A Work and School Perspective on the Experiences of Working Students

Samir Awab Assi

A Thesis

in

John Molson School of Business

Presented in Partial Fulfillment of the Requirements for the Degree of Master of Science in

Management at

Concordia University

Montreal, Quebec, Canada

March 2023

CONCORDIA UNIVERSITY

School of Graduate Studies

This is to certify that the thesis prepared

By: Samir Awab Assi

Entitled: A Work and School Perspective on the Experiences of Working Students

and submitted in partial fulfillment of the requirements for the degree of

Master of Science in Management

complies with the regulations of the University and meets the accepted standards with respect to

originality and quality.

Signed by the final examining committee:

_____ Chair
Dr. Asma Fattoum-Guedri

_____ Examiner
Dr. Linda Dyer

_____ Examiner
Dr. Alex Lefter

_____ Thesis Supervisor
Dr. Tracy Hecht

Approved by _____
            Chair of Department or Graduate Program Director

            _____
                        Dean of (Faculty)

Abstract

A Work and School Perspective on the Experiences of Working Students

Samir Awab Assi

The purpose of this research is to explore the experiences of working students at both work and school domains by investigating how demands from the two domains interfere with one another, and how personal resources affect those domains. The main theoretical framework of this thesis is the Job Demands-Resources model (JD-R). I hypothesized that work/school time pressure positively predicts work/school emotional exhaustion and work/school engagement, and that work-school conflict partially mediates the two relationships. I further hypothesized that dispositional mindfulness moderates the relationship between work/school time pressure and work-school conflict. These hypotheses were tested in a correlational study with on through an online survey. Data was collected from the Management Department undergraduate subject pool (N = 152) at John Molson School of Business, Concordia University. In terms of the results, work/school time pressure was found to be positively related to work/school emotional exhaustion but not work/school engagement. Work-school conflict was found to mediate the relationship between time pressure and emotional exhaustion but not the relationship between time pressure and engagement. Finally, dispositional mindfulness was not found to have a moderating effect on the relationship between work/school time pressure and work-school conflict. I discuss the theoretical and practical implications of the findings.

Acknowledgements

First and foremost, I would like to thank my mother, the most important person in my life, for everything that I have achieved to this day without exception. Thank you for always giving all that you have and for loving me unconditionally. I would not have written this thesis and completed my master's if not for you and our family by my side.

Second, I would like to thank Dr. Tracy Hecht for guiding me and supervising me through this thesis with her truly inspiring expertise and knowledge. I am very thankful to have had such a competent, patient, supportive, and truly brilliant scholar supervise my thesis. Thank you for everything Dr. Tracy, even though thank you does not do you justice.

Third, I want to thank my committee members, Dr. Linda Dyer and Dr. Alex Lefter, for aiding me with genuine and constructive suggestions that have led my thesis to an inarguably better direction. I couldn't have completed this thesis without your support, advice, and responsiveness.

Finally, I would like to extend my sincerest gratitude to every professor who has inspired me during the program and prepared me to write this thesis.

Table of Contents

List of Tables

List of Figures

A Work and School Perspective on the Experiences of Working Students

Work and school are both demanding responsibilities on their own. Some jobs and/or academic programs can be a load that leaves no time or ability for other responsibilities. Where does that leave working students who are stuck in between the two and how would they be able to properly balance between work and school? And if they are able to do so, how would they be able to avoid overworking and negatively impacting their wellbeing?

What is the prevalence of working students to start with? A survey of adult skills conducted by OECD (2012) revealed that the percentage of youth between the ages of 16 and 29 combining work and study was found to be around 60% in both Canada and the United States. More recently, the employment rate of students in Canada who were attending school full-time in March 2021 and were planning on returning to school full-time in the Fall of 2021 was 56.1% (Statistics Canada, 2022). The average percentage of university students aged 18 to 29 in Canada who were working in years 2020/2021 was 50.67% (Statistics Canada, 2022).

The United States Department of Education revealed that the proportion of full-time students working for pay was 43% in 2017, and the proportion of part-time students working for pay in the US was found to be 81% (Perna & Odle, 2020). Altogether, more than 11.4 million undergraduate students in the United States worked for pay while being enrolled in school for the year 2017 (Perna & Odle, 2020). Altogether, it seems that working and studying simultaneously is a phenomenon that is very prevalent.

With the phenomenon of working students increasing, the present study will delve into the school-work interface, by exploring the relations of school and work time pressure on school and work burnout and engagement in working students. Burnout is "a psychological syndrome that involves a prolonged response to chronic interpersonal stressors" (Maslach & Leiter, 2006 p. 37)

and has three dimensions: emotional exhaustion, depersonalization/cynicism, and reduced self-efficacy (Maslach & Jackson, 1981; Maslach, Jackson, & Leiter, 1997; Leiter, Maslach, & Frame, 2014). Engagement is characterized by a high level of energy and strong identification with one's work and/or school (Bakker et al., 2014) and has three dimensions: vigor, dedication, and absorption (Schaufeli et al., 2002). Considering that work and school are both activities that require significant temporal investments and that tend to involve deadlines and lead to stress (Crompton, 2011), each domain can create time pressure for those who are engaged in it. Time pressure is the sense of being rushed due to limited time for role duties and responsibilities (Dugan et al., 2012; Kleiner, 2014). This is especially pronounced for those who are engaged in both domains at the same time.

In this study, I will explore the relations of school and work time pressure on school and work burnout and engagement, and investigate the potential mediating effect of work-to-school conflict (WSC) and school-to-work conflict (SWC) on the relations between time pressure on the one hand and burnout and engagement on the other. WSC is the interference from work-related responsibilities to school-related responsibilities, and SWC is the interference from school-related responsibilities to work-related responsibilities (Wan et al., 2021). Past research on the work-school interface has studied work-school conflict solely as an outcome (Wan et al., 2021; Höge, 2009), predictor (Creed et al. 2015; Koperski, 2017), or mediator (Kleiner & Wallace, 2017). My research aims to study work-school conflict simultaneously as a mediator, outcome, and predictor, to explain the underneath relationship between work/school time pressure, work/school emotional exhaustion, and work/school engagement and to examine WSC/SWC in a more complete framework. Moreover, this study will also investigate the potential moderating effect of dispositional mindfulness, which involves paying attention to one's thoughts and feelings in the

present moment without judgment (Vogel, 2022), on the relations between time pressure and work-school conflicts.

<div align="center">

Literature Review

</div>

Burnout

Burnout has been defined as a three-dimensional syndrome of emotional exhaustion, cynicism/depersonalization, and reduced self-efficacy (Maslach & Jackson, 1981). More recently, it has been approached as a "psychological syndrome emerging as a prolonged response to chronic interpersonal stressors on the job" (Maslach and Leiter, 2016, p. 103). Burnout is a popular topic that has attracted the attention of scholars, especially given that the prevalence of the syndrome has recently been described as a global pandemic (McDargh, 2020). Data has shown that the cost of stress and burnout to North American companies is estimated to range between 120 and 300 billion USD (The American Institute of Stress, 2019). It has also been confirmed that 58% of working Canadians report excessive stress every day at work (McDargh, 2020). According to a survey conducted by The Ohio State University's Office of the Chief Wellness Officer, student burnout was at 40% when the survey was first conducted in August 2020 and had risen to 71% when it was administered again in April 2021, revealing a 31% increase during the first year of the COVID-19 pandemic which was a completely unprecedented experience (Citroner, 2021). All these alarming statistical figures and factors should serve as a red flag, wake-up call and prompt for an immediate response and intervention in this context. Burnout can occur in specific domains independently of one another, e.g., one can be burnt out at work but not at school. Considering that, this study measures burnout separately in the domains of both work and school. I focus on the dimension of emotional exhaustion as it is the burnout construct that is "most widely reported and the most thoroughly analyzed" (Maslach & Schaufeli, 2001 p. 403) to the extent that some

scholars have argued that the cynicism and reduced self-efficacy constructs are incidental or unnecessary (Maslach & Schaufeli, 2001; Shirom, 1989).

Engagement

"Engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002, p. 74). Vigor has been defined as having high levels of energy and mental resilience while working, dedication as a sense of significance, enthusiasm, inspiration, pride, and challenge, and absorption as full concentration, being deeply engrossed in one's work, and finding difficulties in detaching oneself from work. Similar to previous scholars, Schaufeli et al. (2002) considered engagement to be an opposite of burnout but did not measure it by considering engagement scores to be the opposite of burnout scores as some scholars had done before. Rather, they argued for an independent approach to study and measure engagement employing different instruments than those used for measuring burnout. I adopt that approach and study each of engagement and burnout in an independent light and in both work and school settings in order to observe the effects of time pressure and work-school conflict in a more complete manner.

Job Demands-Resources Model

The Job Demands-Resources (JD-R) model constitutes the main theoretical framework that will inform this research. The Job Demands-Resources Model (JD-R) proposes that combining both the demands of a job and resources, including job and personal resources, can predict job performance (Bakker & Demerouti, 2007).

Bakker and Demerouti (2007, p. 312) refer to job demands as "physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological

and/or psychological costs." Examples of job demands include high work pressure, unfavorable physical environments, emotionally demanding interactions with customers and clients (Bakker & Demerouti, 2007), and irregular working hours (Demerouti & Bakker, 2011). It is also worth noting that job demands may become job stressors when meeting those demands requires an effort that the employee has not properly recovered to have (Meijman & Mulder, 2013; Bakker & Demerouti, 2007). LePine et al. (2005) identify demands as being either hindrance stressors or challenge stressors. Hindrance stressors are demands that "have a negative direct effect on performance, as well as negative indirect effects on performance through strains and motivation" (LePine et al., 2005, p. 764). Challenge stressors are demands that "have a positive direct effect on performance, as well as offsetting indirect effects on performance through strains (negative) and motivation (positive)" (LePine et al., 2005, p. 764). Time pressure is the subjective sense of being rushed due to limited time to handle role duties and responsibilities (Dugan et al., 2012; Kleiner, 2014) and is the main demand (that may also be a stressor) that will be considered in this study.

Resources, on the other hand, refer to "physical, psychological, social, or organizational aspects" (Bakker and Demerouti, 2007, p.312) that support being "functional in achieving work goals", reducing "job demands and the associated physiological and psychological costs", and stimulating "personal growth, learning, and development" (Demerouti et al., 2001, p. 501). Resources can be job resources and may exist at different levels of the organization (Bakker & Demerouti, 2007). For example, at the organizational level, resources may include "salaries, career advancement opportunities, and job security," at the level of interpersonal and social relations, resources can include "supervisor and colleague support, and team climate," at the level of the job task, resources can include "role clarity, participation in decision making, and skill variety, task

identity, task significance, autonomy, and performance feedback," and resources also include personal resources such as self-efficacy, optimism, and self-esteem (Bakker & Demerouti, 2007 p. 312-313). Dispositional mindfulness, which has been defined as "the awareness that results from paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn 1994, p.4) and "highlights the receptive attention and awareness of present experience (Wan et al., 2021 p.6; Brown et al., 2007; Brown & Ryan, 2003), is considered to be a personal resource that can enable working students to buffer their resource loss that arises from work and/or school time pressure (Wan et al., 2021), and it is the resource that will be considered in this study.

Burnout & Engagement in Light of the JD-R Model

The JD-R model constitutes an adequate theoretical framework when studying burnout and engagement as it proposes that job performance is predicted by job characteristics and personal resources through engagement. That is, engagement likely occurs when one is met with challenges in the workplace and has sufficient job and personal resources to face those challenges and perform adequately (Bakker et al., 2018). On the opposite side of the spectrum, burnout is likely to occur when one is met with demands and does not have sufficient resources to meet them. Consistent with this, there is evidence that job demands are positively related to exhaustion (Demerouti et al., 2001). A meta-analysis of longitudinal studies on the reciprocal effects between job stressors and burnout also revealed that job stressors and burnout are reciprocally related (Guthier et al., 2020). Another meta-analysis investigated the relations between job demands, resources, and attitudes on one hand and burnout on the other hand; it revealed that burnout is related with higher demands, lower resources, and lower adaptive organizational attitudes (Alarcon, 2011). Further, a meta-analysis of work engagement found that work engagement constructs were negatively related with

burnout and job demands, and that work engagement was positively related with job resources and positive outcomes at work (Halbesleben, 2010).

Conceptual framework

Time Pressure and Burnout

As previously mentioned, time pressure constitutes a job demand since it may require increased effort or skills and thus may be associated with psychological/physiological costs. Burston (2017) found that working students could easily experience time deficits which create an imbalance between work and school hours. Wan et al. (2021, p. 3101-3102) also indicated "the existence of a real time pressure for working students and the necessity of theorizing and testing time pressure systematically in the context." Following the mentioned evidence and the JD-R model, this would suggest that time pressure may lead to burnout. Consistent with this, Darawad et al. (2015) found that time pressure was related to the burnout dimensions of emotional exhaustion and depersonalization. In the field of nursing, time pressure interacted with burnout to negatively affect patient safety (Teng et al., 2010). Further, Skaalvik and Skaalvik (2017) found a significant positive relation between time pressure and emotional exhaustion in a study on teacher burnout, and Kleiner and Wallace (2017) found that subjective work time pressure also positively predicted burnout. This leads to the first hypotheses of the study:

Hypothesis 1a: Work Time Pressure is positively related to Work Burnout.

Hypothesis 1b: School Time Pressure is positively related to School Burnout.

Time Pressure and Engagement

The relationship between demands and engagement is complex and multifaceted. As mentioned earlier, time pressure is considered a demand, and according to the JD-R model, work engagement constructs are negatively related to job demands. However, a meta-analysis linking

demands and resources to engagement and burnout found that demands which employees consider hindrances were negatively associated with engagement, whereas those that employees consider challenges were positively associated with engagement (Crawford et al., 2010). A study in which Baethge et al. (2018) assumed that time pressure acts as a challenge under short-term exposure and as a hindrance stressor under long-term exposure showed that while a short-term increase in time pressure can increase work engagement temporarily, stable and long-time exposure reduces work engagement. Schmitt et al. (2015) provided evidence of an inverted U-shaped relationship between time pressure and work engagement. Kühnel et al. (2012) found that job control moderates the relationship time pressure and work engagement, i.e., higher job control lead time pressure to increase work engagement, whereas lower job control lead time pressure to decrease work engagement. Another study by Baethge et al. (2018) found a significantly positive effect of short term exposure to time pressure on work engagement, but it found that stable and long-term exposure to time pressure has a significantly negative effect on work engagement. A study by Sheng et al. (2019) also found a curvilinear, inverted U-shaped relationship between time pressure and work engagement; that is, time pressure, when lower than the optimal level, positively predicted work engagement but impaired work engagement when at a substantial level. The evidence on the effect of time pressure on engagement is variable. As mentioned earlier, Baethge et al. (2018) showed that while a short-term increase in time pressure can increase work engagement temporarily, stable and long-time exposure reduces work engagement. Time pressure for working students is assumed to be closer to short-term rather than long-term given that time pressure at school can be temporary in nature (during exams, assignments, projects, etc.) and that many work to support their education and cover their living expenses rather than work a career job. Hence, I hypothsize that time pressure at work and school is beneficial for engagement.

The second hypotheses of the study are as follows:

Hypothesis 2a: Work Time Pressure is positively related with Work Engagement.

Hypothesis 2b: School Time Pressure is positively related with School Engagement.

The School-Work Interface

The unique and increasingly relevant context of working students is conceptually interesting considering the conflict and competing demands between work and school for working students. Work–to-School conflict (WSC) is defined as the interference of work-related demands and responsibilities in school-related demands and responsibilities (Markel & Frone, 1998). Vice versa, School-to-Work Conflict (SWC) is defined as the interference of school-related demands and responsibilities in work-related demands and responsibilities (Markel & Frone, 1998). Source attribution theory suggests that conflict in one domain can lead to decreased performance in the receiving domain (e.g. WSC can lead to decreased performance at school), but that individuals would "attribute blame to the domain that was the source of the conflict" (e.g., work in the case of WSC; Shockley & Singla, 2011 p. 864). Domain specificity theory, on the other hand, suggests that "predictors stem from the originating role domain, and consequences are from the receiving role domain" (Shockley & Singla, 2011 p.862), e.g., WSC predictors transpire in the school domain, while WSC consequences influence the work domain. Frone et al. (1992) stated that when one role (e.g., work) interferes with another role (e.g., school), one will have difficulty meeting demands in the receiving role (school) and not only in the source (work). Amstad et al. (2011) found that work-to-family conflict was more strongly related to job satisfaction than family satisfaction, and that family-to-work conflict was more strongly related to family satisfaction than job satisfaction even when including job and family stress in the model as controls. Shockley and Singla (2011) stated that when work stressors influence one's wellbeing at work, work-to-family

conflict occurs which in turn influences one's family-related wellbeing. Applied to the theoretical framework of this study, this implies that work stressors not only could influence work-related outcomes but school-related outcomes as well, and school stressors not only could influence school-related outcomes but work-related outcomes as well, but the influence on each domain would vary. I focus on the relations between WSC and work time pressure, emotional exhaustion, and engagement. On the other hand, I also focus on the relations between SWC (work outcome) and school time pressure, emotional exhaustion, and engagement (school outcomes).

Time pressure, Work-to-School conflict (WSC), and School-to-Work conflict (SWC)

Few studies have examined time pressure and the work-school interface. Time pressure in both work and school is expected to cause conflict between the two domains due to the limited time available for working students. A study by Wan et al. (2021) found that work and school time pressures are positively related with work-school conflicts, and that these relations are mediated by work-school boundary permeabilities. Time pressure has also been found to be positively correlated with work-family conflict (Höge, 2009). Since time pressure is a demand as per the JD-R model, it is expected that being pressured with time in either work or school will lead work roles to interfere with school roles, or vice versa, and lead to conflict. Thus, the third hypotheses of the study are as follows:

> *Hypothesis 3a:* Work Time Pressure is positively related with Work-to-School Conflict.

> *Hypothesis 3b:* School Time Pressure is positively related with School-to-Work Conflict.

Dispositional mindfulness as a moderator of the relations between time pressure and WSC, and time pressure and SWC

This study does not only examine the relations between time pressure for working students with conflicts between work and school, but also highlights factors that may potentially exacerbate or lessen these relations. Mindfulness is defined by Brown and Ryan (2003, p. 823) as "a quality of consciousness that is characterized by clarity and vividness of current experience and functioning, and thus stands in contrast to the mindless, less "awake" states of habitual or automatic functioning that may be chronic for many individuals." Dispositional mindfulness is when one is present in the current moment and fully immersed with attentiveness and awareness in each role aside from other potentially conflicting roles (Brown & Ryan, 2003; Allen & Kiburz, 2012). Mindfulness can be characterized as both a state and a trait. "Dispositional mindfulness, also known as trait mindfulness, is a type of awareness that involves paying attention to our thoughts and feelings in the present moment without judgment" (Vogel, 2022: *Dispositional mindfulness vs. state mindfulness*). State mindfulness is momentary and "occurs mainly in meditation", whereas dispositional mindfulness refers to "a person's predisposition to be mindful daily" and "occurs over time to become part of one's personality" (Vogel, 2022: *Dispositional mindfulness vs. state mindfulness*). Dispositional mindfulness is a useful stress management trait that helps working students be non-judgmental and consciously attentive to present-moment experiences (Wan et al., 2021; Brown et al., 2007).

A study carried out by Rau and Williams (2016) on dispositional mindfulness asserts that it is "a multidimensional construct reflecting both the *focus* and *quality* of attention" (p.32) and was found to be associated with neuroticism, conscientiousness, and other firmly established personality traits (Rau and Williams, 2016). Tomlinson et al. (2018) carried out a meta-analysis

on dispositional mindfulness that revealed a positive correlation between dispositional mindfulness and psychological well-being, as the former showed a negative correlation with symptoms of psychological disorders such as depressive symptoms, a positive association with adaptive cognitive processes such as having ownership of the problems and refraining from victimization, and a positive connection with improved emotional processing and regulation.

Mindfulness has also been found to be negatively correlated with conflict, and negatively correlated with stress through perceptions of conflict (Nicklin et al., 2019). Further, Wan et al. (2021) found that dispositional mindfulness was a moderator of the indirect relation of school time pressure on SWC via school-to-work boundary permeability. According to the JD-R model, dispositional mindfulness can be considered a resource. The study of the moderating effect of dispositional mindfulness on the relations among work time pressure and WSC/SWC (Wan et al., 2021) is to be replicated in this study (without measuring boundary permeability as Wan et al.), which leads to the fourth hypothesis of this study:

Hypothesis 4a: Dispositional Mindfulness moderates the relation between Work Time Pressure and Work-to-School Conflict, such that the relation weakens as dispositional mindfulness increases.

Hypothesis 4b: Dispositional Mindfulness moderates the relation between School Time Pressure and School-to-Work Conflict, such that the relation weakens as dispositional mindfulness increases.

WSC and SWC, and Burnout

The conflict between work and school can be significantly demanding on working students. The interference of work-related demands with school-related demands, or vice versa, can put an unreasonable workload on working students and would require increased effort and/or skills and

thus may be associated with psychological/physiological costs. Considering that and following from the JD-R model, this would suggest that WSC and SWC is also a job demand and may lead to burnout. A meta-analysis was carried out on 220 coefficients from 91 samples with a total of 51,700 working adults across various cultural backgrounds revealed that both directions of work-nonwork conflict ("interferences between work and nonwork activities, including family issues and nonwork roles beyond the family") were strongly correlated with both emotional exhaustion and cynicism (Reichl et al., 2014 p .981). Looking at the school-work-family interface, a study by Kremer (2016) revealed that SWC (but not WSC) contributed to subjective stress and burnout.

Informed by the literature found on work-family conflicts, it is apparent that inter-role conflict negatively impacts well-being, leading the fifth hypotheses to be:

Hypothesis 5a: Work-to-School Conflict is positively related to Work Burnout.

Hypothesis 5b: School-to-Work Conflict is positively related to School Burnout.

WSC, SWC, and Engagement

As mentioned previously, the interference of work-related demands with school-related demands, or vice versa, can put an unreasonable workload on working students and would require increased effort and/or skills and thus may be associated with psychological/physiological costs. This may have a negative impact on one's resources in work and/or school. Considering that, and following from the JD-R model, this would suggest that WSC and SWC is a job demand and may negatively impact one's engagement. Work-family conflict has been found to negatively predict work engagement (Opie & Hen, 2013). Another study found work engagement to fully mediate the relationship between work–family conflict and life satisfaction, and partially mediate the relationship between family–work conflict on life satisfaction (Karatepe & Karadas, 2016). Also, Yucel et al. (2021) found significant negative relations between work–family conflict and work

engagement. In the school-work domain, WSC has been found to be significantly, negatively correlated to study engagement (Koperski, 2017) and work-university conflict has been found to be negatively related to university engagement (Creed et al., 2015). This leads to the sixth hypotheses of the study:

> *Hypothesis 6a:* Work-to-School Conflict is negatively related to Work Engagement.

> *Hypothesis 6b:* School-to-Work Conflict is negatively related to School Engagement.

Indirect effects of time pressures on burnout and engagement via work-school conflicts

I hypothesize in this study that work-school conflicts negatively affect engagement and positively affect burnout, and that time pressure positively affects both engagement and burnout. I also propose that work-school conflicts mediate relations between time pressures and both burnout and engagement. Consistent with this, Kleiner and Wallace (2017) found that work-family conflict mediated the relation between subjective work time pressure and general burnout (Kleiner & Wallace, 2017). This leads to the last hypotheses of the study:

> *Hypothesis 7a:* Work-to-School Conflict partially mediates the relation between Work Time Pressure and Work Emotional Exhaustion.

> *Hypothesis 7b:* Work-to-School Conflict partially mediates the relation between Work Time Pressure and Work Engagement.

> *Hypothesis 8a:* School-to-Work Conflict partially mediates the relation between School Time Pressure and School Emotional Exhaustion.

> *Hypothesis 8b:* School-to-Work Conflict partially mediates the relation between School Time Pressure and School Engagement.

A summary of my theoretical model appears in Figure 1.
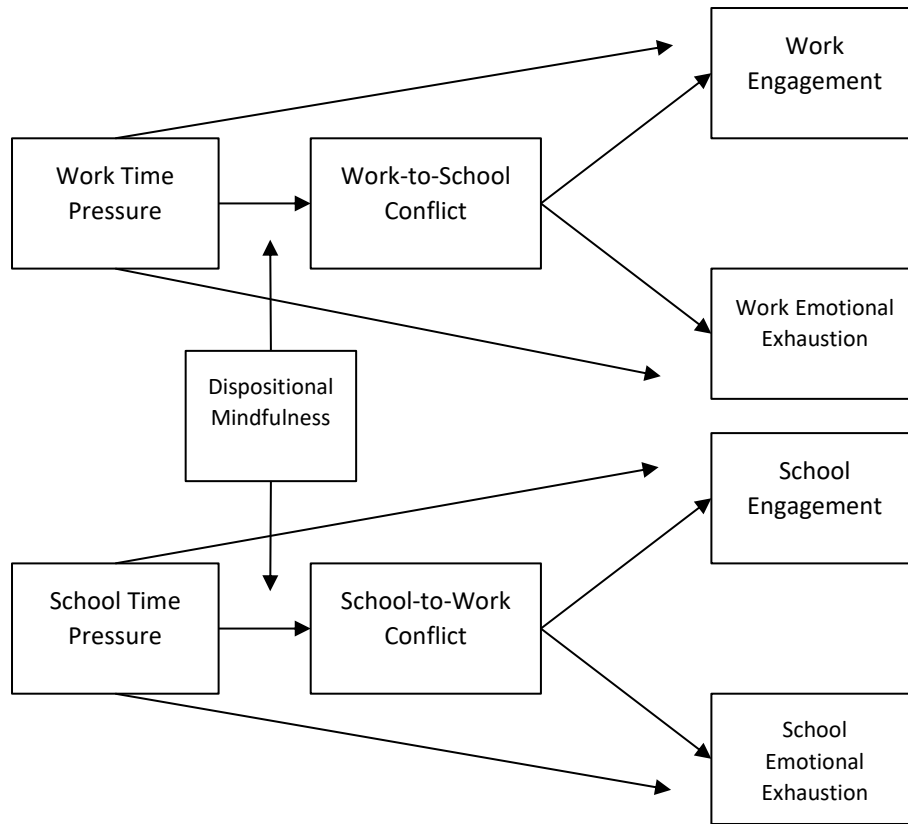
Figure 1. Theoretical Framework of the Study Illustrating the Hypothesized Direct Effects of Time Pressure on Conflict, Engagement, and Emotional Exhaustion, the Mediating Effects of WSC and SWC, and the Moderating Effect of Dispositional Mindfulness.

Methodology

Participants

Participants were recruited from the JMSB Management Department undergraduate subject pool that is open to all students taking COMM222, which is an introductory course in Organizational Behaviour and is required of all students who are completing the Bachelor of Commerce degree at John Molson School of Business, Concordia University. Students enrolled in COMM222 can access the subject pool's online platform to examine available studies and sign up for research projects for which they are eligible. In exchange for their involvement, students received course credit (i.e., one percentage point added to their final grade in the course for each hour of participation). All subject pool rules and regulations were strictly followed. Participants were required to provide their consent prior to participating. Participation was voluntary.

Two hundred and three individuals signed up to participate in the survey during the Winter 2022 term. The surveys were screened for quality and completeness. Individuals were excluded from the data analyses: 1- if they had no paid job, and/or 2- completed the survey in less than 1/3 of the median time taken to complete the survey (i.e., less than 4 minutes & 12 seconds), and/or 3- if they failed two attention checks while completing the survey (e.g., please select number 2). One participant was excluded because they requested that their data be withdrawn. The number of participants was reduced to 167 after applying the above three exclusion criteria. These data were then analyzed to determine if any cases were multivariate outliers on the variables included in the hypothesis tests based on Mahalanobis Distance (Tabachnick, Fidell, & Ullman, 2007), and 15 multivariate outliers were found. These outliers were excluded from the data analyses. The final number of participants after removing respondents who were ineligible, careless, or outliers was N = 152.

Of these 152 individuals, 40.00% were male and 60.00% were female. Of note, participants were given options for other genders, but no participants selected a gender other than male or female. Participants ranged from 18 to 47 years of age, with a mean of 21.81 years (SD = 3.90). Around 97% of participants were under the age of 30 years and 96.00% were single. The majority (93.40%) of participants reported being part-time workers, whereas 6.60% reported being full-time workers. The average hours worked per week by participants varied from 6 to 51 hours with a mean of 18.55 hours per week (S.D. = 8.09). Participants' reported job titles were varied, including cashier, sales associate, tennis coach, and secretary, with 53.30% working in a small-sized company (2-100 people), 13.20% working in a medium-sized company (101 – 1000 people), 32.90% working in a large company (more than 1001 people), and 0.70% who are self-employed.

With respect to their school situations, 11.20% of participants were part-time students and 88.80% were full-time students. The majority were taking 4 courses (73.00%) or 5 courses (19.70%), with smaller percentages taking only 2 courses (2.00%) or taking 3 courses (5.30%). Participants were from different majors including but not limited to business technology management, finance, accountancy, management, international business, human resource management, economics, marketing, and supply chain operations management.

Procedure

Two online surveys were conducted taking approximately 15-20 minutes each to complete. The two surveys were conducted one week apart. Participants were given 0.5 credits toward their grade in COMM222 for each survey they carefully completed. The first survey measured work and school time pressure, work and school emotional exhaustion, work and school engagement, WSC/SWC, dispositional mindfulness, and demographics. The second survey measured the same variables as the first survey in addition to work and school autonomy and work and school support.

172 people completed the second survey (N = 172) and 96 people completed both surveys (N = 96). Only the data from Survey 1 are analyzed in this thesis as the number of people who completed both surveys was low.

Measures

Work Emotional Exhaustion: The 7-item sub-dimension of the Copenhagen Burnout Inventory (CBI; Kristensen, 2005), which measures the emotional exhaustion sub-dimension of burnout, was used. Sample items include: "I feel worn out at the end of a work shift at my job" and "My job is emotionally exhausting". Participants responded to these items on a 7-point Likert scale.

School Emotional Exhaustion: The 7-item sub-dimension of the Copenhagen Burnout Inventory (CBI; Kristensen, 2005), which measures the emotional exhaustion sub-dimension of burnout, was adapted to measure school emotional exhaustion. Sample items include: "I feel worn out at the end of the day when I have classes" and "My classes are emotionally exhausting". Participants responded to these items on a 7-point Likert scale.

Work engagement: The 9-item shortened Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006) was used. Sample items include: "When I get up in the morning, I feel like going to work" and "To me, my job is challenging". Participants responded to these items on a 7-point Likert scale.

School Engagement: The 9-item shortened Utrecht Work Engagement Scale for Students (UWES-9S; Carmona-Halty et al., 2019) was used. Sample items include: "When I get up in the morning, I feel like going to class" and "I am enthusiastic about my studies". Participants responded to these items on a 7-point Likert scale.

Dispositional Mindfulness: The 14-item Freiburg Mindfulness Inventory (FMI) (Walach et al., 2006) was used. Sample items include: "I am open to the experience of the present moment" and "I feel connected to my experience in the here-and-now". Participants responded to these items on a 5-point frequency scale (0 to 4).

Work-to-School Conflict: The 5-item scale developed by Markel and Frone (1998) was used. Sample items include: "Because of my job, I go to school tired" and "When I'm at school, I spend a lot of time thinking about my job". Participants responded to these items on a 7-point Likert scale.

School-to-Work Conflict: The 5-item scale developed by Markel and Frone (1998) was adapted to measure school-to-work conflict. Sample items include: "Because of my schoolwork, I go to my job tired" and "When I am at my job, I spend a lot of time thinking about school". Participants responded to these items on a 7-point Likert scale.

Work Time Pressure: The 5-item Time Pressure measure developed by Beck and Schmidt (2013) was used. Sample items include: "I am working under excessive time pressure at my job" and "I have sufficient time to complete my tasks at my job". Participants responded to these items on a 7-point Likert scale.

School Time Pressure: The 5-item Time Pressure measure developed by Beck and Schmidt (2013) was adapted to measure school time pressure. Sample items include: "I am working under excessive time pressure at school" and "I have sufficient time to complete my tasks at school". Participants responded to these items on a 7-point Likert scale.

Positive Affect: A 4-item positive affect measure adapted from the 10-item positive mood scale by Watson et al. (1988) was used to measure the extent to which participants felt 4 positive emotions (happy, self-assured, attentive, calm) while they were completing the survey.

Negative Affect: A 4-item negative affect measure adapted from the 10-item negative mood scale by Watson et al. (1988) was used to measure the extent to which participants felt 4 negative emotions (afraid, angry, guilty, sad) while they were completing the survey.

Results

Analytic Strategy

Prior to conducting the main analyses, preliminary analyses were done. Nine exploratory factor analyses were conducted using SPSS (one analysis for each measured construct). Based on the results of these analyses, three item parcels were generated for each variable to use as indicators in confirmatory factor analyses. Items were placed in the same parcel based on using a combination of low and high factor loadings in each parcel, following the recommendations of Little, Cunningham, Shahar, and Widaman (2002). The variables included in the CFAs were dispositional mindfulness, work emotional exhaustion, school emotional exhaustion, work engagement, school engagement, work time pressure, school time pressure, work-to-school conflict, school-to-work conflict.

Confirmatory factor analyses were conducted using MPlus. Four factor models were tested: the default 9-factor model, an 8-factor model in which work and school emotional exhaustions were combined into one factor, a 7-factor model in which work emotional exhaustion and work engagement were combined into one factor, and school emotional exhaustion and school engagement were combined into one factor; and a 1-factor model in which all variables were combined into one factor.

Descriptive statistics were then calculated, as well as bivariate correlations between variables (see Table 1). To test my hypotheses, the PROCESS macro for SPSS (Hayes, 2016), which is based on OLS regression, was used for all the regression analyses in the present study. PROCESS can be used for estimating direct and indirect effects in single or multiple mediator models. The mediation tests were executed through a bootstrapping procedure to test the significance of the indirect effects. In this study, the 95% confidence interval was used, and 5,000 bootstrap samples were run. If zero is contained within the 95% CI for the bootstrap samples, it indicates a lack of significance. It is noteworthy that all regression analyses for the hypothesis tests were run with and without positive affect (PA) and negative affect (NA) as covariates, and the pattern of results remained the same. "PROCESS Model 4" was used to test hypotheses 1, 2, 3, 5, 6, 7, 8, and "PROCESS Model 7" was used to test hypothesis 4. "PROCESS Model 4" tests mediation by testing the direct effect of the IV on the DV, the effects of the IV on the Mediator, the effects of the mediator on the DV, and the indirect effect of the IV on the DV through the mediator. "PROCESS Model 7" tests moderated mediation by testing all the paths in Model 4, as well as the conditional indirect effect of the IV on the DV at different levels of the moderator.

Finally, "PROCESS Model 1" was used to test simple moderations by testing the conditional effect of the independent variable on the mediator variable at different levels of the moderator. "PROCESS Model 1" was also used in post-hoc analyses to test the effect of the independent variable on the dependent variable at different levels of the moderator. It is also worth noting that results for "Model 2" in the regression tables were done using regular OLS regression in SPSS.

Results of Preliminary Analyses

According to Nye (2022), "larger chi-square values indicate poor fit" (p. 10). In addition, "the most stringent guidelines have suggested that an RMSEA ≤.06, CFI ≥.95, TLI ≥.95, and SRMR ≤.06 generally indicate good approximate fit" (Nye, 2022 p. 11). These guidelines are "often relaxed such that an RMSEA ≤.08, CFI ≥.90, TLI ≥.90, and SRMR ≤.08 indicate moderate fit" (Nye, 2022 p. 11). The results of the CFAs revealed that the default 9-factor model provided a moderate fit to the data (see Table 6, chi-square, CFI, TLI, RMSEA, SRMR) and was the best fit out of all the models based on the chi-square different test. The 8-factor model (EN) provided a less than moderate fit to the data but provided a better fit than the 8-factor model (EE) (see Table 6, chi-square, CFI, TLI, RMSEA, SRMR). The 8-factor model (EE) provided a less than moderate fit to the data but provided a better fit than the 7-factor model (see Table 6, chi-square, CFI, TLI, RMSEA, SRMR). Likewise, the 7-factor model provided a less than moderate fit to the data but provided a better fit than the 1-factor model (see Table 6, chi-square, CFI, TLI, RMSEA, SRMR). I took these results as evidence that the nine variables in my models are distinct, and that I could proceed with my hypothesis tests as planned.

In regard to bivariate correlations as shown in Table 1, work time pressure was found to be positively correlated with school-to-work conflict. School time pressure was found to be positively correlated with both work-to-school conflict and work emotional exhaustion. Work-to-school conflict was found to be positively correlated with school emotional exhaustion. Work emotional exhaustion was positively correlated with school emotional exhaustion and negatively correlated with work engagement. Work engagement was positively correlated with school engagement. Work time pressure was positively correlated with school time pressure. School emotional exhaustion was negatively correlated with school engagement. Cronbach alphas were calculated and are reported in Table 1.

Hypothesis Tests

Time pressure and emotional exhaustion

Hypothesis 1a stated that work time pressure is positively related to work emotional exhaustion. Consistent with this hypothesis, work time pressure was positively related to work emotional exhaustion (see Table 2, Model 3; coeff = **.59**, p < .001).

Hypothesis 1b stated that school time pressure is positively related to school emotional exhaustion. Consistent with this hypothesis, school time pressure was positively related to school emotional exhaustion (see Table 3, Model 3; coeff = **.54**, p < .001).

Time pressure and engagement

Hypothesis 2a stated that work time pressure is positively related to work engagement. Contrary to this hypothesis, work time pressure was not related to work engagement (see Table 4, Model 3; coeff = **-.05**, p = .31).

Hypothesis 2b stated that school time pressure is positively related to school engagement. Contrary to this hypothesis, school time pressure was negatively related to school engagement (see Table 5, Model 3; coeff = **-.19**, p = .003).

Time Pressure and WSC/SWC

Hypothesis 3a stated that work time pressure is positively related with work-to-school conflict. Consistent with this hypothesis, work time pressure was positively related to work-to-school conflict (see Table 2, Model 1; coeff = **.69**, p < .001).

Hypothesis 3b stated that school time pressure is positively related with school-to-work conflict. Consistent with this hypothesis, school time pressure was positively related to school-to-work conflict (see Table 3, Model 1; coeff = **.65**, p < .001).

Moderating effects of dispositional mindfulness on the relations between time pressure and

WSC/SWC

Hypothesis 4a stated that dispositional mindfulness moderates the relation between work time pressure and work-to-school conflict, such that the relation weakens as dispositional mindfulness increases. As shown in Tables 2 and 4 (see Model 5; coeff = **-.10**, p = .57), dispositional mindfulness did not moderate the relation between work time pressure and work-to-school conflict. The interaction between work time pressure and mindfulness in predicting work-to-school conflict added only .001% to the prediction equation and this was non-significant. On the other hand, it is worth noting that mindfulness was found to be a negative predictor of work-to-school conflict (see Tables 2 and 4, Model 2; coeff = **-.38**, p = .02) meaning that the more mindful an individual, the lower their work-to-school conflict.

Hypothesis 4b stated that dispositional mindfulness moderates the relation between school time pressure and school-to-work conflict, such that the relation weakens as dispositional mindfulness increases. As shown in Tables 3 and 5 (see Model 5; coeff = **.05**, p = .62), dispositional mindfulness did not moderate the relation between school time pressure and school-to-work conflict. The interaction between school time pressure and mindfulness in predicting work-to-school conflict added only .001% to the prediction equation and this was non-significant. Also of note, in contrast to work-to-school conflict, no significant relation was found between mindfulness and school-to-work conflict (see Tables 3 and 5, Model 2; coeff = **-.09**, p = .48).

WSC/SWC and emotional exhaustion

Hypothesis 5a stated that work-to-school conflict is positively related to work emotional exhaustion. Consistent with this hypothesis, work-to-school conflict was positively related to work emotional exhaustion (see Table 2, Model 4; coeff = **.44**, p < .001).

Hypothesis 5b stated that school-to-work conflict is positively related to school emotional exhaustion. Consistent with this hypothesis, school-to-work conflict was positively related to school emotional exhaustion (see Table 3, Model 4; coeff = **.28**, p = .01).

WSC/SWC and engagement

Hypothesis 6a stated that work-to-school conflict is negatively related to work engagement. Consistent with this hypothesis, work-to-school conflict was negatively related to work engagement (see Table 4, Model 4; coeff = **-.22**, p = .01).

Hypothesis 6b stated that school-to-work conflict is negatively related to school engagement. Contrary to this hypothesis, school-to-work conflict was not related to school engagement (see Table 5, Model 4; coeff = **.15**, p = .14).

Mediating effect of WSC on the relations between time pressure, emotional exhaustion, and engagement

Hypothesis 7a stated that work-to-school conflict partially mediates the positive relation that work time pressure has with work emotional exhaustion. As shown in Table 2, there was an indirect effect of work time pressure on work emotional exhaustion via work-to-school conflict (estimate = .30, 95% CI = .18 to .44). The effect of work time pressure on work emotional exhaustion remained significant (see Table 2, Model 4; coeff = **.28**, p =.005). These results are consistent with the hypothesis of partial mediation. Of note, the index of moderated mediation (see Table 2) was non-significant (estimate = .04, 95% CI: -.19 to .09).

Hypothesis 7b stated that work-to-school conflict partially mediates the positive relation that work time pressure has with work engagement. As shown in Table 4, there was an indirect effect of work time pressure on work engagement via work-to-school conflict (estimate = -.15,

95% CI = -.26 to -.03) and the effect of work time pressure on work engagement remained non-significant (see Table 4, Model 4; coeff = **.10**, p = .31). These results are not strictly consistent with the hypothesis of partial mediation because, although the indirect effect was significant, the direct effect of work time pressure on work engagement was found to be non-significant. Of note, the index of moderated mediation (see Table 4) was non-significant (estimate = .02, 95% CI: -.04 to .10).

Mediating effect of SWC on the relations between time pressure, emotional exhaustion, and engagement

Hypothesis 8a stated that school-to-work conflict partially mediates the positive relation that school time pressure has with school emotional exhaustion. As shown in Table 3, there was an indirect effect of school time pressure on school emotional exhaustion via school-to-work conflict (estimate = .18, 95% CI = .05 to .34). The effect of school time pressure on school emotional exhaustion remained significant (see Table 3, Model 4; coeff = **.36**, p < .001). These results are consistent with the hypothesis of partial mediation. Of note, the index of moderated mediation (see table 3) was non-significant (estimate = .01, 95% CI: -.04 to .08).

Hypothesis 8b stated that school-to-work conflict partially mediates the positive relation that school time pressure has with school engagement. As shown in Table 5, the indirect effect of school time pressure on school engagement via school-to-work conflict was non-significant (estimate = .10, 95% CI = -.03 to .23). The effect of school time pressure on school engagement remained significant (see Table 5, Model 4; coeff = **-.29**, p =.003). These results are inconsistent with the hypothesis of partial mediation. Of note, the index of moderated mediation (see table 5) was also non-significant (estimate = .01, 95% CI: -.02 to .05).

Post-Hoc Analyses

Considering that mindfulness did not moderate relations of time pressure with inter-role conflicts, I decided to test if it moderated relations with burnout and engagement. For these post-hoc analyses, the "PROCESS Model 1" test was run with Johnson-Neymann output requested for the following models (see Table 7):

1. Work time pressure to work emotional exhaustion, moderated by mindfulness (see Model 1, Table 7).

2. School time pressure to school emotional exhaustion, moderated by mindfulness (see Model 2, Table 7).

3. Work time pressure to work engagement, moderated by mindfulness (see Model 3, Table 7).

4. School time pressure to school engagement, moderated by mindfulness (see Model 4, Table 7).

As shown in Table 7, the relation between school time pressure and school engagement was moderated by mindfulness (see Model 4), and no other significant interaction was found. A graph was plotted using the Johnson-Neymann output to probe the significant interaction (see Figure 2). The graph depicts the size of the relation between school time pressure and school engagement at different levels of mindfulness. When all three lines are above or below zero, this reflects that the 95% confidence interval for the effect excludes zero and the relation is significant. As shown, the relation between school time pressure and school engagement is negative (all three lines are below zero) when mindfulness is less than 2.69 (low level of mindfulness), and there is no relation when mindfulness is above 2.69 (high level of mindfulness).

Discussion

This study was motivated by the increasing prevalence of college and university students taking work-related responsibilities in conjunction with their studies. In light of the importance and critical nature of the subject matter, the purpose of this study was threefold. **First**, it aimed to examine the effects of school and work time pressure on school and work burnout and engagement in working students. **Second**, it aimed to inquire into the mediating effects of work-school conflict. **Third**, it aimed to explore the potential moderating effect of dispositional mindfulness. This study pursued these three outcomes through an empirical analysis of data gathered from university students of Concordia University in Montreal, Canada who are pursuing both school and work roles and responsibilities. In what follows, I discuss the main takeaways and findings of my study in accordance with the three forementioned goals before reflecting on broader theoretical and practical implications.

Effects of Time Pressures on Working Students

This study investigated the effects of working students experiencing time pressures in either the school domain or the work domain. In line with hypotheses 1a and 1b respectively, I found that work time pressure was positively related with work emotional exhaustion and school time pressure was positively related with school emotional exhaustion. That is, as working students experienced time pressure in either the school or work domains, they were likely to experience burnout in the same domain as a result in the form of emotional exhaustion. These findings are consistent with past research that studied the relation between time pressure and emotional exhaustion in different domains such as work, life, and school (e.g., Darawad et al., 2015; Kleiner and Wallace, 2017; Skaalvik & Skaalvik, 2017; Wan et al., 2021).

28

In contrast to hypothesis 2b, school time pressure was negatively related to school engagement. That is, as working students experienced time pressure at school, they were likely to be less engaged with their academic endeavors. Upon further reflection on the reason behind the negative relation, I note that although time pressure has been treated uniformly throughout my study, Baethge et al. (2018) differentiated between different durations of exposure to time pressure. Baethge et al. argued that long-term exposure is associated with greater negative impact on engagement relative to short-term exposure. I argue that school time pressure might be an example of long-term exposure to time pressure considering that it may persist – albeit in varying degrees – throughout the semester (and even the degree as a whole), which explains its negative relation to school engagement. In this context, time pressure may serve as a hindrance stressor that would negatively impact engagement (Crawford et al., 2010). This negative relation highlights the potential negative implications of school time pressure for working students in terms of not only higher burnout but also lower engagement in their studies and academic endeavors.

Moreover, the findings – in contrast to hypothesis 2a – did not establish a relation between the perceived time pressure that students experienced at work and their engagement with their respective jobs. This non-significant finding warrants further conceptual and empirical investigation into work engagement for working students. Work engagement been conceptualized as a more persistent and pervasive affective-cognitive state for employees and workers in their respective professional endeavors (Schaufeli et al., 2002). Moreover, as noted by Schaufeli et al. (2006), the construct exhibits notable variations for workers pursuing different professions under different motivations. For example, blue-collar workers tend to be less engaged in their work than police officers and educators, on average. I note this to suggest that the forementioned lack of a statistically significant relation as per hypothesis 2a can be potentially attributed to the types of

jobs and underlying motivations that students pursue (Schaufeli et al., 2006). So, while working students do exhibit work engagement as per the descriptive statistics (see Table 1) in the study, the relation between time pressure and engagement was not significant considering that, for a portion of these students, work (temporary and part-time) is secondary relative to their studies. Moreover, their engagement might be thus determined by the need to support themselves while they study. For these students, the level of engagement might be relatively fixed and unlikely to be impacted by work time pressure since the basis for work engagement is simply to make ends meet. As such, work time pressure might not have an impact on their level of work engagement, in contrast to my hypothesis. While I pose this line of argumentation as a possibility, future research might thus investigate whether work engagement, as conceptualized and measured, needs to be revisited for student work. Moreover, while I proposed a positive relation between work time pressure and work engagement, other relations can further be tested. For example, a curvilinear, inverted U-shaped relationship has been found between work time pressure and work engagement in past research (e.g., Schmitt et al., 2015; Sheng et al., 2019). These studies found that as work time pressure increases, work engagement increases to a certain peak and then decreases as time pressure continues to increase. Such a relationship can be investigated in future research while noting that types and motivation of student work need to be accounted for as well.

Effect of Work-to-School and School-to-Work Conflicts

Critical to the conceptual development of this study is the notion that there are conflicts between the school and work domains for working students. This interplay has been established in past research (Kremer, 2016; Markel & Frone, 1998; Wan et al., 2021). In analyzing the role of work-to-school conflict and school-to-work conflict as per the conceptual model, this study contributes to the increasingly relevant school domain.

Conflict as mediating the relationship between time pressure and emotional exhaustion.

        In line with hypotheses 3a and 3b, work and school time pressures positively predict work-to-school conflict (WSC) and school-to-work conflict (SWC) respectively. Also, in line with hypotheses 5a and 5b, WSC and SWC positively predict work emotional exhaustion and school emotional exhaustion respectively. For hypothesis 7a, WSC was found to partially mediate the relation that work time pressure has with work emotional exhaustion. As for hypothesis 8a, SWC was found to partially mediate the positive relation that school time pressure has with school emotional exhaustion. These findings point to statistically significant correlations between work and school time pressures, emotional exhaustion, and WSC/SWC. With the school domain deemed under-researched relative to the work and life domains, the research findings extend the important work-school interface literature (Wan et al., 2021; Höge, 2009; Reichl et al., 2014; Alarcon, 2011; Kremer, 2016). Moreover, the findings that are in accordance with the conceptual model add nuance to past research. For example, while Kremer (2016) established the relation between SWC (but not WSC) and the overall subjective stress and burnout of individuals in their study, my study establishes the relation between WSC and SWC and domain-specific burnout. Thus, it highlights the implications of WSC and SWC to work-specific and school-specific outcomes respectively.

Conflict as mediating the relationship between time pressure and engagement.

        In line with hypothesis 6a, WSC was found to be negatively related to work engagement. That is, work-to-school conflict was found to be associated with working students being less engaged with their work and professional endeavors. This negative relation is in line with research into inter-role and inter-domain conflicts (beyond school-specific conflicts). For example, past research has found a negative relation between work-family conflict and work engagement (Opie & Hen, 2013; Yucel et al., 2021). This finding is also in line with Koperski's (2017) finding that

WSC is negatively correlated to study engagement, and Creed et al.'s (2015) finding that work-university conflict is negatively related to university engagement, albeit those studies were looking at crossover to school engagement. Further, although work time pressure was not related to work engagement, a negative indirect effect was found of work time pressure on work engagement via work-to-school conflict (hypothesis 7b). Notably, my research did not establish a relation between school-to-work conflict and school engagement (hypothesis 6b) and, accordingly, SWC did not mediate the negative relation that school time pressure has with school engagement (hypothesis 8b).

The Moderating Effects of Mindfulness

In addition to studying the effects of time pressures on the burnout and engagement of working students and attempting to disentangle the interplay between the school and work domains, as discussed in the previous sub-section, this study investigated the potential moderating effects of mindfulness through which the construct may buffer the relation between time pressure and school-work conflict. In contrast to hypotheses 4a and 4b, however, dispositional mindfulness was not found to have a moderating effect on the positive relation between work time pressure and WSC, or the positive relationship between school time pressure and SWC. These findings are inconsistent with past research. In particular, Wan et al. (2021) found a moderating effect of dispositional mindfulness on the relation between school time pressure, school-to-work boundary permeability, and SWC.

These findings - in terms of the lack of moderation of the relation between time pressure and conflict - can be attributed to data collection taking place around the end of the term that typically coincides with students having a multitude of deadlines for projects and assignments in addition to the preparation for final exams. This context could render mindfulness on its own

ineffective for working students in buffering the undesirable effects of time pressure, leading them to experience WSC/SWC. That is, in contexts when time pressure is high (i.e., sharp peak), the mindfulness resource might not compensate for the emotional exhaustion and high WSC/SWC. The high time pressure that coincided with the undertaking of data collection could explain the lack of support for the hypothesized moderating effects in accordance with the tested conceptual model. This, coupled with mindfulness – as measured in the survey – being self-reported warrants further research into the relation between high time pressure and dispositional mindfulness relative to WSC/SWC.

Though hypotheses 4a and 4b were not supported, I should note that upon further analysis of the collected data, two findings were identified that might add nuance into the study and similarly inform future research. **First**, the results showed a negative relation between school time pressure and school engagement at low levels of dispositional mindfulness. That is, students who self-reported low mindfulness were likely to be less engaged with their school (see figure 2). **Second**, the results showed no relation between school time pressure and school engagement at high levels of dispositional mindfulness (see figure 2). Collectively, these additional findings point to low dispositional mindfulness having an inverse effect on student engagement amid periods of high time pressure that have arguably coincided with data collection. However, students who exhibit high dispositional mindfulness were not as adversely impacted by time pressure with the relation not supported, all together.

Theoretical Implications

The forementioned outcomes of this study touch upon multiple domains and invoke multiple theories and frameworks. As such the findings have broader theoretical implications.

First. I theorized and tested an expanded conceptual model of the conflict between the school and work domains, its antecedents in the form of time pressure, and its outcomes (i.e., emotional exhaustion and engagement). I argued for the importance of accounting for the school domain - which has been under researched relative to other domains with notable exceptions (Creed et al. 2015; Kleiner & Wallace, 2017; Koperski, 2017; Wan et al., 2021) - that contributes to inter-role conflicts (i.e., work and school) and related outcomes. Though the support for the proposed hypotheses was mixed, the main implication from the study is related to the emotional exhaustion that working students experience at school and at work. The findings highlight that indeed time pressure in each of the school and work domains is associated with burnout relative to the respective domains; this association is mediated by SWC and WSC. The proposed conceptual model can be used in future research especially as it pertains to burnout.

Second. The study adds to our understanding of the added value of leveraging the JD-R model in the study of the work-school interface. In proposing and measuring the hypotheses in the study, the JD-R model constituted an appropriate conceptual lens that accommodates for both (school and work) demands and resources, i.e., facing demands at school and work with the proper school and work resources can predict domain-specific outcomes (Bakker & Demerouti, 2007; Demerouti et al., 2001). More specifically, the emotional and physical job demands that working students experienced in the form of time pressures were found to predict work emotional exhaustion. These findings are inline with the notion that job demands are positively related to exhaustion. Leveraging the JD-R model can be further extended through proposing and testing resources that would mitigate the negative effects of job demands (i.e., time pressure) on burnout (Bakker et al., 2005). In this study, mindfulness was proposed and tested as exemplary of such resources. Though

the results were mixed, future research can nevertheless consider additional personal and job resources.

Third. Relatedly, the study did not establish mindfulness – as reported by working students - to be a sufficient resource in dealing with school and work time pressure and SWC and WSC, respectively. Unlike the study by Wan et al. (2021), dispositional mindfulness was not found to moderate the aforementioned relations. The findings of this study are not consistent with the JD-R model that argues that with sufficient job (i.e., school and work) and personal resources individual can respond to demands and challenges (e.g., Bakker et al., 2018). This could imply, as mentioned previously, the ineffectiveness of mindfulness under higher levels (i.e., peaks) of time pressure or during stressful times during a semester that in conjunction with work lead to burnout. The implications of the findings (or non-findings) suggest that further research is warranted into job resources that are to be tailored to universities and colleges, and personal resources that would be most effective for students relative to working professionals, for example.

Practical Implications

Among the motivations for this study is its relevance not only to furthering academic research but also because of its practical implications. The latter is especially emphasized considering the forementioned research findings. Among the contributions of this study is the assertion that time pressure is associated with emotional exhaustion for working students. Moreover, the interplay between the two domains and resultant conflicts suggests that there are implications for institutions across the board in addition to students themselves. It is important to the note the following implications greatly overlap.

Implications for Colleges and Universities.

The findings shed light on the potential implications of students pursuing work in addition to their studies. Though the study did not delve qualitatively into the reasons for students to pursue work in conjunction with their studies, it is reasonable based on research to suggest that financial needs drive this trend (e.g., Darolia, 2013; Denning, 2017; Hall, 2010). With the findings that SWC and WSC are positively related to emotional exhaustion of working students in mind, educational institutions may alleviate the pressures that students put upon themselves towards financial support. Past research has documented the relation between financial stress and emotional exhaustion on one hand and the relation between financial aid and engagement on the other hand (e.g., Britt et al., 2015; Lim et al., 2014; Nora et al., 2006).

Though the study emphasized time pressures, as opposed to financial pressures, accounting for financial aid and counselling might reduce the need for students to undertake longer work shifts and commitments; this would lower the incidence of SWC and WSC as per the proposed and measured conceptual model. That is, with more financial aid for working students, they may not be required to work in order to support themselves during their studies or undertake longer shifts, with their limited time and energy, and risk high time pressure and SWC/WSC. Furthermore, colleges and universities may similarly invest in mental health counselling services that support students as they manage their studies and related emotional exhaustion.

Implications for Organizations.

While dispositional mindfulness was not found to moderate the relations between school and work time pressures and SWC and WSC, respectively, analysis of the data did highlight that mindfulness is related to conflicts, emotional exhaustion, and engagement. Specifically, dispositional mindfulness was found to be negatively correlated with both work and school emotional exhaustion and positively correlated with both work and school engagement.

Dispositional mindfulness was also found to be negatively correlated with WSC. As such, organizations and universities could invest in accommodations such as counselling or mindfulness training programs, such as the Mindfulness-Based Stress Reduction (MBSR) program and the Mindfulness Self-Compassion (MSC) program, that have been found to significantly improve mindfulness and reduce anxiety and depression (Jiménez-Gómez et al., 2022). This could have positive implications for workers more broadly and working students, more specifically, who have to deal with the inter-role and inter-domain conflicts.

More broadly, research has suggested that organizations should support their employees in mitigating work-life or work-family conflicts for their workers, which has been associated with better employee health and job performance (e.g., Brough & Kalliath, 2009). This study contributes to research into the importance of considering the work-school interface and has argued for the implications of SWC and WSC. As such, organizations could accommodate their workers, and employees who pursue studies and who experience negative interactions between work and school domains, through additional flexibility and the provisioning of emotional support. This is important given the growth in the number of students in the workforce and the reliance of organizations on their skillsets and flexibility (e.g., part-time jobs).

Implications for Students.

This study has implications for students who elect to work during their studies or who need to work for financial reasons. In particular, the time pressure that students might experience during their school and their work has been associated with WSC/SWC and emotional exhaustion across both domains in this study as in past research (e.g., Wan et al., 2021). Therefore, students need to be conscious of the implications of engaging with both the school and work domains simultaneously amid time pressures and should plan accordingly. First, considering that time is a

finite resource, students should attempt to decrease the overlap between work and time pressures. For example, they may want to plan for shorter or fewer work shifts during their examination periods. Second, students could be encouraged to access resources around mindfulness available at their respective universities, organizations, and even public sources. As noted above, increased mindfulness was related to lower conflict, lower exhaustion, and higher engagement. Thus, cultivating mindfulness could help. Third, students who work to support themselves could leverage different options to lessen work time pressure (e.g., bursaries, grants, student loans, etc.). While this might not always be feasible, students can at least survey different options.

Limitations and Future Research

This study has several conceptual and empirical limitations that offer possible directions for future research. These limitations are acknowledged in this section.

A **first limitation** is that the research design relied on self-reported data provided by working students. For example, students were asked to report on their own school and work time pressures and to report on their own burnouts. Therefore, the possibility that my findings are influenced by common method variance must be acknowledged as a limitation of the study. This said, it is important to note that valid, previously published measured were used for all constructs in accordance with past research (e.g., Kristensen, 2005; Schaufeli et al., 2006; Walach et al., 2006), Future research would benefit from including other sources of data to allow for the triangulation of results. Further, qualitative research in which working students are interviewed could add further insights about the reasons and motivations for working students to engage with both the school and work domains. Such data could inform the lack of relation between work time pressure and work engagement if indeed a portion of the working students were undertaking part-time and temporary work for financial support and thus the relationship between time pressure and

engagement was less salient. Future research might include additional contextual factors in the survey administered to students.

A **second limitation** pertains to the correlational design that was used in this study. A major issue that could arise from the correlational nature of this study is the potential for reverse causation or spuriousness. For example, it cannot be determined whether time pressure causes emotional exhaustion or emotional exhaustion causes time pressure, or whether a third independent variable exists that was not measured in the study that causes both time pressure and emotional exhaustion. Therefore, future research should include more potential constructs in the theoretical framework to rule out third variables and could use an experimental design to mitigate the issues of reverse causality and spuriousness.

A **third limitation** pertains to the cross-sectional design that was used in this study. In the past few decades, it has been pointed out that because mediation invariably occurs over time, empirical investigations of mediation should take time into account (e.g., Maxwell & Cole, 2007; Maxwell et al., 2011). Maxwell et al. (2011) further argued that cross-sectional research designs can "substantially over- or underestimate longitudinal effects even when longitudinal parameter estimates are completely stable, and there is no measurement error" (Maxwell et al., 2011, p. 838). Broadly, mediation analysis is inherently causal, and the examination of complex causal relations is best done through longitudinal design (Maxwell et al., 2011). In this study, the research design was cross-sectional and time was not accounted for in the examination of the mediating effect of WSC and SWC. As such, the variations that may take place over time and across different phases of the school term(s) and working schedules were not measured. As discussed earlier, among the possible explanations for the results of the hypotheses testing is that the study took place at a single

point of time in the term of the respective participants. Future research should thus study the mediating effects of conflict across a longer period of time.

A **fourth limitation** pertains to the data collection being done from students at a single educational institution (i.e., Concordia University). This poses potential questions as to whether these findings (or non-findings for that matter) are unique to the institution studied relative to other education institutions in Montreal and Canada. This potential limitation – which was imposed for practical reasons – can be addressed through replicating the study and testing the hypotheses in other colleges and universities, which could provide evidence of whether the results are generalizable.

Conclusion

Working students are facing increasing challenges and pressures in both work and school domains. This issue requires attention from organizations and academic institutions to avoid or mitigate the negative consequences working students are seeing. The purpose of this study was to investigate the experiences of working students in both work and school domains and explore the demands they are facing, along with the resources they have or are provided to face those demands. I explored the relations of time pressure (demand) on emotional exhaustion and engagement and investigated the potential mediating effect of conflict on the relations between time pressure on the one hand and emotional exhaustion and engagement on the other. Also, I investigated the potential moderating effect of dispositional mindfulness (resource). The findings suggest that work and school time pressure is positively related to work and school emotional exhaustion but not work and school engagement. Work-school conflict was found to mediate the relationship between time pressure and emotional exhaustion but not the relationship between time pressure and engagement. Dispositional mindfulness was not found to have a moderating effect on the

relationship between work and school time pressure and work-school conflict. Organizations could provide several accommodations (e.g., mindfulness training programs) and academic institutions could provide counselling and financial aid in order to help preserve the wellbeing of working students and prevent the negative consequences they are experiencing.

Table 1. Means, standard deviations, internal consistencies, and correlations.

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1-Dispositional Mindfulness	2.61	.50	**.83**										
2- Work Emotional Exhaustion	3.78	1.27	-.21**	**.89**									
3- Work Engagement	4.33	1.03	.36**	-.52**	**.87**								
4- Work Time Pressure	3.17	1.06	-.09	.49**	-.05	**.76**							
5- Work-to-School Conflict	3.73	1.22	-.21**	.56**	-.19*	.60**	**.77**						
6- School Emotional Exhaustion	4.97	1.21	-.27**	.44**	-.20*	.12	.32**	**.87**					
7- School Engagement	4.01	1.02	.35**	-.11	.33**	.09	-.09	-.52**	**.85**				
8- School Time Pressure	4.57	1.22	-.13	.31**	.04	.32**	.61**	.54**	-.23**	**.84**			
9- School-to-Work Conflict	4.15	1.10	-.14	.37**	.05	.35**	.56**	.52**	-.08	.72**	**.68**		
10- Positive Affect	3.35	.79	.31**	-.13	.25**	-.12	-.19*	-.28**	.31**	-.21*	-.20*	**.69**	
11- Negative Affect	1.51	.70	-.16	.25**	-.12	.22**	.27**	.21*	-.08	.30**	.22**	-.31**	**.74**

Note. N = 152. S.D. = standard deviation. Cronbach's alphas are reported on the diagonal. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table 2. Relations of work time pressure, work-to-school conflict, work emotional exhaustion, and dispositional mindfulness.

	Work-to-School Conflict (Model 1)		Work-to-School Conflict (Model 2)		Work Emotional Exhaustion (Model 3)		Work Emotional Exhaustion (Model 4)		Work-to-School Conflict (Model 5)	
	coeff	se	coeff	se	coeff	se	coeff	se	coeff	se
Work Time Pressure	.69***	.08	.68***	.07	.59***	.09	.28**	.10	.93*	.44
Work-to-School Conflict							.44***	.09		
Mindfulness			-.38*	.16					-.09	.53
Work Time Pressure X Mindfulness									-.10	.17
R-squared	.36***		.39***		.24***		.35***		.39***	

Indirect Effect of Work Time Pressure on Work Emotional Exhaustion via WSC (Model 4): estimate = .30 (Boot se = .07), 95% CI: .18 to .44
Index of Moderated Mediation (Based on Model 4 and Model 5): estimate = .04 (Boot se = .07), 95% CI: -.19 to .09

Note. $N = 152$. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table 3. Relations of school time pressure, school-to-work conflict, school emotional exhaustion, and dispositional mindfulness.

	School-to-Work Conflict (Model 1)		School-to-Work Conflict (Model 2)		School Emotional Exhaustion (Model 3)		School Emotional Exhaustion (Model 4)		School-to-Work Conflict (Model 5)	
	coeff	Se	coeff	se	coeff	se	coeff	se	coeff	se
School Time Pressure	.65***	.05	.64***	.05	.54***	.07	.36***	.10	.52*	.26
School-to-Work Conflict							.28**	.11		
Mindfulness			-.09	.13					-.30	.44
School Time Pressure X Mindfulness									.05	.10
R-squared	.51***		.51***		.30***		.33***		.51***	

Indirect Effect of School Time Pressure on School Emotional Exhaustion via SWC (Model 4): estimate = .18 (Boot se = .07), 95% CI: .05 to .34
Index of Moderated Mediation (Based on Model 4 and Model 5): estimate = .01 (Boot se = .03), 95% CI: -.04 to .08

Note. N = 152. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table 4. Relations of work time pressure, work-to-school conflict, work engagement, and dispositional mindfulness.

	Work-to-School Conflict (Model 1)		Work-to-School Conflict (Model 2)		Work Engagement (Model 3)		Work Engagement (Model 4)		Work-to-School Conflict (Model 5)	
	coeff	Se	coeff	se	coeff	se	coeff	se	coeff	se
Work Time Pressure	.69***	.08	.68***	.07	-.05	.08	.10	.10	.93*	.44
Work-to-School Conflict							-.22*	.09		
Mindfulness			-.38*	.16					-.09	.53
Work Time Pressure X Mindfulness									-.10	.17
R-squared	.36***		.39***		.003		.04*		.39***	

Indirect Effect of Work Time Pressure on Work Engagement via WSC (Model 4): estimate = -.15 (Boot se = .06), 95% CI: -.26 to -.03
Index of Moderated Mediation (Based on Model 4 and Model 5): estimate = .02 (Boot se = .04), 95% CI: -.04 to .10

Note. N = 152. *** p < 0.001, ** p < 0.01, * p < 0.05.

Table 5. Relations of school time pressure, school-to-work conflict, school engagement, and dispositional mindfulness.

	School-to-Work Conflict (Model 1)		School-to-Work Conflict (Model 2)		School Engagement (Model 3)		School Engagement (Model 4)		School-to-Work Conflict (Model 5)	
	coeff	Se	coeff	se	coeff	se	coeff	se	coeff	se
School Time Pressure	.65***	.05	.64***	.05	-.19**	.07	-.29**	.10	.52*	.26
School-to-Work Conflict							.15	.11		
Mindfulness			-.09	.13					-.30	.44
School Time Pressure X Mindfulness									.05	.10
R-squared	.51***		.51***		.05**		.06***		.51***	

Indirect Effect of School Time Pressure on School Engagement via SWC (Model 4): .10 (Boot se = .07), 95% CI: -.03 to .23
Index of Moderated Mediation (Based on Model 4 and Model 5): .01 (Boot se = .02), 95% CI: -.02 to .05

Note. N = 152. *** p < 0.001, ** p < 0.01, * p < 0.05.

Table 6. Results of confirmatory factor analyses.

	c^2	CFI	TLI	RMSEA	SRMR
9-factor model	504.78	.92	.90	.07	.07
8-factor model (EN)	785.09	.82	.78	.10	.10
8-factor model (EE)	791.02	.82	.78	.10	.10
7-factor model	962.93	.75	.77	.11	.11
1-factor model	1985.31	.38	.33	.18	.16

Note: **N = 152. 9-factor model:** default model (factors: work time pressure, school time pressure, work emotional exhaustion, school emotional exhaustion, work engagement, school engagement, dispositional mindfulness, work-to-school conflict, school-to-work conflict). **8-factor model (EN):** work and school engagement were combined into one factor. **8-factor model (EE):** work and school emotional exhaustions were combined into one factor. **7-factor model:** work emotional exhaustion and work engagement were combined into one factor, and school emotional exhaustion and school engagement were combined into one factor. **1-factor model:** all variables were combined into one factor

Table 7. Relations of burnout, engagement, mindfulness, and time pressure.

	Work Emotional Exhaustion (Model 1)		School Emotional Exhaustion (Model 2)		Work Engagement (Model 3)		School Engagement (Model 4)	
	coeff	se	coeff	se	coeff	se	coeff	se
Work / School Time Pressure	1.33**	.49	.44	.33	-.27	.44	-.78*	.31
Mindfulness	.46	.60	-.60	.57	.43	.53	-.37	.53
Work / School Time Pressure X Mindfulness	-.29	.19	.03	.13	.10	.17	.24*	.19
R-squared	.28***		.33***		.13***		.18***	

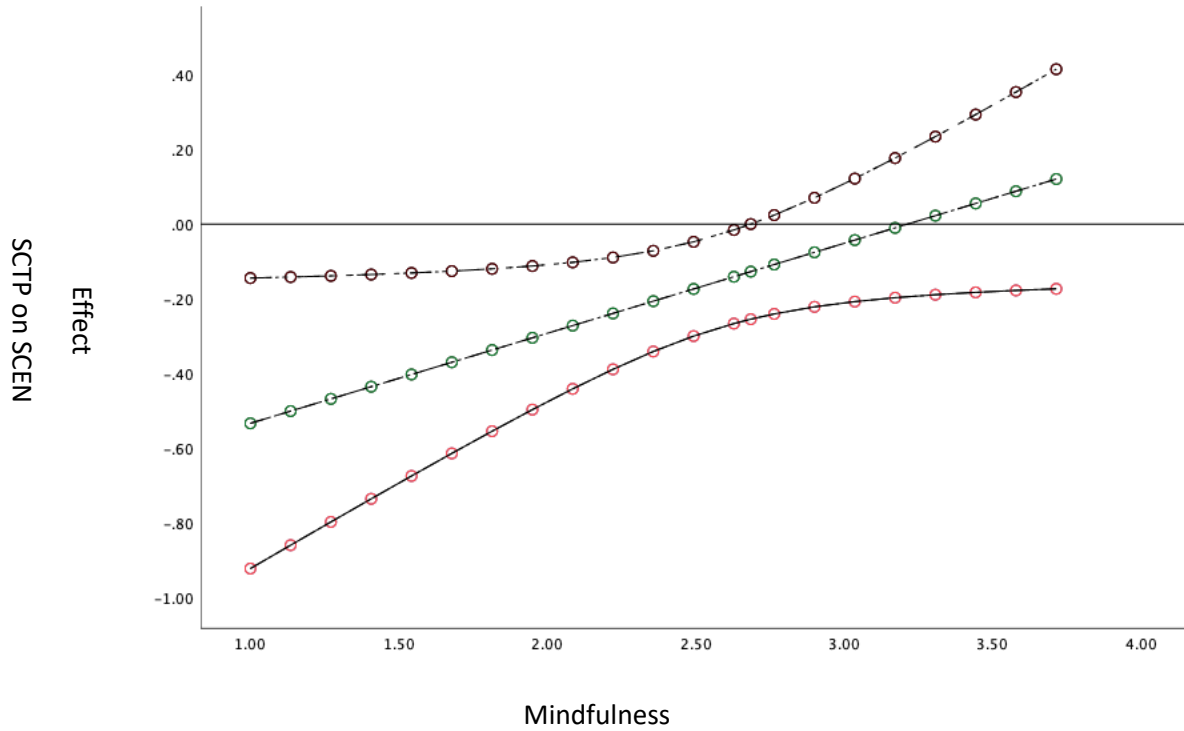Note. N = 152. *** p < 0.001, ** p < 0.01, * p < 0.05.

Figure 2. Plot of Effect Sizes for Relation of School Time Pressure to Engagement at Different Levels of Mindfulness.

Note. SCTP = School Time Pressure. SCEN = School Engagement. The middle line reflects the estimated effect. The top line reflects the ULCI and the bottom line reflects the LLCI.

References

Ádám, S., Gyorffy, Z., & Susánszky, É. (2008). Physician Burnout in Hungary. *Journal of Health Psychology*, 13(7), 847–856. https://doi.org/10.1177/1359105308095055

Adams, R. V., & Blair, E. (2019). Impact of Time Management Behaviors on Undergraduate Engineering Students' Performance. *SAGE Open*, 9, 1-11. https://doi.org/10.1177/2158244018824506

Alarcon, G. M. (2011). A meta-analysis of burnout with job demands, resources, and attitudes. *Journal of Vocational Behavior*, 79(2), 549–562. https://doi.org/10.1016/j.jvb.2011.03.007

Allen, T. D., & Kiburz, K. M. (2012). Trait mindfulness and work–family balance among working parents: The mediating effects of vitality and sleep quality. *Journal of Vocational Behavior*, 80(2), 372–379. https://doi.org/10.1016/j.jvb.2011.09.002

Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A., & Semmer, N. K. (2011). A meta-analysis of work–family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology*, 16(2), 151–169. https://doi.org/10.1037/a0022170

American Psychology Association (2020). *Stress in America*™ *2020: A National Mental Health Crisis*. https://www.apa.org/news/press/releases/stress/2020/sia-mental-health-crisis.pdf

Baethge, A., Vahle-Hinz, T., Schulte-Braucks, J., & van Dick, R. (2018). A matter of time? Challenging and hindering effects of time pressure on work engagement. *Work & Stress*, 32(3), 228–247. https://doi.org/10.1080/02678373.2017.1415998

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*, *22*(3), 309–328. https://doi.org/10.1108/02683940710733115

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 389–411. https://doi.org/10.1146/annurev-orgpsych-031413-091235

Beck, J. W., & Schmidt, A. M. (2013). State-level goal orientations as mediators of the relationship between time pressure and performance: A longitudinal study. *Journal of Applied Psychology*, 98(2), 354–363. https://doi.org/10.1037/a0031145

Blanch, A., & Aluja, A. (2012). Social support (family and supervisor), work–family conflict, and burnout: Sex differences. *Human Relations*, 65(7), 811–833. https://doi.org/10.1177/0018726712440471

Beatson, N. J., De Lange, P. P. M., & Oosthuizen, H. (2021). A question of balance: study–work–life, perspectives from accounting students. *Pacific Accounting Review*, 33(3), 257–273. https://doi.org/10.1108/par-09-2020-0137

Breaugh, J. A. (1985). The measurement of work autonomy. *Human Relations*, 38(6), 551–570. https://doi.org/10.1177/001872678503800604

Brem, A. (2009). Encyclopedia of Case Study Research. *SAGE Publications, Inc. EBooks*. https://doi.org/10.4135/9781412957397

Britt, S. L., Canale, A., Fernatt, F., Stutz, K., & Tibbetts, R. (2015). Financial Stress and Financial Counseling: Helping College Students. *Journal of Financial Counseling and Planning*, 26(2), 172–186. https://doi.org/10.1891/1052-3073.26.2.172

Brough, P., & Kalliath, T. (2009). Work-family balance: Theoretical and empirical advancements. Journal of Organizational Behavior, 30(5), 581–585. https://doi.org/10.1002/job.618

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. https://doi.org/10.1037/0022-3514.84.4.822

Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4), 211–237. https://doi.org/10.1080/10478400701598298

Burke, R. J., & Greenglass, E. R. (2001). Hospital restructuring, work-family conflict and psychological burnout among nursing staff. *Psychology & Health*, *16*(5), 583–594. https://doi.org/10.1080/08870440108405528

Burston, M. A. (2017). I work and don't have time for that theory stuff: Time poverty and higher education. *Journal of Further and Higher Education*, 41(4), 516–529. https://doi.org/10.1080/0309877X.2015.1135885

Carmona-Halty, M., Schaufeli, W. B., & Salanova, M. (2019). The Utrecht Work Engagement Scale for Students (UWES–9S): Factorial Validity, Reliability, and Measurement Invariance in a Chilean Sample of Undergraduate University Students. *Frontiers in Psychology*, *10*. https://doi.org/10.3389/fpsyg.2019.01017

Choo, C. E. K., Kan, Z. X., & Cho, E. (2021). A review of the literature on the school-work-life interface. *Journal of Career Development*, *48*(3), 290-305. https://doi.org/10.1177/0894845319841170

Citroner, G. (2021, July 25). College Students Increasingly Report High Levels of Anxiety and Burnout During the Pandemic. Healthline. https://www.healthline.com/health-news/college-students-increasingly-report-high-levels-of-anxiety-and-burnout-during-the-

pandemic#Vaccination-may-reduce-anxiety

Clark, S. C. (2001). Work cultures and work/family balance. *Journal of Vocational Behavior*, 58(3), 348–365. https://doi.org/10.1006/jvbe.2000.1759

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834–848. https://doi.org/10.1037/a0019364

Creed, P. A., French, J., & Hood, M. (2015). Working while studying at university: The relationship between work benefits and demands and engagement and well-being. *Journal of Vocational Behavior*, 86, 48–57. https://doi.org/10.1016/j.jvb.2014.11.002

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

Crompton, S. (2011). What's stressing the stressed? Main sources of stress among workers. *Canadian Social Trends*, *92*, 44-51. https://www150.statcan.gc.ca/n1/pub/11-008-x/2011002/article/11562-eng.htm

Darawad, M. , Nawafleh, H. , Maharmeh, M. , Hamdan-Mansour, A. and Azzeghaiby, S. (2015) The Relationship between Time Pressure and Burnout Syndrome: A Cross-Sectional Survey among Jordanian Nurses. *Health*, 7, 14-22. doi: 10.4236/health.2015.71003.

Darolia, R. (2014). Working (and studying) day and night: Heterogeneous effects of working on the academic performance of full-time and part-time students. *Economics of Education Review*, 38, 38-50. https://doi.org/10.1016/j.econedurev.2013.10.004

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Denning, J. T. (2019). Born under a lucky star financial aid, college completion, labor supply, and credit constraints. *Journal of Human Resources*, 54(3), 760-784. doi: 10.3368/jhr.54.3.1116.8359R1

Dugan, A. G., Matthews, R. A., & Barnes-Farrell, J. L. (2012). Understanding the roles of subjective and objective aspects of time in the work-family interface. *Community, Work & Family*, 15(2), 149–172. https://doi.org/10.1080/13668803.2011.609656

DeVoe, S. E., & Pfeffer, J. (2011). Time is tight: How higher economic value of time increases feelings of time pressure. *Journal of Applied Psychology*, 96(4), 665–676. https://doi.org/10.1037/a0022148

Eurostat. (2021, June). *Adult learning statistics – characteristics of education and training – Statistics Explained*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Adult_learning_statistics_-_characteristics_of_education_and_training

EvoLLLution NewsWire. (2012, September 4). *New Research Shows Continuing Education Increases Employee Income and Corporate Efficiency*. The EvoLLLution. https://evolllution.com/press-releases/research-shows-continuing-education-increases-employee-income-corporate-efficiency/

Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77(1), 65–78. https://doi.org/10.1037/0021-9010.77.1.65

Government of Canada, Statistics Canada. (2022, February 4). *Unemployment rate and employment rate by type of student during summer months, monthly, unadjusted for seasonality, last 5 months*. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410028601&pickMembers%5B0%5D=1.1&pickMembers%5B1%5D=4.1&pickMembers%5B2%5D=5.1&pickMembers%5B3%5D=6.1&cubeTimeFrame.startMonth=06&cubeTimeFrame.startYear=2021&cubeTimeFrame.endMonth=01&cubeTimeFrame.endYear=2022&referencePeriods=20210601%2C20220101

Leiter, M. P., Maslach, C., & Frame, K. A. (2015b). Burnout. *The Encyclopedia of Clinical Psychology*, 1–7. https://doi.org/10.1002/9781118625392.wbecp142

Hall, R. P. (2010). The work–study relationship: experiences of full-time university students undertaking part-time employment. *Journal of Education and Work*, 23(5), 439–449. https://doi.org/10.1080/13639080.2010.515969

Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In A. B. Bakker (Ed.) & M. P. Leiter, Work engagement: A handbook of essential theory and research (pp. 102–117). *Psychology Press*.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. https://doi.org/10.1037/0003-066X.44.3.513

Höge, T. (2009). When work strain transcends psychological boundaries: an inquiry into the relationship between time pressure, irritation, work-family conflict and psychosomatic complaints. *Stress and Health*, 25(1), 41–51. https://doi.org/10.1002/smi.1226

Hopkins, D. (2008). *A Teacher's Guide to Classroom Research*. Open University Press.

Hussar, B., Zhang, J., Hein, S., Wang, K., Roberts, A., Cui, J., Smith, M. L., Mann, F. B., Barmer, A., & Dilig, R. (2020). The Condition of Education 2020. NCES 2020-144. *National Center for Education Statistics*. http://files.eric.ed.gov/fulltext/ED605216.pdf

Jiménez-Gómez, L., Yela, J. R., Crego, A., Melero-Ventola, A. R., & Gómez-Martínez, M. Á. (2022). Effectiveness of the Mindfulness-Based Stress Reduction (MBSR) vs. the Mindful Self-Compassion (MSC) programs in clinical and health psychologist trainees. *Mindfulness*, 13(3), 584–599. https://doi.org/10.1007/s12671-021-01814-2

Kabat-Zinn, J. (1994). *Mindfulness Meditation for Everyday Life*. Piatkus Books.

Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human Relations*, 45(4), 321–349. https://doi.org/10.1177/001872679204500402

Karatepe, O. M., & Karadas, G. (2016). Service employees' fit, work-family conflict, and work engagement. Journal of Services Marketing, 30(5), 554–566. https://doi.org/10.1108/jsm-02-2015-0066

Kleiner, S. (2014). Subjective time pressure: General or domain specific? *Social Science Research*, 47, 108–120. https://doi.org/10.1016/j.ssresearch.2014.03.013

Kleiner, S., & Wallace, J. E. (2017). Oncologist burnout and compassion fatigue: investigating time pressure at work as a predictor and the mediating role of work-family conflict. *BMC health services research*, *17*(1), 1-8. https://doi.org/10.1186/s12913-017-2581-9

Korunka, C., Kubicek, B., Schaufeli, W. B., & Hoonakker, P. (2009). Work engagement and burnout: testing the robustness of the Job Demands-Resources model. *The Journal of Positive Psychology*, 4(3), 243–255. https://doi.org/10.1080/17439760902879976

Koperski, Lucas G., "The Moderating Effects of Psychological Capital on the Relationship Between Work-School Facilitation and Work-School Conflict and Student Study Engagement and Performance" (2017). *Culminating Projects in Psychology*. 5. https://repository.stcloudstate.edu/psyc_etds/5

Kremer, I. (2016). The relationship between school-work-family-conflict, subjective stress, and burnout. *Journal of Managerial Psychology*, 31(4), 805–819. https://doi.org/10.1108/JMP-01-2015-0014

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, 19(3), 192–207. https://doi.org/10.1080/02678370500297720

Kühnel, J., Sonnentag, S., & Bledow, R. (2012). Resources and time pressure as day-level antecedents of work engagement. *Journal of Occupational and Organizational Psychology*, 85(1), 181–198. https://doi.org/10.1111/j.2044-8325.2011.02022.x

Laughman, C., Boyd, E. M., & Rusbasan, D. (2016). Burnout as a mediator between work–school conflict and work outcomes. *Journal of Career Development*, 43(5), 413–425. https://doi.org/10.1177/0894845316633523

Lepine, J. A., Podsakoff, N. P., & Lepine, M. A. (2005). A meta-analytic test of the challenge stressor-hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, 48(5), 764–775. https://doi.org/10.5465/AMJ.2005.18803921

Lim, H., Heckman, S. J., Letkiewicz, J. C., & Montalto, C. P. (2014). Financial Stress, Self-Efficacy, and Financial Help-Seeking Behavior of College Students. *Journal of Financial Counseling and Planning*, 25(2), 148–160. http://files.eric.ed.gov/fulltext/EJ1048681.pdf

Markel, K. S., & Frone, M. R. (1998). Job characteristics, work–school conflict, and school outcomes among adolescents: Testing a structural model. *Journal of Applied Psychology*, 83(2), 277–287. https://doi.org/10.1037/0021-9010.83.2.277

Maslach, C. (2017). Finding solutions to the problem of burnout. *Consulting Psychology Journal: Practice and Research*, 69(2), 143–152. https://doi.org/10.1037/cpb0000090

Maslach, C., & Schaufeli, W. B. (2017). Historical and Conceptual Development of Burnout. *Routledge EBooks*, 1–16. https://doi.org/10.4324/9781315227979-1

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of organizational behavior*, *2*(2), 99-113. https://doi.org/10.1002/job.4030020205

Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach Burnout Inventory: Third edition. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 191–218). Scarecrow Education.

Maslach, C., & Leiter, M. P. (1997). *The Truth about Burnout: How Organizations Cause Personal Stress and What to do about It.* San Francisco, CA: Jossey-Bass.

Maslach, C., & Leiter, M. P. (2006). Burnout. Stress and quality of working life: current perspectives in occupational health, 37, 42-49.

Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103–111. https://doi.org/10.1002/wps.20311

Maxwell, S. E., Cole, D. A., & Mitchell, M. A. (2011). Bias in cross-sectional analyses of longitudinal mediation: Partial and complete mediation under an autoregressive model. *Multivariate Behavioral Research*, 46(5), 816–841. https://doi.org/10.1080/00273171.2011.606716

McDargh, E. (2020). *Burnout to Breakthrough: Building Resilience to Refuel, Recharge, and Reclaim What Matters*. Berrett-Koehler Publishers.

Meijman, T. F., & Mulder, G. (2013). Psychological aspects of workload. In *A handbook of work and organizational psychology* (pp. 15-44). Psychology Press. https://doi.org/10.4324/9780203765425

Mills, A. J., Durepos, G., & Wiebe, E. (Eds.). (2009). *Encyclopedia of case study research*. Sage Publications. https://doi.org/10.4135/9781412957397

Mohajan, H. K. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spiru Haret University Economic Series*, 17, 59-82. https://doi.org/10.26458/1746

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work–family conflict and family–work conflict scales. *Journal of Applied Psychology*, 81(4), 400–410. https://doi.org/10.1037/0021-9010.81.4.400

Neuman, L. W. (2009). *Social Research Methods: Qualitative and Quantitative Approaches (7th Edition)* (7th ed.). Pearson, Boston.

Nicklin, J. M., Meachon, E. J., & McNall, L. A. (2019). Balancing work, school, and personal life among graduate students: A positive psychology approach. *Applied Research in Quality of Life*, 14(5), 1265–1286. https://doi.org/10.1007/s11482-018-9650-z

Nora, A., Barlow, L., & Crisp, G. (2006). Examining the tangible and psychosocial benefits of financial aid with student access, engagement, and degree attainment. *American Behavioral Scientist*, 49(12), 1636-1651. https://doi.org/10.1177/0002764206289143

Nye, C. D. (2022). Reviewer Resources: Confirmatory Factor Analysis. *Organizational Research Methods*, 109442812211205. https://doi.org/10.1177/10944281221120541

OECD. (2020). *The Programme for the international assessment of adult competencies (PIAAC): Students at work*. OECD. https://www.oecd.org/statistics/students-at-work.htm

Opie, T. J., & Henn, C. M. (2013). Work-family conflict and work engagement among mothers: Conscientiousness and neuroticism as moderators. *SA Journal of Industrial Psychology*, *39*(1), 1-12. https://doi.org/10.4102/sajip.v39i1.1082

Park, Y. A., & Headrick, L. (2017). Student workers' work-life balance: Review, synthesis, and research agenda. In *Work-Life Balance in the 21st Century: Perspectives, Practices and Challenges* (pp. 221-255). Nova Science Publishers, Inc..

Proportion of students who are working aged 15 to 29, by age and type of institution attended - Open Government Portal. (2021, November 1). https://open.canada.ca/data/en/dataset/a7d9b059-bf05-457e-95a6-fdb09b059f92

Recognizing the Reality of Working College Students. (2020, February 6). AAUP. https://www.aaup.org/article/recognizing-reality-working-college-students#.Yd3RBC3b1QJ

Rau, H. K., & Williams, P. G. (2016). Dispositional mindfulness: A critical review of construct validation research. *Personality and Individual Differences*, 93, 32–43. https://doi.org/10.1016/j.paid.2015.09.035

Reichl, C., Leiter, M. P., & Spinath, F. M. (2014). Work–nonwork conflict and burnout: A meta-analysis. *Human Relations*, 67(8), 979–1005. https://doi.org/10.1177/0018726713509857

Rigotti, T., Schyns, B., & Mohr, G. (2008). A short version of the occupational self-efficacy scale: Structural and construct validity across five countries. *Journal of Career Assessment*, 16(2), 238-255. https://doi.org/10.1177/1069072707305763

Rosales-Ricardo, Y., Rizzo-Chunga, F., Mocha-Bonilla, J., & Ferreira, J. P. (2021). Prevalence of burnout syndrome in university students: A systematic review. *Salud mental*, *44*(2), 91-102. https://doi.org/10.17711/sm.0185-3325.2021.013

Rose, J. (2015, November 12). *Time pressure may be a better way to measure work-life balance*. The Conversation. https://theconversation.com/time-pressure-may-be-a-better-way-to-measure-work-life-balance-50199

Rupert, P. A., Stevanovic, P., & Hunley, H. A. (2009). Work-family conflict and burnout among practicing psychologists. *Professional Psychology: Research and Practice*, 40(1), 54–61. https://doi.org/10.1037/a0012538

Saunders, E. G. (2019, July 5). *6 Causes of Burnout, and How to Avoid Them*. Harvard Business Review. https://hbr.org/2019/07/6-causes-of-burnout-and-how-to-avoid-them

Schaufeli, W.B., Leiter, M.P. and Maslach, C. (2009), "Burnout: 35 years of research and practice", *Career Development International*, Vol. 14 No. 3, pp. 204-220. https://doi.org/10.1108/13620430910966406

Schaufeli, W.B. and A.B. Bakker: 2001, 'Werk en welbevinden: Naar een positieve benadering in de Arbeids-en Gezondheidspsychologie' [Work and well-being: Towards a positive Occupational Health Psychology] *Gedrag & Organisatie, 14, 229–253.*

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The Measurement of Work Engagement With a Short Questionnaire. *Educational and Psychological Measurement*, *66*(4), 701–716. https://doi.org/10.1177/0013164405282471

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*(1), 71–92. https://doi.org/10.1023/a:1015630930326

Schmitt, A., Ohly, S., & Kleespies, N. (2015). Time Pressure Promotes Work Engagement. *Journal of Personnel Psychology*, *14*(1), 28–36. https://doi.org/10.1027/1866-5888/a000119

Sheng, X., Wang, Y., Hong, W., Zhu, Z. Y., & Zhang, X. (2017). The curvilinear relationship between daily time pressure and work engagement: The role of psychological capital and sleep. *International Journal of Stress Management*, *26*(1), 25–35. https://doi.org/10.1037/str0000085

Sherer, M., & Adams, C. A. (1983). Construct Validation of the Self-Efficacy Scale. *Psychological Reports*, *53*(3), 899–902. https://doi.org/10.2466/pr0.1983.53.3.899

Shirom, A. (1989). Burnout in work organizations.

Shockley, K. M., & Singla, N. (2011). Reconsidering Work—Family Interactions and Satisfaction: A Meta-Analysis. *Journal of Management*, *37*(3), 861–886. https://doi.org/10.1177/0149206310394864

Skaalvik, E. M., & Skaalvik, S. (2017). Dimensions of teacher burnout: relations with potential stressors at school. *Social Psychology of Education*, *20*(4), 775–790. https://doi.org/10.1007/s11218-017-9391-0

Statista. (2022, November 25). *Percent of Canadian adults 25-64 with a tertiary education 2021*. https://www.statista.com/statistics/542964/percent-of-canadian-adults-25-64-with-a-tertiary-education-by-age-group-and-sex/

Tabachnick, B.G., Fidell, L.S. and Ullman, J.B. (2007) Using Multivariate Statistics. Vol. 5, *Pearson, Boston*, 481-498.

Teng, C., Shyu, Y. L., Chiou, W., Fan, H., & Lam, S. M. (2010). Interactive effects of nurse-experienced time pressure and burnout on patient safety: A cross-sectional survey. *International Journal of Nursing Studies*, *47*(11), 1442–1450. https://doi.org/10.1016/j.ijnurstu.2010.04.005

Tomlinson, E., Yousaf, O., Vittersø, A. D., & Jones, L. (2018). Dispositional Mindfulness and Psychological Health: a Systematic Review. *Mindfulness*, *9*(1), 23–43. https://doi.org/10.1007/s12671-017-0762-6

Vogel, K. (2022, July 6). *Understanding Dispositional Mindfulness*. Psych Central. Retrieved October 15, 2022, from https://psychcentral.com/blog/dispositional-mindfulness-noticing-what-you-notice

Wan, M., Feng, L., Meng, X., Zhai, M., & Konopaske, R. (2021). Working College Students' Time Pressure and Work-School Conflict: Do Boundary Permeability and Dispositional Mindfulness Matter? *Psychological Reports*, *125*(6), 3100–3125. https://doi.org/10.1177/00332941211029621

Wang, Y., Chang, Y., Fu, J., & Wang, L. (2012). Work-family conflict and burnout among Chinese female nurses: the mediating effect of psychological capital. *BMC Public Health*, *12*(1). https://doi.org/10.1186/1471-2458-12-915

Watson, D. I., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063–1070. https://doi.org/10.1037/0022-3514.54.6.1063

Yücel, İ., Şirin, M. C., & Baş, M. (2021). The mediating effect of work engagement on the relationship between work–family conflict and turnover intention and moderated mediating role of supervisor support during global pandemic. *International Journal of Productivity and Performance Management*, *72*(3), 577–598. https://doi.org/10.1108/ijppm-07-2020-0361