable amount of stress to professors' work-life (Ogbonna & Harris, 2004) which in turn depletes one's mental resources needed to perform (Hülshager & Schewe, 2011).

According to the Ego depletion theory (Baumeister, 2002), this effect can be explained by the fact that self-regulation (i.e. the conscious effort to modify a behavior), when used on a regular basis, will deplete one's individual resources, just like a muscle that becomes tired (Baumeister, 2002; Baumeister & Vohs, 2007). Emotional labor arises from emotional regulation (Totterdell & Holman, 2003), an intrinsic part of self-regulation. This is due to the fact that emotional regulation requires an effort to produce a certain expected emotional state which depletes one's individual resources (Grandey, 2000). Based on Ego depletion theory, surface acting occurs when there is a depletion of the individual resources employees once had to function normally. In the workplace,

the lack of individual or contextual resources leads to a series of consequences, including diminished performance (Hülshager & Schewe, 2011). Therefore, surface acting should lead to diminished performance (Tice & Bratslavsky, 2000). This relationship has been shown by Ogbonna and Harris (2004), who conducted an exploratory study in a sample of university professors. The authors conducted 54 in-depth interviews with a wide range of university professors from six universities and revealed that participants expressed that complying with emotional display expectations (i.e. the organization's expectations of appropriate emotions), is an important part of their working lives. Results also reveal that professors are subjected to high-performance expectations regarding teaching, researching, the obtainment of funds, consulting, mentoring as well as administration, which are linked to a raise in the emotional labor given the university has emotional display rules which are also expected to be followed by professors.

1.3.2 Emotional Exhaustion as a Mediator

Emotional labor has been found to have important repercussions on employees, including emotional dissonance and job dissatisfaction (Choi, Kim, & Kim, 2014; Morris & Feldman, 1996; Pugliesi, 1999) as well as emotional exhaustion (Brotheridge & Grandey, 2003; Grandey, 2003; Pugliesi, 1999). Hindrance job demands, such as emotional labor, necessitate the deployment of energy in order to carry out these demands, leading to strain, dissatisfaction and feelings of exhaustion and being worn out (Crawford et al., 2010).

The relationship between emotional labor and emotional exhaustion has been empirically observed in a variety of workers (e.g., Brotheridge & Grandey, 2003; Grandey, 2003; Pugliesi, 1999), including university professors (Mahoney et al., 2011).

In their study among 598 American professors, Mahoney et al. (2011) found that emotional labor is directly linked to emotional exhaustion.

Moreover, according to JD-R, the relationship between emotional exhaustion and performance should be negative as employees experiencing emotional exhaustion do not have the necessary individual resources needed to perform at work (Bakker & Demerouti, 2017). There is strong empirical evidence for this negative relationship (Cropanzano et al., 2003; Demerouti et al., 2014; Moon & Hur, 2011; Taris, 2006; Wright & Bonett, 1997).

Demerouti et al. (2014) conducted a study among 294 workers from the Netherlands and found that burnout (which is conceptualized notably through symptoms of emotional exhaustion; Maslach, 1982) diminishes performance. The authors suggest that the feelings of exhaustion emerge from the intolerance of any effort due to a lack of energy. Although the negative relationship between emotional exhaustion and performance has been studied and supported in a variety of working populations, including nurses, police officers, desk workers, human service personnel and customer service employees (Bakker et al., 2004; Bakker & Heuven, 2006; Brotheridge & Grandey, 2002; Wright & Bonnet, 1997), it has not been tested amongst university professors. Due to the competitive nature of a professor's job and the fact that their performance is measured in a way that is not generalizable to other jobs, it is important to understand which aspects of their performance can be influenced by emotional exhaustion.

In sum, when workers do emotional labor, they have to allocate extra effort to their tasks, as the emotional regulation process will deplete one's individual resources (Grandey, 2000; Totterdell & Holman, 2003), resulting in emotional exhaustion (Mahoney et al., 2011). As such, the worker doing emotional labor will have to expend more effort to reach the same goal as a worker who is not doing emotional labor. This

can affect their performance at work as a lack of individual resources can lead to diminished performance (Hülshager & Schewe, 2011; Ogbonna & Harris, 2004).

To our knowledge, there is only one study that examined the mediating role of emotional exhaustion in the relationship between emotional demands and work performance (Bakker et al., 2004). However, this study did not assess precisely the role of surface acting as an emotional demand (i.e., emotional demands were evaluated globally). Moreover, past research has provided support to individual parts of this sequence: the relationship between emotional demands and emotional exhaustion (e.g., Brotheridge & Grandey, 2003), the relationship between emotional exhaustion and performance (e.g., Cronpanzano et al., 2003; Wright and Bonnet, 1997). It is important to investigate surface acting as a specific job demand given that the display of emotions is an aspect of work that occurs on a daily basis. It can thus lead to negative consequences by regularly adding stress to a worker's life, thereby depleting their individual resources needed to perform adequately (Hülshager & Schewe, 2011). In light of such results as well as the ones presented in the previous sections, we suggest that:

Hypothesis 1: Emotional exhaustion will mediate the relationship between surface acting and performance.

1.3.5 Job autonomy as a Moderator

Previous studies have examined how autonomy can buffer the negative effects of job demands on emotional exhaustion (e.g., Bakker, Demerouti, & Euwema, 2005; Taipale, Selander, Anttila, & Nätti, 2011; Xanthopoulou et al., 2007). However, as university professors deal with several job demands which can have a negative impact on their well-being and performance, it is important to investigate the contextual

resources that could alter these outcomes. As job autonomy is an important resource for professors (Ward & Wolf-Wendel, 2004), its protective role should be studied more in-depth and in a different perspective. In other words, since emotional exhaustion is common among this population (Mahoney, Buboltz, Doverspike, & Buckner, 2011) it is important to better understand how professors can cope with the negative effects of emotional exhaustion on their performance due to emotional labor. To our knowledge, the moderating role of job autonomy in the relationship between emotional exhaustion and performance has never been tested. Nevertheless, it is reasonable to postulate that job autonomy could play a moderating role in the relationship between surface acting, emotional exhaustion and performance. First, because hindrance stressors (e.g., surface acting) tend to hinder the achievement of job tasks (Cavanaugh et al., 2000) and valued goals as well as produce negative work outcomes, such as emotional exhaustion (Brotheridge & Grandey, 2003; Grandey, 2003; Pugliesi, 1999) employees facing these demands have lower motivation or capacity to invest in contextual resources to deal with these stressors (Lin, Ma, Wang, & Wang, 2015).

Moreover, job autonomy could influence the extent to which individuals are able to conserve or protect their current individual resources when facing hindrance stressors. In fact, a study conducted by Peng et al. (2018) has shown the moderating effect of autonomy on stressor-performance relationships. In their study using a sample of 266 full-time employees, the authors showed that the negative hindrance stressor-performance relationship is stronger for employees with high autonomy than for those with low autonomy as it provides them with a sense of freedom, choice and control in their actions. This is due to the fact that employees with high autonomy are withholding efforts in order to protect and conserve their remaining individual resources. In other words, because doing hindrance stressors, such as emotional labor, deplete individual resources and leads to emotional exhaustion (Brotheridge & Grandey, 2003; Grandey, 2003; Pugliesi, 1999), withholding efforts in performing certain tasks by using job autonomy could help professors conserve their psychological resources, resulting in

reduced performance. Conversely, professors with low job autonomy have less freedom and choice to conserve their individual resources and have to perform work tasks as required by the job (Peng et al., 2018), which may result in less reduced performance.

As with the JD-R model, the challenge-hindrance demand framework applies to COR theory (Crawford et al., 2010; Peng, Zhang, Xu, Matthews, & Jex, 2018). Hindrance demands such as surface acting, create obstacles to personal achievement by causing negative symptoms, such as burnout (Shirom, 1989). However, in order to protect themselves against these obstacles resulting in poor performance and future losses of individual resources, COR theory and the resource allocation strategy explain that individuals can either invest in contextual resources, such as job autonomy, or they can simply protect the individual resources they currently have by, for example, decreasing their performance levels (Hobfoll, 2001). In this vein, the resource allocation strategy is influenced by the nature of the demand, its consequences and the person's existing resources (Peng et al., 2018).

Nonetheless, a person who has lost resources and cannot rely on many more can suffer from a loss spiral, where they cannot benefit from new resources as they cannot acquire them (Hobfoll, 2001). On the other hand, a person who has lost a resource but can rely on other ones could benefit from future resources and can invest in them in order to protect themselves against future losses, and thus benefit from a gain spiral (Hobfoll, 2001).

As university professors have a certain degree of freedom and flexibility regarding their schedules and the organization of their day (Ward & Wold-Wendel, 2004), job autonomy is a resource they rely on in order to reach their goals. Thus, it is important to examine how job autonomy, as a moderator, influences the relationship between emotional exhaustion and performance. Based on COR theory and the resource

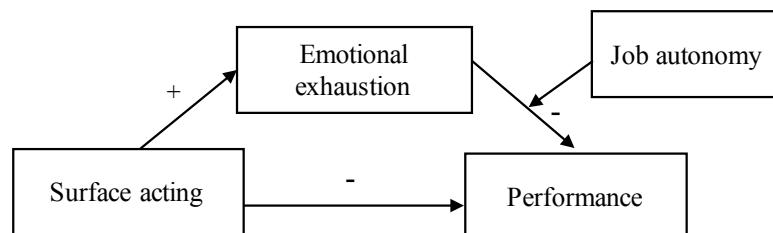
allocation strategy, the level of job autonomy professors possess could increase the negative relationship between emotional exhaustion and performance.

Since autonomy plays a moderating role in the relationship between hindrance demands (i.e., surface acting) and performance (Peng et al., 2018) and that emotional exhaustion plays a mediating role in the relationship between emotional labor and performance (Bakker et al., 2004), we posit that job autonomy will moderate the mediated relationship between surface acting, emotional exhaustion and performance. Thus:

Hypothesis 2: Autonomy will moderate the mediating effect of emotional exhaustion in the relationship between surface acting and performance. The mediating effect will be stronger when job autonomy is high.

The aim of the present study is to investigate how surface acting affects the performance of university professors through emotional exhaustion. Furthermore, we wish to assess the role of job autonomy as a resource in the interplay between surface acting, emotional exhaustion and consequently, performance. We anticipate that surface acting will lead to emotional exhaustion and reduced job performance. We also anticipate that professors who have high job autonomy will experience a decrease in performance levels due to their capacity to protect and conserve their remaining individual resources in the context of emotional exhaustion.

Figure 1.1. Proposed moderated mediation model.



1.5 Ethics

This doctoral project is compliant with the ethics committee of the Université du Québec à Montréal. All doctoral students and supervisors were in possession of their research ethics certificate in compliance with the Course on Research Ethics from the Panel on Research Ethics from the Government of Canada. The study cared for the participant's well-being and welfare, as well as assured their respect. As this project involved human beings, the participants had to sign a consent form before beginning the survey. This consent form required that participants give their free and informed consent and explained that they may choose to stop their participation at any given time during the study. The researcher's contact information was available on the consent form in case of any questions, concerns or comments.

For every 100 participants, a \$100-value prepaid Visa gift card was drawn. A report presenting the general results of the study was offered to participants. In order to do so, a section in the consent form was available to express the interest. As the invitation emails were sent out individually, the participants who expressed the interest in receiving the report were traceable. Once the data had been used for the purpose of the study, it was transferred to the main researcher's computer and laboratory, which were both locked at all times and were accessible only by the laboratory members.

The data was collected via Survey Monkey, an online survey platform. The data collected was then stored on American servers, which were in compliance with recommendations made by the USA PATRIOT Act. As the invitation to participate in the survey was sent by email, anonymity could not be guaranteed. However, once the survey was completed, a participant number was assigned to each participant with

which they were identified for the duration of the study. Therefore, confidentiality was guaranteed. In order to assure the confidentiality of the collected data, it was stored on computers belonging to the doctoral student's director. These computers were only available to students working under the director's supervision.

The risks and advantages of participating in this study were explained in the consent form. This project did not pose any major risk for the participant. Negative feelings could have arisen when completing the survey, however, these feelings were comparable to what a person could feel on a daily basis. If they felt the need to withdraw from the study due to these feelings, they could do so at any moment.

CHAPTER II

PERFORMANCE OF ACADEMICS: HOW SURFACE ACTING, EMOTIONAL
EXHAUSTION AND AUTONOMY AFFECT THEIR WORK

(SCIENTIFIC ARTICLE)

PERFORMANCE OF ACADEMICS: HOW SURFACE ACTING, EMOTIONAL
EXHAUSTION AND AUTONOMY AFFECT THEIR WORK

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Abstract

Based on the Job Demands-Resources (JD-R) model and the Conservation of Resources (COR) theory, this study examined the mediating role of emotional exhaustion in the relationship between surface acting (emotional labor dimension) and performance in the academic profession as well as the moderating role of job autonomy in this mediation. A total of 1,021 professors from 11 English- and French-speaking universities in the province of Quebec, Canada took part in this study. Results indicated that emotional exhaustion mediated the relationship between surface acting and several indicators of performance and that job autonomy influenced these relationships. More specifically, these results indicate that (1) emotional exhaustion mediated the relationship between surface acting and research funding, research dissemination, administrative tasks and assessment and review activities and (2) the negative effect of surface acting on administrative tasks and assessment and review activities through emotional exhaustion was significant only for employees high on job autonomy. However, results show that professors with low job autonomy perform less than those with high job autonomy regardless of their levels of emotional exhaustion due to surface acting. Theoretical and practical implications on the performance of academics are proposed.

Keywords: professors, emotional labor, emotional exhaustion, performance, job autonomy.

Performance of Academics: How Surface Acting, Emotional Exhaustion and Autonomy Affect Their Work

Past research has shown how job demands affect burnout and performance (Bakker, Demerouti, & Verbeke, 2004; Demerouti, Bakker, & Leiter, 2014). This applies to university professors, as the culture of performance amongst this population is very present (Rawat & Meena, 2014). A professor's day to day schedule is paved with a number of different undertakings, including teaching, research dissemination, research supervision, as well as administrative, institutional and executive activities. Professors' performance is evaluated according to these different multidimensional aspects of their job and they can often feel pressured to perform and attain certain goals because of the number of work tasks they have and the difficulty to conciliate them (Miller et al., 2011).

Within these multiple work tasks, professors can often face job demands that can accentuate the difficulty of performing adequately their tasks by depleting their individual resources and creating emotional exhaustion (Mahoney et al., 2011). In fact, past research has shown that professors are often emotionally exhausted due to their work demands (Mahoney et al., 2011). A particularly important job demand for professors is surface acting, a dimension of emotional labor (Mahoney et al., 2011), due to their interactions with students and other colleagues (Mahoney et al., 2011; Meier, 2005; Ogbonna & Harris, 2004). Surface acting refers to the simulation of emotions that are not actually felt (i.e., faking) (Hochschild, 1983). This concept has been studied greatly in a wide variety of populations such as customer service

representatives, call center representatives and teachers (Grandey, Fisk, & Steiner, 2005; Holman, Chissick, & Totterdell, 2002; Sutton, 2004). However, little is currently known regarding surface acting in academics. The few studies on the matter show that emotional labor and more specifically surface acting is very common amongst academics (Bellas, 1999; Mahoney et al., 2011; Meier, 2009).

Research shows that surface acting can have negative repercussions on professors, as it can accentuate emotional exhaustion (Cropanzano, Rupp, & Byrne, 2003; Demerouti et al., 2014; Mahoney et al., 2011; Moon & Hur, 2011; Ogbonna & Harris, 2004). Emotional exhaustion can subsequently lead to a decrease in performance at work because it depletes the individual resources needed to maintain enough energy to perform adequately (Bakker et al., 2004). However, even though professors face many demands, they are equipped with job resources that can help alleviate the negative effects of these demands (Mahoney et al., 2011). One particularly important contextual resource is job autonomy. University professors often rely on job autonomy as they have a certain degree of freedom and flexibility regarding their schedules, the tasks they undertake as well as the organization of their day (Ward & Wold-Wendel, 2004). It has been shown that job autonomy mitigates the negative effect of demands, as it offers the possibility to take control over one's tasks and schedule (Bakker & Demerouti, 2007; Bakker et al., 2005; Schaufeli, Bakker, & Van Rhenen, 2009). However, to our knowledge, the role of job autonomy as a resource has never been examined amongst professors when studying the relationship between emotional labor, emotional exhaustion and performance. In fact,

autonomy could influence the relationship between emotional exhaustion and performance by allowing professors to conserve their remaining energy resources by deciding how, when and where to allocate them.

The purpose of the present study was to examine whether 1) the association between surface acting and performance was mediated by emotional exhaustion and whether 2) this mediation was moderated by job autonomy.

Theoretical Perspective on Emotional Labor, Emotional Exhaustion and Performance

The Job Demands-Resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) provides insight into the antecedents of employee functioning, including burnout, work engagement and job performance (Bakker & Demerouti, 2017). A central assumption of this theoretical perspective is that although job characteristics can vary greatly across jobs, there are two main categories that characterize every job, which are job demands and job resources (Demerouti et al., 2001). Job demands are physical, psychological, social and organizational aspects of one's job which require sustained physical or psychological effort and are associated with physical or psychological costs (Schaufeli & Bakker, 2004). Job resources are defined as the physical, psychological, social and organizational aspects of one's job that helps (1) achieve work goals, (2) reduce job demands and their psychological or physiological impacts, or (3) foster personal growth or development (Bakker et al., 2004). This model can thus be applied to any organizational context, regardless of the

particular demands and resources present in its environment (Bakker & Demerouti, 2007).

Regarding job demands, Crawford et al. (2010) subsequently added that job demands can be divided into two categories: challenges and hindrances. A demand perceived as a challenge (e.g., job responsibilities) will be stressful but will promote mastery or future gains whereas demands perceived as hindrances (e.g., emotional labor) generate stress and can hinder the attainment of work goals by generating negative emotions or passive emotional styles of coping (Crawford et al., 2010; Mahoney et al., 2011).

A particularly important hindrance for professors is emotional labor. Emotional labor refers to the effort, planning and control needed to display appropriate emotions which conform to the organization's expectations (Hoschild, 1983; Morris & Feldman, 1996; Ogbonna & Harris, 2004). There are three main categories of emotional labor strategies: (1) surface acting, where a person may simulate emotions that are not actually felt (i.e., faking), (2) deep acting, where a person may modify felt emotions to display what others want them to display (i.e., suppressing; Hoschild, 1983), and (3) genuine displays of emotions which can also create emotional labor as a person must consciously make an effort to ensure that their emotions coincide with expectations of the organization (Ashforth & Humphrey, 1993; Diefendorff, Croyle, & Gosserand, 2005). It has been shown that professors report high levels of emotional labor, more specifically surface acting, due to their

interaction with students and other colleagues (Mahoney et al., 2011; Meier, 2005; Ogbonna & Harris, 2004).

According to the JD-R model and the challenge-hindrance framework, job hindrances such as emotional labor are likely to lead to strain and negatively affect performance (LePine, Podsakoff, & LePine, 2005; Mahoney et al., 2011). This can be explained by the fact that job demands (including hindrances) activate a depletion process by requiring employees to invest a sustained effort in order to overcome these demands, which comes at a physical or psychological cost (Crawford, LePine, & Rich, 2010). This sustained investment drains employees' individual resources, resulting in energy depletion (i.e., emotional exhaustion, defined as chronic feelings of emotional, cognitive and physical fatigue; Bakker et al., 2004; Demerouti et al., 2001) and feelings of being worn out (Crawford et al., 2010). This impoverished psychological state subsequently results in reduced performance (Demerouti et al., 2014).

In line with this, research, including among professors, shows that emotional demands, such as surface acting are negatively linked to performance through emotional exhaustion (Bakker et al., 2004; Mahoney et al., 2011; Ogbonna & Harris, 2004). When workers do emotional labor, they have to allocate extra effort to their tasks, as the emotional regulation process depletes one's individual resources (Grandey, 2000; Totterdell & Holman, 2003), resulting in emotional exhaustion (Brotheridge & Grandey, 2002; Grandey, 2003; Pugliesi, 1999; Mahoney et al., 2011). As such, a worker doing emotional labor will have to expend more effort to

reach the same goal as a worker who is not doing emotional labor, negatively affecting their performance (Hülshager & Schewe, 2011; Ogbonna & Harris, 2004). Indeed, when job demands are high and specifically emotional demands (Bakker, Demerouti, & Verbeke, 2004), employees find it difficult to allocate their attention, energy and individual resources to the task at hand due to the greater effort needed to complete it. In response to emotional demands, exhausted employees will tend to reduce their efforts at work to lower the impact of such demands, which in turn will diminish their performance (Bakker et al., 2004). As such, emotional exhaustion plays a key role in explaining the relationship between job (emotional) demands and performance.

In light of such results, we suggest that:

Hypothesis 1: Emotional exhaustion will mediate the relationship between surface acting and performance.

The Moderating Role of Job Autonomy

Although job demands reduce employees' capacity to take control of their work environment thus reducing their overall efficiency (Fried, Ben-David, Tieg, Avital & Yeverehyahu, 1998), job resources can influence this effect (Bakker et al., 2004).

The Conservation of Resources (COR) theory (Hobfoll, 1989) offers insight into how job resources, such as autonomy, can alter the way individuals deal with work demands. At the basis of COR theory is the idea that human beings seek to

acquire new resources as well as retain, foster and protect their current resources (Hobfoll, 2001). The types of resources that individuals seek (e.g., objects, states, conditions, energies, personal characteristics, etc.) can vary as they hold different meanings for different people.

Hindrance stressors such as emotional labor, create obstacles to personal achievement and cause negative outcomes, such as burnout (Crawford et al., 2010; Shirom, 1989). However, according to COR theory, in order to protect themselves against these outcomes and future losses of resources, individuals can either seek additional resources, such as job autonomy, or they can simply protect the resources (e.g., energy, self-esteem) they currently have by, for example, decreasing their performance levels (Hobfoll, 2001). Autonomy is defined as independence from others while completing tasks as well as the freedom of decision regarding work pace and phases (Bakker, Demerouti, & Euwema, 2005). In this vein, the allocation of resources is influenced by the nature of the stressor and the person's existing resources (Peng et al., 2018). In other words, whether a person decides to invest in resources or conserve their remaining ones can depend on whether the stressor is perceived as a hindrance or a challenge and the person's amount of pre-existing resources. In this vein, an employee is more likely to invest in resources if the stressor is perceived as a challenge rather than as a hindrance as it is perceived as a "good" stressor, since the benefits following this investment can outweigh the cost of the actual investment (Demerouti & Bakker, 2011).

As individuals rely on resources to invest in future resources, when there is a loss of individual resources, for example, emotional labor (i.e. energy), it can lead to an increase of emotional exhaustion, which then becomes more difficult to acquire new ones in order to increase performance at work, thus resulting in a loss spiral (Hobfoll, 2001).

As university professors have a certain degree of freedom and flexibility regarding their schedules and the organization of their day (Ward & Wold-Wendel, 2004), job autonomy is a resource they rely on to reach their goals.

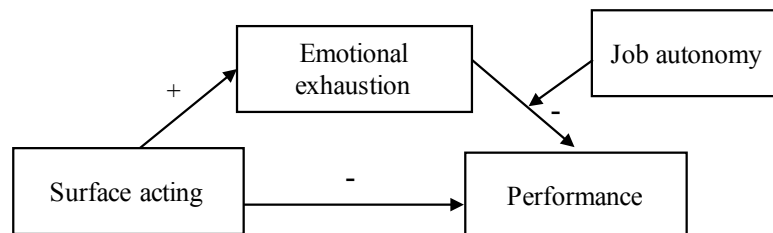
According to COR theory, job autonomy could thus moderate the impact of emotional exhaustion on performance for professors as it provides them with a sense of freedom, motivation, choice and control in their actions. Because surface acting depletes individual resources and can lead to emotional exhaustion, using job autonomy to modulate efforts in the completion of their tasks could help professors conserve and protect their remaining individual resources, which would, therefore, increase the negative relationship between exhaustion and performance. In other words, professors with high job autonomy could refrain from effort in order to conserve their individual resources, which would, therefore, decrease their performance. Conversely, professors with low job autonomy have less freedom at work. This could influence the extent to which they would decrease their performance to conserve their individual resources. The mediated relationship between surface acting, emotional exhaustion and performance would then be stronger for professors with high job autonomy.

Accordingly, we posit that:

Hypothesis 2: Autonomy will moderate the mediating effect of emotional exhaustion in the relationship between surface acting and performance. The mediating effect will be stronger when job autonomy is high.

Figure 2.1

Proposed moderated mediation model



Method

Participants and procedure

The sample consisted of 1,021 professors (453 men and 568 women) from 11 English- and French-speaking universities in the province of Quebec, Canada. A total of 8,393 professors were contacted at work via email to participate in the study (response rate of 14%). The age of participants ranged from 28 to 81 years ($M = 48.5$, $SD = 9.3$). Participants had an average of two children living under their roof ($SD = 1.1$) and had an average of five graduate students under their supervision ($SD = 4.1$). All participants held a tenure position or a tenure track position.

The cross-sectional study was conducted after having received approval from the university's ethics committee. Participants were invited to complete an online questionnaire (available in both French and English) pertaining to (1) the work-related demands specific to professors, their performance and their well-being as well as (2) the individual or environmental factors that can affect their performance and well-being.

Measures

All scales originally in English were translated to French. The translation was made according to the back-translation method (Vallerand, 1989).

Surface Acting. The surface acting subscale (9 items) of the Discrete Emotions Emotional Labor Scale (DEELS; Glomb & Tews, 2003) was used to assess surface acting. Positive and negative emotions were grouped separately. On a Likert scale ranging from 1 (*I never keep this to myself*) to 5 (*I keep this to myself many times a day*), participants were asked to indicate how often they express emotions on the job when they do not really feel emotions such as enthusiasm or anger. The scale's Cronbach's alpha coefficient was of .89 for positive emotions and of .91 for negative emotions.

Emotional Exhaustion. The emotional exhaustion subscale of the Maslach Burnout Inventory-General Survey (MBI-GS; Maslach, Jackson, & Leiter, 1996) was used to assess emotional exhaustion. The scale has been translated to French by Papineau, Morin, Legault, Demers, Chevrier and Côté (2005). The emotional

exhaustion subscale is composed of 5 items (Cronbach's alpha coefficient. = .91). On a Likert scale ranging from 1 (*Never*) to 7 (*Everyday*), participants were asked to indicate to which extent they agree with statements such as: "*I feel emotionally drained from my work*".

Job Autonomy. The control subscale of the Areas of Worklife Scale. (AWS; Leiter & Maslach, 2003) was used to assess job autonomy. This subscale is composed of three items (Cronbach's alpha = .76). On a Likert scale ranging from 1 (*Totally disagree*) to 5 (*Totally agree*), participants were asked to indicate to which extent they agreed with statements such as: "*I control the way I do my job*".

Job Performance. A homemade questionnaire was used to assess job performance. The scale composed of seven items reflecting the areas of work in which professors have to perform. These specific work areas are (1) research funding, (2) publication and research or scholarly outputs, (3) research dissemination through conferences, interviews and media relations, (4) teaching, (5) research supervision, (6) administrative, institutional and executive activities, (7) assessment and review activities. These items were based on the Canadian Common CV, a governmental reference in scientific research. On a Likert scale ranging from 0 (*Worst performance*) to 10 (*Best performance*) or N/A (*Not applicable to my domain*), participants were asked to indicate how they would rate their performance in terms of both quantity and quality over the past year in the different areas of their work.

Data Analysis

Statistical analyses were carried out using SPSS v.24 (IBM, 2016).

Correlational analyses were first performed to examine associations between the study's variables. Mediation and moderation analyses were then conducted using Hayes' (2013) PROCESS macro for SPSS. This macro uses linear regression to estimate the total effect of a statistical model, the direct and indirect effect of mediations, and the direct or indirect conditional links (moderation; Hayes, 2012). Each analysis used 5,000 bootstrapping resamples and bias-corrected 95% confidence intervals (CI). Variables were standardized (Z score) prior to mediation and moderation analyses.

Results

Preliminary analyses, descriptive statistics and correlational analyses

A t-test was conducted in the preliminary analyses to determine whether there were differences between Anglophone and Francophone participants. Results showed there were no significant differences between the two groups with regard to the variables of interest (i.e., surface acting, emotional exhaustion, job autonomy and performance). Therefore, the two groups were dealt with in an undifferentiated manner.

Table 2.1 presents descriptive statistics and bivariate correlations among the study variables. Participants mean score on emotional exhaustion was 3.90, which aligns with past research showing that professors report higher than average levels of

emotional exhaustion (Cruz, Pole, & Thomas, 2007; Mahoney et al., 2011; McCann & Holt, 2009).

Since work and home demands can influence levels of emotional exhaustion, the number of graduate students under supervision and the number of children were controlled for (Peeters, Montgomery, Bakker, & Schaufeli, 2005). Moreover, as there are gender differences in surface acting as well as for emotional exhaustion, gender was also controlled for (Scott & Barnes, 2011; Yoleri & Bostanci, 2012). Furthermore, age was also controlled for as work performance can decline with age (Koopman-Boyden & Macdonald, 2010).

Results indicate that the number of children was significantly and negatively associated with teaching activities. The number of graduate students under supervision was significantly and positively associated with research funding, publications, research dissemination and research and supervision activities. Moreover, gender was significantly associated with emotional exhaustion and teaching activities as well as with research funding, publications, and autonomy: men reported more autonomy and greater performance in publication and research funding whereas women reported greater exhaustion and performance in teaching activities. Age was significantly and negatively associated with surface acting as well as emotional exhaustion and was significantly and positively associated with research dissemination, administrative tasks and assessment and review activities. Surface acting was significantly and positively associated with emotional exhaustion, and was

significantly and negatively associated with each indicator of performance Emotional exhaustion was also significantly and positively associated with each indicator of performance. With regard to autonomy, results show significant and negative links with surface acting and emotional exhaustion as well as significant and positive links with research funding, publications, research dissemination, research supervision, administrative tasks and assessment and review activities.

Table 2.1*Descriptive statistics and correlations among study.*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Number of children	2.17	1.13													
2. Number of grad. students	7.23	4.10	.08												
3. Gender	-	-	-.02	-.00											
4. Age	48.50	9.84	.00	-.06*	-.17*										
5. Autonomy	3.72	.67	.05	.00	-.16*	.05									
6. Assessment and review	7.88	2.48	-.00	.03	-.01	.17*	.10*								
7. Administrative tasks	8.04	2.44	.00	.03	.04	.09*	.15*	.40*							
8. Research supervision	8.14	2.50	-.01	.28*	.02	.09*	.10*	.38*	.34*						
9. Teaching	8.72	2.03	-.07*	-.02	.09*	.02	.06	.25*	.36*	.37*					
10. Research dissemination	7.26	2.62	.01	.22*	-.00	.10*	.18*	.29*	.21*	.33*	.15*				
11. Publications	7.09	2.55	-.01	.18*	-.12*	-.03	.17*	.37*	.14*	.33*	.06	.57*			
12. Research funding	6.31	3.14	.04	.18*	-.12*	-.03	.20*	.18*	.07	.25*	-.03	.46*	.52*		
13. Emotional exhaustion	3.90	1.52	.08	.06	.14*	-.21*	-.39*	-.16*	-.15*	-.06	-.09*	-.16*	-.19*	-.11*	
14. Surface acting	1.75	.82	-.03	-.01	.01	-.11*	-.17*	-.14*	-.15*	-.12*	-.08*	-.10*	-.08*	-.09*	.23*

Note. * $p < .05$.; gender (1=men, 2=women)

Mediation Analysis

Table 2.2 presents standardized beta regression coefficients and standard errors for each path in the mediation analyses. All the mediated relationships were stronger when professors were faking positive emotions rather than negative emotions. Due to this, the presented mediated relationships concern the faking of positive emotions.

Results show a significant negative indirect effect of surface acting through emotional exhaustion on four performance outcomes: research funding ($\beta = -.02$, $SE = .01$, 95% CI [$-.05$, $-.01$]), research dissemination ($\beta = -.04$, $SE = .01$, 95% CI [$-.07$, $-.02$]), administrative tasks ($\beta = -.02$, $SE = .01$, 95% CI [$-.04$, $-.01$]) and assessment and review activities ($\beta = -.02$, $SE = .01$, 95% CI [$-.04$, $-.01$]). Emotional exhaustion did not mediate the relationship between surface acting and publications, teaching activities and research supervision, respectively. Therefore, hypothesis 1 was partially supported.

Table 2.2

Mediation analysis of the association between surface acting and performance outcomes through emotional exhaustion.

Mediation	Path a		Path b		Path c' direct effect		Path c total effect	
	β	<i>SE</i>	β	<i>SE</i>	β	<i>SE</i>	β	<i>SE</i>
Surface acting → Emotional exhaustion → Research funding	.21***	.04	-.11**	.04	-.05	.04	-.08*	.04
Surface acting → Emotional exhaustion → Publications	.21***	.04	-.19***	.04	-.03	.04	-.07	.04
Surface acting → Emotional exhaustion → Research dissemination	.21***	.04	-.19***	.04	-.06	.04	-.10**	.04
Surface acting → Emotional exhaustion → Teaching activities	.21***	.04	-.08*	.04	-.05	.04	-.07	.04
Surface acting → Emotional exhaustion → Research supervision	.22***	.04	-.04	.04	-.08	.04	-.07	.04
Surface acting → Emotional exhaustion → Administrative tasks	.23***	.04	-.10	.04	-.10**	.04	-.12***	.04
Surface acting → Emotional exhaustion → Assessment and review activities	.21***	.04	-.10	.04	-.09*	.04	-.12**	.04

Note. Path a = effect of surface acting on emotional exhaustion. Path b = effect of emotional exhaustion on the performance outcome. Path c' direct effect = effect of surface acting on the performance outcomes. Path c total effect = mediation effect. *SE* = standard error. * $p < .05$; ** $p < .01$; *** $p < .001$

Moderated mediation analysis

In order to assess the moderated mediation analysis (Ng, Ang, & Chang, 2008; Preacher, Rucker, & Hayes, 2007), four conditions were established: (1) significant association between surface acting and the performance criterion; (2) significant association between surface acting and the performance criterion; (3) significant interaction between emotional exhaustion and job autonomy in the prediction of the performance criterion; (4) significant association between emotional exhaustion and the performance criterion, and (5) different conditional indirect effect of surface acting on the performance criterion via emotional exhaustion across low and high job autonomy.

As the results of the mediation analysis showed, emotional exhaustion mediates the relationship between surface acting and research funding, research dissemination, administrative tasks and assessment and review activities, the moderating role of job autonomy in only these mediations was tested. Results indicate that hypothesis 2 was partially supported. For research funding and research dissemination, analyses indicate that the indirect effect was not significantly moderated by job autonomy. For administrative tasks, results indicated that the indirect effect was significantly moderated by job autonomy ($\beta = -.02$, $SE = .01$, 95% CI [-.04, -.00]). For assessment and review activities, results also indicated that the indirect effect was significantly moderated by job autonomy ($\beta = -.02$, $SE = .01$, 95% CI [-.04, -.01]). As shown in Table 2.2, the indirect effects of surface acting on administrative tasks ($\beta = -.03$, $SE = .01$, 95% CI [-.06, -.07]) as well as assessment

and review activities ($\beta = -.04$, $SE = .01$, 95% CI [$-.07$, $-.02$]) through emotional exhaustion were negative and significant for participants with high job autonomy but not for participants with low job autonomy. Moreover, as presented in figures 2.2 and 2.3, professors with low job autonomy have relatively low performance levels for administrative tasks and assessment and review activities, regardless of their level of emotional exhaustion. Professors with high job autonomy have report a significant decrease in their performance (administrative tasks and assessment, review activities), such that their performance level in the context of high emotional exhaustion is similar to that of professors with low autonomy.

Table 2.3

Conditional indirect effect of surface acting on performance outcomes via emotional exhaustion for values of job autonomy.

Outcome	Moderator	Conditional indirect effect	SE	LLCI	ULCI
Research funding	Low job autonomy	-.00	.01	-.03	.02
	Mean	-.01	.01	-.03	.01
	High job autonomy	-.01	.01	-.04	.01
Publications	Low job autonomy	-.03	.01	-.06	-.01
	Mean	-.03	.01	-.05	-.01
	High job autonomy	-.03	.01	-.06	-.01
Research dissemination	Low job autonomy	-.03	.01	-.05	.00
	Mean	-.03	.01	-.05	-.01

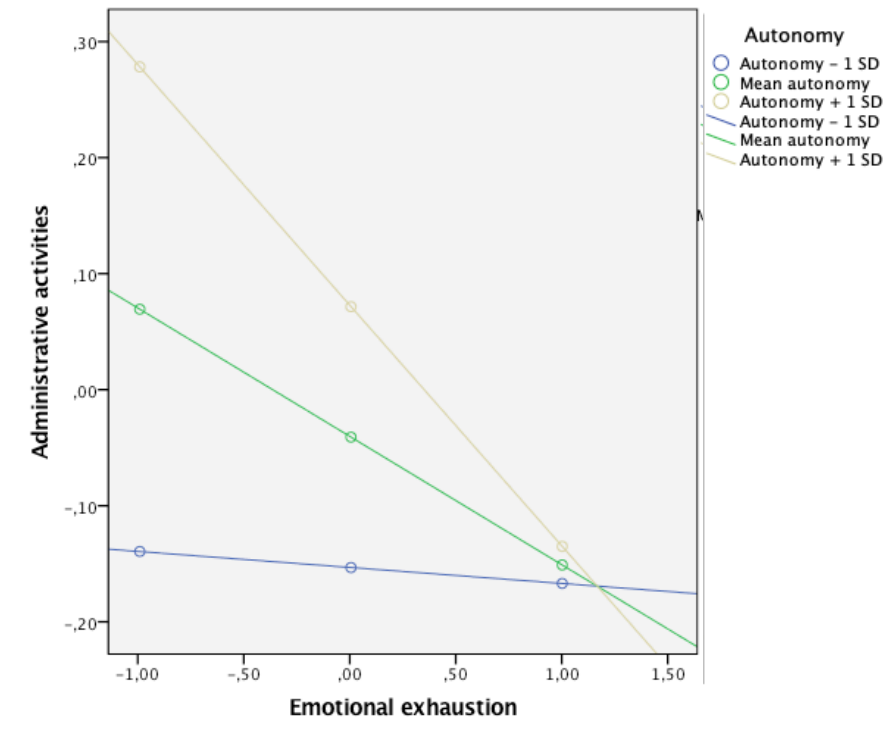
Teaching activities	High job autonomy	-.03	.01	-.07	-.01
	Low job autonomy	.00	.01	-.02	.03
	Mean	-.01	.01	-.03	.01
Research supervision	High job autonomy	-.02	.01	-.05	-.00
	Low job autonomy	.02	.01	-.01	.05
	Mean	-.00	.01	-.02	.02
Administrative tasks	High job autonomy	-.02	.01	-.05	.00
	Low job autonomy	.01	.01	-.02	.03
	Mean	-.01	.01	-.03	.01
Assessment and review activities	High job autonomy	-.03**	.01	-.06	-.07
	Low job autonomy	.01	.01	-.02	.04
	Mean	-.02	.01	-.04	.00
	High job autonomy	-.04**	.01	-.07	-.02

Note. LLCI = lower level of confidence interval; ULCI = upper level of confidence interval; *SE* = standard error.

** $p < .01$.

Figure 2.2

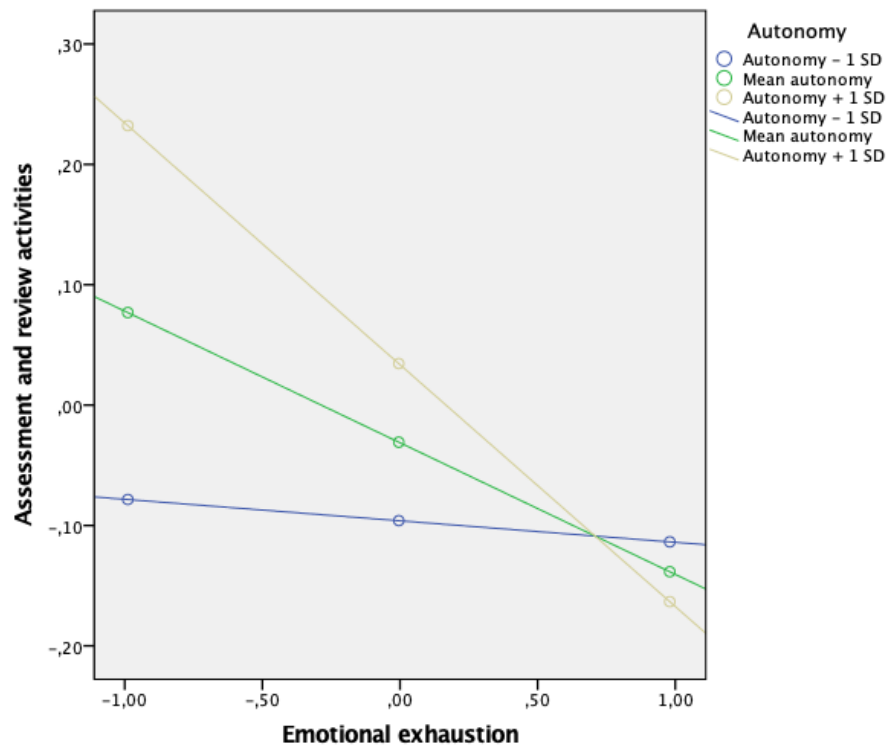
Moderated role of autonomy in the relationship between emotional exhaustion and administrative activities.



Note. SD = standard deviation.

Figure 2.3

Moderated role of autonomy in the relationship between emotional exhaustion and assessment and review activities.



Note. SD = standard deviation.

Discussion

Results from this study support previous empirical research on the JD-R model (Demerouti et al., 2001) and COR theory (Hobfoll, 1989). In general, results suggest that by simulating their emotions professors can experience a decrease in the performance of certain tasks through feelings of emotional exhaustion (i.e. loss of

energy resource). However, results also suggest that as job autonomy is an important part of a professor's job, they could use it in order to protect themselves against further losses of individual resources by, for example, limiting the efforts deployed in the accomplishment of certain tasks. However, doing so could increase the negative relationship between emotional exhaustion and their performance in these tasks.

Surface acting, emotional exhaustion and performance.

Our results suggest that surface acting is negatively associated with performance because of increased levels of emotional exhaustion. Surface acting depletes individual resources an employee has because of the discrepancy between felt emotions and expressed emotions (Crawford et al., 2010; Diefendorff & Gosserand, 2003). This discrepancy creates cognitive dissonance, which requires an effort to adjust to the given situation (Diefendorff & Gosserand, 2003). This depletion of individual resources can lead to emotional exhaustion, a state in which individuals have chronic feelings of emotional, cognitive and physical fatigue (i.e. lack of energy resources; Bakker et al., 2004). In turn, this may decrease their performance levels because of their inability to invest more individual resources in the achievement of their tasks. Indeed, resources such as energy or social support could improve performance levels if professors have the necessary resource capital to invest in them (Glaser, Seubert, Hornung, & Herbig, 2015; Reijseger, Schaufeli, Peeters, & Taris, 2012). Indeed, in order to benefit and use resources at their disposition, professors must have a necessarily individual resource capital (i.e. energy). In other words, if

professors are emotionally exhausted, investing in individual resources becomes more difficult (Demerouti et al., 2004).

More specifically, results show that emotional exhaustion explains the relationship between surface acting and professors' performance and four aspects of performance (1) research funding, (2) research dissemination, (3) administrative tasks and (4) assessment and review activities.

The discrepancy between felt emotions and expressed emotions could use professors' energy resources and could lead to emotional exhaustion thus decreasing their overall performance for research funding. Research funding is a long and tedious process for professors. They have to promote their research proposals to funding programs, which must be presented in a near-perfect way to increase their chances of being funded. Moreover, as the standards for the selection of grant recipients are high and that the number of applicants often outweigh the number of grants, professors spend a lot of time writing these proposals in a meticulous way and risk a negative response from the funding programs. This means that professors require a certain amount of individual resources to perform well in this aspect of their job. If they are emotionally exhausted due to surface acting, they might not have enough remaining individual resources in order to perform adequately in this aspect of their work.

Research dissemination, for example through the publication process, interviews or conferences, could be affected by surface acting, which could lead to emotional exhaustion and in turn, could make this aspect of their work difficult to

complete or sustain. First, the publication process of scientific articles is strenuous since the rejection rate can be as high as 90% (APA, 2018). It can be a very difficult process for professors because of the importance they give to their research and the acceptance rate of scientific articles. In order to push through the difficult times and stay focused on their work, professors could feel the need to allocate many resources to this aspect of their work. Moreover, professors must assess the importance of the journal in which they try to publish because of the prestige associated with the said journal. It goes without saying that the more renowned the journal, the harder it is to get published therefore professors could feel a lot of pressure to publish in a specific journal (Binswanger, 2015). If they are simulating their emotions and thus feeling emotionally exhausted, it could be difficult for them to allocate more resources to research dissemination. Another reason as to why surface acting would affect research dissemination, for example through interviews or conferences, could be that many people feel anxiety and discomfort when speaking in public (Arnold, 2018). Therefore, it could require many more individual resources to act with confidence and control even when they are feeling anxious or uncomfortable. If they are not equipped with such resources, this could result in decreased performance.

Also, our results reveal that when professors do surface acting they also report emotional exhaustion and decreased performance doing administrative work. Faking can happen when they are aware of the necessity of administrative tasks for the proper functioning of the department or institution while nonetheless feel negative emotions while doing them. Research shows that administrative tasks are not often

appreciated in the workplace (Wimsatt, Trice, & Langley, 2009). As administrative work is not the main part of the professor's busy schedule, it can be a hassle to do this work in a proper way. When feeling emotionally exhausted due to surface acting, they could restrain their efforts towards this task, thus resulting in poorer performance for administrative work.

Finally, results also reveal that when professors are emotionally exhausted from doing surface acting, this could decrease their performance levels for assessment and review activities. Assessment and review activities such as journal reviews, conference reviews, graduate examinations, application assessment or promotional tenure assessment can be a difficult part of the job because of the time it takes to perform these tasks. In order to do this in a proper way, professors must spend many hours reviewing their colleagues' or their students' work (Link, Swann, & Bozeman, 2008). This can be strenuous because of the possible repercussions that could come from doing these tasks in a superficial manner. Moreover, professors benefit from doing these tasks because they also need this feedback in return from their colleagues when they do research (Binswanger, 2015). Therefore, professors could find that reviewing their peers' or students' work is important but if they do not have the necessary individual resources to do it correctly due to feelings of emotional exhaustion, their performance levels could decrease.

The role of job autonomy in professors' performance

Moderated mediation results first indicate that job autonomy does indeed accentuate the negative relationship between emotional exhaustion and both

administrative tasks and assessment and review activities. The literature shows that autonomy is an essential resource for professors due to the nature of their work (Ward & Wold-Wendel, 2004). Without an actual manager to supervise their work, professors have to be autonomous in order to fill the duties of their job (Hamilton, 2007). However, results show that professors with low job autonomy have relatively low performance levels for administrative tasks and assessment and review activities, regardless of their level of emotional exhaustion. Professors with high job autonomy have the freedom and flexibility to make autonomous decisions about their work and can, therefore, decide how and when to do their work. This allows them to allocate the type of resources they want to the task they want to perform. Based on COR theory, this could allow them to conserve certain resources, for example, energy, and invest in others, such as social support. Thus, our results show that job autonomy is an important aspect of the job and a necessary resource needed to perform adequately at work for both administrative tasks and assessment and review activities.

Nevertheless, results show that job autonomy can have negative repercussions as it accentuates how emotional exhaustion contributes to the negative link between surface acting and two aspects of performance: (1) administrative tasks and (2) assessment and review activities. In other words, the performance of professors with high job autonomy was more affected by emotional exhaustion than those with lower job autonomy.

According to COR theory, individuals tend to seek to acquire new resources as well as retain, foster and protect their current resources (Hobfoll, 2001). However,

when individuals no longer have resources to invest in further ones, COR states that they will tend to conserve their remaining resources (Hobfoll, 2001). This idea refers to the loss spiral which explains that as the acquisition of resources requires an investment of resources, a previous loss of resources can prevent individuals to acquire and benefit from new ones, which in turn leads to further losses and so on (Hobfoll, 2001). For example, if professors do surface acting and are emotionally exhausted because of it and therefore lose energy resources, they could risk the inability to invest in more resources, due to the loss spiral, which could lead them to lose even more resources. They could risk losing individual resources such as self-efficacy, sense of control, self-esteem, emotional stability, etc. The reason why this relationship is stronger for professors with high job autonomy could be explained by the fact that professors with high job autonomy have freedom and flexibility which allows them to decide how and when to do their work along with the work pace and phases. As such, in the context of administrative tasks and assessment and review activities, professors could use their job autonomy to decide to put these tasks aside when feeling emotionally exhausted (i.e. loss of energy resources) from surface acting. Since these tasks are not at the core of their role as professors, contrarily to teaching or doing research, for example, this could be a way to protect themselves from further losses of individual resources by scheduling them for another period of time.

The fact that job autonomy did not moderate the relationship between surface acting, emotional exhaustion and the other indicators of performance (research

funding, publications, research dissemination, teaching activities and research supervision) could be explained by the fact that administrative tasks and assessment and review activities are tasks that are overlooked due to their mundane characteristics (Wimsatt, Trice, & Langley, 2009). Job autonomy would thus allow them to choose to do something else with their time if they do not feel they have the energy to complete these tasks. Paperwork and high-stakes accountability demands such as administrative tasks and assessment and review activities are important, yet cause dissatisfaction amongst teachers (Van Droogenbroeck, Spruyt, Vanroelen, 2014). Previous research suggests that when feeling pressured to perform a task that does not intrinsically motivate them, professors respond by conserving their remaining individual resources by reducing their engagement (i.e. making an autonomous decision), which would result in poorer performance (Grant, 2008).

Implications

There are many implications to this study. First, we combined two sequences that have been tested separately: (1) the mediating role of emotional exhaustion in the relationship between emotional demands and performance (Bakker et al., 2004), and (2) the moderating role of job autonomy in the relationship between emotional exhaustion and performance (Peng et al., 2018). Doing so offers in-depth insight into the interplay between job demands, job resources, emotional exhaustion and performance. Furthermore, this expands our current understanding of the mechanisms and boundary conditions that can promote or hinder performance in the context of job

demands. Second, to our knowledge, this model has never been tested before amongst university professors. Indeed, although the interplay of these variables has been tested separately on a variety of workers holding different positions, including construction workers, industrial workers, transportation workers, nurses and service workers to name a few (Bakker et al., 2004; Brotheridge & Grandey, 2002; Goodwin, Groth, & Frenkel, 2011) this is the first study to test the combined models amongst academics. Given that very few studies have focused on university professors' performance (Gulbrandsen & Smeby, 2005; Peterson & Wiesenber, 2006; Ogbonna & Harris, 2004), this study provides insight into the organizational and individual factors that can either promote or hinder specific aspects of professors' performance. Indeed, the few studies that have focused on the performance of professors have investigated this variable in a narrow manner. Specifically, these studies have merely focused on obtained research funding, publications, teaching and service to the community (Gulbrandsen & Smeby, 2005; Mahoney et al., 2011; Watson & Thompson, 2010). In the present study, however, seven factors related to the performance of professors were assessed, which provides an encompassing view of this multifaceted concept.

Moreover, results from this study press the importance of preventing surface acting and emotional exhaustion amongst professors as the effects on performance for research funding, research dissemination, administrative tasks and assessment and review activities can be detrimental. As performance is at the basis of their profession, it is important to understand what can influence their performance and how to improve it. By understanding the mechanisms and conditions underlying

changes in performance levels, professors are better equipped to respond to them. The combination of these results alongside theoretical perspectives on the topic allows the possibility for professors to act consciously according to the demands that they face and the resources that they have to promote a better performance while considering their well-being. Future studies could examine ways in which professors could protect themselves from the negative effects of surface acting and emotional exhaustion in order to avoid their repercussions on their work. Specifically, individual characteristics such as the strength of inhibition, neuroticism and extraversion or contextual variables such as social support or the development of problem-solving or listening skills could be studied since personality and temperament are related to levels of emotional exhaustion (Christian, Garza, & Slaughter, 2011; Langelaan, Bakker, Van Doornen, & Schaufeli, 2006; Shani, Uriely, Reichel, & Ginsburg, 2014; Witt, Andrews, & Carlson, 2004; van Tooren, & Rutte, 2016).

Limitations

Although this study provided support for the predicted interactions, it is not without its limitations. First, since the aim of the study was to examine the relationship between surface acting and performance, we only measured one subscale for the emotional labor construct. However, future studies could compare all three types of emotional labor (i.e. surface acting, deep acting and the genuine display of emotions) to assess their respective impacts on emotional exhaustion and

performance. Moreover, the performance of professors was a self-reported measure and future studies could measure this variable in a more objective way with, for example, the h-index or the amount of research funding received. Furthermore, the cross-sectional design of this study prevents us from concluding any cause-effect relationships between surface acting and performance criteria. Finally, as our response rate was relatively low (14%) and that our sample was taken from mostly French-speaking universities in the province of Québec, the results from this study might not be representative of all professors.

Conclusion

In sum, based on the JD-R model and COR theory the present findings help to explain the role of job autonomy in the relationship between surface acting, emotional exhaustion and performance of professors. Doing so offers valuable insight into how contextual factors interact to explain performance in academic professors, a profession that has received little attention up to now. By revealing that (1) surface acting is positively related to emotional exhaustion which can lead to decreased performance for certain aspects of performance and that (2) this relationship is stronger for those with high job autonomy, future studies could contribute to the implementation of preventive measures aimed at protecting professors' performance and well as their well-being in the workplace.

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CHAPTER III
GENERAL DISCUSSION

The current study used the JD-R model as well as COR theory to examine the moderating role of job autonomy in the relationship between surface acting as a dimension of emotional labor, emotional exhaustion and performance of professors. Indicators of performance were assessed individually due to the unique nature of each one, in order to examine the contextual and individual antecedents of each indicator. Specifically, we hypothesized that emotional exhaustion would mediate the relationship between surface acting and performance and we also suggested that job autonomy would moderate this mediation: job autonomy would increase the negative relationship between emotional exhaustion and performance.

Results from this study partially support our hypotheses. First, the mediation analyses showed that the relationship between surface acting, emotional exhaustion and performance was supported for four out of seven aspects of performance (i.e., research funding, research dissemination, administrative tasks and assessment and review activities). Second, the moderated mediation analysis revealed that job autonomy moderated the mediation between surface acting, emotional exhaustion and two aspects of performance (i.e., administrative tasks and assessment and review activities). Autonomy increased the negative relationship between emotional exhaustion and these two aspects of performance.

According to JD-R model (Demerouti et al., 2001), job demands such as emotional labor deplete individual resources professors need to perform adequately at work. Results from this study suggest that when professors do surface acting, this creates a discrepancy between felt emotions and expressed emotions. This discrepancy depletes their individual resources and leads to emotional exhaustion (Diefendorff & Gosserand, 2003). This state of chronic emotional fatigue (Bakker et al., 2004) has important consequences. As professors need individual resources to perform at work and that faking their emotions depletes these resources, this demand decreases professors' performance levels in four particular areas of their job.

Research funding, research dissemination, administrative tasks and assessment and review activities all share one common characteristic, which is that they are all necessary, yet might not hold as much significance as other tasks (e.g., teaching or doing research) and where professors might not be able to put into practice their abilities (Boada, Diego, & Agullo, 2004; Navarro, Mas, & Jiménez, 2010). These tasks could require more energy to complete them, compared to other tasks such as teaching or doing research, because of the lack of motivation felt toward them (Boada et al., 2004; Navarro et al., 2010). As emotionally exhausted employees due to surface acting lack the necessary personal resources to conduct these demanding tasks, this could result in a significant decrease in job performance.

Moreover, COR theory (Hobfoll, 1989) suggests that individuals can decide when facing work demands whether they prefer to protect and conserve their remaining individual resources or invest in future resources. As job autonomy is an important resource for professors and it can help them allocate their time and energy in a proactive way, we suggest that it could be used to conserve their remaining individual resources when feeling emotionally exhausted from doing surface acting. Results from this study suggest that job autonomy is used as a resource to protect their remaining individual resources by, for example, refraining from effort. In this context, this could be beneficial for professors because it would allow them to conserve their remaining energy, but would however come at a cost. In fact, by doing so, professors could see their performance decrease in administrative tasks and assessment and review activities.

Administrative tasks and assessment and review activities are often perceived as being redundant tasks that are not particularly stimulating (Musselin & Becquet, 2008; Woolhandler & Himmelstein, 2014). When professors are emotionally exhausted due to surface acting, they could use their job autonomy as a resource to refrain from effort

in these tasks and allocate their remaining individual resources to other ones that could hold more value for them. Due to the mundane characteristics of these two aspects of professors' performance, this could explain why the moderated mediation was significant for these two aspects of professors' performance and not the four other indicators (i.e., research funding, research dissemination, administrative tasks and assessment and review activities).

This study, although not without its limitations, contains several theoretical and practical implications. The following sections will discuss them in more detail.

3.1 Implications for Research

This study tested a moderated mediation model that, to our knowledge, has never been tested before. Past studies have examined separately the relationship between emotional demands and emotional exhaustion (Brotheridge & Grandey, 2003) and emotional exhaustion and performance (Cronpanzano et al., 2003; Wright and Bonnet, 1997) and the moderating role of autonomy between emotional demands and performance (Peng et al., 2018), whereas this study examined how these variables were related within one theoretical model. Doing so provides valuable insight into the interplay between the variables, shedding light on how different aspects of professors' performance is altered.

Moreover, since the JD-R model and COR theory can be applied to any job or occupational setting, combining two theoretical models provides valuable insight into how job demands can deplete resources (the JD-R model) and how resources are affected by previous losses of resources (COR theory). Thus, by adding COR theory to the JD-R model, it puts forth an explanation regarding the interplay of variables.

Another contribution of this study to research is the concept of performance for professors. A professor's job performance differs greatly from other types of workers such as nurses, police officers or accountants. In fact, the specificities of their job require a clear measure of their performance to properly assess the construct (Ogbonna & Harris, 2004). Previous literature on the topic has not examined precisely the different aspects of their job. In fact, the few studies that have examined this construct have limited its measure to research funding, teaching and service to the community (Gulbrandsen & Smeby, 2005; Peterson & Wiesenber, 2006; Ogbonna & Harris, 2004). As professors are employed by the institution but yet remain independent in their work, it is important to understand the aspects that represent their overall performance. Teaching and doing research are indeed at the basis of their job, however, there are other aspects that are necessary to perform well as a professor.

In sum, these research implications put forth the relevancy of this study and stress the importance of future research on this topic. Future research is encouraged to replicate our findings in other professions that rely heavily on job autonomy, for example, medical doctors working in private practice or psychologists, by adapting the performance requirements.

3.2 Practical Implications

First, results of this study suggest that surface acting can have a negative effect on the performance of professors. In this vein, interventions aiming to reduce surface acting in the workplace could be beneficial. For example, the universities' departments or human resources could offer training to its staff on the display of authentic emotions in a healthy and appropriate manner. In fact, past studies have shown that the display of authentic emotions allows the replenishment of individual resources and acts as a

buffer against the strain of emotional labor (Grandey, Foo, Groth, & Goodwin, 2012). Moreover, a climate of authenticity in the workplace protects against the depletion of individual resources caused by emotional labor (Grandey et al., 2012). It is often encouraged to fake negative emotions in the workplace to avoid conflict or uncomfortable situations (Ashforth & Humphrey, 1993). However, results from the current study suggest that this comes at a cost. Therefore, encouraging a change of emotion-display culture in the workplace could help counteract these negative repercussions.

Furthermore, past studies on emotional labor and emotional contagion (i.e., the tendency to automatically mimic another person's facial expression and to converge emotionally; Hatfield, Cacioppo, & Rapson, 1994), show that employees' emotions can have an effect on the people around them (Hennig-Thurau, Groth, Paul, & Gremler, 2006). When employees display authentic emotions, this can have a contagion effect on others (Hennig-Thurau et al., 2006). Therefore, if professors display positive emotions in an authentic way, this could have a positive effect on their colleagues by helping to generate an authentic climate in the workplace.

Another suggestion to help reduce surface acting in the workplace would be to promote mindfulness, which is the awareness and openness to one's feelings, sensations and emotional state in the present moment and without judgment (Hülshager, Alberts, Feinholdt, & Lang, 2013). In order to be more in tune with their emotions and allow them to properly identify when they are doing surface acting, mindfulness-based workshops could help professors. These workshops could focus on identifying the dominant emotion in the present moment as well as the internal reactions that professors may have. Past studies have shown that mindfulness-based intervention groups help individuals experience less surface acting and in turn, less emotional exhaustion (Hülshager et al., 2013). In fact, the universities' human resources department could implement a Mindfulness-Based Stress Reduction (MBSR) program

for all professors. MBSR programs focus on different types of mindfulness practices, such as yoga, meditation or body-scan based attention (Kabat-Zinn, 1990). Past studies have highlighted the efficiency of MBSR programs in the regulation of emotions and the reduction of surface acting (Chambers, Gullone, & Allen, 2009; Goldin & Gross, 2010; Hülshager et al., 2013).

Moreover, in a prevention perspective, the universities' human resources could also do a type of surface acting screening before hiring a new candidate to encourage them to participate in an MBSR program aiming at reducing their surface acting or emotional exhaustion by teaching emotional management skills (Hülshager et al., 2013; Zeithaml, Bitner, & Gremler, 2006).

Second, results from this study stress the importance of job autonomy as a resource for professors to protect themselves against further depletion of resources when feeling emotionally exhausted. Professors use their job autonomy to organize their schedules and prioritize certain tasks. Thus, this resource is essential to maintain their energy and avoid being overly affected by emotional exhaustion. From an organizational standpoint, it is also beneficial for universities to promote job autonomy in their professors because it could prevent a loss spiral as described by COR theory (Hobfoll, 2001). This loss spiral could have serious organizational consequences such as sick leave or occupational burnout (Bakker & Costa, 2014; Schaufeli et al., 2009). Moreover, results also suggest that professors with low job autonomy do not perform as well as those with high job autonomy. Therefore, promoting job autonomy for professors is important. One suggestion would be for university departments to offer more tools for professors to reach their goals. Through training, technology or new staff, university departments show job autonomy-supportive behaviors that offer resources that can help professors be more productive. Results suggest that professors use job autonomy to protect themselves against emotional exhaustion due to surface acting and see their performance decrease for administrative tasks and assessment and

review activities. By encouraging the use of job autonomy as a resource for professors, this could (1) increase their desire to take a break when feeling emotionally exhausted, (2) would allow them to feel less pressure when making this decision and (3) would allow them to freely make this decision (Kusurkar & Croiset, 2015).

Third, this study highlights the diversity of a professor's job. By examining seven different aspects of their job, this study showed which of these were mostly affected by emotional exhaustion due to surface acting. By becoming aware of these results, professors can consciously think about how to organize their schedules in order to maximize their performance but yet maintain good mental health. In other words, if professors know that certain performance aspects of their job can decrease when feeling emotionally exhausted due to surface acting (i.e., research funding, research dissemination, administrative tasks and assessment and review activities), then they can prioritize these aspects or other ones depending on what they are going through at work. If, for example, they are going through a stressful period where they have a difficult time managing their emotions around students or colleagues, they could push back these four tasks to avoid seeing their performance decrease.

One way to promote this behavior could be through time management workshops. These workshops could help professors organize their schedules in a more efficient way by focusing on, for example, boundary setting, maximizing productivity, handling interruptions, setting daily goals, reviewing short and long-term goals, delegating tasks, defining clear objectives, to name a few.

Furthermore, taking into consideration the competitiveness of this job, understanding the many aspects of their performance is essential to be a well-rounded professor. In other words, the more aware they are of how they can improve different aspects of their

work in their overall performance, the more they can shape their job in the most productive way for them.

3.3 Study Limitations and Directions for Future Research

Even though this study offers many theoretical and practical implications, it is not without its limitations. To begin, this study used a cross-sectional design that does not allow the inference of causality. Futures studies could replicate the present one by using a longitudinal design to examine the causality between variables.

Another limitation of the current study was the use of self-reported data. Due to this, participants' answers could be biased and subject to social desirability. Future studies could use more objective measures, for example, the actual number of publications or the number of conferences given in the past year.

Furthermore, this study examined universities from the province of Quebec only. Even though data was collected from both French- and English-speaking universities, the fact that the data was collected from one specific province in the country could limit the generalizability of this study. In this vein, there was a stronger participation rate from French-speaking universities compared to the English-speaking ones, which could also bias the results due to possible cultural differences.

Lastly, this study showed how autonomy, as a contextual resource, could help protect professors' remaining individual resources when feeling emotionally exhausted. As it has been shown that emotional exhaustion is present among this population, future studies could test this proposition empirically by adding a psychological health indicator to the proposed model (e.g., of anxiety, self-esteem or depression).

3.4 Conclusion

Emotional exhaustion mediated the relationship between surface acting and four aspects of the performance of professors: research funding, research dissemination, administrative tasks and assessment and review activities. This study replicates findings from authors who have shown the positive relationship between emotional labor (i.e. surface acting) and emotional exhaustion (Brotheridge & Grandey, 2003; Grandey, 2003; Pugliesi, 1999). Also, this study replicates findings from many past studies that have shown the negative relationship between emotional exhaustion and performance (Cropanzano et al., 2003; Demerouti et al., 2014; Moon & Hur, 2011; Taris, 2006; Wright & Bonett, 1997). This study, however, extends past research by examining whether job autonomy alters the relationship between surface acting, emotional exhaustion and performance. Results showed that the negative relationship between emotional exhaustion and two aspects of the performance was stronger for employees with high job autonomy: administrative tasks and assessment and review activities. Overall, results from this study highlight the importance for professors of (1) preventing surface acting in the workplace in order to reduce levels of emotional exhaustion, (2) using job autonomy to protect themselves from the depletion of resources and (3) organizing their work schedule to prioritize tasks that could maintain their energy levels while maximizing their performance.

APPENDIX A

INFORMATION AND CONSENT

A.1 Confirmation of Ethics Committee



No du certificat : 1474_e_2017

CERTIFICAT D'ÉTHIQUE

Le Comité institutionnel d'éthique de la recherche avec des êtres humains de l'UQAM, a examiné le protocole de recherche suivant et jugé qu'il est conforme aux pratiques habituelles et répond aux normes établies par la Politique no 54 sur l'éthique de la recherche avec des êtres humains (décembre 2015).

Protocole de recherche

Chercheure principale : Julie Ménard

Unité de rattachement : Département de psychologie

Équipe de recherche :

Étudiants réalisant un projet de thèse doctorale dans le cadre de cette recherche : Krista Pratte; Tommy Bélanger; Célestine Stevens

Titre du protocole de recherche : *Professeurs d'université en équilibre/Balanced Academics*

Sources de financement (le cas échéant): s/o

Durée du projet : 5 ans

Modalités d'application

Le présent certificat est valide pour le projet tel qu'approuvé par le CIEREH. Les modifications importantes pouvant être apportées au protocole de recherche en cours de réalisation doivent être communiquées au comitéⁱ. Tout événement ou renseignement pouvant affecter l'intégrité ou l'éthicité de la recherche doit être communiqué au comité.

Toute suspension ou cessation du protocole (temporaire ou définitive) doit être communiquée au comité dans les meilleurs délais.

Le présent certificat d'éthique est valide jusqu'au **30 novembre 2018**. Selon les normes de l'Université en vigueur, un suivi annuel est minimalement exigé pour maintenir la validité de la présente approbation éthique. Le rapport d'avancement de projet (renouvellement annuel ou fin de projet) est requis dans les trois mois qui précèdent la date d'échéance du certificatⁱⁱ.

Yanick Farmer, Ph.D.
Professeur
Président

11 décembre 2017

Date d'émission initiale du certificat

ⁱ <http://recherche.uqam.ca/ethique/humains/modifications-apportees-a-un-projet-en-cours.html>

ⁱⁱ <http://recherche.uqam.ca/ethique/humains/rapport-annuel-ou-final-de-suivi.html>

A.2 Information and Consent Form (French Version)

CHERCHEUSE PRINCIPALE

Julie Ménard, Ph.D., Université du Québec à Montréal (UQAM)
menard.julie@uqam.ca (514) 987-3000 poste 2437

MEMBRES DU GROUPE

Krista Pratte et Célestine Stevens (doctorantes en psychologie du travail et des organisations à l'UQAM).

Coordonatrice: Célestine Stevens (stevens.celestine@courrier.uqam.ca)

PRÉAMBULE

Nous vous invitons à participer à un projet de recherche.

Avant d'accepter de participer à ce projet et de signer ce formulaire, il est important de prendre le temps de lire et de bien comprendre les renseignements ci-dessous. S'il y a des mots ou des sections que vous ne comprenez pas ou qui ne semblent pas clairs, n'hésitez pas à nous à poser des questions ou à communiquer avec la coordonnatrice de recherche.

OBJECTIFS DU PROJET

Le but de ce projet de recherche est de comprendre davantage la pression vécue par les professeurs dans leur milieu de travail. Plus spécifiquement, nous voulons 1) mesurer l'effet de la demande et du stress spécifiques aux professeurs sur leur performance en tant que professeur ainsi que leur bien-être et 2) identifier les facteurs individuels et environnementaux qui aident ou empêchent leur performance et leur bien-être.

NATURE DE LA PARTICIPATION

Votre participation consiste à répondre à un questionnaire en ligne via

SurveyMonkey. Le même questionnaire vous sera envoyé à quatre reprises; aujourd'hui, dans 6 mois, dans un an et dans 2 ans. Cela nécessitera environ 20 minutes par passation (chaque série de questionnaires). Le questionnaire portera sur les expériences que vous vivez en tant que professeur à l'université.

AVANTAGES

Votre contribution permettra de mieux comprendre la réalité des professeurs dans leur milieu de travail. Aussi, votre participation pourra contribuer à l'avancement des connaissances sur les expériences des professeurs. Si vous êtes intéressé(e), nous pourrions vous faire parvenir un rapport annuel présentant les résultats globaux non nominatifs de l'étude.

RISQUES ET INCONVÉNIENTS

En participant à cette recherche, vous ne courez pas de risque important d'inconfort ou d'inconvénients particuliers. Il est possible que la complétion du questionnaire suscite des pensées ou des souvenirs émouvants ou désagréables. Si tel est le cas, n'hésitez pas à contacter directement la chercheuse principale, qui pourra vous référer à l'aide spécialisée appropriée.

COMPENSATION

Pour chaque tranche de 100 participants, un tirage d'une carte d'achat prépayée d'une valeur de 100\$ sera effectué parmi les participants, après chaque temps de mesure (ex. aujourd'hui, après 6 mois, dans 1 an et dans 2 ans). Un rapport annuel présentant les résultats globaux non nominatifs sera effectué pour toute la durée du projet.

CONFIDENTIALITÉ

Il est entendu que tous les renseignements recueillis sont confidentiels. Bien que nous prenions tous les moyens nécessaires pour assurer la confidentialité des réponses, nous ne pouvons pas la garantir dû au fait que le serveur de SurveyMonkey est aux

États-Unis et est contrôlé par le « patriot act ». Le « patriot act » donne le pouvoir aux autorités du gouvernement des États-Unis d'avoir accès aux bases de données détenues par des agences américaines. À part de cette possibilité, seuls les membres de l'équipe de recherche y auront accès. Les données de recherche ainsi que votre formulaire de consentement seront conservés séparément. La banque de données sera conservée sur l'ordinateur du laboratoire de recherche d'expertise et de recherche en psychologie et interventions au travail (LERÉPIT), ainsi que sur celui de la chercheuse responsable, qui sont tous deux dans un bureau fermé sous clé.

Afin de protéger votre identité et la confidentialité de vos données, vous serez toujours identifié par un code alphanumérique. Ce code associé à votre nom ne sera connu que du responsable du projet et de l'assistant(e) de recherche chargé(e) de la codification. De plus, la liste de courriels et les codes seront conservés séparément des bases de données prévues aux fins d'analyse, sur un ordinateur dans un bureau fermé sous clé au laboratoire de la chercheuse responsable pour la durée totale du projet. Aucune information nominative ne sera dévoilée dans les publications ou présentations issues de cette étude. Les données de recherche seront détruites une fois l'étude complétée.

PARTICIPATION VOLONTAIRE ET DROIT DE RETRAIT

Votre participation à ce projet est volontaire. Cela signifie que vous acceptez de participer au projet sans aucune contrainte ou pression extérieure. Cela signifie également que vous êtes libre de mettre fin à votre participation en tout temps au cours de cette recherche, sans préjudice de quelque nature que ce soit, et sans avoir à vous justifier. Dans ce cas, et à moins d'une directive verbale ou écrite contraire de votre part, les documents, renseignements et données vous concernant seront détruits. La chercheuse principale du projet peut mettre fin à votre participation, sans votre consentement, si elle estime que votre bien-être ou celui des autres participants est compromis ou bien si vous ne respectez pas les consignes du projet.

RESPONSABILITÉ

En acceptant de participer à ce projet, vous ne renoncez à aucun de vos droits ni ne libérez les chercheurs, le(s) commanditaire(s) ou l'institution impliquée (ou les institutions impliquées) de leurs obligations civiles et professionnelles.

PERSONNES-RESOURCE

Vous pouvez contacter la chercheuse principale du projet au numéro (514) 987-3000 poste 2437 pour des questions additionnelles sur le projet. Vous pouvez discuter avec elle, des conditions dans lesquelles se déroule votre participation.

Le Comité institutionnel d'éthique de la recherche avec des êtres humains (CIEREH) a approuvé ce projet et en assure le suivi. Pour toute information vous pouvez communiquer avec la coordonatrice du Comité au numéro (514) 987-3000 poste 7753 ou par courriel à l'adresse : ciereh@uqam.ca.

Pour toute question concernant vos droits en tant que participant à ce projet de recherche ou si vous avez des plaintes à formuler, vous pouvez communiquer avec le bureau de l'ombudsman de l'UQAM (Courriel: ombudsman@uqam.ca; Téléphone: (514) 987-3151.

Vos données de recherche seront rendues anonymes et conservées indéfiniment au terme du projet. Nous souhaitons les utiliser dans d'autres projets de recherche similaires. Vous êtes libre de refuser cette utilisation secondaire.

- J'accepte que mes données puissent être utilisées dans d'autres projets de recherche
- Je refuse que mes données puissent être utilisées dans d'autres projets de recherche

Acceptez-vous que le responsable du projet ou son délégué vous sollicite ultérieurement dans le cadre d'autres projets de recherche ?

Oui Non

Par la présente, je reconnais avoir lu le présent formulaire d'information et de consentement. Je comprends les objectifs du projet et ce que ma participation implique. Je confirme avoir disposé du temps nécessaire pour réfléchir à ma décision de participer. Je reconnais avoir eu la possibilité de contacter le responsable du projet (ou son délégué) afin de poser toutes les questions concernant ma participation et que l'on m'a répondu de manière satisfaisante. Je comprends que je peux me retirer du projet en tout temps, sans pénalité d'aucune forme, ni justification à donner. Je consens volontairement à participer à ce projet de recherche.

J'accepte

Je refuse

A.3 Information and Consent Form (English Version)

PRIMARY INVESTIGATOR

Julie Ménard, Ph.D., Université du Québec à Montréal (UQAM)
menard.julie@uqam.ca (514) 987-3000 extension 2437

GROUP MEMBERS

Krista Pratte & Célestine Stevens (UQAM doctoral students in work and organizational psychology)
Coordinator: Célestine Stevens (stevens.celestine@courrier.uqam.ca)

PREAMBLE

You are being invited to participate in a research project.
Please read the form carefully and make sure you clearly understand the information below before deciding if you want to participate and sign this form. If there is anything you do not understand, or if you want additional information, please do not hesitate to ask questions by communicating directly with the coordinator of the study.

PURPOSE OF THE STUDY

The purpose of the study is to gain a greater understanding of the pressures faced by professors in their daily work environment. Specifically, the study aims to 1) measure the effects of work-related demands and stress specific to professors, on their performance and well-being and to 2) identify the individual and environmental factors that help or impede their performance and well-being.

NATURE OF PARTICIPATION

Your participation consists of answering a questionnaire via SurveyMonkey that will be sent to you at four different times; today, in 6 months, in one year and in two years. Each time-point of the above-mentioned questionnaire will take approximately

20 minutes to complete and will pertain to your experiences as a professor.

ADVANTAGES

Your participation will allow us to get a better understanding of a professor's daily work environment and experiences. If interested, we can send you an annual report of the global non-nominative results of the present study.

RISKS AND INCONVENIENCES

There are no major risks associated with participating in this study. It is possible that the completion of the questionnaire may generate unpleasant or uncomfortable thoughts or memories. If so, please do not hesitate to directly contact the primary investigator, who can refer you to appropriate and specialized help.

COMPENSATION

For every 100 participants, a prepaid gift certificate of 100\$ will be drawn after each time-point (e.g. today, after 6 months, in one year and in two years). An annual report of the global non-nominative results will be made at each time point for the duration of the study.

CONFIDENTIALITY

It is understood that all collected information is confidential. Although we take all the precautionary measures to ensure that confidentiality is maintained, we cannot guarantee it due to the fact that SurveyMonkey is based in the United States and thus under the legislature of the Patriot Act. The Patriot Act gives power to governmental authorities of the United States to have access to the databases held by American agencies. With the exception of this possibility, only the members of the research team will have access to the database. The research data and the consent form will be kept separately. The database will be kept on the LERÉPIT (laboratoire de recherche d'expertise et de recherche en psychologie et interventions au travail) computer and

on the primary investigator's computer, which are both located in a locked office at UQAM.

In order to protect your identity and the confidentiality of your data, you will be assigned an alphanumeric code. The code associated with your name will only be known by the primary investigator and the research assistant in charge of coding. Moreover, the lists of emails and codes will be kept separately from the database intended for analysis. These will in turn be kept on a computer in the primary investigator's laboratory which will be locked at all times for the duration of the study. No nominative information will be unveiled in the publications or presentations issued from this study. The research data will be destroyed once the study is completed.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW

Your participation in this study is voluntary. This means that you accept to participate without coercion or external pressure. This also means that you are free to withdraw at any time, without prejudice or need for justification. Should you choose to withdraw, all documents, information and data will be destroyed unless verbal or written permission is given otherwise.

The primary investigator of the study can terminate your participation, without your consent, if they judge that your well-being or that of other participants is being compromised or if you do not respect the guidelines of the study.

RESPONSIBILITY

Agreeing to participate in this study does not waive your rights or release the researchers, sponsors or the implicated institution(s) from their civil and professional obligations.

CONTACT PERSON

Should you have any additional questions, please contact the primary investigator of the study at the following number (514) 987-3000 ext. 2437. You may discuss with them the terms and conditions of your participation in the study.

The CIEREH (Comité institutionnel d'éthique de la recherche avec des êtres humains) has approved this project and ensures its follow-up. For any additional information, please communicate with the committee's coordinator at the following number (514) 987-3000 ext. 7753 or by email at: ciereh@uqam.ca.

For any complaints, or if you have any questions concerning your rights as a participant, please communicate with UQAM's ombudsman's office (Email: ombudsman@uqam.ca; Phone: (514) 987-3151).

Your data will be anonymous and will be kept indefinitely for the duration of this study. We would like to use your data in other similar research projects though you are free to refuse this secondary use.

I accept that my data be used in other research projects

I refuse that my data be used in other research projects

Do you accept that the primary investigator or their delegate solicit you for future research projects?

Yes No

I hereby acknowledge having read the present information and consent form. I understand the objectives of the study and what my involvement entails. I confirm having taken the necessary time to think about my decision to participate. I recognize

having had the opportunity to contact the primary investigator (or their delegate) to ask any questions regarding my participation and they have answered in a satisfactory manner. I understand that I can withdraw my participation from this study at any time without penalty or justification. I voluntarily consent to participate in this research project.

I accept

I refuse

APPENDIX B

MEASURES

B.1 Questionnaire (French Version)

QUESTIONS SOCIODÉMOGRAPHIQUES

Dans quelle université travaillez-vous ? _____

Veuillez indiquer le titre de votre poste (p.ex. professeur adjoint) _____

Au sein de quel département travaillez-vous ? _____

En quelle année avez-vous obtenu votre premier poste de professeur ?

En quelle année avez-vous obtenu un poste au sein de votre département ?

Combien d'étudiants à la maîtrise supervisez-vous actuellement ? _____

Combien d'étudiants au doctorat supervisez-vous actuellement ? _____

Quel est votre âge ? (S.v.p., n'inscrivez que le chiffre ; p.ex., 36) _____

8. Êtes-vous... ?

- Un homme
- Une femme
- Non-binaire
- Préfère ne pas se prononcer

9. Quel est votre état civil ?

- Célibataire
- Marié(e)
- Union libre
- Séparé(e)
- Divorcé(e)
- Veuf(ve)

10. Veuillez indiquer combien d'enfants résident actuellement sous le même toit que le vôtre.

MASLACH BURNOUT INVENTORY GENERAL SURVEY

Voici 5 énoncés mettant en relation le travail et les sentiments qui y sont reliés. Lisez attentivement chaque énoncé et réfléchissez à s'il vous arrive de vous sentir de cette façon au travail. Indiquez le chiffre correspondant à la fréquence de cet état.

1- Jamais
2- Quelques fois par année ou moins
3- Une fois par mois ou moins
4- Quelque fois par mois
5- Une fois par semaine
6- Quelques fois par semaine
7- Tous les jours

Je me sens émotionnellement vidé(e) par mon travail.	1	2	3	4	5	6	7
Je me sens épuisé (e) à la fin de ma journée de travail.	1	2	3	4	5	6	7
Je me sens fatigué(e) quand je me lève le matin et que j'ai à faire face à une autre journée de travail.	1	2	3	4	5	6	7
Travailler toute la journée est vraiment un effort pour moi.	1	2	3	4	5	6	7
Je me sens vidé (e) par mon travail.	1	2	3	4	5	6	7

AREAS OF WORKLIFE SURVEY

Veillez indiquer à quel point vous êtes d'accord avec les énoncés suivants.

1- Totalemment en désaccord

2- En désaccord

3 -Neutre

4- En accord

5- Totalemment en accord

Je contrôle la façon dont je fais mon travail.	1	2	3	4	5
Je peux influencer la direction afin d'obtenir les ressources (p. ex., équipement) et l'espace nécessaires à mon travail.	1	2	3	4	5
Je possède une autonomie/indépendance professionnelle dans mon travail.	1	2	3	4	5

PROFESSOR'S WORK PERFORMANCE QUESTIONNAIRE

Combien d'heures au total avez-vous travaillées au cours des 7 derniers jours?

Sur l'échelle de 1 à 10, comment noteriez-vous votre performance (à la fois en termes de quantité et de qualité) pendant la dernière année en ce qui a trait à votre/vos... ?

- | | | |
|---------------------------------------|----|----------------------------|
| N/A – Ne s'applique pas à mon domaine | 3- | 7- |
| 1 – Très mauvaise performance | 4- | 8- |
| 2- | 5- | 9- |
| | 6- | 10- Très bonne performance |

Subventions de recherche détenues	N/ A	1	2	3	4	5	6	7	8	9	10
Publications et productions de recherche ou productions savantes (p. ex. articles, livres, chapitres de livre, etc.)	N/ A	1	2	3	4	5	6	7	8	9	10
Diffusion de la recherche dans le cadre de conférences, d'entrevues et de relations avec les médias	N/ A	1	2	3	4	5	6	7	8	9	10
Enseignement (p. ex., cours dispensés, élaboration de cours, élaboration de programme)	N/ A	1	2	3	4	5	6	7	8	9	10
Encadrement de la recherche (p. ex., supervision d'étudiants, supervision de personnel de recherche)	N/ A	1	2	3	4	5	6	7	8	9	10
Activités administratives, institutionnelles et exécutives	N/ A	1	2	3	4	5	6	7	8	9	10

Activités d'évaluation et de révision (p. ex., révision de revues, révision de conférences, examen d'études supérieures, évaluation de demandes de financement de projets de recherche, évaluation en cours de processus de promotion et de titularisation, examen d'établissement)	N/A	1	2	3	4	5	6	7	8	9	10
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DISCRETE EMOTIONS EMOTIONAL LABOR SCALE

Expression d'émotions que vous ne ressentez pas

Dans la section qui suit, nous aimerions savoir à quelle fréquence vous exprimez des émotions que vous ne ressentez pas.

N/A- Ne s'applique pas

1- Je n'exprime jamais cela quand je ne le ressens pas

2- J'exprime cela quelques fois par mois alors que je ne le ressens pas

3- J'exprime cela quelques fois par semaine alors que je ne le ressens pas

4- J'exprime cela quelques fois par jour alors que je ne le ressens pas

5- J'exprime cela plusieurs fois par jour alors que je ne le ressens pas

Items						
Irritation	N/A	1	2	3	4	5
Anxiété	N/A	1	2	3	4	5
Contentement	N/A	1	2	3	4	5
Tristesse	N/A	1	2	3	4	5
Préoccupation	N/A	1	2	3	4	5
Joie	N/A	1	2	3	4	5
Détresse	N/A	1	2	3	4	5
Colère	N/A	1	2	3	4	5
Enthousiasme	N/A	1	2	3	4	5

B.2 Questionnaire (English Version)

SOCIODEMOGRAPHIC QUESTIONS

What university do you work in? _____

Please indicate the title of your position (e.g. assistant professor) _____

What department do you work in? _____

In what year did you get your first job as a professor? _____

In what year did you obtain a position in your department? _____

How many masters students are you currently supervising? _____

How many doctoral students are you currently supervising? _____

How old are you? (please only write the number; ex. 36) _____

Are you...?

- Male
- Female
- Non binary
- Prefer not to say

What is your marital status?

- Married
- Common law spouse
- Separated
- Divorced
- Widowed

Please indicate how many children are currently living under your roof.

MASLACH BURNOUT INVENTORY GENERAL SURVEY

Here are 5 statements regarding job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. Indicate the number that corresponds to the frequency of this state.

1- Never
2- A few times a year or less
3 - Once a month or less
4- A few times a month
5- Once a week
6- A few times a week
7- Everyday

Items	1	2	3	4	5	6	7
I feel burned out from my work.	1	2	3	4	5	6	7
I feel tired when I get up in the morning and have to face another day on the job.	1	2	3	4	5	6	7
I feel used up at the end of a working day.	1	2	3	4	5	6	7
I feel emotionally drained from my work.	1	2	3	4	5	6	7
Working all day is really a strain for me.	1	2	3	4	5	6	7

AREAS OF WORKLIFE SURVEY

Please indicate to what extent you agree with each statement.

1- Totally disagree

2- Disagree

3- Neutral

4- Agree

5- Totally agree

I control the way I do my job.	1	2	3	4	5
I can influence the direction of my job in order to get the resources (e.g., equipment) and space that are required for my job.	1	2	3	4	5
I have professional autonomy in my job.	1	2	3	4	5

PROFESSOR'S WORK PERFORMANCE QUESTIONNAIRE

How many hours have you worked over the past 7 days?

On the scale from 1 to 10, how would you rate your usual performance (in terms of both quantity and quality over the past year in terms of your...?)

N/A – Not applicable to my domain	3-	7-
1 – Worst performance	4-	8-
2-	5-	9-
	6-	10- Best performance

Research funding obtained.	N/A	1	2	3	4	5	6	7	8	9	10
Publications and research or scholarly outputs (e.g., articles, books, book chapters, etc.).	N/A	1	2	3	4	5	6	7	8	9	10
Research dissemination through conferences, interviews and media relations.	N/A	1	2	3	4	5	6	7	8	9	10
Teaching (e.g., courses taught, course development, program development).	N/A	1	2	3	4	5	6	7	8	9	10
Research supervision (p ex., student supervision, research staff supervision).	N/A	1	2	3	4	5	6	7	8	9	10
Administrative, institutional and executive activities.	N/A	1	2	3	4	5	6	7	8	9	10

Assessment and review activities (e.g., journal reviews, conference reviews, graduate examination, research funding, application assessment, promotion tenure assessment, organizational review).	N/A	1	2	3	4	5	6	7	8	9	10
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DISCRETE EMOTIONS EMOTIONAL LABOR SCALE

Expressing emotions you do not feel

N/A- Not applicable

In this section, we would like to know how often you express emotions on the job when you really do not feel these emotions.

1- I never genuinely express this

2- I genuinely express this a few times a month

3- I genuinely express this a few times a week

4- I genuinely express this a few times a day

5- I genuinely express this many times a day

Items						
Irritation	N/A	1	2	3	4	5
Anxiety	N/A	1	2	3	4	5
Contentment	N/A	1	2	3	4	5
Sadness	N/A	1	2	3	4	5
Concern	N/A	1	2	3	4	5
Happiness	N/A	1	2	3	4	5
Distress	N/A	1	2	3	4	5
Anger	N/A	1	2	3	4	5
Enthusiasm	N/A	1	2	3	4	5

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