



**Iso-strain in Remote Workers and Its Impact on Emotional
Exhaustion and Affective Commitment in a COVID-19 Context**

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Abstract

The objective of this research is to examine, first, whether iso-strain, a combination of high psychological demands, low decision latitude and low social support in remote workers impacts affective commitment in the context of the pandemic and second, to verify the mediating effect of emotional exhaustion in this relation. This study was conducted on the Canadian adult remote working population (18 years and over). The research design model was cross-sectional. Quantitative data was collected via Qualtrics, an online survey collection platform. In total, our sample consisted of 118 working professionals in over fifteen sectors of activity. Structural equation modeling was used to test the research hypotheses.

Results showed that psychological demands, decision latitude and social support at work are each positively linked to affective commitment. In addition, psychological demands are positively linked to emotional exhaustion. However, decision latitude as well as social support at work are individually negatively linked to emotional exhaustion. Emotional exhaustion was shown to be negatively linked to affective commitment. There is an inconsistent mediation in the relation between psychological demands – emotional exhaustion and affective commitment, as a double effect (positive and negative) occur on affective commitment. Emotional exhaustion mediates the positive relationship between decision latitude and affective commitment. Finally, emotional exhaustion mediates the positive relationship between social support at work and affective commitment.

One of our main findings is that psychological demands are positively and significantly associated with emotional exhaustion. Thus, organizations must take the necessary steps (i.e., reduce demands) to prevent emotional exhaustion at work. As many organizations seek to achieve their goals and remain competitive in the marketplace, ensuring control of the work environment is essential for employee well-being (Koon & Pun, 2018; Sliter et al., 2011). Designing tasks and responsibilities that support the ability to make choices is essential when it comes to employee well-being at work (Abdel Hadi et al., 2021; Koon & Pun, 2018). Trust and perceived organizational support (POS) have been found to have a positive effect on affective commitment (Albrecht & Travaglione, 2003; Allen & Meyer, 1990; Bloemer et al., 2013; Colquitt et al., 2001; Eisenberger et al., 1990; Ferres, 2008; Jackson et al., 2013; Meyer et al., 2002; Mowday et al.,

1979; Rhoades & Eisenberger, 2002; Wayne et al., 1997). In a post-COVID-19 world, organizations should strive to establish opportunities for advancement, trust, and clear and cohesive communication with their staff to keep them engaged, happy, and motivated at work (Mercurio, 2015). This can start from the recruitment process and continue as employees grow within the organization (Mercurio, 2015). Leaders can ensure that employees are making decisions about their tasks, projects, and assignments (Mercurio, 2015). They can also implement mentoring programs and encourage training and development (Mercurio, 2015). Employees who are not committed to the organization are likely to leave and take their talent and knowledge elsewhere (Mercurio, 2015). The added value of our research shows organizations the importance of having employees who are emotionally committed to their organization. Employees who remain loyal to an organization over the long term are valuable assets because they know the company, values, and goals and are less likely to quit (Mercurio, 2015; Min Park & Rainey, 2007; R. Mowday et al., 1982; Vandenberghe et al., 2017). These employees are less likely to have absenteeism, less stress and anxiety (Mercurio, 2015; R. T. Mowday et al., 2013; Solinger et al., 2008; Somers, 2009).

Keywords: *Iso-strain, Remote Work, Emotional Exhaustion, Affective Commitment, COVID-19*

Résumé

L'objectif de cette recherche est d'examiner, dans un premier lieu, si la tension au travail avec isolement social (l'isostrain), soit une demande psychologique élevée, faible latitude décisionnelle et faible soutien social, chez les télétravailleurs, a un impact sur l'engagement affectif des employés dans le contexte de la pandémie. Dans un deuxième lieu, vérifier l'effet médiateur de l'épuisement émotionnel entre les demandes psychologiques et l'engagement affectif, entre la latitude décisionnelle et l'engagement affectif ainsi qu'entre le soutien social et l'engagement affectif. Cette étude a été menée auprès de la population adulte canadienne travaillant à distance (18 ans et plus). Le devis de la recherche était transversal. Les données quantitatives ont été collectées via Qualtrics, une plateforme de collecte de données en ligne. Au total, notre échantillon était composé de 118 professionnels travaillant dans plus de quinze secteurs d'activité différents. La modélisation par équation structurelle a été utilisée pour tester les hypothèses de recherche.

Les résultats ont montré que les demandes psychologiques, la latitude décisionnelle et le soutien social au travail sont liés positivement à l'engagement affectif. De plus, les demandes psychologiques sont positivement liées à l'épuisement émotionnel. Cependant, la latitude décisionnelle ainsi que le soutien social au travail sont négativement liés à l'épuisement émotionnel. L'épuisement émotionnel est négativement lié à l'engagement affectif. Il y a une médiation incohérente entre la relation demande psychologiques – épuisement émotionnel – engagement affectif, car un double effet (positif et négatif) se produit sur l'engagement affectif. L'épuisement émotionnel est le médiateur de la relation positive entre la latitude de décision et l'engagement affectif. Enfin, l'épuisement émotionnel est le médiateur de la relation positive entre le soutien social au travail et l'engagement affectif.

L'une de nos principales conclusions est que les demandes psychologiques sont positivement et significativement associées à l'épuisement émotionnel. Donc, les organisations doivent prendre les mesures nécessaires (c'est-à-dire réduire les demandes) pour prévenir l'épuisement émotionnel au travail. Alors que de nombreuses organisations cherchent à atteindre leurs objectifs et à rester compétitives sur le marché, assurer le contrôle de l'environnement de travail est essentiel pour le bien-être des employés (Koon & Pun, 2018; Sliter et al., 2011). La conception de tâches et de responsabilités qui favorisent la capacité à faire des choix est essentielle

lorsqu'il s'agit du bien-être des employés au travail (Abdel Hadi et al., 2021; Koon & Pun, 2018). On a constaté que la confiance et le soutien organisationnel perçu (POS) ont un effet positif sur l'engagement affectif (Albrecht & Travaglione, 2003; Allen & Meyer, 1990; Bloemer et al., 2013; Colquitt et al., 2001; Eisenberger et al., 1990; Ferres, 2008; Jackson et al., 2013; Meyer et al., 2002; Mowday et al., 1979; Rhoades & Eisenberger, 2002; Wayne et al., 1997). Dans un monde post-COVID-19, les organisations devraient s'efforcer d'établir des possibilités d'avancement, de la confiance, une communication claire et cohésive avec leur personnel pour qu'il reste engagé, heureux et motivé au travail (Mercurio, 2015). Cela peut commencer dès le processus de recrutement et se poursuivre au fur et à mesure que les employés évoluent au sein de l'organisation (Mercurio, 2015). Les dirigeants peuvent s'assurer que les employés prennent des décisions en ce qui concerne leurs tâches, leurs projets et leurs affectations (Mercurio, 2015). Ils peuvent également mettre en place des programmes de mentorat et encourager la formation et le développement (Mercurio, 2015). Les employés qui ne sont pas engagés envers l'organisation sont susceptibles de partir et d'emmener leur talent et leurs connaissances ailleurs (Mercurio, 2015). La valeur ajoutée de notre recherche montre aux organisations l'importance d'avoir des employés qui sont affectivement engagés envers leur organisation. Les employés qui restent fidèles à une organisation sur le long terme sont des atouts précieux car ils connaissent l'entreprise, les valeurs et les objectifs et sont moins susceptibles de démissionner (Mercurio, 2015; Min Park & Rainey, 2007; R. Mowday et al., 1982; Vandenberghe et al., 2017). Ces employés sont moins susceptibles d'avoir de l'absentéisme, moins de stress et d'anxiété (Mercurio, 2015; R. T. Mowday et al., 2013; Solinger et al., 2008; Somers, 2009).

Mots clés : *Isostrain, travail à distance, épuisement émotionnel, engagement affectif, COVID-19*

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List of Acronyms

Acronym	Meaning
aMBI-HSS	Abbreviated Maslach Burnout Inventory – Human Services Survey
AT&T	American Telephone and Telegraph company
BBI	Bergen Burnout Inventory
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CFO	Chief Financial Officer
COR	Conservation of Resources
DCSQ	Demand-Control-Support Questionnaire
EY	Ernest & Young
HR	Human Resources
IBM	Internal Business Machines Corporation
ICT	Information and Communication Technologies
IDC-11	Internal Classification of Diseases
ILO	Internal Labor Organization
JCQ	Job Content Questionnaire
JD-R	Job Demands-Resources
JDC	Job Demand and Control
JDCS	Job-Demand-Control-Support
JDI	Job Description Index
MBI	Maslach Burnout Inventory
MBI-ES	Maslach Burnout Inventory – Educators Survey
MBI-GS	Maslach Burnout Inventory – General Survey
MBI-HSS	Maslach Burnout Inventory – Human Services Study
MBI-MP	Maslach Burnout Inventory – Medical Practitioners

NSF	National Science Foundation
OCQ	Organizational Commitment Questionnaire
OCQ-R	Organizational Commitment Questionnaire-Revised
PNFI	Parsimony Normed Fit Index
POS	Perceived Organization Support
PPE	Personal Protective Equipment
REB	Research Ethics Board
RMSEA	Root Means Square Error of Approximation
SEM	Structural Equation Modeling
SMBM	Shirom-Melamed Burnout Measure
SPSS	Statistical Package for the Social Sciences
SRMR	Standardized Root Mean Square Residual
USA	United States of America
USD	United States Dollars
VPN	Virtual Private Network
WHO	World Health Organization
Wi-Fi	Wireless Fidelity
WRS	Work-Related Stress

List of Abbreviations

Acronym	Title
α	Cronbach's Alpha
β	Standardized Regression Coefficient
df	Degrees of Freedom
i.e.,	That is
N	Sample Size
ns	Non-significant
p	Significance Threshold
r	Pearson's Correlation Coefficient
χ^2	Chi-squared

Foreword

In March 2022, the HEC Montréal Research Ethics Board (REB) reviewed the objectives and conduct of this research and approved this project. We ensured that the objectives of the research were clearly presented to the participants. In addition, we ensured that the participants agreed to complete the survey and answer the questions voluntarily. We informed the participants that the answers would be collected and analyzed in a confidential manner and that no personal information would be identifiable.

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Finally, I wish to thank my friends and colleagues at SSENSE who frequently checked in on me as I navigated working full-time and undergoing graduate studies simultaneously. Their positive spirits motivated me to keep writing, even when the process seemed to be never-ending. Working on this thesis certainly pushed me outside my comfort zone. After spending two years bringing a meaningful project to life, I know that I will look back and be proud of this accomplishment. I hope I can inspire others to do the same!

Introduction

COVID-19 Pandemic Context

In December 2019, SARS-CoV-2, the virus that causes COVID-19 began in Wuhan, China (Center for Disease Control and Prevention, 2021). On March 11th, 2020, when nearly 100,000 individuals around the world were impacted, the World Health Organization (WHO) made the formal announcement of the COVID-19 outbreak, declaring it a global pandemic (Baghchechi et al., 2020; Contreras et al., 2020). To flatten the curve in concentrated locations such as the workplace, the WHO recommended social distancing measures, and temporary remote work for those who could safely do so (Contreras et al., 2020). With more remote staff, organizations had to consider psychosocial risks, which are hazardous work design elements that can impact an employee's response to their work and job conditions (Giménez-Espert et al., 2020). Stemming from poor social conditions, weak management, work design and structure, psychosocial risks are linked to health problems, low job satisfaction as well as poor engagement and motivation (T. Bailey et al., 2015; Bergh et al., 2018; Elshaer et al., 2018; Fornell et al., 2018; Giménez-Espert et al., 2020; Guadix et al., 2015; Junne et al., 2018). Subsequently, other outcomes can arise. Ultimately, working remotely during a global pandemic can exacerbate the impact on the individual (Giménez-Espert et al., 2020). A detailed explanation is provided in chapter 1.

Objective and Potential Contributions of the Study

In the ongoing COVID-19 crisis, a critical question that evokes discussions on the news and in organizations is regarding the impact that remote work has on its workforce. The pandemic has challenged our society to rethink, redesign and implement unique and creative workplace practices that are aligned with the needs of organizations, as well as the individual needs of their staff. In 2022, the pandemic continues to be a part of our lives as many employees still working 100% remotely. Therefore, it is critical to learn about the impact of remote work on our workforce. Our research team is interested in the impact of iso-strain, emotional exhaustion, and affective commitment of remote employees during the period of the global pandemic.

Threatening to an individuals' overall well-being, iso-strain is the combination of high job demands, low job control and low social support that an employee experiences due to their work

(Höckerberg et al., 2010; Ibrahim et al., 2021; S. Kim et al., 2021; Perry et al., 2018). A large portion of the research on iso-strain during the COVID-19 pandemic surrounds its impact on healthcare professionals and educators (Pujo et al., 2021; Taş et al., 2021). As we are interested in the impact on the remote work population, this provides us with an opportunity to discover more on the topic.

Emotional exhaustion is defined as the expenditure of energy and extreme tiredness that a working professional can experience because of their job (Edú-valsania et al., 2022; S. Kim et al., 2021; Lin et al., 2022). Previous research teams have examined employee emotional exhaustion combined with other factors, unrelated to this thesis, such as leisure crafting, job performance and workplace bullying (Abdel Hadi et al., 2021; Anasori et al., 2020; Tjldink et al., 2014). Research on emotional exhaustion during the pandemic examined the impact on healthcare professionals (Wroclawski & Heldwein, 2021). Psychosocial risks like iso-strain and emotional exhaustion have a strong impact on working professional's health and well-being whether they are physically at the office or working outside the office (Abdel Hadi et al., 2021; Ariza-Montes et al., 2018). Such psychosocial risks have not been studied extensively on this population, especially within the COVID-19 context, so this provides us with a unique opportunity to bring forth insights.

We are also interested in affective commitment. Affective commitment is known as the job-related positive emotional attachment that one has to their organization (Al-Jabari & Ghazzawi, 2019; Chanana, 2021; Jaros, 2007; Manetje & Martins, 2009; Morrow, 1993). It has also been shown to be the dimension that provides the most advantages to the organization, leading us to want to learn more about this type of desired employee behavior (Fernandez-Lores et al., 2016; Meyer et al., 2002). Past literature on affective commitment has looked at its link with factors unrelated to this thesis, such as perceived external prestige, citizenship behaviors, autonomy needs satisfaction and role overload (Allen & Meyer, 1990; Bergman, 2006; Carmeli, 2005; Tang & Vandenberghe, 2020). These concepts and their impact on remote employees will be explained in detail in chapter 1.

Through our literature review, we noticed a lack of research connecting iso-strain (a combination of high psychological demands, low decision latitude and low social support), emotional exhaustion, and affective commitment with remote work within the COVID-19 context. Thus, our research study will explore whether the above components of iso-strain in remote

workers negatively impacts affective commitment via an increase in employee emotional exhaustion rates in the context of the pandemic. We will also verify the mediating effect of emotional exhaustion in this relation. This research study is valuable as it provides concrete quantitative evidence on the link between these factors within the COVID-19 context.

From a practical standpoint, we anticipate that this study will provide key insights for organizations, leaders and human resources professionals aiming to sustain a positive and healthy work environment for their remote staff as they adjust to this new way of working. We hope that organizational leaders will reflect their current practices and make decisions that are in-line with their employee well-being. Concretely, the value added of our study shows the importance of having affectively commitment employees that remain loyal to the organization year over year as they are less likely to experience absenteeism, have lower stress levels and anxiety (Mercurio, 2015; Min Park & Rainey, 2007; R. T. Mowday et al., 2013; Solinger et al., 2008; Somers, 2009; Vandenberghe et al., 2017).

Thesis Structure

In the first chapter, we will do a complete literature review to gain a clear and in-depth understanding of relevant past research. Precisely, we defined and explained the key concepts of this thesis, remote work, iso-strain, emotional exhaustion, and affective commitment. We will also present the theoretical and empirical links that support the relationships between these variables. In chapter (2), we will explain the research problem, model, and hypotheses. Chapter (3) is dedicated to the methodology and presents the methodological choices, study design and measurement instruments, participant recruitment and data collection process, sample description, measurement of the variables, ethical considerations as well as the analysis plan. Chapter (4) presents the results of the preliminary analyses and research hypotheses verification. In chapter (5), we discuss and interpret the results, implications of the research, limits, strengths, and future research avenues. The conclusion that follows these chapters provides a synthesis of the research and its main findings.

Chapter 1 – Literature Review

In this chapter, we carry out a literature review to define the concepts of this thesis and the links between them. First, we define remote work and dive into key elements like its history, remote work trends, impact on global health, advantages, and disadvantages, as well its legislation and legal implications. Then, we define iso-strain, present Karasek's two models, establish the link between iso-strain and remote work as well as the link between technostress, remote work, and iso-strain. Finally, we discuss the future of remote work in a post-COVID-19 context. Afterwards, we define emotional exhaustion and explore important topics like its history, dimensions, assessment tools, conceptual models, factors, consequences, and impact in the remote work context. In the last portion of the literature review, we define affective commitment and explain key topics like its history, dimensions, factors, and consequences. Finally, we discuss research connecting emotional exhaustion and affective commitment.

The main databases consulted for this literature review were Business Source Complete (EBSCO), European Journal of Work and Organizational Psychology, American Psychological Association, ProQuest, and Web of Science. The research was conducted using the following key words: remote work, iso-strain, emotional exhaustion, affective commitment, and COVID-19.

1.1. Remote Work

1.1.1. Introduction and Definition

In response to the global pandemic, new working trends have gained importance as companies strive to offer safe, productive, and pleasant working conditions for their employees. More specifically, the presence of remote work, also known as telecommuting, remote e-work and telework has increased significantly around the world since March 2020 (Contreras et al., 2020). Remote work is a broad concept that calls attention to paid work from a location away from the physical office (Contreras et al., 2020). It is important to note that external workers, such as freelancers, who engage in partnerships with companies are not included in this definition (Contreras et al., 2020; Olson, 1983). Remote work uses technology to facilitate employee tasks, granting them access to stay well connected, autonomous and under less direct supervision while

still capable of contributing to the company objectives (Contreras et al., 2020). In fact, with this work arrangement, individuals are not limited in terms of time, location, type of communication nor use of information (Contreras et al., 2020). Varty et al. (2017) even went as far as identifying this modern work arrangement as a culture of “work anywhere, anyplace, anytime” (Narayanan et al., 2017). Remote work can be done full-time, part-time, temporary, or occasional (Araújo & Lua, 2021; Wagner, 2022). The concept highlights the importance that work from a physical office is not essential for employees to do their work effectively (Wagner, 2022).

1.1.2. History and Evolution of Remote Work

Although remote work is a well-known term in 2022, it may come to a surprise to some that it is not a new concept. As a matter of fact, remote work stems from numerous social, economic, technological and environment factors of the late 1900s (Venkatraman, 1994). The most familiar one being the oil crisis in the 1970s (Venkatraman, 1994). During that time, homeowners wanted to save money on their energy bills and thought that working remotely would be an efficient way to do so (Venkatraman, 1994). Three years later, Jack Nilles, a former NASA engineer coined the term “telecommuting” (Vyas & Butakhieo, 2021). With the labour market transitioning from highly concentrated agricultural, industrial, and manufacturing work to more than half of workers involved in the information-focused line of work, on-site work became less relevant (Kitamura et al., 1990). Not long after, Nilles received the National Science Foundation (NSF) grant to explore the policy implications of a telecommunications-transportation arrangement (Kitamura et al., 1990). As the director of an interdisciplinary development program for the University of Southern California, he established the California Telecommute Pilot Project to gain more knowledge on this work arrangement (Kitamura et al., 1990). Through a two-year testing period, Nilles’ objective was to assess the application of telecommuting in 185 state workers across thirteen state agencies (Kitamura et al., 1990). In conducting this experiment, he wanted to explore the characteristics of the employees, the augmentation of the workload without the addition of new employees to the team, the cost of purchasing office space and the increase in traffic as well as the need to reduce pollution and energy consumption in urban California (Kitamura et al., 1990).

Afterwards, in 1984, the idea of teleworking was brought to the attention of the California Department of General Services as a solution to decrease the need for office space in big cities (Kitamura et al., 1990). The California Department of General Services recognized the benefits and quickly approved this new form of work. Four years later, in 1988, the workers and superiors of Nilles' study began their training period (Kitamura et al., 1990). Following the trainings, travel diary questionnaires were handed out to the participants to test the likelihood of future success of this new way of working (Kitamura et al., 1990). After reviewing the results, the supervisors chose which employees would be best suited to work from home on a consistent basis (Kitamura et al., 1990). The results suggested that with the implementation of telecommuting, employees would travel less frequently, leading to reduced traffic and better air quality in the state of California (Kitamura et al., 1990). Following Nilles' work, the concept of telecommuting has been interpreted through numerous terms such as flexible workplaces, e-working, telework and remote work, just to name a few (Vyas & Butakhieo, 2021).

As of the mid-1990s, various federal, state and private sector organizations were implementing telecommuting into their work practices (Narayanan et al., 2017). Previously, the commonly accepted belief was that for organizations to flourish in terms of talent attraction, productivity and staff development, on-site work was a necessity (de Lucas Ancillo et al., 2021). As a result, large companies sought out prime real-estate in big cities where the open-concept and communal workspace design was at the forefront (de Lucas Ancillo et al., 2021). Despite this, remote work was starting to gain popularity in certain lines of work (Contreras et al., 2020). In 1992, American Telephone and Telegraph company, AT&T created the Employee Telework Initiative (Venkatraman, 1994). This gave 134 Arizonian employees the opportunity to telecommute at least one day per week (Venkatraman, 1994). AT&T was happy to report that a total of 100,000 fewer miles were driven throughout their experiment (Venkatraman, 1994). Because of their success, AT&T believed that if other companies followed suit, air pollution could be greatly improved (Venkatraman, 1994). During the nineties, remote work initiatives were implemented to assist and retain employees who suffered from illnesses, had relocation needs or were pregnant (Venkatraman, 1994). Along with seeing the positive outcomes of these special cases and the decrease in costs, companies were inclined to go ahead and offer remote work arrangements to a larger pool of employees (Venkatraman, 1994). After all, in the 1990s, the only necessary work equipment was a computer, a modem and a phone (Venkatraman, 1994).

1.1.3. Remote Work Trends Prior to COVID-19

Since the 1990s, companies have shifted their mindset from a mechanistic and structured way of thinking to a more organic and flexible working perspective (Contreras et al., 2020). This was done to meet organizational needs in terms of globalization, competition, and demographics (Contreras et al., 2020). Flexible work schedules have become more and more prevalent in organizations and desired by job seekers since it first appeared more than forty years ago (Hayes et al., 2021). In the 2000s, remote work was more common as technology evolved with laptops, Wireless Fidelity (Wi-Fi) and smartphones more easily accessible to organizations (Hayes et al., 2021). According to the Department of Labor, there were between 13 million and 19 million telecommuters in the year 2000 (Mills et al., 2001).

In the recent years, internet-based platforms facilitating communication and collaboration from a distance like Slack, Zoom and Microsoft Teams have garnished value and one can only assume that it will continue to prevail through difficult times, like COVID-19 (Hayes et al., 2021). Amongst all the countries in the world, the United States was at the top of the list in terms of remote work percentages in the early 2010s (Raffaele & Connell, 2016). In fact, around 10% of the American workforce completed their working tasks from a distance during this time (Raffaele & Connell, 2016). The 2017 U.S. State of Telecommuting Report revealed that over the past decade remote work in the USA increased to 115% (Narayanan et al., 2017). Looking to developing countries like China, Belgium, Thailand, and the Philippines, companies in those geographical regions already had e-working practices in place before 2020 (Abdullah et al., 2020). Prior to Spring 2020, employees who would engage in telework would come into the office a couple of days per week and work off-site on the remaining days (Chong et al., 2020). Such types of work arrangements are broken down into three distinct groups: Commute-only, Work From Home Some Days and Work From Home Only (Bick et al., 2021). The Commute-Only group was formed of workers who travelled to work every day that they worked (Bick et al., 2021). The Work From Home Some Days group was made up of employees who commuted to work at least one day per week (Bick et al., 2021). A large portion of workers who are now in the Work From Home Only group, came from those who used to commute to work every day (Bick et al., 2021). Lastly, the Work From Home Only Group was composed of individuals who worked remotely but did not physically go into the office (Bick et al., 2021). Traditional approaches to remote work attracted

and retained employees through flexibility in the form of compromise to those who had unique situations such as an illness or childcare responsibilities (Ernst Kossek et al., 2021). Physically being at the office meant that the employees had access to the technology and could coordinate work tasks through face-to-face conversations with their colleagues, enabling positive relationships (Chong et al., 2020). Working outside the office more than 50% of the time was seen as leading to a decline in colleague rapport (van Zoonen & Sivunen, 2021).

1.1.4. Remote Work Trends During COVID-19

As stated previously, COVID-19 led to new and unexpected ways of working. Through virtual communication platforms like Zoom, Microsoft Teams, and Skype, working professionals can now take meetings from anywhere in the world, including their home (N. Williams, 2021). The increase in usage of said platforms is astounding, with Zoom alone reporting an increase of 360% (N. Williams, 2021). According to research done by the Federal Reserve Bank of Dallas, American bachelor's degree holders were amongst a large group of individuals who began working remotely due to the pandemic (Bick et al., 2021). In February 2020, 8.5% of this group worked out of the office compared to close to 50% in May 2020 (Bick et al., 2021). Individuals reporting high school as their highest level of education were less impacted by the transition to remote work (Bick et al., 2021). 6.4% of them held positions that required them to work remotely in February 2020 and this percentage rose to a mere 14.2% three months later (Bick et al., 2021). In terms of demographics, females, Caucasians, high-income earners, and workers over the age of 50 represented the highest percentage of individuals who moved to the remote work arrangement (Bick et al., 2021). Male, minority, low-income earners, and those under the age of 50 were amongst the least impacted group (Bick et al., 2021).

In early 2020, the Global Research and Advisory Company, Gartner surveyed 229 Global Human Resources (HR) leaders to find out more about their COVID-19 work practices (Kniffin et al., 2020). Half of those surveyed revealed that 80% of their employees were working remotely during the beginning of the pandemic (Kniffin et al., 2020). Experts are predicting that it will continue in a post-COVID-19 world (Kniffin et al., 2020). Research conducted by Chi et al. predicted that 34% of American jobs could be successfully done outside the office (Chi et al., 2021). In terms of employee preferences, a 2021 McKinsey study revealed that close to three out

of every ten employees would think about changing jobs if they were told that the return to office work was mandatory at their current company (Mugayar-Baldocchi et al., 2021).

In Québec, Canada, COVID-19 impacted the way work is done (Tremblay & Mathieu, 2020). In March 2020, the percentage of teleworkers in the province was at 15% (Tremblay & Mathieu, 2020). Just two months later, in May 2020, that percentage rose to 48% (Tremblay & Mathieu, 2020). The COVID-19 crisis proved to have a strong effect on women in Québec, particularly as many of them worked in sectors that were impacted, like restauration, hospitality, and retail (Alberio & Tremblay, 2021). The 2020-2021 Québec Population Health Survey revealed that close to 26% of working professionals underwent financial challenges during the COVID-19 pandemic (Charton et al., 2022). Affected individuals had difficulty with their financial obligations and basic living needs (Charton et al., 2022). Specifically, low-income earners, single parents and families with children made up this group (Charton et al., 2022).

1.1.5. Impact of Remote Work on Global Health During COVID-19

With the quick and sudden transition from on-site work to remote work in Spring 2020, working professions had to rapidly adapt to this new work arrangement. Because of it, unforeseen challenges related to global health emerged. In the following paragraphs, we will discuss physical problems, work-related stress, technostress, and exhaustion in relation to remote work.

1.1.5.1. Physical Problems

The implications of working remotely during the pandemic on one's physical health are related to physical activity, or lack thereof as well as diet and lifestyle choices (López-Cabarcos et al., 2021). Staying active is beneficial for one's personal and work life (López-Bueno et al., 2020). It can improve one's immunity and promote resistance to infections (Gleeson, 2007; López-Bueno et al., 2020; Nieman & Wentz, 2019). In addition, physical activity is known to reduce the chance of pneumonia in females (Baik et al., 2000; López-Cabarcos et al., 2021). An online study conducted in early 2020 on 2042 Spanish adult remote workers on the changes in physical activity during the first days of confinement revealed interesting results (López-Bueno et al., 2020). There was a 11.7% decrease in adults who met the WHO physical activity recommendations (López-Bueno et al., 2020). When it comes to diet, the results are not the same in all countries. During the

pandemic, German working professionals have been eating better as they do not have access to the unhealthy meal options that were once present at the workplace (Askew, 2020; Tronco Hernandez, 2020). However, in the United Kingdom, the opposite is happening (Churchill, 2020a; Tronco Hernandez, 2020). Adults have been resorting to alcohol and unhealthy eating habits to cope with the boredom they are experiencing (Churchill, 2020a; Tronco Hernandez, 2020). In the long-term, poor eating habits can lead to dangerous health risks like obesity (Anderson & Durstine, 2019; Tronco Hernandez, 2020). A mid-2020 research article on the impacts of remote work on one's physical well-being revealed that physical well-being decreased as individuals transitioned to remote work (Xiao et al., 2021). 64.8% of the 988 respondents revealed that new physical health problems arose when they began to work outside of the office (Xiao et al., 2021). Female working professionals making less than \$100,000 per year indicated that they had at least two new physical or mental problems because of this new way of working (Xiao et al., 2021). The research team also discovered that exercise was lower than usual during this period (Xiao et al., 2021). Reduced physical movement can negatively impact one's metabolism, circulation, and endorphins, which are all essential to one's health (Xiao et al., 2021). The same article stated that, on average, processed or unhealthy food consumption had a marginal increase but that those who exercised less ate more junk food (Xiao et al., 2021). The increase in food consumption, especially unhealthy food, can lead to more damaging issues like higher body mass, lethargy, and digestion problems (Majumdar et al., 2020; Xiao et al., 2021). Other issues that come from working remotely are related to the ergonomic support of the new workspace, particularly of the neck area and the strain it can have on the body (Moretti et al., 2020; Xiao et al., 2021).

1.1.5.2. Psychosocial Problems: Work Related Stress (WRS) and Technostress

Stress has previously been looked at as a bleak emotional encounter due to the perception that one has of not being able to manage what is going on around them (Camacho & Barrios, 2022; Cox & Griffiths, 2010). There is a decent amount of research on remote work and work-related stress (WRS) (Bolger et al., 1989; Duxbury et al., 2018; Goode, 1960; S. W. Hayes et al., 2021). Remote workers experiencing WRS may also feel like they are not receiving the support they need from their company and that their physical workspace is not ideal for their performance (S. Hayes et al., 2020). Key words related to stress that are extracted from such articles are “role strain”, “role surcharge” and “role overflow” that snowballs from work to home life and if not handled

properly, can eventually lead to burnout, which will be discussed later in this paper (Bolger et al., 1989; Duxbury et al., 2018; Goode, 1960; S. W. Hayes et al., 2021).

Individuals that began working remotely due to the pandemic started using information and communication technologies (ICTs), such as laptops, iPads, and cell phones more frequently (Bondanini et al., 2020; Camacho & Barrios, 2022). With the rise in use of ICTs, risks associated with employee health and safety became issues (Camacho & Barrios, 2022). In 1984, Craig Brod, one of the first authors that looked at technostress stated that the condition initially came from stress (Bondanini et al., 2020; Brod, 1984). Brod explained that technostress is composed of strain of the organism, an external stressor and an experience that comes from the continuous relationship between the individual and their environmental conditions within the workplace (Bondanini et al., 2020; Tarafdar et al., 2007). More recent authors state that technostress comes from a person or an organization's ineffectiveness to appropriately adjust to new technology, impacting their ability to work and limiting their desire to use technology on a regular basis (Estrada-Muñoz et al., 2021; Tarafdar et al., 2007). Technostress can impact a working professionals' mental health and can have poor effects on their perspective, and habits (Bondanini et al., 2020; Tarafdar et al., 2007). Ultimately, this "dark side" of ICTs is revealed as individuals experiencing technostress feel tension and anxiety when it comes to using technology (Estrada-Muñoz et al., 2021; Tarafdar et al., 2007). It can also lead to feelings of role vagueness, self-doubt and like they are being weighed down (Bondanini et al., 2020; Fenner & Renn, 2010; C. A. Grant et al., 2013). The transactional approach to technostress views the impact in terms of satisfaction at work, employee commitment to the company as well as absenteeism and turnover rates (Bondanini et al., 2020; Ragu-Nathan et al., 2008). From a technostress perspective, working professionals deal with technology surcharge and intricacy, invasion into one's life, and unpredictability (Bondanini et al., 2020; Tarafdar et al., 2011). Obstacles to technostress include literary trainers, technology programs as well as technological support (Bondanini et al., 2020).

1.1.5.3. Psychosocial Problem: Exhaustion

When working remotely, employees are on their computers all day, staring at the screen and taking meetings from their makeshift desks. For those that use their home as their workspace, they may feel like they are not working from home but living from home on a permanent basis (S.

Hayes et al., 2020). For some, this way of work is more effective than the traditional in person, face-to-face communication as information is more readily available and feedback can be given instantaneously (Daft et al., 1987; Fulk & Collins-Jarvis, 2001; Maruping & Agarwal, 2004; Nesher Shoshan & Wehrt, 2021). On the flip side, video calls lack the ability to spot nonverbal cues and may result in less focus on the person speaking (Daft et al., 1987; Nesher Shoshan & Wehrt, 2021; Wegge et al., 2007). In our current state, it is not uncommon that a concept known as videoconference fatigue would emerge from this new way of working. Videoconference fatigue is explained as feelings of exhaustion or tiredness due to being present on video calls like Zoom or Microsoft Teams for a large portion of one's workday (Bennett et al., 2021). A quantitative study done on 55 remote work staff during COVID-19 displayed that videoconference's at various points during the workday caused different levels of fatigue based on the level of involvement the employee was required to provide, including being on mute or not (Bennett et al., 2021). The same study showed that meetings through videos calls resulted in overall more exhaustion than the regular daily level of tiredness. Not only is there virtual fatigue but there is also general exhaustion coming from working during a global pandemic (Bonanomi et al., 2021). Work fatigue can be a by-product of a physical illness, an actualization through subjacent psychological problems or sometimes both (Bonanomi et al., 2021). It can be severe and/or persistent, leaving the individual in feelings of exhaustion that could also damage their physical and cerebral parts of the body (Bonanomi et al., 2021; Ream & Richardson, 1996). Organizations must aim to encourage pragmatic employee behaviors that are beneficial to their overall health, especially during these times (Hervieux et al., 2022).

1.1.6. Advantages of Remote Work Before COVID-19

Telework can be a double-edged sword, resulting in positive and negative impacts on the employee and the organization, who have different needs. Starting off with the advantages pre-COVID-19, studies have demonstrated that overall job performance, time management and attendance are positively affected (Contreras et al., 2020; Vyas & Butakhieo, 2021). Working remotely means no office politics, reduced absences due to being sick and no tardiness because of the weather or public transportation (Schur et al., 2020). These reasons lead to an enhanced employee quality of life with more happiness and reduced stress levels (Contreras et al., 2020). Diversity has improved due to the flexibility that remote working provides (Vyas & Butakhieo,

2021). Women, who usually handle the child-care duties have benefited from the flexibility of working remotely as they can better manage their time (Olson, 1983; Vyas & Butakhieo, 2021). Also, workers with disabilities have less barriers when it comes to employment opportunities (Schur et al., 2020). Specifically, the cost and challenges that it takes for them to leave the home and get to work is not present with this new form of work (Schur et al., 2020). If they need to be close to medication or medical equipment and/or need to take appointments for their health, remote work facilitates this (Schur et al., 2020). It is important to note that while the above are all advantages, support from management and colleagues are vital to reduce potential negative effects (Contreras et al., 2020).

From the organization's perspective, the benefits are in line with the HR strategic plan in terms of financial growth and long-term benefits (Narayanan et al., 2017). In terms of cost savings, a company will save a large sum of money on rent, building maintenance, office overhead and labour when they require less workspace or even better, no workspace at all (de Lucas Ancillo et al., 2021; Olson, 1983). In the late 1990s, computer hardware company, Internal Business Machines Corporation (IBM) saved \$75 Million United States Dollars (USD) by selling some of their buildings and reducing their office space (Narayanan et al., 2017). Similarly, multinational professional services network, Ernest & Young (EY), decreased their office space by two million square feet and saw savings of \$25 Million USD each year (Narayanan et al., 2017). Another form of savings comes from employee retention and turnover. Back in 1997, A&T surveyed remote workers to gain knowledge on whether they enjoyed working outside of the office and if the work location would impact their desire to remain employed at that company (Mills et al., 2001). 36% indicated that they would look elsewhere if their manager required them to return to the office (Mills et al., 2001). Furthermore, through remote working, leaders can implement unique processes that work well with this new reality and thereby, reinforcing the company's work culture (de Lucas Ancillo et al., 2021).

1.1.7. Disadvantages of Remote Work Before COVID-19

On the flip side, this new reality draws in some inconveniences. From the employee standpoint, working from home may lead to a difficult distinction between working time and family time, further guiding distractions (Giurge & Bohns, 2020; Vyas & Butakhieo, 2021). Those

who have young children at home may find it tough to focus solely on their tasks during designated working time (Vyas & Butakhieo, 2021). There is also the possibility of overworking due to being unable to separate work hours from leisure hours (Giurge & Bohns, 2020; Vyas & Butakhieo, 2021). This is supported by a 2017 study done by Eddleston and Mulki that shared that remote workers have a hard time disconnecting from work during their off hours (Vyas & Butakhieo, 2021). Those who live alone or work at home by themselves all day may find social isolation to be an ongoing challenge as human interaction is scarce (Vyas & Butakhieo, 2021). In terms of the work itself, individuals who learn best through working next to their colleagues and observing how they do things are at a disadvantage as they must specifically seek out virtual assistance (Contreras et al., 2020). Unorganized workers will have a tough time maintaining adequate time management and organization skills (Contreras et al., 2020). On the financial side, employees now have extra expenses in terms of electricity and internet that are not necessarily being reimbursed by their employer (Vyas & Butakhieo, 2021).

For remote work to be done successfully, employees need to have access to reliable internet (Zykova & Maussymbek, 2021). This is something that the employer can control if the employees are physically at work (Zykova & Maussymbek, 2021). However, if the employees are working at a remote location with slow internet, their productivity can be impacted (Zykova & Maussymbek, 2021). There is also the difficulty of promoting employee relations through a screen (Zykova & Maussymbek, 2021). When in the office, the collaboration and teamwork aspect is more obvious and the ways of encouraging it are more present (Zykova & Maussymbek, 2021). The demotivation of working away from others and not having that comradery can also be a huge disadvantage with the remote work model (Zykova & Maussymbek, 2021).

A 2018 study done by McAlpine on the effects of remote work in terms of communication and creativity in a team displayed interesting results. The amount of the times that employees would engage in telework impacted the likelihood of them engaging in casual and friendly chats with their colleagues (Maslach & Leiter, 2016). Overall, the less often teammates would speak to each other informally, the less likely they were to generate clever ideas and concepts, which are essential in our rapidly changing world (McAlpine, 2018). For managers, working at the office signified being able to see and be reassured that their staff was at their desks working (Parker et al., 2020). Some found it difficult to simply trust that their remote workers were being autonomous

and progressing with their assignments (Parker et al., 2020). This uncertainty caused distrust and extremely high expectations of being available 24/7 (Parker et al., 2020). Ultimately, the employees' personal lives were disrupted leading to issues that will be discussed later in this paper (Parker et al., 2020).

The advantages and disadvantages of remote work before COVID-19 can be seen through the lenses of the employee and of the organization in table 1 below.

Table 1. Remote Work from the Perspective of the Employee and of the Organization Before COVID-19

	Advantages	Disadvantages
Employee	Positive impact on aspects related to the job: Performance, time management and attendance improved	Distinction between work/family time: Possibility of overworking, difficulty disconnecting
	Enhanced employee quality of life: No office politics, no tardiness because of the weather/commute, trust from the manager	Social Isolation: Challenge for those living alone
	Improvement in diversity: Women and workers with disabilities have less job opportunity barriers	Virtual learning curve: Can't learn by watching their colleagues next to them
		Unorganized employees: Difficulty with time management and organization
Organization		Finances: Extra expenses for electricity and internet may not be reimbursed by employer
	Human Resources Strategic Plan: Financial growth	Reliable internet access: difficulty ensuring that all employees have dependable internet

Financial savings: Rent, building
maintenance, office overhead, labour

Adaptation required: promoting
collaboration and teamwork,
ensuring motivation

Stronger employee retention and turnover

Implementation of unique processes:

Reinforcing the work culture

1.1.8. Advantages of Remote Work During COVID-19

In addition to the advantages stated in the previous section, the onset of the pandemic lead to its own benefits when it comes to remote work. It is important to note that research on remote work during the pandemic is relatively new, but there is still some interesting information to share. Many businesses relied on remote work to maintain their workflow during the pandemic (Ferreira et al., 2021; George et al., 2020). As such, an urgency was created for organizations to quickly adapt to the new digital world and for their employees to learn and be emersed in these new technologies (George et al., 2020). This new business model allowed remote teachers a safe new way of educating their students from a distance, by utilizing digital platforms like Zoom and Microsoft Teams (George et al., 2020). Promoting learning new technologies is beneficial for employees as the remote way of working does not have a determined end date (George et al., 2020). For professionals like teachers that are educating from a distance, they are imparting safe learning, free of the risk of contracting COVID-19 (George et al., 2020). Overall, working at a distance contributes to employees' feelings of protection and security, given the nature of the pandemic and how symptoms are spread (de Lucas Ancillo et al., 2021). With the world is operating remotely, employees can seek out interesting work opportunities without having to physically move to a new city (Savić, 2020). If they have highly sought-after skills, they can negotiate substantial compensation and benefits packages while having the remote international work exposure (Savić, 2020). In addition, they will have the opportunity to network with individuals that they would have never met before (Savić, 2020).

From the organization's standpoint, talent attraction for certain roles has no geographical boundaries (de Lucas Ancillo et al., 2021). With talent dispersed around the world and individuals

looking for the best opportunity, no matter where it is, companies can meet their hiring needs and bring in fresh ideas and new perspectives to the organization (de Lucas Ancillo et al., 2021). The ability to hire talented individuals across the world without having to pay for their relocation is a big win (de Lucas Ancillo et al., 2021). In addition, another beneficial result of the pandemic was greater retention of older workers, who chose to maintain their employment during this period (Savić, 2020).

1.1.9. Disadvantages of Remote Work During COVID-19

Working remotely during a global pandemic is not for everyone. In addition to the challenges mentioned in the pre-COVID section, there are some specifically related to the pandemic. To begin, various studies on corporate employees brought to light emotions of sadness, loneliness and isolation felt by professionals due to this new way of working, specifically the work-life balance (Churchill, 2020; Savić, 2020; Tronco Hernandez, 2020). Being away from colleagues that they used to see on a regular basis has a negative impact on employees' mental health (Ipsen et al., 2021; Passos et al., 2020; Pierce et al., 2020; Salari et al., 2020). In addition, the same studies declared that these professionals underwent more physical problems like reduced physical activity and poor eating habits (López-Bueno et al., 2020; Tramotin M., 2020; Tronco Hernandez, 2020; Xiao et al., 2021). With regards to physical health, the ergonomic support of the new workspace was proven to cause pain, particularly in the neck area (Moretti et al., 2020; Xiao et al., 2021). In terms of workload, some employees interviewed mentioned that their employers expected them to work more productively since they were at home, but the employer did not provide more autonomy in exchange (Tramotin M., 2020; Tronco Hernandez, 2020). Other researchers found that employees had received irregular amounts of tasks and expectations of working very punctually with tight deadlines, leading to potential anxiety (Al-Habaibeh et al., 2021; Matli, 2020). With schools closing whenever there is a health risk, remote working parents must reorganize their schedule to manage their time between childcare commitment and work (Al-Habaibeh et al., 2021). The disruptions in one's workflow with children in the home rather than being in a closed-office space are a downside of this new way of working (Al-Habaibeh et al., 2021; Cho, 2020). Data collected from 29 European countries on the remote work experience at the start of the pandemic indicated that the main disadvantages were the limitations of the remote office (unsuitable tools for work) and the precariousness of work (Ipsen et al., 2021). As a new hire,

onboarding during the COVID-19 period can be a big challenge (Carlos & Muralles, 2022). Without physical prompts or collaboration with peers, the experience can be daunting, and the individual can feel like they are all alone, especially if they had not taken on a remote job before (Carlos & Muralles, 2022). A greater understanding, patience, and empathy for what the new hire is going through is critical for the ultimate success (Carlos & Muralles, 2022).

For the employer, there is an increase in security risks (Savić, 2020). Having employees work from anywhere and connect to their own internet rather than the company-secured one means that computer hackers have easier access to private company information (Savić, 2020). In addition, managers may find it difficult to lead a team from afar (Savić, 2020). Their main challenges will be in terms of communication and ensuring that their employees produce the desired results (Savić, 2020). The work culture may take a hit (Savić, 2020). Organizations that strive to promote collaboration and teamwork will have to adapt their work arrangements to offer this (Savić, 2020). With regards to the onboarding program for new hires, employers need to be especially vigilant when creating this mentorship program and ensuring the new hires are paired up with the supportive trainers (Carlos & Muralles, 2022). The proper trainers will go beyond teaching the day-to-day tasks, they will share additional resources and be a trusting point-of-contact for the months to come (Savić, 2020).

The advantages and disadvantages of remote work during COVID-19 can be seen through the lenses of the employee and of the organization in table 2 below.

Table 2. Remote Work from the Perspective of the Employee and of the Organization During COVID-19

	Advantages	Disadvantages
Employee	Learn new ways of working that are technology-friendly	Physical Health: Reduced physical activity, poor diet, ergonomic troubles
	Feeling of safety and protection: No risk of contracting COVID-19 in their remote workspace	Mental Health: Difficulty being away from colleagues
	Sought-after employees: Exposure to new employment and networking opportunities	Children at home: Constant schedule reorganization for the working parents
		Workload: High expectation of productivity, irregular amount of work
Organization		Onboarding experience: new experience, feeling of being alone
	Attraction of new talent: Employee recruitment with no geographical boundaries	Security risks: Employees working anywhere and using their own internet increases opportunities for hackers
	Higher retention of older generation	Leading a team from afar: Communication, achieving desired results
		Adaptation required: Promoting collaboration and teamwork
		Onboarding experience: Matching the proper trainer with the new hire to maximise success

1.1.10. Telework Legislation before COVID-19

In 1996, the International Labour Organization (ILO), a United Nations agency created a remote work convention followed by recommendations on this form of work (Scaillerez & Tremblay, 2016). The ILO's convention obligates employers to treat their remote workers the same as their employees that work on-site, a requirement that is not in place in Canada and the United States yet (Scaillerez & Tremblay, 2016). In Canada and the United States, there is some reluctance when it comes to putting in place legal frameworks for remote work (Scaillerez & Tremblay, 2016). As such, there are few legal articles written about remote work in these two countries (Scaillerez & Tremblay, 2016). A 2016 report published by the Canadian Government illustrates their consultative work on how the way of work is changing and that working professionals need assistance when it comes to organizing their personal and work schedules (Employment and Social Development Canada, 2016). The report discusses flexible work arrangements, defined as arrangements that grant employees to modify their work schedule (hours, location of work or leaves of absence) to meet their personal obligations (Employment and Social Development Canada, 2016). The same report highlights the benefits for employers including encouraging productivity, inclusivity, and support for their staff and as a recruitment tool for future staff (Employment and Social Development Canada, 2016). Upon hearing Canadian workers' thoughts on this report, the Government stated that they are planning on revising the Labour Code to provide those working in federally regulated sectors the right to ask their employer for flexible work arrangement to create a better work-life balance (Employment and Social Development Canada, 2016). However, nothing concrete has been put in place so far (Employment and Social Development Canada, 2016). Some municipalities in Québec have restricted the presence of telework in the home by limiting the work area to certain rooms or by preventing the teleworker of hiring their own employee (CEFRIO., 2001; Scaillerez & Tremblay, 2016). The explanation given for this restriction is to ensure that female teleworkers are not working from home all the time and being marginalized to the outside of the visible employment market (Scaillerez & Tremblay, 2016; Tremblay & Thomsin, 2012). To summarize the situation in Canada, there is no developed legal framework in place, but the relationship of subordination and a contract indicating that the employees' place of work is present (Scaillerez & Tremblay, 2016). Since 2010 in the United States, there is a Telework Enhancement Act that encourages and helps with the execution

of remote work in the federal government (Scaillerez & Tremblay, 2016). There is no legal framework for other sectors of work (Scaillerez & Tremblay, 2016).

In Europe the situation is different. Since the 1990s in the private and civil servant sectors in Belgium and France, telework legislation has applied (Scaillerez & Tremblay, 2016). From the 2000s onward, the telework legislation has become more specific (Scaillerez & Tremblay, 2016). The European Council has been encouraging of telework and even created its own definition for the term (Scaillerez & Tremblay, 2016). Following this, members of the European Union were given until 2005 to incorporate telework into their national law (Scaillerez & Tremblay, 2016). With the implementation of this new law, there is equality and protection for employees that choose to work remotely (Scaillerez & Tremblay, 2016). Companies operating in the European Council must indicate in their contracts if the employees are to work remotely and if changes are to be made, then the contract must be amended (Scaillerez & Tremblay, 2016). Jurisprudence shows that the employee is not entitled to additional compensation for telework, if they are the one who asked for it. The only exception is if it is the employer that requested it (Scaillerez & Tremblay, 2016).

1.1.11. Legal Implications of Remote Work During and After COVID-19

The COVID-19 pandemic's impact on employees in terms of the social, financial, and now, legal facets of work is huge and long-lasting (Tahan, 2020). Urgent legislations were implemented on short notice to respond to the pandemic (Carvalho Martins, 2020). As such, labor law is a fundamental subject to consider when looking its impact on remote work, especially in the long term (Carvalho Martins, 2020). It corresponds to the set of legal responsibilities, rights and working conditions that exist in an employment relationship between the employee and the employer (Șerbănescu, 2021). Employers should be aware of the five existing categories of remote work locations: from home, from anywhere within the local tax jurisdiction, from anywhere within their country of residence, from the office or anywhere where a permanent company building exists and remote work from anywhere in the world (Deloitte Worldwide BRC, 2021; Wagner, 2022). Each of the five categories comes with their own risks and compliance issues (Wagner, 2022). From a compliance standpoint, the first option, work from home provides the least risks compared to the last option, work from anywhere in the world (Wagner, 2022). When it comes to the law

governing an individual's employment, typically, it is the law of the province or state where they are physically located and working from that applies (McMillan LLP, 2021; Wagner, 2022). An employee working remotely in an apartment in Toronto for a Montréal company, will have to follow the Ontario Employment Standards Act (McMillan LLP, 2021). An employee that works in Ontario and occasionally outside the province are still subject to the Ontario Employment Standards Act (McMillan LLP, 2021). From a tax and payroll deductions perspective, the reference point is the company's "place of business", i.e., where the company owns or rents property and where at least one employee physically reports to work (McMillan LLP, 2021; Oberson & Hull, 2011; Wagner, 2022). Therefore, in the previous example with the employee residing in Ontario but working for a Québec-based company, the individual will follow Québec tax and payroll deduction regulations (McMillan LLP, 2021).

When it comes to employment contracts for new hires, employers should consider including clauses determining whether the remote work arrangement will be on a temporary or permanent basis, and if it is on a temporary basis, the contract should include a physical return to work date (McMillan LLP, 2021; Wagner, 2022). The employment contract should also set parameters on the specific location of work (i.e., anywhere within the province of Québec) (McMillan LLP, 2021). The contract should consider health and safety (McMillan LLP, 2021). As such, the contract should specify to the employee that their remote work location must comply with the health and safety regulations approved by the employer and if the employee does not respect this, their employment is not guaranteed (McMillan LLP, 2021). The employment contract should mention details on the number of hours worked on a weekly basis, how overtime is determined how data privacy and security works, as well as how confidentiality of company information and equipment for their remote work duties works (McMillan LLP, 2021). Cybersecurity and ensuring that staff meet their company information confidentiality duties is a concern (Carvalho Martins, 2020). In terms of conservation of data privacy, employers should ensure, through legal documentation, that employees are not sharing company information with others, that they are taking the necessary steps to protect their data, including using password protection and a virtual private network (VPN) (Wagner, 2022). For companies that have existing employees, it is recommended to create a remote work policy that includes the same information and regulations as new hires (McMillan LLP, 2021; Wagner, 2022). When it comes to employer obligations, occupational health and safety is still a requirement in the COVID-19 era (McMillan

LLP, 2021). Employers must ensure that their employees have an ergonomically safe workspace and that there are minimal health and safety risks (McMillan LLP, 2021).

In the following two sections, we will further examine the job risks that working professionals may be exposed to via two models, Karasek's Job Demand-Control (JDC) Model and Karasek's Job-Demand-Control-Support (JDCS) Model. Both models examine the job characteristics, demands and control (Åhlin et al., 2018; Ariza-Montes et al., 2018; Asif et al., 2018; Baka, 2020; Dawson et al., 2016; Johnson & Hall, 1988; Karasek et al., 1979). The JDCS model adds an additional component, support (Åhlin et al., 2018; Ariza-Montes et al., 2018; Asif et al., 2018; Baka, 2020; Dawson et al., 2016; Johnson & Hall, 1988; Karasek et al., 1979).

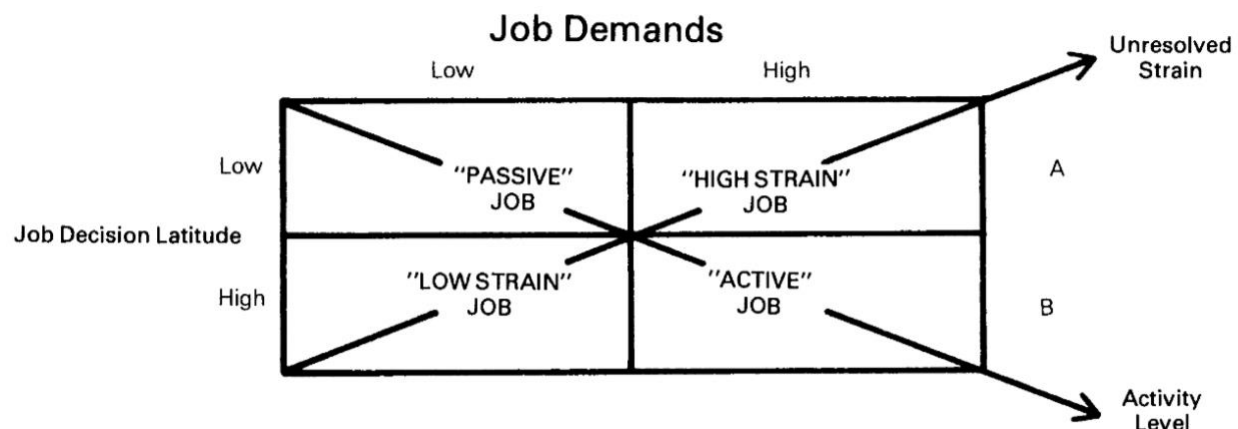
1.1.12. Karasek's Job Demand-Control (JDC) Model

In 1979, Karasek created the Job Demand-Control (JDC) Model to look at two work-related characteristics, job demands and job control (Åhlin et al., 2018; Baka, 2020; Karasek et al., 1979). The model suggests that psychological strain comes from the tasks at work and the decision-making capability of the employee, also known as job demands and job decision latitude (Asif et al., 2018; Baka, 2020; Karasek et al., 1979). Job demands are defined as the rhythm and cognitive magnitude of the work in question, or workload (Åhlin et al., 2018; Baka, 2020). Decision latitude or job control is made up of the decision authority of the individual when it comes to their work tasks and skill discretion (Åhlin et al., 2018; Baka, 2020). The goal of the model is to have the psychological demands and decision latitude correlated (Karasek et al., 1979). Decision latitude acts as a shield from physical and mental strain (Hervieux et al., 2022). Individuals experiencing high job demands are also experiencing a great deal of professional achievement while carrying out their healthy lifestyle (Hervieux et al., 2022; Kouvonen et al., 2013). This model emphasizes on strain as a buffer hypothesis (Baka, 2020; W. Fan et al., 2019).

Figure 1 below outlines the types of jobs that would fall under each of the quadrants (Karasek et al., 1979). In the top left-hand corner are passive jobs that providing employees with low job demands and low decision latitude (Åhlin et al., 2018; Karasek et al., 1979). In the bottom right-hand corner are active jobs, which are the complete opposite of passive jobs (Åhlin et al., 2018; Karasek et al., 1979). Active jobs provide employees with high job demands and high decision latitude (Åhlin et al., 2018; Karasek et al., 1979). In active jobs, employees enjoy their

tasks, are regularly maintaining and improving their skills and are growing their skill level (Åhlin et al., 2018; Karasek et al., 1979). Even though there is a high level of job demand, these individuals can make a reasonable number of decisions at work by utilizing their problem-solving skills (Åhlin et al., 2018; A. B. Bakker et al., 2010). Low strain jobs are in the bottom left-hand corner (Åhlin et al., 2018; Karasek et al., 1979). These jobs provide employees with low job demands but high job decision latitude (Åhlin et al., 2018; Karasek et al., 1979). Finally, the top right-hand corner represents high strain jobs (Åhlin et al., 2018; Karasek et al., 1979). Those that fall under this category have high job demands and low job decision latitude (Åhlin et al., 2018; Karasek et al., 1979). These individuals have the greatest health risk when it comes to their psychological well-being (Ariza-Montes et al., 2018). The model also includes a buffer hypothesis, meaning the communal result of the job demands and decision latitude can curb the damaging effects of elevated job demands (Ariza-Montes et al., 2018).

Figure 1. Karasek’s Job Demand-Control (JDC) Model (Karasek et al., 1979).



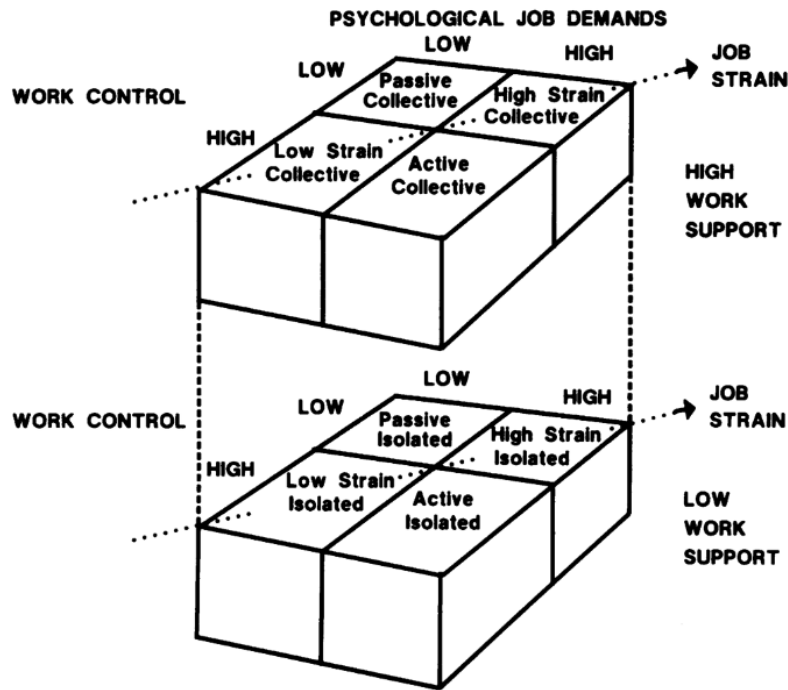
1.1.13. Karasek’s Job-Demand-Control-Support (JDCS) Model

In 1990, Karasek and Theorell expanded on their Job-Demand-Control (JDC) model to create the Job-Demand-Control-Support (JDCS) model (Ariza-Montes et al., 2018; Asif et al., 2018; Dawson et al., 2016; Johnson & Hall, 1988; Karasek et al., 1979). In doing so, they added a third component, work support (Ariza-Montes et al., 2018; Asif et al., 2018; Dawson et al., 2016; Johnson & Hall, 1988; Karasek et al., 1979). The decision to add an element to the model was supported by other researchers (Ariza-Montes et al., 2018; C. Cooper et al., 2001). Social support

is viewed as pleasant interactions between an employee and their manager and/or peer that empowers the employee to deal with stress (Ariza-Montes et al., 2018; Wadsworth & Owens, 2007). Having social support is critical to mitigate potential workplace stress (Ariza-Montes et al., 2018; Chiaburu & Harrison, 2008). The JDCS model is a commonly researched model that looks at the connection between one's job environment and their health at work (Asif et al., 2018). The model includes three components, the psychological work conditions of job demand and job control (from the previous model) in addition to work support. The model's buffer hypothesis is like the JDC model, however, in the JDCS model there is a relationship between job demands, job control and support on the employees' strain (Dawson et al., 2016). The model cautions that those who experience iso-strain are individuals who are exposed to the most substantial risks when it comes to their physical and psychological health at work (Ariza-Montes et al., 2018). In addition, each element of the model can impact a working professional's health on its own, but when they are together, the impact is stronger (Ariza-Montes et al., 2018). The JDCS model has been tried out in workplaces where individuals experience persistent job demands that do not seem dangerous at first (Baka, 2020). The model does not establish the fundamental reason an employee is experiencing iso-strain; however, it provides critical data that leaders can use to make business decisions (Pujo et al., 2021). Today, the JDCS model is known for being a primary tool used to examine the link between workplace attributes and employee health (Asif et al., 2018).

Figure 2 below illustrates the JDCS Model (Johnson & Hall, 1988). As shown in the model, the merger of high job demands and low job strain with low social support can illicit stress in the individual through the form of anxiety and poor job fulfillment (Asif et al., 2018). The other part of the model shows that the combination of low job demands and high control or low demands, high control and high social support can create elevated employee health (Asif et al., 2018). Many researchers have audited and can attest to the validity of this tool (Asif et al., 2018; Kristensen, 1995; Schnall et al., 1994; van der Doef & Maes, 1999; van Doef & Maes, 1998).

Figure 2. Karasek's Job Demand-Control-Support (JDCS) Model (Johnson & Hall, 1988).



1.2. Iso-strain

1.2.1. Introduction and Definition

Employee strain, a reduced degree of comfort or prosperity at work, is connected to the physical, social, and psychological parts of work (Perry et al., 2018). When remote work is constant, the impact can be greater (Perry et al., 2018). Karasek's 1979 Demand-Control-Person (DC) model postulates that job demands, and control collaborate to estimate strain (Perry et al., 2018). In 1990, Karasek and Theorell came up with the term, "iso-strain" (Höckerberg et al., 2010; Kim et al., 2021; Perry et al., 2018). Iso-strain is defined as the combination of high psychological demands, low decision latitude, and low social support at work (Höckerberg et al., 2010; Kim et al., 2021; Perry et al., 2018). Those who experience iso-strain will undergo the worst repercussions, health-wise (Höckerberg et al., 2010; Kim et al., 2021; Perry et al., 2018; Poncelet et al., 2021). Iso-strain jobs are threatening to working professionals' mental well-being because of the high job demands, low job control and low social support provided (Ibrahim et al., 2021). An employee can experience such strain when his resources are weakened, making it more challenging to meet the

job demands and attain the occupational goals set for themselves (Baka, 2020; Perry et al., 2018). There exists a link between remote work and iso-strain (Perry et al., 2018). The more an employee works in a setting that is different than the usual office space, the more chances he will experience strain (Perry et al., 2018). Karasek's model was later modified to add social support at work as an intermediary dimension between elevated strain on stress-related issues (Höckerberg et al., 2010; Ibrahim et al., 2021). Karasek's framework is instrumental in job stress and well-being research today (W. Fan et al., 2019).

1.2.2. Iso-strain During COVID-19

From the hospital to the classroom, working professionals are feeling the impact of the pandemic on their stress level (Poncelet et al., 2021; Rehman Sheriff & Rehman, 2022). Essential workers in hospitals have a high chance of experiencing iso-strain due to the nature of their job (Taş et al., 2021; The Republic of Turkey Ministry Of Health Directorate General Of Public Health, 2020). A 2021 study on hospital emergency department staff in French Guiana revealed interesting findings with regards to iso-strain during the pandemic (Pujo et al., 2021). Upon analyzing the 117 valid questionnaires, the research team discovered signs of iso-strain in 13.7% of individuals (Pujo et al., 2021). Iso-strain was highest in individuals with longer job tenure, those not physically working at the hospital, those that signaled poor work conditions and those with extreme amounts of workload (Pujo et al., 2021). Overall, these results indicate a level of stress comparable to pre-pandemic situations (Pujo et al., 2021). Another pandemic study on iso-strain in medical professionals revealed insightful findings (Taş et al., 2021). The results of an online questionnaire filled out by 448 Turkish family physicians showed that anxiety levels and job strain increased during the pandemic (Taş et al., 2021). Specifically, an alarming 95.8% of the family doctors that participated in the study had higher anxiety during the pandemic compared to before the pandemic (Taş et al., 2021). In terms of job strain, the workload and job task scores increased, and the social support score went down (Inter-Agency Standing Committee, 2020; Koh et al., 2005; Taş et al., 2021). In Turkey, many hospitals were repurposed to provide care to individuals diagnosed with COVID-19 and family doctors acted as the first point of contact (Taş et al., 2021). Putting themselves at risk of contracting the virus along with taking on more work caused a higher risk of strain for these professionals, and the impact trickled down to the community reliant on these experts to provide care (Taş et al., 2021).

The well-being of teachers has always been important, but it has been a top priority during the COVID-19 crisis (Ibrahim et al., 2021). Contribution to a teacher's stress is their experience, workload and job demands (Desouky & Allam, 2017; Ibrahim et al., 2021). A 2021 quantitative study on 335 Malaysian high school teachers looked at job control, job demands and social support (Ibrahim et al., 2021). The research indicated that all three components had a strong impact in estimating Malaysian teacher well-being (Ibrahim et al., 2021). Like a pre-pandemic study, the teachers that reported high job demands, low job control and low social support had a higher chance of exposure to stress and anxiety (Bakker & Demerouti, 2007; Gao et al., 2011; Ibrahim et al., 2021; Johnson & Hall, 1988; Ter Doest et al., 2006). The study highlights the link that social support plays as a mediator in assisting working professions who are working through high demands and low control at work (C. L. Cooper et al., 2001; A. M. Grant et al., 2009; Ibrahim et al., 2021; Panatik, 2010; Viswesvaran et al., 1999).

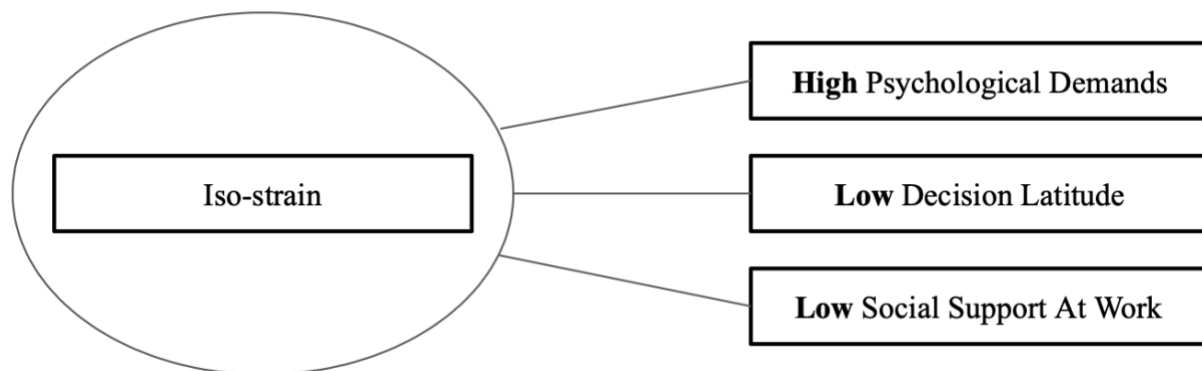
1.2.3. Link Between Iso-strain and Remote Work

Telework allows employees the freedom to choose where they work, leading many to believe that this arrangement would have a positive impact on employee strain (Hager, 2018). However, the potential downside of this type of work arrangement is that it might contribute to increasing strain (Hager, 2018). Because the boundaries between work and personal life are blurred, employees work more hours and have higher job demands, causing non-optimal performance (Qu & Yan, 2022). Past research teams have looked at the impact of job demands and job control in the remote work environment (D. E. Bailey & Kurland, 2002; Felstead et al., 2001; Golden et al., 2006; Hager, 2018; Montreuil & Lippel, 2003; Paoli & Merllié, 2001). As mentioned previously, prior to COVID-19 many organizations did not provide their staff the option to work remotely nor did these individuals seek out that possibility (C. Zhang et al., 2021). Therefore, once governmental regulations were established, employees around the world experienced a drastic and stressful change in their lives (van Zoonen & Sivunen, 2021; C. Zhang et al., 2021). Due to the unprecedented circumstances, examining the impact of the shift from in-office to out-of-office work on the workforce's well-being is essential (van Zoonen & Sivunen, 2021; C. Zhang et al., 2021). Telework serves as a challenge stressor in an intertwining way, meaning that it reduces one's energy and prompts it (Perry et al., 2018). Because of this, it is firmly associated with burnout and organization commitment, two topics that will be discussed later in

this paper (Perry et al., 2018). Remote employees who are consistently spending a significant amount of their workday on basic responsibilities like organizing tasks and trying to reach managers for information to continue be able to proceed to other tasks, usually feel strain (Perry et al., 2018). Using the JCDS model, an early pandemic study compared the work quality and productivity between remote workers and office workers in China (Qu & Yan, 2022). The study found that remote work positively affected job performance via a connection between the job demands and control and moderated by social support, but it had a negative impact on productivity (Qu & Yan, 2022). As such, the study found that working remotely provided employees the independence to choose the time during the day to finish their work tasks (Qu & Yan, 2022).

Figure 3 below illustrates the three dimensions of iso-strain in remote workers: high psychological demands, low decision latitude, and low social support at work.

Figure 3. Dimensions of Iso-strain



1.2.4. Link Between Technostress, Remote Work, and Iso-strain

Technostress is defined as a specific type of stress related to employee helplessness when it comes to using new technology (Camacho & Barrios, 2022; Spagnoli et al., 2020; Tarafdar et al., 2011). Technostress is also known for causing stress because of the relentless connectivity, multi-tasking, and technology upgrades they face (Spagnoli et al., 2020; Tarafdar et al., 2011). With new technology implemented in the workplace each year, individuals can experience this dangerous phenomenon (Camacho & Barrios, 2022; Ragu-Nathan et al., 2008). Technostress can

cause lower well-being, productivity, satisfaction at work and engagement as well as elevated exhaustion, tiredness, and risk of burnout (Camacho & Barrios, 2022; Fuglseth & Sørensen, 2014; Maier et al., 2015; Park & Haun, 2018; Srivastava et al., 2015). Technostress research looks at inhibitors, which are used to lower the negative impacts of technostress (Camacho & Barrios, 2022; Sarabadani et al., 2018). Inhibitors are trainings to use the new technology and technical support (Camacho & Barrios, 2022; Ragu-Nathan et al., 2008; Tarafdar et al., 2011).

Research on technostress and telework shows that those who work from a location outside of the office experience stress differently than those who work onsite (Camacho & Barrios, 2022; Weinert et al., 2015). With remote work on the rise, employees are dealing with constant technological requests that require proper management, otherwise leading to stress (Camacho & Barrios, 2022; Weinert et al., 2015). As mentioned previously, iso-strain is the consequence of combined high psychological demands, low decision latitude, and low social support at work (Höckerberg et al., 2010; Kim et al., 2021; Perry et al., 2018). The link between iso-strain and technostress is that technostress creates strain (Camacho & Barrios, 2022; Galluch, 2009; C. Lee et al., 2016). Therefore, when an employees' resources are weakened due to the technostress that he is feeling, it is more challenging for him to meet the job demands and attain the goals he set for himself (Baka, 2020; Perry et al., 2018). Due to the global pandemic, the impact of technostress and strain on employees forced to begin working remotely was magnified (Camacho & Barrios, 2022). Camacho et al.'s research on the rapid implementation of remote work due to the pandemic showed that individuals felt stressed, were less protected and more isolated (Camacho & Barrios, 2022). This resulted in a lack of desire to interact with others and work efficiently through taking initiative (Camacho & Barrios, 2022; Molino et al., 2020). Research done by Camacho et al. also indicated that the instant effects of technostress on remote workers are work-personal time conflict and high workload (Camacho & Barrios, 2022). Moreover, they discovered that strain reduces job satisfaction for the remote work population (Camacho & Barrios, 2022).

1.2.5. Future of Remote Work in the Post-COVID-19 Context

Remote work made an appearance in the 1970s as the labour market transitioned from an agricultural, industrial, and manufacturing environment to an information-focused with marketplace, making on-site work less relevant (Kitamura et al., 1990). Fast-forward to the early

1990s, where organizations shifted to an organic and flexible work arrangement to meet the needs of the ever-changing work landscape (Contreras et al., 2020). Then in 2017, with more technological tools available to the working professional population, there was an increase of 115% in remote workers (Narayanan et al., 2017). Prior to the pandemic, remote work was not common practice for everyone (Wang et al., 2021). Those that took part would typically spend a couple of days per week from home and a couple of days onsite (Chong et al., 2020). When March 2020 came around, a large proportion of the working population, whether ready or not, transitioned to full-time work outside the office in a short period of time, 80% according to Gartner and suddenly, this began the new way of working (Kniffin et al., 2020; Wang et al., 2021). In Canada, COVID-19 caused an uptick in the number of remote workers (Tremblay, 2020, 2022). Prior the pandemic, only 10% of working professionals periodically completed their tasks outside the office (Tremblay, 2020, 2022). In April 2020, that percentage rose to 40% (Tremblay, 2020, 2022). Research on Canadian populations shows that there is a keen interest in remote work and Tremblay predicts that we will likely transition to a hybrid work environment (Tremblay, 2020, 2022).

The impact of COVID-19 on employees around the world is unprecedented. With the rapid switch to remote work at the start of the pandemic, many companies began operating fully digitally (Wang et al., 2020). The insights gathered from remote work practices during the COVID-19 pandemic can assist in leading employers in the right direction when making decisions about flexible work options (Wang et al., 2021). The future of remote work in a post-COVID-19 world will likely continue with the use of digital tools for communication and this could be the only way of working for companies that choose to operate 100% remotely (Wang et al., 2020). There are numerous advantages of remote work for the employer and employee alike and employers must be aware of the challenges of managing a virtual workforce (Wang et al., 2021). Much of research links back to technology as a main concern for the physical and psychosocial problems that remote workers are facing (S. W. Hayes et al., 2021). Therefore, when imaging the future of work in a post-COVID-19 era, organizations will have to be cognizant of the long-term physical problems and psychosocial problems (work-related stress, technostress, and exhaustion) affecting their remote worker's health. They will have to think about the impact of their organizational changes on their staff and in particular women and those with child-care duties (S. W. Hayes et al., 2021). The future of remote work could also include a hypermobility paradigm, with an extensive amount of mobility as more individuals venture out on a digital nomad lifestyle (Cook, 2020; Green, 2020;

Mancinelli, 2020; Wang et al., 2020). Digital nomadism appeared in the past decade with working professionals taking on jobs like blogging, website design and social media marketing that would enable them to travel and explore more of the world (Schlagwein, 2018; Schlagwein & Sydney, 2017; Wang et al., 2020). Because of this potential shift in the type of remote work and jobs individuals will take on, organizations will also have to stay up to date with labour law and ensure that their practices are compliant (McMillan LLP, 2021; Wagner, 2022).

The pandemic has brought to light areas where companies need to focus on to improve their business' functioning and staff's overall well-being in a post-Covid-19 era (de Lucas Ancillo et al., 2021). As mentioned previously, the sudden change from on-site work to remote work had a significant impact on the functioning of organizations and there are speculations on whether it will continue in the upcoming years (Contreras et al., 2020). Not every company, nor every department in each company has the same needs, and therefore, they will not all make the same work-related decisions moving forward (de Lucas Ancillo et al., 2021). It will be essential to align the three (T's): talent, tasks and technologies in a new workplace design that facilitates the dynamic goal orientation that the company strives for (de Lucas Ancillo et al., 2021). Organizations that wish to have their employees work at the office or come into the office when required will have to reimagine its overall look and appeal (de Lucas Ancillo et al., 2021). Instead of dedicating much of the space to cubicles, small, shared spaces and meeting rooms, companies will have to create spaces that respect the needs of their employees (de Lucas Ancillo et al., 2021). Safety regulations and social distancing measures with clean common areas will have to be considered (de Lucas Ancillo et al., 2021). For more collaborative companies, the future workplace might have larger and open meeting spaces (de Lucas Ancillo et al., 2021). However, organizations that will transition permanently to remote work will not need to spend as much money on large office spaces (de Lucas Ancillo et al., 2021). A 2020 study done by IT service management company, Gartner demonstrated that close to 75% of Chief Financial Officers (CFOs) intended to transition at least 5% of their office-based workforce to permanent remote work after the pandemic (Agrawal et al., 2020). Similarly, the social media platform 9GAG, is the first company in Hong Kong to switch to remote working for an indefinite period (Vyas & Butakhieo, 2021). Overall, technology will play a crucial role moving forward, especially considering the health and safety measures, potential flexible work arrangements and progression of the pandemic (de Lucas Ancillo et al., 2021).

1.3. Burnout: Emotional Exhaustion

1.3.1. Burnout Introduction and Definition

While our research is centered around emotional exhaustion, it is important to first explain burnout in detail. We do this by looking at burnout's research history, dimensions, explanation for just researching the emotional exhaustion dimension, assessment tools and conceptual models as these elements are all connected to emotional exhaustion. Their importance will be detailed in their respective sections. Then, we will go into the consequences and factors related to emotional exhaustion, what it looked like before and during COVID-19 as well as its link between with remote work before and during the pandemic.

1.3.2. History of Research on Burnout

The history of burnout research begins in the 1970s during the pioneering phase in the United States (Edú-valsania et al., 2022; Maslach et al., 2000; Rotstein et al., 2019). During this period, exploratory research on the experience of those working in people-facing jobs such as health care was executed (Maslach et al., 2001; Samra, 2018). Then, American psychologist, Herbert Freudenberger came up with the term “burnout” from his early qualitative work (Maricuțoiu et al., 2016; Maslach et al., 2000; West et al., 2018). In 1975, Freudenberger wrote his first article on burnout where he detailed the unique tiredness, he noticed in mental health clinic workers (Edú-valsania et al., 2022; Levinson, 1996; Maslach et al., 2000). Freudenberger observed that these employees experienced extreme tiredness and had lost a significant amount of motivation and commitment with regards to their work (Edú-valsania et al., 2022; Maslach et al., 2000). These observations highlighted the social psychology research perspective (i.e., interpersonal connections) as well as emotion and motivation (Maslach & Leiter, 2016). To learn more, Freudenberger conducted interviews with human service professionals to better understand their jobs, stress, and coping mechanisms (Maslach et al., 2001; Maslach & Schaufeli, 2018). Thus, early research on burnout was social and clinical, focusing on the relationship between the individual and their colleagues and touching on the mental health perspective (Edú-valsania et al., 2022; Maslach et al., 2001). From the research, the first two dimensions of burnout, emotional

exhaustion, and cynicism emerged (Maslach et al., 2001; Maslach & Schaufeli, 2018). Later in this chapter, we will discuss these dimensions in detail.

In the 1980s, burnout research developed into a more structured and pragmatic approach (Maslach et al., 2001; Maslach & Schaufeli, 2018). During this period, known as the empirical phase, research was more quantitative rather than qualitative (Maslach et al., 2001; Maslach & Schaufeli, 2018). As such, the assessment tools were mainly surveys, looking at larger populations (Maslach et al., 2001; Maslach & Schaufeli, 2018). In 1981, Maslach and Jackson developed the first measurement tool, the Maslach Burnout Inventory (MBI) (Maslach et al., 2001; Maslach & Schaufeli, 2018). Years afterwards, Christina Maslach and her University of California at Berkeley research colleagues looked at the phenomenon more in-depth (Levinson, 1996; West et al., 2018). They discovered that the earliest forms of social and clinical psychological research on burnout were exploratory and qualitative in nature (Levinson, 1996; West et al., 2018). Perception and response through interpersonal relationships, motivation as well as emotion were topics of interest to the social psychology side of research (Maslach & Leiter, 2016). On the clinical side, motivation and emotion were also of interest, but touched more on the psychological disorders side (i.e., depression) (Maslach & Leiter, 2016). Later, burnout was examined from an organizational context with the accentuation on attitude and behaviour (Maslach & Leiter, 2016). Following suit, the three dimensions of burnout, emotional exhaustion, cynicism, and personal accomplishment at work were finalized (Kim et al., 2021; Maslach & Leiter, 2016).

In the 1990s, burnout was no longer viewed as an occurrence solely in human service and health service workers (Maslach et al., 2001; Schaufeli et al., 2020). The concept was extended to the technology, administration, and management fields of work (Maslach et al., 2001; Schaufeli et al., 2020). Over time, other tools were created to fit the specific needs of the researcher (Maslach et al., 2001; Maslach & Schaufeli, 2018). Longitudinal studies began to emerge, allowing researchers to see burnout's impact in the long term as well as examine the best intervention methods (Maslach et al., 2000; Maslach & Schaufeli, 2018). Burnout has an interesting history in that, as jobs complexified, tasks, relationships with colleagues and performance outcomes became more relevant, the phenomenon was viewed as impacting more people than initially anticipated (Samra, 2018). Today, burnout is viewed as a phenomenon that impacts working professionals in jobs that are emotionally charged (Eisenstein, 2018; Samra, 2018).

In 2019, burnout cases were amongst the largest expenses for the American healthcare system, costing the country over \$4 billion dollars per year (Caleshu et al., 2022; National Academies of Sciences, 2019). The implications, stemming from having poor structure and management in the workplace can be detrimental for the employees' health and well-being (Caleshu et al., 2022). Working in a fast-paced environment can cause feelings of extreme tiredness for employees (Edú-valsania et al., 2022). Since each researcher had their own viewpoint on burnout, it took some time to come up with a concrete definition (Maslach et al., 2001; Samra, 2018). According to Maslach, burnout is the result of long-term and persistent emotional and relational stress from one's work (Bayes et al., 2021; Maslach et al., 2001). Usually, burnout is present in those who deal with regular person-to-person interactions (Rotstein et al., 2019). Raudenská believes that burnout is a psychological disorder that results in feelings of exhaustion, loss of energy, mental detachment from work and feelings of reduced professional effectiveness in working professionals (Raudenská et al., 2020). After an individual makes numerous attempts to deal with their workplace stress, burnout emerges as the last step (Rotstein et al., 2019). Seeing the serious impact of this health phenomenon on the working population around the world, the WHO, recently added burnout to the Internal Classification of Diseases (ICD-11) (Edú-valsania et al., 2022).

1.3.3. Dimensions of Burnout

We will explain all three dimensions of burnout in this section and justify our choice to look only at the emotional exhaustion dimension. Even though the concrete definition of burnout can differ depending on the author, there was unanimity in establishing the three dimensions that make up burnout, emotional exhaustion, cynicism and reduced personal accomplishment (Maslach et al., 2000; Maslach & Schaufeli, 2018).

1.3.3.1. Emotional Exhaustion

While some authors believe that the three dimensions of burnout do not function completely on their own, the central dimension of burnout is emotional exhaustion and it is said to be the easiest one to spot in individuals (Edú-valsania et al., 2022; Maslach et al., 2000). Emotional exhaustion is defined as the expenditure of energy and tiredness that a working professional can

go through due to their job (S. Kim et al., 2021; Lin et al., 2022). Precisely, it comes in the form of feelings of extreme tiredness, weariness, or fatigue due to the cognitive or psychological endeavors made in the workplace (Edú-valsania et al., 2022). Individuals that have a higher level of burnout will also be more emotionally exhausted (Lin et al., 2022). Because of it, they will have difficulty coping with workplace challenges such as assigned tasks (Edú-valsania et al., 2022). Often, when a person is explaining their burnout symptoms, they talk about the emotional exhaustion part of it (Bilal & Ahmed, 2017; Burke & Greenglass, 2001; Cocco et al., 2003; Maslach & Leiter, 2008; Watson et al., 2008). As such, this dimension is the most looked at and inspected from a research point of view (Arens & Morin, 2016; Bilal & Ahmed, 2017). As a coping mechanism, working professionals that undergo emotional exhaustion will attempt to detach themselves from their work (Maslach et al., 2000; Maslach & Schaufeli, 2018).

1.3.3.2. Cynicism

The second dimension of burnout is cynicism, also known as depersonalization (Arens & Morin, 2016; S. Kim et al., 2021; Lin et al., 2022). It refers to the act of detaching oneself from their work (Arens & Morin, 2016; S. Kim et al., 2021; Lin et al., 2022). A person experiencing cynicism will purposely separate themselves from their colleagues and the work itself (Lin et al., 2022; Maslach et al., 2000; Maslach & Schaufeli, 2018). They will become less intrigued with what is going on around them and less invested in their work (Lin et al., 2022; Maslach et al., 2000; Maslach & Schaufeli, 2018). Cynicism is reflected in one's behavior by showing zero concern towards their work and their colleagues (Edú-valsania et al., 2022; Lin et al., 2022). As a result, the behaviour and attitude change and the person becomes more negative (Edú-valsania et al., 2022). Precisely, they become more irritable and less pleasant to be around (Edú-valsania et al., 2022). Those experiencing higher levels of depersonalization have more intense burnout (Lin et al., 2022).

1.3.3.3. Reduced Personal Accomplishment

The third and final dimension of burnout is reduced personal accomplishment (S. Kim et al., 2021; Maslach et al., 2001; E. S. Williams et al., 2020). Also known by the term, inefficiency, it results in feelings of helplessness or inadequacy at work (S. Kim et al., 2021; Maslach et al.,

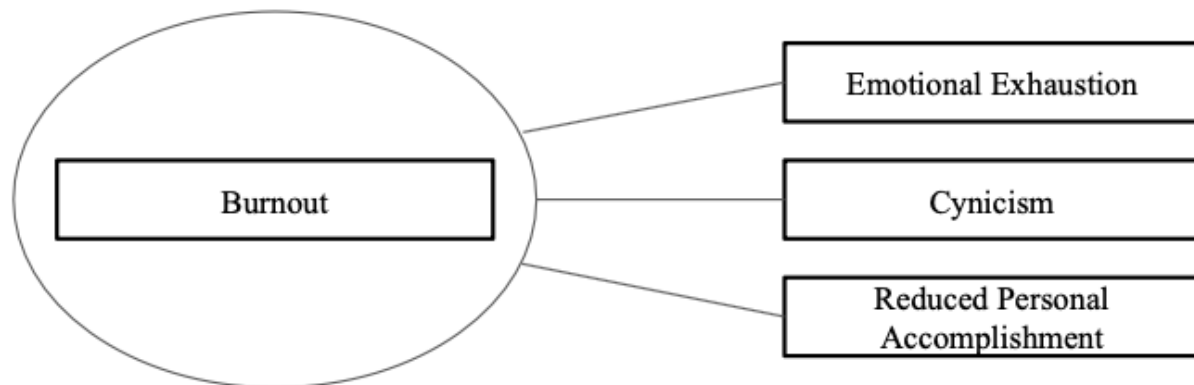
2001; E. S. Williams et al., 2020). Overall, the individual has negative feels about their ability to do work well and accomplish tasks within the scope of their job (Edú-valsania et al., 2022). As a result, their aptness and efficiency are lower and their morale goes down (Edú-valsania et al., 2022). In comparison to the two previous dimensions, inefficiency has a more complicated link to burnout (Maslach et al., 2001). Depending on the situation, it can be seen as basis for exhaustion, cynicism or the two together (Maslach et al., 2001). This is explained in a situation where an employee has difficulty feeling a sense of accomplishment when they are emotionally exhausted (Maslach et al., 2001). Looking at it more closely, we can see that the three-dimensional model positions one's stressful undergoing into a social context, considering their view of themselves and of those around them (Maslach & Leiter, 2016).

1.3.3.4. Reasons for Researching just the Emotional Exhaustion Dimension

We decided to focus our research only on the emotional exhaustion dimension of burnout for a couple of reasons. First, in our readings on the topic, several authors established emotional exhaustion as the essence or most critical dimension of burnout (Arens & Morin, 2016; Bilal & Ahmed, 2017). The reasoning behind it was that emotional exhaustion occurs first and then causes cynicism and reduced feelings of personal accomplishment to occur (Arens & Morin, 2016; Bilal & Ahmed, 2017; Maslach et al., 2001). Second, previous research shows that emotional exhaustion best forecasts reduced work performance in staff members (Arens & Morin, 2016; T. A. Wright & Bonett, 1997). In addition, when a working professional states that they are experiencing feelings of burnout, they are typically referring to the emotional exhaustion piece of it (Bilal & Ahmed, 2017; Burke & Greenglass, 2001; Cocco et al., 2003; Maslach & Leiter, 2008; Watson et al., 2008). This decision is supported by other researchers who made the same choice to focus their research only on the emotional exhaustion dimension (Ben-Zur & Michael, 2007; Bilal & Ahmed, 2017; Dicke et al., 2015; Estryn-Béhar et al., 2007; Gandoy-Crego et al., 2009; Klusmann et al., 2008a, 2008b; F. J. Lee et al., 2008; Trautwein et al., 2006). Since there is already valuable research on the topic, we believed it would be an asset in building upon our research (Bilal & Ahmed, 2017).

Figure 4 below provides a visualization of the three dimensions of burnout: emotional exhaustion, cynicism, and reduced personal accomplishment.

Figure 4. Dimensions of Burnout



1.3.4. Assessment Tool of Burnout

Once the attributes pertaining to burnout were more distinctly recognized and well aligned with the WHO's definition of the term, it became important to create tools that could evaluate it (Maslach & Leiter, 2016, 2021). There are no assessment tools that measure emotional exhaustion on its own. Overall, the tools vary, with some only looking at one distinct dimension or two out of the three dimensions (Maslach & Leiter, 2016). Although the interest for these types of assessment tools came from health care and human services, glimpses of interest began to surface from other occupations, creating a need for the assessment tools to be more generalizable (Maslach & Leiter, 2016). It was then that the dimensions were modified to become more relatable to all professions (Maslach & Leiter, 2016). In this section, we will discuss, the Maslach Burnout Inventory (MBI). The MBI is the most used assessment tool of burnout and it is the one we used for our research. The Bergen Burnout Inventory (BBI) and the Shirom-Melamed Burnout Measure (SMBM) are two other assessment tools of burnout. See Appendix 3 for a description of the BBI and SMBM.

1.3.4.1. Maslach Burnout Inventory (MBI)

Used in over 90% of empirical studies on burnout, the Maslach Burnout Inventory (MBI) is known as the standard psychometric tool in the field (Lin et al., 2022; Raudenská et al., 2020). Published for the first time in 1981, it is the first scientific assessment tool to evaluate burnout in individuals occupying human-facing jobs (Maslach & Jackson, 1981; Maslach & Leiter, 2016). The self-assessment tool, made up of 22 items scored from 0 to 6, was created to look at the three dimensions of burnout, emotional exhaustion, cynicism and reduced personal accomplishment

individually to improve the understanding of burnout and the approach to take to mitigate it in organizations (Lim et al., 2020; Maslach & Leiter, 2016; West et al., 2018). High scores on this test indicate that individuals are experiencing burnout (Edú-valsania et al., 2022). The results obtained from the test can provide an outline to organization leaders on how to create engaged and flourishing workplaces (Maslach & Leiter, 2021). The MBI can help make strong changes in human resources functions such as talent acquisition, training, and development as well as job design (Maslach & Jackson, 1981). In fact, the MBI published different variations, allowing to test its reachability with different jobs around the world (Maslach & Leiter, 2021). The MBI-Human Services Study (MBI-HSS), created to be used by human services and healthcare workers was the original study (Lim et al., 2020; Lin et al., 2022; Maslach et al., 2000; Raudenská et al., 2020). The MBI-Educators Survey (MBI-ES) was created for workers in educational fields (Lin et al., 2022; Maslach et al., 2000). The MBI for medical workers (MBI-MP) was developed for medical professionals (Maslach et al., 1997; Raudenská et al., 2020). Finally, the MBI-General Survey (MBI-GS) was created for all types of workers, no matter the occupation (Maslach et al., 1997; Raudenská et al., 2020). A study was conducted on American physicians using the MBI scale (Brady et al., 2020). The following statements were included, I feel emotionally drained (EE1); I treat patients as objects (DP1); I easily understand patients (PAT1) (Brady et al., 2020). The MBI has also been used for supplementary objectives like individual identification of burnout and company benchmarks (Maslach & Leiter, 2021). The MBI has been authenticated in different cultural and employment circumstances and is available for use in French, Spanish, Italian, Chinese, Arabic, Dutch, and Greek (Bocéréan, 2019; Edú-valsania et al., 2022; Hu & Schaufeli, 2009; Loera et al., 2014; Sabbah et al., 2012; Salanova et al., 2000; Xanthopoulou et al., 2012). In our thesis, we chose to use the MBI as the questions are clearly written and comprehensible for all participants, allowing us to measure and obtain accurate results. Since there are different variations of the MBI, we were able to review and select the one that is most suitable for the sample population answering our survey.

1.3.5. Conceptual Models of Burnout

Building upon the assessment tools of burnout, researchers sought out a better understanding of burnout by conceptualizing it (Maslach & Leiter, 2017). In the early stages, researchers believed that burnout occurred through progressive stages (Maslach & Leiter, 2017).

Exhaustion was the first dimension of burnout to emerge as employees experienced pressing requests and a surcharge in work (Maslach & Leiter, 2016). As a mechanism to grapple the exhaustion they felt, employees would become less attached to their colleagues and to their job, in other words, they would feel a sense of depersonalization (Maslach & Leiter, 2016, 2017) . At this point, negative emotions would begin surfacing (Maslach & Leiter, 2016, 2017) . Should the sentiments persist, the employees would feel less accomplished and even inadequate in their role (Maslach & Leiter, 2016).

For this thesis, we are focusing on the emotional exhaustion component of burnout. Past researchers have found that emotional exhaustion is the most important dimension of burnout as it occurs first, then can cause cynicism and reduced personal accomplishment (Arens & Morin, 2016; Bilal & Ahmed, 2017). Emotional exhaustion also best predicts staff performance (Arens & Morin, 2016; T. A. Wright & Bonett, 1997). However, there are no conceptual models that look at emotional exhaustion on its own. Therefore, we will discuss three conceptual models that look at all dimensions of burnout, the Job Demands-Resources (JD-R) Model and the Conservation of Resources (COR) model. Both models have been validated and are commonly used tools providing a clear way of conceiving emotional exhaustion.

1.3.5.1. Job Demands-Resources (JD-R) Model

Building upon the MBI, the Job Demands-Resources (JD-R) model is a theoretical framework used in occupational health psychology (Galanti et al., 2021). The JD-R model explains that strain comes from a disproportion in the job demands given to the employee and the resources they have at their disposal to handle those demands (A. B. Bakker & Demerouti, 2007; Rattrie et al., 2019). The model highlights that employee health can be recognized, described, and estimated via employment demands and resources (Rattrie et al., 2019). Therefore, when employees are given too many requests at work and not enough resources to do it all, their performance and well-being are impacted (Galanti et al., 2021; Maslach & Leiter, 2016). The model is broken down into two sections, the job demands and the job resources (Bakker et al., 2014; Galanti et al., 2021). Jobs demands are the physical, mental, or social characteristics of the job that need consistent effort and with that comes a cost, which can also include the job risks and dangers (Bakker et al., 2014; Bakker & Demerouti, 2007; Galanti et al., 2021). In other words, job demands are what must be

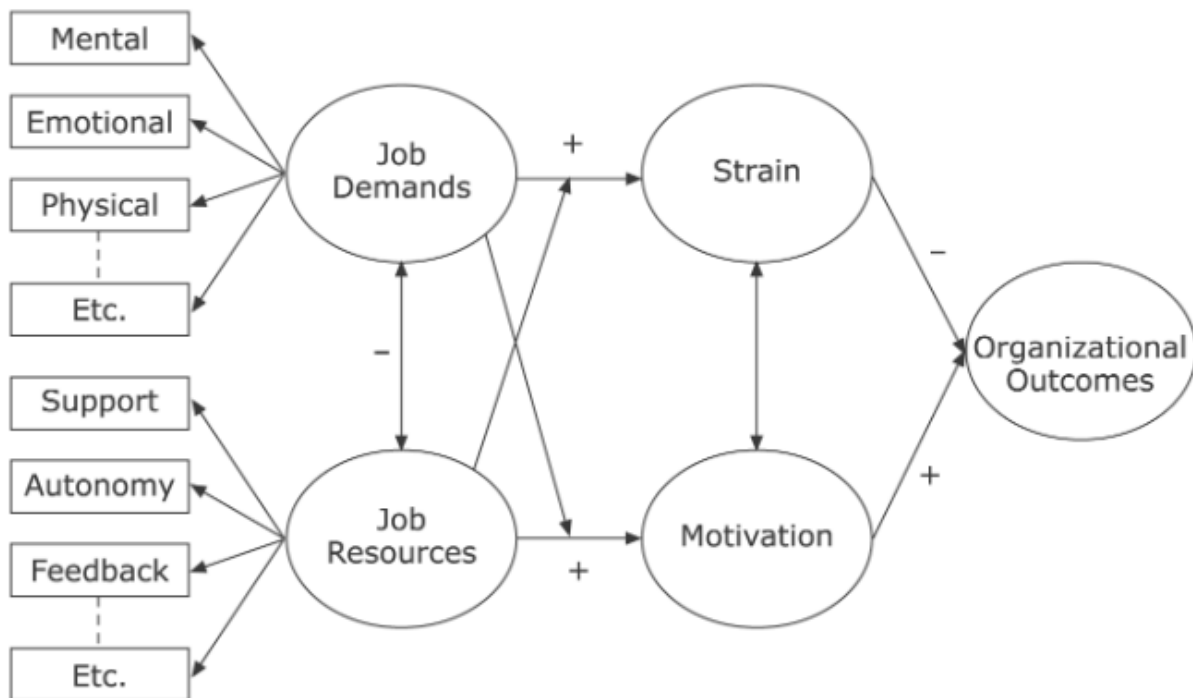
accomplished (Schaufeli & Bakker, 2004a). Job demands have been recognized as the main source of burnout in workers (A. B. Bakker et al., 2014). The other part of the model, the job resources include the physical, mental, or social features of the job that either help to achieve the objectives, diminish job pressure and/or vitalize learning and personal progress, including the safety and preventative aspect (Bakker et al., 2014; Bakker & Demerouti, 2007). Seen as a context neutral tool, the JD-R model aims to explain how two aspects of work, the job demands, and the job resources play a part in employee burnout and engagement, two important parts of this thesis (Dixit & Upadhyay, 2021; Schaufeli & Bakker, 2004a).

The JD-R model is a flexible model as the job demands and job resources can be examined in any job and personally tailored to each occupation (Bakker et al., 2014; Galanti et al., 2021). For example, in more physical jobs like construction, landscaping and plumbing, the physical demands portion is of higher importance, whereas in more cognitively stimulating jobs like healthcare, research and accounting, the mental demands trump (A. B. Bakker et al., 2014). Job resources are recognized as the key links to engagement (A. B. Bakker et al., 2014). Because of that, employees have higher well-being and stronger impacts on the organization (A. B. Bakker et al., 2014). The theoretical framework brings together two unrelated research practices: the stress and the motivation research tradition (Demerouti & Bakker, 2011). On the practicality side, the model can be applied to various occupations to improve employee well-being, encourage inspiration, and enhance performance (Demerouti & Bakker, 2011). It can also anticipate all dimensions of burnout as well as employee engagement (Demerouti & Bakker, 2011).

Referencing the JD-R model in the literature review is important as it provides insight as to the interaction between job demands and resources that can be used to examine most types of jobs (A. Bakker & Demerouti, 2007; Dixit & Upadhyay, 2021). The JD-R model and the theory surrounding were important parts of this thesis, especially when determining the link and hypothesis between decision latitude (independent variable) and affective commitment (dependant variable) in chapter 2. Without understand the theory behind the JD-R model, we would not have been able to articulate its importance when establishing hypothesis 1b, which will be discussed later in this thesis.

Figure 5 below provides a visualization of how job resources (support, autonomy, feedback) prompt engagement, an important element in our research. Job resources prompt employee engagement either through the satisfaction of basic personal needs or through the accomplishment of objectives at work. If the needs and/or accomplishments are not present, employees will have a cynical attitude regarding their work.

Figure 5. Bakker and Demerouti's Job Demands-Resources (JD-R) Model (A. Bakker & Demerouti, 2007; Dixit & Upadhyay, 2021).



1.3.5.2. Conservation of Resources (COR) Model

The Conservation of Resources (COR) theory explains that individuals view themselves by examining the resources they have, and they aim to conserve those resources and acquire more resources that have a significant meaning for them (Hobfoll et al., 2018; Modrzyński, 2018; Singh et al., 2019). The resources in question are physical, intellectual, social, and circumstantial and they help reach objectives, lower job demands and encourage individual advancement and improvement (A. B. Bakker & Demerouti, 2007; Singh et al., 2019). By either gaining or losing resources, an individual's quality of life can either be improved or worsened (Modrzyński, 2018).

The COR model plays a part in the motivation for change process (Modrzyński, 2018). As such, individuals aim to keep a certain number of resources and then make decisions on whether they should bring forth new changes (Modrzyński, 2018). When an individual loses resources, the loss holds a higher weight than the resources gained (Halbesleben et al., 2014). Similarly, the first resource loss will lead to other future resource losses and the first resource gains will lead to future resource gains (Halbesleben et al., 2014). The COR model conceptualizes that burnout is the result of either the menace to the perception of the loss of the resource, actual loss of the resource, or the stress of the failure to acquire supplementary resources (Halbesleben, 2006; Hobfoll & Freddi, 2017; Singh et al., 2019). In the professional setting, all three cases would steer the individual towards trying to keep those resources intact (Maslach & Leiter, 2016). A hard-working professional's output is rewarded in a salary increase and/or promotion (Singh et al., 2019). Working professionals must invest resources to not lose resources (Hobfoll et al., 2018). This hypothesis has been verified through various studies (Maslach & Leiter, 2016). With proper support from colleagues and management, an employee can obtain more resources and replenish the ones that are missing, thus improving their situation (Halbesleben, 2006; Singh et al., 2019). Using the theory, Hobfoll's COR model is one of the main resources used to grasp how one gets to the burnout stage at work, including the emotional exhaustion component (Halbesleben, 2006).

Referencing the COR model in the literature review is important as it provides a different perspective than the JD-R model when it comes to the interaction between job demands and job resources. The COR model and its theory were important parts of this thesis, especially when determining the link and hypothesis between emotional exhaustion (mediating variable) and affective commitment (dependant variable) in chapter 2. Without understanding the theory behind the COR model, we would not have been able to articulate its importance when establishing our hypothesis 3, which will be discussed later in this thesis.

Figure 6 below provides a visualization of the resource conservation process (Buchwald & Schwarzer, 2010). It looks at the broader life circumstances and resource-loss events (Buchwald & Schwarzer, 2010). When an individual experiences resource loss, it typically leads to more loss and it can be recurring (Buchwald & Schwarzer, 2010). To cope with this loss, the individual uses resource conservation strategies to adapt (Buchwald & Schwarzer, 2010). If done correctly, new resources will be introduced and allow them to be able to cope better in the future (Buchwald &

Schwarzer, 2010). If unsuccessful, the consequence is anxiety and depreciation of resources (Buchwald & Schwarzer, 2010). This can then cause a loss spiral (Buchwald & Schwarzer, 2010).

Figure 6. Resource Conservation Process (Buchwald & Schwarzer, 2010).

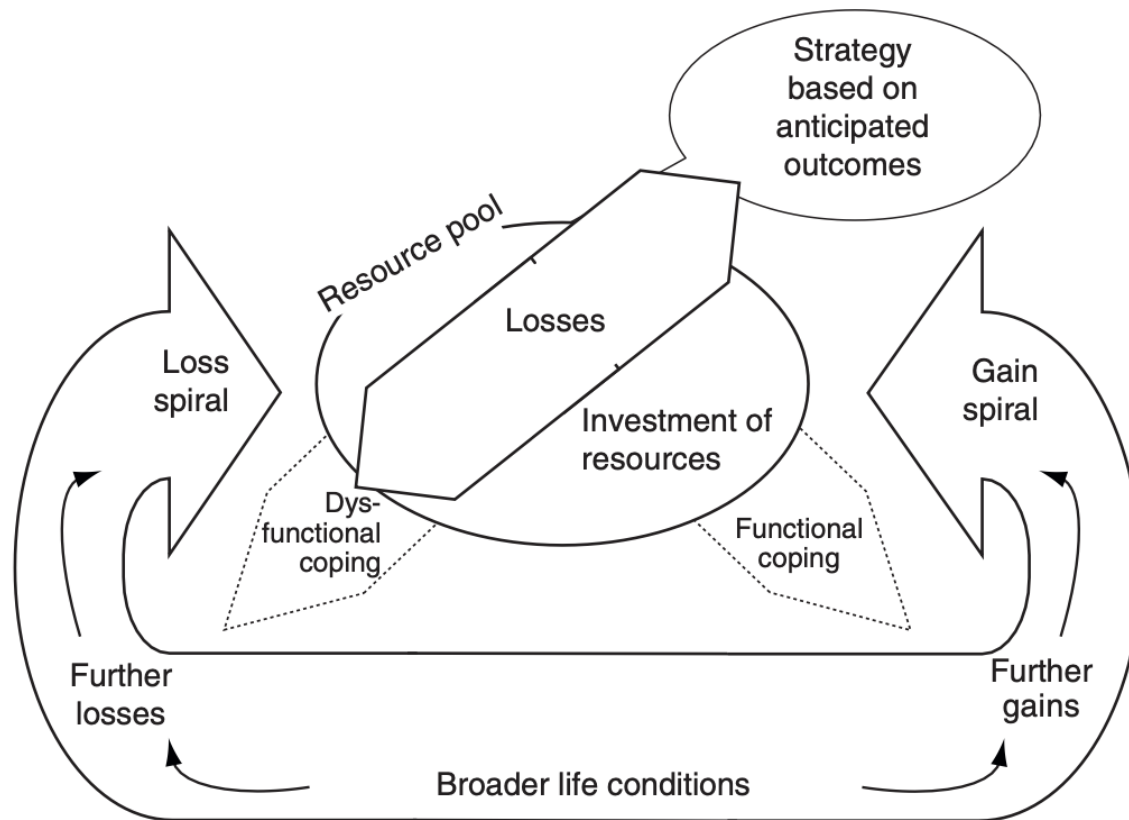


Table 3 below summarizes the key information pertaining to the two conceptual models of burnout discussed above, the JD-R Model and COR Model.

Table 3. Burnout Conceptual Models

Burnout Conceptual Model	Description
Job Demands-Resources Model (JD-R)	The JD-R model explains that strain comes from a disproportion in the job demands given to the employee and the resources they have at their disposal to handle those demands (Bakker & Demerouti, 2007).
Conservation of Resources Model (COR)	The COR model conceptualizes that burnout is a result of either the menace to the perception of the loss of the resource, actual loss of the resource, or rather to the stress of the failure to acquire supplementary resources (Halbesleben, 2006; Hobfoll & Freddy, 2017; Singh et al., 2019). In the professional setting, all three cases would steer the individual towards trying to keep those resources intact (Maslach & Leiter, 2016).

1.3.6. Factors Leading to Emotional Exhaustion

The factors that trigger, maintain, or worsen emotional exhaustion can be grouped into two main categories, organizational factors, and individual factors (Edú-valsania et al., 2022). Working professionals become vulnerable to these factors when exposed to unfortunate work environment conditions and it is not caused by their own personality (Edú-valsania et al., 2022). Overall, it is not the organizational factors on their own that trigger emotional exhaustion, but these factors can act as a moderating element (Edú-valsania et al., 2022). Likewise, individual factors do not cause emotional exhaustion on their own, rather they act as a reinforcer, complimenting a context-related factor or as a mitigator, by reducing the impact (Edú-valsania et al., 2022). In the upcoming paragraphs, we will outline the details pertaining to the organizational and individual factors leading to emotional exhaustion in working professionals.

1.3.6.1. Organizational Factors

The organizational factors that trigger emotional exhaustion can be broken down into seven sub-categories, work overload, emotional labour, absence of independence and influence,

vagueness and role clash, poor supervisor and feeling of prejudice, absence of social support and unsatisfactory working hours (Edú-valsania et al., 2022). Employees that deal with an exorbitant amount of work, be it the quantity of work required to produce and/or the quality of work required, can provoke emotional exhaustion as well as the desire to separate and be less involved in their work (Bakker & Demerouti, 2007; Edú-valsania et al., 2022; López-Cabarcos et al., 2021; Maslach & Leiter, 2016, 2017b). The same is true for physicians, as explained in Patel et al.'s research (Patel et al., 2018). Emotional labour is the act of managing and/or masking one's feelings of agitation, annoyance or hurt to accomplish what is required of them at work and meet the company's objectives (Edú-valsania et al., 2022). Those who experience emotional labour may display the opposite of what they are feeling as a coping mechanism and end up with an even more challenging workload (Edú-valsania et al., 2022). Sometimes, there can be a positive link between emotional labour and emotional exhaustion, as shown in research on teachers and human resources professionals (Edú-valsania et al., 2022; Kaya & Altinkurt, 2018; Orgambidez & Almeida, 2019). Employees that do know clearly understand what they are supposed to be doing, do not have all the information required to complete their tasks or are receiving contrasting information from different sources will likely experience high levels of emotional exhaustion (Acker, 2003; Edú-valsania et al., 2022). The failure to provide employees with proper and supportive supervision when it comes to completing tasks and valuing their success increases their chance of experiencing emotional exhaustion (Edú-valsania et al., 2022; López-Cabarcos et al., 2021). Such behavior includes being unreasonable with instructions or not providing any at all, displaying favoritism towards one employee over another and/or magnifying the poor aspects of their performance or output (Edú-valsania et al., 2022). The opposite quality in supervision and proper resources available will result in employees less likely to develop emotional exhaustion (Acker, 2003; Edú-valsania et al., 2022; López-Cabarcos et al., 2021). The lack of social support from peers or managers at work and conflict between individuals can precipitate burnout (Edú-valsania et al., 2022; Laschinger et al., 2015; Patel et al., 2018). However, with a proper and consistent amount of social support, emotional exhaustion feelings can be defused (Edú-valsania et al., 2022; Laschinger et al., 2015; Patel et al., 2018). Finally, when it comes to work hours, the work-life balance piece can be challenging when individuals are not working a stable and consistent weekly schedule (Edú-valsania et al., 2022; López-Cabarcos et al., 2021). For example, those who experience shift work, evening/night work, long daily working hours or excessive overtime can

experience emotional exhaustion (López-Cabarcos et al., 2021). From a health perspective, these individuals can have sleep troubles, heart problems, general health issues, dissatisfaction at work, reduced attention span, productivity, and performance as well as higher chances of accidents (Edú-valsania et al., 2022; López-Cabarcos et al., 2021; Maslach & Leiter, 2017b; Patel et al., 2018). It has also been linked to lower productivity, performance, dissatisfaction, reduced organizational commitment, absenteeism, turnover, and the desire to quit (López-Cabarcos et al., 2021; Maslach & Leiter, 2016, 2017a). Industries that tend to promote longer work hours, more work, frequent staff shortage and lack of management support are prone to have sustained emotional exhaustion (López-Cabarcos et al., 2021; Maslach & Leiter, 2016).

1.3.6.2. Individual Factors

From an individual standpoint, personality has an impact on how individuals view their workplace as well as how they deal with the job demands that come their way and the resources available to them (Edú-valsania et al., 2022). The Big Five model personality traits, extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience have an important and distinct link with emotional exhaustion (Edú-valsania et al., 2022; Galaiya et al., 2020; L. E. Kim et al., 2019; Pérez-Fuentes et al., 2019). The protective or positive factors reduce the development of feelings of emotional exhaustion are agreeableness, honesty, extraversion, openness to experience, positive psychological capital, and problem-focused coping (Edú-valsania et al., 2022). Conversely, the enhancers that contribute to developing feelings of burnout are neuroticism, external locus of control, type A personalities, alexithymia, and emotion-focused coping (Edú-valsania et al., 2022). Specifically, type A individuals can be competitive and aggressive in terms of getting what they want (Edú-valsania et al., 2022). A positive link is observed between these individuals and the emotional exhaustion dimension of burnout (Edú-valsania et al., 2022). Determined individuals with high-achieving goals are at risk of experiencing high levels of emotional exhaustion and cynicism (Adriaenssens et al., 2015a; Edú-valsania et al., 2022; Maslach & Leiter, 2017b). From a sociodemographic perspective, the level of burnout experienced goes down as individuals age (Adriaenssens et al., 2015a; Edú-valsania et al., 2022; Maslach & Leiter, 2017b). In terms of gender, women have higher emotional exhaustion and lower professional fulfillment (Edú-valsania et al., 2022). Women also typically experience burnout more as they are known to take care of duties around the home (Edú-valsania et al., 2022). Single men are more

likely to experience feelings of emotional exhaustion than those who are in a relationship (Edú-valsania et al., 2022).

Table 4 below summarizes the key information pertaining to the organizational and individual factors leading to emotional exhaustion.

Table 4. Factors Leading to Emotional Exhaustion

Organizational Factors	Source
Work overload	(A. Bakker & Demerouti, 2007; Edú-valsania et al., 2022; López-Cabarcos et al., 2021; Maslach et al., 2016; Maslach & Leiter, 2017b)
Emotional labour	(Edú-valsania et al., 2022; Kaya & Altinkurt, 2018; Orgambídez & Almeida, 2019)
Absence of independence and influence	(Acker, 2003; Edú-valsania et al., 2022)
Vagueness and role clash	(Acker, 2003; Edú-valsania et al., 2022)
Poor supervisor and feeling of prejudice	(Acker, 2003; Edú-valsania et al., 2022; López-Cabarcos et al., 2021)
Absence of social support	(Edú-valsania et al., 2022; Laschinger et al., 2015; Patel et al., 2018)
Unsatisfactory working hours	(Edú-valsania et al., 2022; López-Cabarcos et al., 2021; Maslach et al., 2016)
Individual Factors	Source
Personality traits	(Edú-valsania et al., 2022; Galaiya et al., 2020; L. E. Kim et al., 2019; Pérez-Fuentes et al., 2019)
Age	(Adriaenssens et al., 2015b; Edú-valsania et al., 2022; Maslach & Leiter, 2017b)
Gender	(Edú-valsania et al., 2022)
Relationship status	(Edú-valsania et al., 2022)

1.3.7. Consequences of Emotional Exhaustion

When an individual is experiencing emotional exhaustion at work, they will feel the impact in different ways (Edú-valsania et al., 2022). Emotional exhaustion can result in numerous consequences that can be grouped into global health consequences and behavioral consequences, which over time will impact the organization (Edú-valsania et al., 2022; Salvagioni et al., 2017). From the health perspective, emotional exhaustion can have trickling effects on one's cognition and emotions (Edú-valsania et al., 2022). Alterations in a working professional's cognition, specifically their memory, decision-making, stress, confidence, is possible (Bayes et al., 2021; Maslach & Leiter, 2016; Salvagioni et al., 2017). In fact, studies demonstrate that there is a high probability that staff members who experience high levels of emotional exhaustion will also have physical health issues (Edú-valsania et al., 2022). While there are multiple potential consequences, an individual is not likely to experience every single one of them and the impact is different for each person (Edú-valsania et al., 2022). Precisely, they can experience pain in their muscles, bones, ligaments, and joints (Edú-valsania et al., 2022; Giorgi et al., 2017). In addition, they may deal with headaches, cardiovascular disturbances, and gastric problems (Edú-valsania et al., 2022; Giorgi et al., 2017). Those who experience burnout can feel lethargic and have difficulties falling and staying asleep (Bayes et al., 2021; Brand et al., 2010; Edú-valsania et al., 2022; Giorgi et al., 2017). It may not come as a surprise that emotional exhaustion can cause working professionals to be less motivated and not work as efficiently as before, resulting in lower quality of output (Edú-valsania et al., 2022; Rössler, 2012). These individuals can also impact others in the organization, causing them to be interrupted in their work and overall, less efficient with their time (Edú-valsania et al., 2022). Other consequences include reduced organizational commitment, more absences and turnover (Adriaenssens et al., 2015b; Ahola et al., 2017; Edú-valsania et al., 2022; Han et al., 2016; Salvagioni et al., 2017). These three outcomes may lead to presenteeism, abnormal and unproductive behaviours and theft of company property (Bryan et al., 2018; Edú-valsania et al., 2022; Giorgi et al., 2017; Metin et al., 2016; Ugwu et al., 2017). Employees experiencing emotional exhaustion will impact their workplace. With less motivation and poorer performance, the quality of the employees' work will also be lower (Edú-valsania et al., 2022; Humborstad et al., 2007). In addition, these employees can create more conflicts or gaps in the work, leaving more

work undone and an overall bad work environment for others around them (Edú-valsania et al., 2022; Maslach & Leiter, 2016).

1.3.8. Employee Emotional Exhaustion Before COVID-19

Prior to the global pandemic, emotional exhaustion was present in several fields of work, including healthcare and education. In these sectors of work, employees have face-to-face interactions on a regular basis to establish strong and trusting bonds (Gray-Stanley & Muramatsu, 2011; Maslach & Leiter, 2016). To meet their job demands, healthcare workers are expected to put in long work hours with their patients' needs ahead of their own (López-Cabarcos et al., 2021; Maslach & Leiter, 2016; Ugwu et al., 2017). It has been proven that emotional exhaustion is associated to nurses who work on irregular hours like overnight shifts (Dall'Ora et al., 2020; Ugwu et al., 2017; Vidotti et al., 2018). With constant contact with their patients' family members, healthcare professionals are under a lot of pressure to ensure the best quality of service, free of mistakes (López-Cabarcos et al., 2021; Maslach & Leiter, 2016; Ugwu et al., 2017). As a result of cutbacks on funding or other restrictions, the resources are not allocated where they should be for these workers to thrive (López-Cabarcos et al., 2021; Maslach & Leiter, 2016; Thanacoody et al., 2014). Role conflict, excessive workload and high patient to medical professional ratios can also impact the healthcare provider (Dall'Ora et al., 2020; Garrosa et al., 2010; Gillet et al., 2015; López-Cabarcos et al., 2021; Thanacoody et al., 2014). Therefore, emotional exhaustion is seen as a workplace danger (Maslach & Leiter, 2016). American studies on physicians showed alarming burnout rates that exceed the 50% mark in student physicians and practitioners aged 30 to 37 (West et al., 2018). These statistics are dangerous considering the impact doctors have on our healthcare system (West et al., 2018). Physicians described their emotional exhaustion at the end of the day as feeling "used up" with nothing more to give to their patients by the time the workday was over (West et al., 2018). Like physicians, Dall'Ora and colleagues note in their theoretical review that studies on nurses show that burnout is viewed as a "workplace outcome" (Dall'Ora et al., 2020). Precisely, in research done by Gustavsson and colleagues using the MBI, emotional exhaustion was seen as the first step in the burnout process for nurses (Dall'Ora et al., 2020). Cynicism and disengagement would come after if the nurses did not properly cope with the emotional exhaustion right away (Dall'Ora et al., 2020). This observation comes from reviewing 91 studies, where the results are conclusive in proving that conflicting job attributes like having lots of work and minimal

staff, long hours, high pressure, poor supervisor support and guidance all tie back to burnout in nurses (Dall'Ora et al., 2020).

Emotional exhaustion in the academic setting is also a big concern. Research shows that teachers are most vulnerable to emotional exhaustion during their first two years of work (Dicke et al., 2015; Goddard et al., 2006). In classrooms with never-ending disturbances, teachers are more likely to feel emotionally drained than those who teach in classrooms with less disturbances (A. B. Bakker et al., 2007; Dicke et al., 2014, 2015). Teachers often deal with working under pressure with time constraints (Skaalvik & Skaalvik, 2017). Research on Norwegian teachers showed that time pressure forecasted emotional exhaustion (Skaalvik & Skaalvik, 2017). Other studies showed that work overload predicted emotional exhaustion in teachers (Fernet et al., 2012; Skaalvik & Skaalvik, 2017). In Norwegian countries, research shows that emotional exhaustion better predicted job satisfaction amongst teachers (Skaalvik & Skaalvik, 2017). On the other side of the world, in China, a study examining high school teachers showed that emotional exhaustion was a key predictor of cynicism and depersonalization (Arens & Morin, 2016; Chan, 2006). In addition, in various studies the ratings obtained on the emotional exhaustion dimension resulted in higher total scores on teacher burnout in comparison to the other two dimensions of burnout (Arens & Morin, 2016; Grayson & Alvarez, 2008).

1.3.9. Employee Emotional Exhaustion During COVID-19

The impact of the COVID-19 pandemic on employees' emotional exhaustion is alarming. In fact, more and more empirical evidence demonstrates the psychological impact of emotional exhaustion on individuals is higher due to the COVID-19 pandemic (Edú-valsania et al., 2022). Healthcare workers were at the front line when COVID-19 took off and continued to play a key part in caring for the sick as the virus impacted individuals in the subsequent months (Jalili et al., 2021). Many healthcare professionals were exposed to the infectious virus daily at work, causing feelings of stress and worry for their health and overall well-being (Jalili et al., 2021). Reports indicated that this group of individuals did not have enough personal protective equipment available for use (Guo et al., 2020; Jalili et al., 2021). They also had a higher and more intense workload, causing a considerable level of anxiety (Guo et al., 2020; Jalili et al., 2021). With regards to healthcare workers, a cross-sectional study conducted on 645 Chinese healthcare workers two

months after the onset of the pandemic revealed that emotional exhaustion was high in the individuals surveyed (Jalili et al., 2021). Specifically, the average score on the emotional exhaustion portion of the test showed that 50.1% of participants experienced high levels of emotional exhaustion (Jalili et al., 2021). When it came to the demographic breakdown, young staff members, females and those with childcare duties were identified as having higher levels of emotional exhaustion than the rest of the surveyed population (Jalili et al., 2021).

A study comparing the emotional exhaustion of South Korean frontline service employees of similar age prior to and during the COVID-19 pandemic displayed interesting results (Hwang et al., 2021). 276 employees completed the online survey from July to October 2019 and 301 employees completed it from March to April 2020 (Hwang et al., 2021). The research team discovered that the employees evaluated in Spring 2020 had much higher emotional exhaustion than those evaluated in Summer and Fall 2019 (Hwang et al., 2021). These results took into consideration the baseline emotions of the participants (Hwang et al., 2021). Additionally, female staff members experienced more emotional exhaustion than their male colleagues (Hwang et al., 2021). The presumption for this is due to the responsibilities many women have outside of work, like caring for family members (Hwang et al., 2021). The assessments showed that employees under 28 years of age, with less tenure at the organization experienced higher emotional exhaustion than employees, aged 45 years and up with higher seniority (Hwang et al., 2021). The presumption for the results regarding age is related to maturity and ability to manage stress (Hwang et al., 2021; Whitty, 2003).

1.3.10. Link Between Emotional Exhaustion and Remote Work Before COVID-19

Emotional exhaustion was present in employees prior to Spring 2020. In this section, we will explore the link between emotional exhaustion and remote work in the years preceding 2020. In 2019, Charalampous and colleagues examined sixty-three studies on remote workers' well-being and commented on its impact on emotional exhaustion (Charalampous et al., 2019). Amongst these studies was Vander Elst's et al.'s study on 878 experienced remote workers from an international telecommunication company (vander Elst et al., 2017). These employees were regularly working outside of the office but no data on its impact had not been gathered before

(vander Elst et al., 2017). The results showed that social support, involvement in decision-making and independence at work all had negative links to emotional exhaustion (vander Elst et al., 2017). Another study that Charalampous and colleagues looked at was Sardeshmukh and colleagues' empirical research on a large American supply chain company (Sardeshmukh et al., 2012). Their sample consisted of 417 teleworkers that had worked remotely for at least one year (Sardeshmukh et al., 2012). Since social support was one of the main elements that lacked when employees worked a lot outside the office, this caused employee emotional exhaustion to go up (Charalampous et al., 2019; Sardeshmukh et al., 2012). The other negative parts linking emotional exhaustion to remote workers was the overall vagueness employees felt surrounding their role and the associated tasks as well as reduced feedback from their manager (Sardeshmukh et al., 2012). Factors that decreased emotional exhaustion included positive and strong relationships with colleagues as well as job autonomy (Charalampous et al., 2019; Fay & Kline, 2011, 2012; Sardeshmukh et al., 2012). Charalampous and colleagues' findings also demonstrated that in the pre-COVID-19 era, not all individuals experience the same situation when it comes to remote work (Charalampous et al., 2019). Specifically, different home-life situations played an important part (Charalampous et al., 2019). From Golden's research on 316 teleworkers, it was found that staff who often worked from their home saw a mix-up between the work and home boundaries (Charalampous et al., 2019; Golden, 2012). While working professionals may resort to remote work thinking that it will improve their quality of life, the inability to separate work and personal life with likely cause more tiredness and emotional exhaustion (Golden, 2012). The impact of this is that these individuals are less capable of retracting themselves from workplace activities and have poorer emotions and more tiredness (Charalampous et al., 2019; Sonnentag et al., 2008). On a positive note, Sardeshmukh and colleagues' research showed that providing employees with more independence and less micromanagement resulted in less intense emotional exhaustion and overall higher satisfaction at work (Charalampous et al., 2019; Sardeshmukh et al., 2012).

1.3.11. Link Between Emotional Exhaustion and Remote Work During COVID-19

COVID-19 has created a unique perspective when it comes to remote work (de Klerk et al., 2021). Two and a half years into the global pandemic, it is evident that emotional exhaustion

has intensified, leading companies and individuals to become more aware of the concept (Maslach & Leiter, 2021). Employees had to adapt to a new way of working in a matter of weeks, which may have contributed to a higher risk of emotional exhaustion (Abdel Hadi et al., 2021). Klerk and colleagues conducted semi-structured interviews with 25 employees that were forced to work remotely due to the pandemic (de Klerk et al., 2021). Signs of emotional exhaustion appeared as employees expressed that they have been feeling exhaustion (de Klerk et al., 2021). An employee at the middle-management level indicated that their level of exhaustion had increased to the point where they feel like they cannot manage it anymore (de Klerk et al., 2021). An employee at the senior management level explained that their exhaustion felt like it drains their energy 24/7 but they felt inclined to push forward anyways (de Klerk et al., 2021). To have a better grasp on the link between remote work and emotional exhaustion due to the COVID-19 pandemic, Abdel Hadi and colleagues conducted a diary study with daily tests on 178 employees that worked remotely before the pandemic, on their own choice and were subsequently told they had to work remotely due to the pandemic (Abdel Hadi et al., 2021). They completed 964 observations, averaging around five observations per employee (Abdel Hadi et al., 2021). Through their research, they determined that high job demands caused emotional exhaustion and impacted the remote employees' health and well-being (Abdel Hadi et al., 2021). Pondering thoughts on COVID-19 and its health impacts was determined to be a stressor for remote employees (Abdel Hadi et al., 2021). Their study also pointed to evidence that a negative link existed between emotional exhaustion and employee performance at work (Abdel Hadi et al., 2021). The researchers highlighted the trickling effects of this on the company's economic performance (Abdel Hadi et al., 2021). However, with leisure crafting, where employees can pursue and enjoy activities that aim to reach specific objectives, the link between emotional exhaustion and leisure crafting is negative (Abdel Hadi et al., 2021).

Physicians are amongst the group of new remote workers that have felt higher than normal levels of anxiety, fatigue, and reduced well-being, all amongst the classic symptoms of emotional exhaustion (Wroclawski & Heldwein, 2021). As medical professionals, they must have health-related knowledge and be able to deliver it to their patients in an attentive and empathetic manner (Wroclawski & Heldwein, 2021). Caring for their patients through telemedicine is a practice that is new for many doctors as it was not common prior to COVID-19 (Gomes et al., 2020; Wroclawski & Heldwein, 2021). Many doctors are struggling with adjusting to this new way of work, especially when it comes to setting up the logistics behind their workspace, including sound,

lighting, professional attire, and internet connection (Wroclawski & Heldwein, 2021). Through video consultation, doctors were expected to be more efficient with the time allocated to their patients and this pressure can lead to feelings of emotional exhaustion (Wroclawski & Heldwein, 2021).

1.4. Organizational Commitment: Affective Commitment

This section is centered around our research on affective commitment, the most known dimension of organizational commitment (Mercurio, 2015). While we will go into detail on the reason behind focusing on this dimension in section 1.4.3.1.1., the main reasons are that affective commitment provides the most advantages to the organization, such as strong and clear connections with workplace outcomes (Cooper-Hakim & Viswesvaran, 2005; Mathieu & Zajac, 1990a; Mercurio, 2015; Meyer et al., 2002; Solinger et al., 2008). To fully grasp the concept, we will begin by explaining organizational commitment in detail. Then, we will examine organizational commitment's research history, dimensions, and our justification for focusing on the affective commitment dimension. After, we will discuss the assessment tools and conceptual models. Finally, we will go into the factors leading to affective commitment as well the link between affective commitment and emotional exhaustion before and during COVID-19.

1.4.1. Organizational Commitment Introduction and Definition

The behaviour and attitudes of employees in the workplace has been a prominent research topic for those studying human resources, organizational behaviour, and management (Meyer & Allen, 1991; Mousa, 2017). In today's fast-paced work environment, organizations strive to have high performing individuals and results-oriented teams (Herrera & de Las Heras-Rosas, 2021). Another key component is low absenteeism and turnover, which is linked to emotional exhaustion (Herrera & de Las Heras-Rosas, 2021). In this context, the commitment of employees to their organization is an essential condition for retention (Herrera & de Las Heras-Rosas, 2021). Organizational commitment is defined as a psychological state that explains the employee's active attachment, identity, acceptance, involvement, and fulfillment in the organization (Ahadet al., 2021; Al-Jabari & Ghazzawi, 2019; Allen & Meyer, 1990; Chanana, 2021; R. Mowday et al., 1982). Highly committed individuals are devoted, motivated and have a positive relationship with

their organization (Chanana, 2021). They identify with the organization's objectives and want to work there because of it (Ahad et al., 2021; Robbins & Judge, 2011). As a result, they will be more likely to continue working there and use their knowledge, skills, and abilities to work efficiently to reach the company's objectives (Ahad et al., 2021; Chanana, 2021). Overall, higher levels of commitment typically lead to lower rates of employee turnover and improved productivity (Sigri et al., 2010). This concept is key for organizations as it pertains to their ultimate success (Tosun & Ulusoy, 2017). It is distinct from other types of commitment that can be found in the business world such as career commitment, job involvement and ethic support (Hendri et al., 2019).

1.4.2. History of Research on Organizational Commitment

Over the years, organizational commitment has garnished interest from organizational behavior researchers like Becker, Porter, and colleagues as well as Meyer & Allen (R. T. Mowday, 1998; Tamandjong, 2020). Howard Becker was the first researcher to examine this topic when he established his side-bet theory in 1960 (Herrera & de Las Heras-Rosas, 2021; Tamandjong, 2020; Weibo et al., 2010). Becker's social exchange or transactional commitment theory highlights that the commitment of an employee to their organization stems from economic exchanges, time, and effort made over time at that organization (Becker, 1960; Cohen & Lowenberg, 1990; Herrera & de Las Heras-Rosas, 2021; Mercurio, 2015; Powell & Meyer, 2004; Tamandjong, 2020; Weibo et al., 2010). All these elements would encourage them to remain there (Becker, 1960; Cohen & Lowenberg, 1990; Herrera & de Las Heras-Rosas, 2021; Mercurio, 2015; Powell & Meyer, 2004; Tamandjong, 2020; Weibo et al., 2010). If an individual leaves the organization, their investment would not be worth it (Mercurio, 2015; Tamandjong, 2020; Weibo et al., 2010). According to Becker, as an employee's organizational tenure goes up, it becomes more challenging for that person to leave the organization (Becker, 1960; Mercurio, 2015; Tamandjong, 2020; Weibo et al., 2010). Becker's theory determines organizational commitment as a key forecaster in linking employee turnover (Tamandjong, 2020; Weibo et al., 2010). Becker's theory was then pushed to the side as work done by new researchers garnished more relevancy (Tamandjong, 2020).

In the 1970s, Porter and colleagues made the transition from the concept of "side-bets" to the concept of employee psychological attachment or devotion to the organization (Tamandjong, 2020; Weibo et al., 2010). As a doctoral student at the University of California, Irvine, Mowday

discovered this phenomenon while working as a research assistant for Porter and Dubin (R. T. Mowday, 1998; R. T. Mowday et al., 1974; Porter et al., 1974). They defined organizational commitment as “the relative strength of an individual’s identification with and involvement in a particular organization” (R. T. Mowday et al., 1979a; Tamandjong, 2020; Weibo et al., 2010). In addition, they believed that organizational commitment was made up of three distinct segments, strong acceptance of the organization’s objectives and beliefs, effort/involvement, as well as allegiance of the employee (R. Mowday et al., 1982; Tamandjong, 2020; Weibo et al., 2010). Porter, Steers, Mowday and Boulian developed the Organizational Commitment Questionnaire (OCQ) to measure this phenomenon using the segments mentioned above (R. T. Mowday, 1998; Tamandjong, 2020). The OCQ propelled research in a new direction via its a tool consisting of 15 items with responses on a 7-point Likert scale from (1) strongly disagree to (7) strongly agree to measure employee commitment to their workplace (Kanning & Hill, 2013; Mathieu & Zajac, 1990b; Mercurio, 2015; R. T. Mowday et al., 1979b; Tamandjong, 2020). Finally, multi-dimensional views of organizational commitment were established in the late 1980s and early 1990s (Tamandjong, 2020). From this new era came Meyer & Allen’s tri-dimensional model, which provided an alternative to the OCQ (Tamandjong, 2020). Meyer & Allen’s work was influenced by Becker’s research (Tamandjong, 2020; Weibo et al., 2010). Meyer & Allen’s Obligatory Commitment Theory posited that an employee’s commitment somewhat flourishes from their way of thinking of obligation to a company (Mercurio, 2015). Meyer & Allen’s model will be discussed in detail later on in this thesis.

1.4.3. Dimensions of Organizational Commitment

The organizational commitment model is composed of three dimensions, affective commitment, normative commitment, and continuance commitment. We will explain all three dimensions in detail in this section. The reasoning behind our choice to look only at the affective commitment dimension is explained in section 1.4.3.1.1 below.

1.4.3.1. Affective Commitment

Affective commitment is the job-related positive emotional attachment that one has to their organization (Al-Jabari & Ghazzawi, 2019; Chanana, 2021; Jaros, 2007; Manetje & Martins, 2009;

Morrow, 1993). It is the comparative and enduring yearning of an employee to recognize with and participate in the company they work for (Chanana, 2021; Fazal-e-Hasan et al., 2017; Fredrickson, 2004; Manetje & Martins, 2009; Morrow, 1993; R. Mowday et al., 1982). It can also be understood as the affection to the job, meaning how one aligns with the company's objectives, beliefs and values as well as how satisfied they are at work (Chanana, 2021). Employees that experience hopeful emotions like acknowledgement combined with happiness and fulfillment will add to positive habits at work and affective commitment (Fazal-e-Hasan et al., 2017; Fredrickson, 2001). If the worker perceives that this emotional feeling is being met, then their attachment will be positive, and they are likely to continue displaying loyalty and performing at work (Beck & Wilson, 2000; Chanana, 2021; Cownie, 2019; Jaros, 2007; Kanter, 1968; Manetje & Martins, 2009). The employees' choice to stay at the organization and accept all that it has to offer comes in exchange with psychological support and/or recognition (Herrera & de Las Heras-Rosas, 2021; Mathieu & Zajac, 1990a; R. T. Mowday et al., 1979b).

1.4.3.1.1. Reasons for Researching just the Affective Commitment Dimension

Recently, authors have questioned Allen & Meyer's tri-dimensional model and reasoned that the three components are quite different from a qualitative standpoint (Bergman, 2006; Mercurio, 2015; Solinger et al., 2008; Stazyk et al., 2011). Several authors pointed towards verifiable studies demonstrating that affective commitment, rather than the other two dimensions of organizational commitment, had a strong and clear relationship with workplace outcomes like turnover, employee performance and positive behaviors like assisting colleagues as well as training and sharing knowledge (Cooper-Hakim & Viswesvaran, 2005; Mathieu & Zajac, 1990a; Mercurio, 2015; Meyer et al., 2002; Solinger et al., 2008). In addition, to get to indisputable observed verification, it is essential to look solely at affective commitment (Mercurio, 2015; Solinger et al., 2008). After reviewing the literature, we noticed that many articles establish affective commitment as the nucleus of organizational commitment and a critical focal point for the direction of future research (Mercurio, 2015). It has also been shown to be the dimension that provides the most advantages to the organization, leading us to want to learn more about this type of desired behavior in employees that companies seek (Fernandez-Lores et al., 2016; Meyer et al., 2002). For these reasons, we decided to focus our research only on the affective commitment dimension of organizational commitment.

1.4.3.2. Normative Commitment

Normative commitment reflects the sense of obligation to remain at one's organization (Al-Jabari & Ghazzawi, 2019; Chanana, 2021; Jaros, 2007; Manetje & Martins, 2009; Meyer & Allen, 1991, 1997). Employees who experience this feeling believe that remaining loyal to their employer is the correct and most suitable thing to do (Allen & Meyer, 1990; Chanana, 2021). This stems from pressures they put on themselves related to allegiance that they have towards their employer (Hanisah bte Marmaya et al., 2011). It is often linked to morals as well as family and cultural norms (Hanisah bte Marmaya et al., 2011; Manetje & Martins, 2009). Therefore, they will get involved in a give-and-take type of relationship with their company (Chanana, 2021; Suliman & Iles, 2000). An individual that is given an advantage, like training or paid education from the organization, feels a powerful normative duty to pay back the organization for the investment made (Chanana, 2021; Manetje & Martins, 2009; McDonald & Makin, 2000; Meyer & Allen, 1991; Suliman & Iles, 2000). Those who are not enjoying their role and are looking at opportunities elsewhere will have a recurring feeling of needing to stay to repay the organization for their generosity (Jaros, 2007; Manetje & Martins, 2009; Meyer & Allen, 1991).

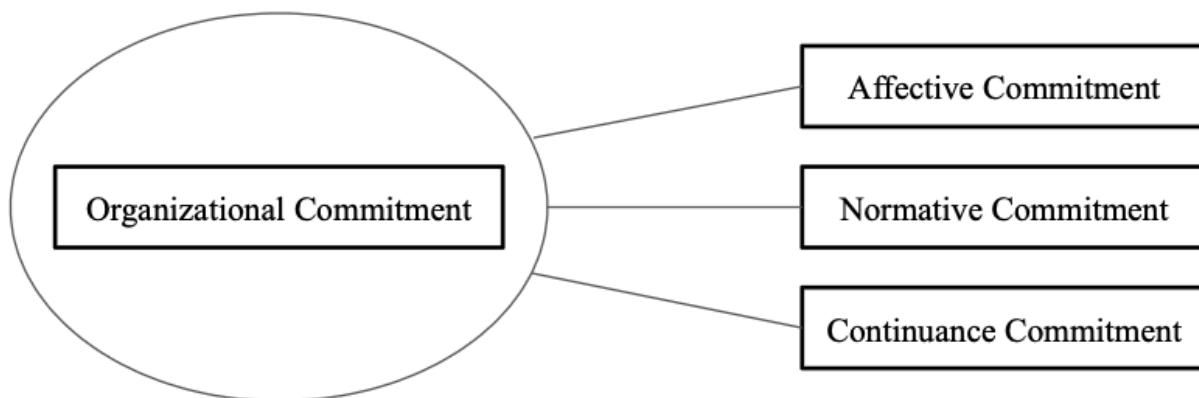
1.4.3.3. Continuance Commitment

Individuals who hesitate between staying at one job versus switching to gain a new experience will weigh the potential benefits and downsides of their decisions (Jaros, 2007; Manetje & Martins, 2009). This calculative way of behaving is referred to as the continuance commitment (Jaros, 2007; Manetje & Martins, 2009; Meyer & Allen, 1997). Each employee who goes through a similar situation at work will experience their unique level of continuance commitment (Hanisah bte Marmaya et al., 2011). As mentioned in the definition, the fear of loss, whether it be monetary or a work experience, is common in those experiencing continuance commitment (Al-Jabari & Ghazzawi, 2019; Beck & Wilson, 2000; Chanana, 2021). Meyer and Allen state that due to internal company investments (like a pension plan), seniority, job market and employment prospects, employees are more inclined to stay at their current company to avoid losing these valuable assets (Allen & Meyer, 1990; Chanana, 2021; Meyer & Allen, 1984, 1997). Those who associate with this dimension will stay at their job as they need to, for extrinsic reasons (Chanana, 2021; Manetje & Martins, 2009; Meyer & Allen, 1991). Continuance commitment will be high when the options

of alternatives are limited and the investments made in the organization are strong (Manetje & Martins, 2009). Weisner (2003) discovered that even if the employee decides on their own to stay at the company, their contribution will not be that useful (Hanisah bte Marmaya et al., 2011).

Figure 7 below provides a visualization of the three dimensions of organizational commitment, affective, normative and continuance commitment.

Figure 7. Dimensions of the Organizational Commitment



1.4.4. Factors Leading to Affective Commitment

In this section, we explain how personality traits, trust, perceived organizational support (POS) as well as emotional exhaustion are correlated to affective commitment.

1.4.4.1. Personality

Results of a meta-analysis examining the role of the Five-Factor Model of Personality and Culture and commitment provided interesting insights (Choi et al., 2015). Based on 55 independent samples from 50 studies, the meta-analysis proved that individuals who are emotionally stable, meaning harmonious, strong, and secure in their work will be positively linked to affective commitment (Choi et al., 2015). Therefore, as one's emotional stability increases so does the affective commitment to their organization (Choi et al., 2015). This is likely due to their ability to foster pleasant relationships with their colleagues and avoid conflict (Choi et al., 2015; Spector & Jex, 1998). The same individuals are inclined to obtain positive work performance results, more

recognition and social support, further enhancing their affective commitment (Barrick & Mount, 1991; Choi et al., 2015; Côté, 2005). It was also proved that extraversion is positively linked to affective commitment (Choi et al., 2015). Extraverts tend to enjoy socializing and because of this, they are fonder of their job and the people they work alongside (Barrick & Mount, 1991; Choi et al., 2015; Côté, 2005). Therefore, as extraversion goes up, so does affective commitment (Choi et al., 2015). A 2003 study done by Thoresen, Kaplan, Barsky, Warren and de Chermont confirmed that extraversion was linked to organizational commitment (Choi et al., 2015; Thoresen et al., 2003). Agreeableness was shown to be positively linked to affective commitment (Choi et al., 2015). Such individuals are cooperative, resilient, and adaptable to change (Choi et al., 2015). Since agreeable individuals aim to trust and get along well with others, it is less probable that a negative work experience will impact their affective commitment in an unfavorable way (Choi et al., 2015; Skarlicki et al., 1999). The results of the meta-analysis showed that as agreeableness goes up, so does affective commitment (Choi et al., 2015). Conscientious workers are determined, goal-oriented and diligent (Choi et al., 2015). Conscientiousness was demonstrated to be positively correlated to affective commitment, meaning as conscientiousness increased, affective commitment also increased (Choi et al., 2015). Establishing and building upon relationships is necessary for conscientious people, as they are more likely to be committed to their employer (Choi et al., 2015; Orvis et al., 2008).

1.4.4.2. Trust and Perceived Organizational Support (POS)

A study aimed at learning more about employee trust in their management team was done in a New South Wales public sector organization (Ferres, 2008). Focus groups were set up and surveys were sent out (Ferres, 2008). Trust in the leadership team as well as peers was found to influence turnover intention and affective commitment (S. Albrecht & Travaglione, 2003; Ferres, 2008). According to a study done on 134 export organizations in the Netherlands, trust is positively linked to affective commitment, and it acts as an energizing force propelling employees to perform their best (Bloemer et al., 2013).

Ferres' study also indicated that Perceived Organizational Support (POS), the degree to which employees feel like they are appreciated by their workplace and that the members of the workplace are concerned about their well-being, impacted turnover intention and affective

commitment (Eisenberger et al., 1990; Ferres, 2008). Other articles confirmed the same, indicating that POS is positively linked to affective commitment (Allen & Meyer, 1990; Ferres, 2008; Mowday et al., 1979; Wayne et al., 1997). In fact, some meta-analyses state that POS has a powerful relationship to affective commitment (Colquitt et al., 2001; Jackson et al., 2013; Meyer et al., 2002; Rhoades & Eisenberger, 2002). One meta-analysis that examined 70 other studies on POS stated that fairness, manager support, recognition and good job conditions were linked to POS and that employees responded via affective commitment (Rhoades & Eisenberger, 2002). This means that when POS increases affective commitment increases as well.

1.4.4.3. Emotional Exhaustion

Emotional exhaustion is negatively correlated to affective commitment (Leiter & Maslach, 1988; Maslach et al., 2001; Portoghese et al., 2018; Sigri et al., 2010; Thanacoody et al., 2014). Healthcare professionals are a prime example of a working population that is consistently exposed to high job demands, low support and control and inadequate resources to properly do their job (Halbesleben & Buckley, 2004; Llorens et al., 2006; Portoghese et al., 2018; Thanacoody et al., 2014; Tourigny et al., 2013). To relieve the pressure coming from their job they become disengaged (Cole et al., 2010; Golden et al., 2006; Sigri et al., 2010). This statement is supported by many studies looking at emotional exhaustion and affective commitment in healthcare practitioners (Halbesleben & Buckley, 2004; Llorens et al., 2006; Portoghese et al., 2018; Thanacoody et al., 2014; Tourigny et al., 2013; J. Zhang et al., 2022). Research done on 332 employees from different departments of a South Korean engine-manufacturing company looked at the correlation between emotional exhaustion and affective commitment (C. Y. Kim & Park, 2015). Using Allen & Meyer's tri-dimensional scale, the research team determined that the link between affective commitment and job performance was moderated by emotional exhaustion, meaning the link was less strong when employees experienced elevated levels of emotional exhaustion (C. Y. Kim & Park, 2015).

Table 5. below summarizes the important information regarding the factors leading to affective commitment.

Table 5. Factors Leading to Affective Commitment

Factor	Source
Personality: Emotional stability, extraversion, agreeableness, conscientiousness	(Barrick & Mount, 1991; Choi et al., 2015; Côté, 2005; Orvis et al., 2008; Skarlicki et al., 1999; Spector & Jex, 1998; Thoresen et al., 2003)
Trust and Perceived Organization Support (POS)	(Albrecht & Travaglione, 2003; Allen & Meyer, 1990; Bloemer et al., 2013; Colquitt et al., 2001; Eisenberger et al., 1990; Ferres, 2008; Jackson et al., 2013; Meyer et al., 2002; Mowday et al., 1979; Rhoades & Eisenberger, 2002; Wayne et al., 1997).
Emotional exhaustion	(Cole et al., 2010; Golden et al., 2006; Halbesleben & Buckley, 2004; C. Y. Kim & Park, 2015; Leiter & Maslach, 1988; Llorens et al., 2006; Portoghese et al., 2018; Sigri et al., 2010; Thanacoody et al., 2014; Tourigny et al., 2013; J. Zhang et al., 2022).

1.4.5. Consequences of Affective Commitment

Behaviors and behavioral intentions are consequences of organizational commitment as a whole (Mathieu & Zajac, 1990a). In the 1990s, Mathieu et al. conducted a meta-analysis that showed that perceived job alternatives, intention to search for a job, intention to leave a job, attendance, lateness, and turnover are all consequences of affective commitment (Mathieu & Zajac, 1990a). However, not all the links are equally as strong (Mathieu & Zajac, 1990a). Organizational commitment correlates positively with attendance (Mathieu & Zajac, 1990a). The unison of these two variables is shown when presence at work increases, so does affective commitment. However, the link is negative when it comes to tardiness and turnover (Mathieu & Zajac, 1990a). Intention to search for job elsewhere and intention to leave one's current place of employment showed strong negative correlations (Mathieu & Zajac, 1990a). A negative correlation explains that as one of the variables goes up, the other one goes down. There was no link between organizational commitment and the perception of job alternatives (Mathieu & Zajac,

1990a). A decade later, in 2002, Meyer and Allen conducted a meta-analysis examining the consequences of organizational commitment (Meyer et al., 2002). Turnover and withdrawal cognition had the strongest correlation with the affective commitment dimension of organizational commitment ($p = -.17$) (Meyer et al., 2002). Other studies have gathered similar evidence that turnover and affective commitment have a strong negative relationship (Albrecht & Andreetta, 2011; Cooper-Hakim & Viswesvaran, 2005; J. Lee et al., 2018; Mercurio, 2015; Meyer et al., 2002; Morrow, 2011). Moreover, absenteeism is usually forecasted by affective commitment (Mercurio, 2015). Interestingly, in Meyer et al.'s research, absenteeism was the only dimension that correlated negatively with affective commitment ($p = -.15$) (Meyer et al., 2002). Those who experience more pronounced levels of affective commitment typically have reduced amounts of absenteeism (Mercurio, 2015; R. T. Mowday et al., 2013; Solinger et al., 2008; Somers, 2009). Job performance correlated positively with affective commitment ($p = .16$) (Meyer et al., 2002). When it comes to stress and work-home life conflict, affective commitment correlated negatively for both with results of $p = -.21$ and $p = -.20$, respectively (Meyer et al., 2002).

1.4.6. Affective Commitment During COVID-19

COVID-19 has disrupted the daily functioning of organizations in different functions of work around the world including the tourism, hospitality, retail, and service industry (Alshaabani et al., 2021). During a period where employees are working remotely and away from their usual routine and colleagues, it is important for them to remain connected with their teams and feel a sense of affiliation to their employer (Mihalache & Mihalache, 2022). Since COVID-19 has spanned closed to three years, this can be especially challenging when there is a continued physical disconnect with this new way of working (Ashforth, 2020; Mihalache & Mihalache, 2022). Just like before the pandemic, organizations must be cognizant to take proper measures to elicit the results they want when it comes to affective commitment (Mihalache & Mihalache, 2022). The more Perceived Organization Support (POS) and manager availability an employee has, the more likely he is to experience affective commitment to the organization (Alshaabani et al., 2021; Mihalache & Mihalache, 2022). Through POS, employees feel a sense of congruence and an overall positive experience when thinking of work, thus, reinforcing the attachment to the organization (Mihalache & Mihalache, 2022). Sharing in the unprecedented, scary, and emotionally-taxing experience of COVID-19, a form of connection or shared sense of identity, can

be created between the employee and management as they both team-up to overcome the difficulties that are linked to the virus (Caligiuri et al., 2020; Mihalache & Mihalache, 2022). When it comes to availability, leaders that take the time to reach out to their direct reports and see how they are doing and how they can help, will impact the employees' experience by aiding in reducing the precariousness that comes with the pandemic (Mihalache & Mihalache, 2022). A big challenge that employees must endure is discerning signals from one's surroundings and then selecting the appropriate actions to take to make that environment more comfortable for themselves (Christianson & Barton, 2021; Mihalache & Mihalache, 2022). Employees now have the challenge of finding ways to communicate with their manager and understand their role and tasks within this new landscape (Mihalache & Mihalache, 2022). Therefore, regular communication with one's supervisor can help improve affective commitment (Mihalache & Mihalache, 2022).

1.4.7. Affective Commitment Implications for Organizations

Organizations can experience wonderful benefits with committed workers on their staff. However, the consequences of having employees that are not affectively committed to the organization can be risky. In a post-COVID-19 world, organizations should strive towards establishing career advancement opportunities, trust, clear and cohesive communication with their staff to keep them engaged, happy and motivated (Mercurio, 2015). This can begin as early on as in the recruitment and selection process for new hires (Mercurio, 2015). Then, as employees continue their career within the company, leaders can ensure employees are making decisions with regards to their tasks, projects, and assignments (Mercurio, 2015). They can also implement mentorship programs and encourage training and development (Mercurio, 2015). Employees who are not committed to the organization are likely to leave and take their talent and knowledge elsewhere (Mercurio, 2015). To avoid this, the first and most critical step is to create, early on a trusting and caring bond with the employee (Mercurio, 2015).

1.4.8. Link Between Affective Commitment and Emotional Exhaustion Before COVID-19

Emotional exhaustion and affective commitment were present prior to the pandemic. In this section we will explore the link between these two concepts in the years preceding 2020. When

experiencing emotional exhaustion, it is normal for an individual to want to get out of that situation (Mahmod & Rosari, 2020; Tourigny et al., 2013). Several articles examining working professionals showed a negative link between emotional exhaustion and affective commitment (Leiter & Maslach, 1988; Maslach et al., 2001; Portoghese et al., 2018; Sigri et al., 2010; Thanacoody et al., 2014). Healthcare workers who are constantly exposed to high job demands, low support and control, in addition to not having enough resources to get the work done, whether it be supplies, other healthcare workers, or support staff, will typically have reduced affective commitment (Halbesleben & Buckley, 2004; Llorens et al., 2006; Portoghese et al., 2018; Thanacoody et al., 2014; Tourigny et al., 2013). For this working population, the pressure to still provide the best care to their patients even though they do not have everything they need to do their job efficiently, will result in own emotional exhaustion and poor affective commitment (Bartram et al., 2012; Cole et al., 2010; Golden et al., 2006; Leggat et al., 2011; Sigri et al., 2010; Thanacoody et al., 2014). Those who experience continued exhaustion will find ways to relieve themselves of it and limit any more extreme tiredness (Schaufeli & Bakker, 2004a; Thanacoody et al., 2014). As such, they may start reducing their affective commitment and begin looking for employment at another organization (Thanacoody et al., 2014). The link between emotional exhaustion and affective commitment was examined via a study on 302 Australian healthcare practitioners (Thanacoody et al., 2014). The daily responsibilities that come with caring for individuals proved to increase emotional exhaustion as they depleted their resources (Thanacoody et al., 2014). To cope with this, the healthcare workers became less engaged while still maintaining their employment (Thanacoody et al., 2014). These results are consistent with previous research done on the topic (Cole et al., 2010; Golden et al., 2006; Sigri et al., 2010).

1.4.9. Link between Emotional Exhaustion and Affective Commitment During COVID-19

Since we now know that emotional exhaustion and affective commitment were present before and during the pandemic, it is important to find out if there is a link between the two during the pandemic. There are few articles addressing these two phenomena's together within the COVID-19 pandemic context. Through our research, we hope to bring clear and easy to understand research on the topic. However, with the limited scientific research available, there are some key

findings to take note of. The literature proves that burnout at work lowers affective commitment in nurses, paramedics, and other medical professionals (J. Zhang et al., 2022). Therefore, as a coping mechanism, employees disengage when they feel like they are losing their resources (J. Zhang et al., 2022). It has been reported that employee behavior changes during a pandemic (Alshaabani et al., 2021). For example, lower employee engagement in remote workers and precariousness when it comes to holding a job has been proven (Ahmed et al., 2020; Alshaabani et al., 2021; Jung et al., 2021). With strong support from one's team and manager, an employee's stress and emotional exhaustion can be reduced (Alshaabani et al., 2021; Chen & Eyouun, 2021; Labrague & de los Santos, 2020). From the education standpoint, one article mentioned the importance of increasing student affective commitment during the pandemic (Capone et al., 2021). The same study indicated that affective commitment should act as a shield to negative psychological effects that come on due to COVID-19 (Capone et al., 2021).

Chapter 2 – Research Model and Hypotheses

This chapter presents the research problem, the research model, and the research hypotheses. We first present the research problem and the associated research questions. Then, we propose the research model that will be used to answer our research questions and we will describe the variables that compose it. Finally, we formulate our research hypotheses and review the theoretical and empirical foundations that support them.

2.1. Research Problem

The purpose of this section is to highlight the limitations observed in the literature review, which our research aims to address. This thesis aims to bring to light important observations regarding the implications of some components of iso-strain on remote workers and its effect on emotional exhaustion and affective commitment. This objective is supported by the theoretical and empirical arguments presented in the previous chapter, which are synthesized in this section.

From the literature review, it is evident that remote work has existed for several decades, with Jack Nilles inventing the term, “telecommuting” in the 1970s (Vyas & Butakhieo, 2021). However, in the 1990s, its importance shifted from a mechanistic to an organic way of thinking to meet organizational needs in terms of globalization (Contreras et al., 2020). With the onset of the COVID-19 pandemic in early 2020, organizations around the world had to shift their way of working in a matter of a couple of weeks, without necessarily having the right measures in place. One of the major changes was the transition from on-site work to remote work (Contreras et al., 2020). This resulted in over 3.5 billion workers working at a location away from the office (Contreras et al., 2020). Since then, research has been conducted on the potential success of this new way of working (Vyas & Butakhieo, 2021). In February 2020, Vyas & Butakhieo disclosed that 8.2% of the US labor force was working remotely and three months later that percentage increased to 35% (Vyas & Butakhieo, 2021). From their research, 71.7% of individuals surveyed indicated that they were able to successfully implement this new work format into their day-to-day life (Vyas & Butakhieo, 2021).

As the pandemic continues to be a part of our lives, it is more and more important to learn about the impact remote work is having on the working population. In our literature review, we explored the topic of iso-strain. Working professionals who deal with high demands at work combined with a limited amount of decision latitude and social support will find it challenging to meet the job demands and reach their goals (Höckerberg et al., 2010; S. Kim et al., 2021; Perry et al., 2018). In the previous chapter, we presented Karasek's job strain model, that outlines the interaction between job demands, job decision latitude as well as the psychological risk of strain. This topic has not been researched extensively, thus, providing us with a unique research opportunity. In addition, we looked at emotional exhaustion, the most common dimension of burnout found in working professionals. As explained in the literature review, emotional exhaustion refers to the expenditure of energy and tiredness that a working professional can go through due to their job (S. Kim et al., 2021). Due to the early works of Freudenberger in the 1970s and Maslach and colleagues in the 1980s and 1990s, there is a great deal of knowledge on burnout and its dimensions (Maricuțoiu et al., 2016; Maslach et al., 2000; West et al., 2018). In fact, burnout has been looked at in numerous areas of work including the healthcare sector (Dall'Ora et al., 2020; Gray-Stanley & Muramatsu, 2011; Maslach & Leiter, 2016; West et al., 2018b; Wroclawski & Heldwein, 2021) and the academic setting (S. Kim et al., 2021). We now know that it is important to consider emotional exhaustion when looking at the challenges that remote workers undergo (Abdel Hadi et al., 2021; de Klerk et al., 2021; Wroclawski & Heldwein, 2021). Finally, we explored affective commitment, the most common dimension of organizational commitment. Since the 1980s, a significant amount of research on affective commitment has been done (Angle & Perry, 1981; Jaros, 2007; Meyer & Allen, 1991; O'Reilly III & Chatman, 1986; Tosun & Ulusoy, 2017). Allen & Meyer's multi-dimensional model is the most common model used to describe the phenomenon (Jaros, 2007).

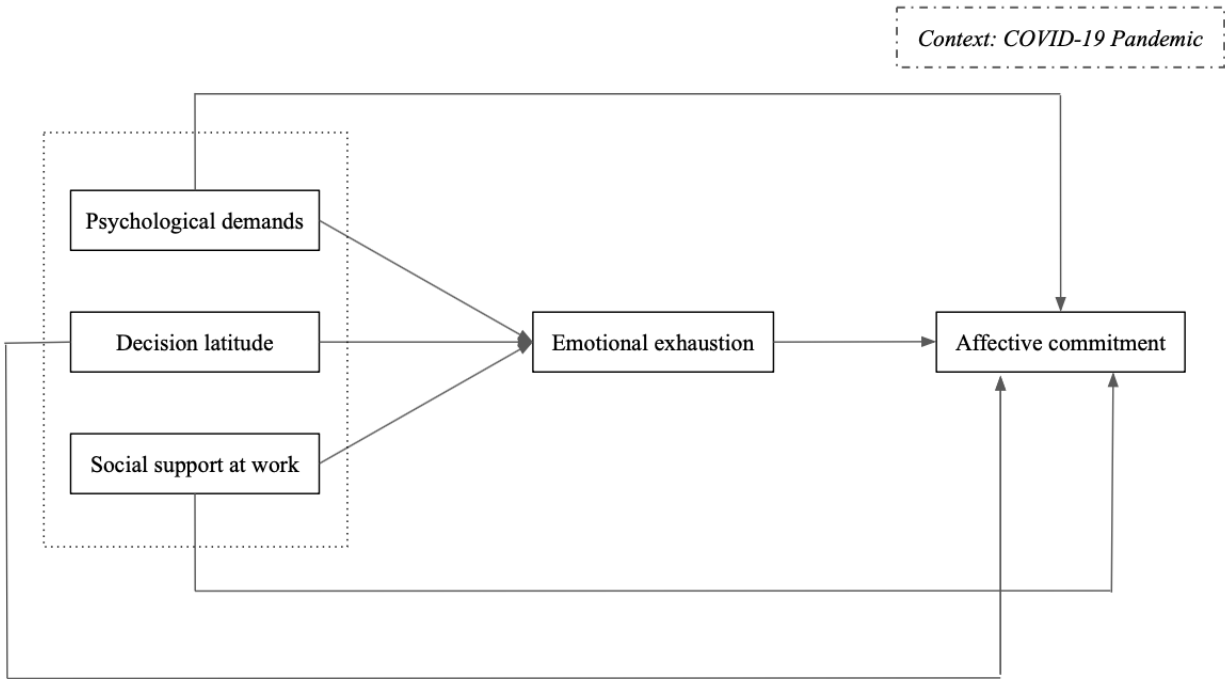
Pre-pandemic research looked at the impact of job strain and burnout (Ahola & Hakanen, 2007; Karasek et al., 1979; Melamed et al., 2010; Ruiller & van der Heijden, 2014; Wilkerson, 2009; Wong & Spence Laschinger, 2015). Past literature has brought to light critical issues regarding employee emotional exhaustion combined with other factors, not studied in this thesis (Abdel Hadi et al., 2021; Anasori et al., 2020; Jiménez-Ortiz et al., 2019; Tjldink et al., 2014). Previous authors have addressed affective commitment with other variables (Allen & Meyer, 1990; Bergman, 2006; Carmeli, 2005; Tang & Vandenberghe, 2020). Some studies have looked at

burnout and organizational commitment in the pre-pandemic era (Akdemir, 2019; Hanisah bte Marmaya et al., 2011; Sigri et al., 2010). Other studies combined research on emotional exhaustion and organizational commitment (Ahad et al., 2021; Lapointe et al., 2011; Wullur & Werang, 2020). However, there is a lack of research on the potential effects of all these issues combined in the context of the post-COVID-19 pandemic, where remote work is predicted to continue to be an important part of the workplace. Thus, our literature review led us to our research question: Does iso-strain in remote workers negatively impact affective commitment via an increase in employee emotional exhaustion during the COVID-19 pandemic? Specifically, we are trying to understand if emotional exhaustion has a mediating effect on the relationship between, on the one hand, psychological demands, decision latitude and, social support at work, and affective commitment on the other hand.

2.2. Research Model

Considering the current knowledge on the concepts being studied and their relationships presented in the literature review chapter, and following the research problem described above, we propose the research model presented in figure 8.

Figure 8. Schematic Representation of the Research Model



The model includes the five variables that we will study: psychological demands, decision latitude and social support at work (independent variables), emotional exhaustion (mediating variable) and affective commitment (dependant variable).

Iso-strain in remote workers (independent variable), is defined by the high psychological demands and low latitude for decision-making along with the low social support that a working professional undergoes in their workplace (Höckerberg et al., 2010; Kim et al., 2021). Iso-strain is characterized by three components, high psychological demands, low decision latitude and low social support at work (Höckerberg et al., 2010). In the figure above, we separate the dimensions of iso-strain to examine their individual interaction with the mediating and dependant variables. As for the mediating variable, we are looking at emotional exhaustion. Emotional exhaustion comes in the form of feelings of extreme tiredness, weariness, or fatigue due to the cognitive or psychological attempts made in the workplace context (Edú-valsania et al., 2022). As for the dependent variable, we are examining affective commitment. Affective commitment is defined as the positive emotional attachment that one has to their organization, including how one aligns with

the company's objectives, beliefs and values as well as how satisfied they are at work (Chanana, 2021; Meyer & Allen, 2007).

2.3. Research Hypotheses

Based on the research model presented in figure 8, ten hypotheses are formulated in table 6 below. These hypotheses are justified in the following paragraphs.

Table 6. Presentation of the Research Hypotheses

Hypothesis	Statement
Hypothesis 1a	Psychological demands are negatively linked to affective commitment.
Hypothesis 1b	Decision latitude is positively linked to affective commitment.
Hypothesis 1c	Social support at work is positively linked to affective commitment.
Hypothesis 2a	Psychological demands are positively linked to emotional exhaustion.
Hypothesis 2b	Decision latitude is negatively linked to emotional exhaustion.
Hypothesis 2c	Social support at work is negatively linked to emotional exhaustion.
Hypothesis 3	Emotional exhaustion is negatively linked to affective commitment.
Hypothesis 4a	Emotional exhaustion mediates the negative relationship between psychological demands and affective commitment.
Hypothesis 4b	Emotional exhaustion mediates the positive relationship between decision latitude and affective commitment.
Hypothesis 4c	Emotional exhaustion mediates the positive relationship between social support at work and affective commitment.

2.3.1. Relationship Between the Independent Variables and Dependant Variables

2.3.1.1. Link Between Psychological Demands and Affective Commitment

As mentioned previously, strain is related to various parts of an employee's work including the psychological aspect (Perry et al., 2018). Karasek's Demand-Control-Person model postulates that job demands, and job control collaborate to estimate strain (Perry et al., 2018). Job demands

are the physical, social, and organizational elements of the job that necessitate consistent physical or cognitive effort (Koon & Pun, 2018). Karasek and Theorell's iso-strain conjecture postulates that those who struggle with high demands at work and have minimal decision latitude and minimal social support will undergo the worst health repercussions (Höckerberg et al., 2010; Kim et al., 2021; Perry et al., 2018). An employee can experience strain when his resources are weakened, making it more challenging for him to meet the job demands and attain the goals he set for himself (Perry et al., 2018). Affective commitment is the positive emotional attachment that an employee has to their job, and it is related to the organization's objectives, beliefs and values and their own satisfaction at work (Chanana, 2021). Balogun et al.'s research shows a negative relationship between psychological demands and affective commitment (Balogun et al., 2013). In their research, when an employee experiences a high level of job demands they are more inclined to quit (Balogun et al., 2013). To verify this potential link in the context of our study, we formulate the following hypothesis:

Hypothesis 1a: There is a negative link between psychological demands and affective commitment.

2.3.1.2. Link Between Decision Latitude and Affective Commitment

Karasek and Theorell (1990) and Demerouti et al. (2001) each proposed job stress models, the Job-Demand-Control-Support model and Job Demands-Resources model, respectively (Balogun et al., 2013). A key component that came from those models was the autonomy or control that one has at their job, also known through the encompassing term, job resources (Balogun et al., 2013). The extent to which a person has control in deciding their tasks, schedule and how they do their work depends a lot on their leader (Balogun et al., 2013; O'Driscoll & Cooper, 2002). Furthermore, the absence of control or ability to make choices can lead individuals to feel less committed to their workplace, a term known as affective commitment (A. Bakker et al., 2003; Balogun et al., 2013; C. Liu & Spector, 2005). Considering past studies that have found a positive link between decision latitude and affective commitment (Balogun et al., 2013; Langkamer & Ervin, 2008), we formulate the following hypothesis:

Hypothesis 1b: There is a positive link between decision latitude and affective commitment.

2.3.1.3. Link Between Social Support at Work and Affective Commitment

A pleasant work atmosphere includes social support which is defined as social and emotional inclusion and collaboration (Stan & Vîrgă, 2021). Social support from peers and leaders can lead to stronger relationships, trust, and overall job satisfaction (Jolly et al., 2021; Stan & Vîrgă, 2021). Research shows that perceived organizational support (POS) leads employees to believe that their organization cares about their well-being and values their contributions (Eisenberger et al., 1986; Vandenberghe et al., 2004). In response, the employee acts in a positive way by becoming more committed to their workplace, a concept known as the reciprocity norm (Gouldner, 1960; Vandenberghe et al., 2004). Past research has found a positive link between social support at work and affective commitment (Allen & Meyer, 1990; Ruiller & van der Heijden, 2014; Schmidt, 2007; Stan & Vîrgă, 2021; Vandenberghe et al., 2004). That is, when an employee is adequately supported in the workplace, they are more likely to be emotionally attached to it (Stan & Vîrgă, 2021). Therefore, we formulate the following hypothesis:

Hypothesis 1c: There is a positive link between social support at work and affective commitment.

2.3.2. Relationship Between the Independent Variables and the Mediating Variable

2.3.2.1. Link Between Psychological Demands and Emotional Exhaustion

Jobs demands are explained as the various elements that make up one's job, whether it consist of physical, interactive, or organizational demands (Demerouti et al., 2001; Koon & Pun, 2018). These demands come with outcomes, such as elevated stress on the employee (Demerouti et al., 2001; Koon & Pun, 2018). While job demands vary depending on the role and field of work, it can include high pressure and an abundance of tasks to be completed while interacting with numerous stakeholders (A. B. Bakker et al., 2010; Koon & Pun, 2018). Emotional exhaustion occurs when an individual feels drained of the emotional and mental energy that is required to complete their tasks (Koon & Pun, 2018). Should an employee experience the longstanding effects of substantial job demands, they may experience high job strain, and feel overly emotionally tired

when it comes to performing their best at work (Koon & Pun, 2018; van Jaarsveld et al., 2010). Job demands and emotional exhaustion could be linked. Researchers have found a positive link between psychological demands and emotional exhaustion (Koon & Pun, 2018; Kim et al., 2021; Melamed et al., 2010). Therefore, we formulate the following hypothesis:

Hypothesis 2a: There is a positive link between psychological demands and emotional exhaustion.

2.3.2.2. Link Between Decision Latitude and Emotional Exhaustion

Decision latitude is defined as the aspects of the job that permit an individual to make choices on their own and control certain aspects of their work, allowing them to have some autonomy (Kowalski et al., 2010; Rhéaume, 2021). Being able to make independent decisions in the workplace can benefit a working professional by alleviating the dangerous consequences of emotional exhaustion (Rhéaume, 2021; Tadić et al., 2015). However, when an individual does not have the possibility of making their own decisions, the impact is great (Kowalski et al., 2010; Rhéaume, 2021). Overall, research has found a negative link between decision latitude and emotional exhaustion, meaning as decision latitude goes down, emotional exhaustion goes up (Kowalski et al., 2010; Melamed et al., 2010; Rhéaume, 2021). For example, Kowalski et al. demonstrate this negative link through their research on 1325 German nurses (Kowalski et al., 2010). Kowalski et al. found that if a nurse indicates that their ability to make choices at work was a single point lower on the four-point Likert scale provided, they were nearly three times inclined to express symptoms of exhaustion (Kowalski et al., 2010). Therefore, we formulate the following hypothesis:

Hypothesis 2b: There is a negative link between decision latitude and emotional exhaustion.

2.3.2.3. Link Between Social Support at Work and Emotional Exhaustion

Studies looking at social support at work and emotional exhaustion have found interesting links between the two variables. For example, a study on college students revealed that social support from classmates is negatively linked with burnout (Jacobs & Dodd, 2003). Other research

has found a direct negative link between social support at work and emotional exhaustion (Kim et al., 2021; Melamed et al., 2010). Meaning, individuals that believe they have a high amount of social support from members of their team, will likely have less intense feelings of emotional exhaustion (S. Kim et al., 2021). They will be able to properly get the support they need from their colleagues (S. Kim et al., 2021). Therefore, we formulate the following hypothesis:

Hypothesis 2c: There is a negative link between social support and emotional exhaustion.

2.3.3. Relationship Between the Mediating Variable and the Dependant Variable

2.3.3.1. Link Between Emotional Exhaustion and Affective Commitment

Turnover intention is related to a working professional's intentional choice to leave an organization (Thanacoody et al., 2014). On the other hand, affective commitment is defined as an employee's emotional attachment to their workplace (Mahmod & Rosari, 2020; Thanacoody et al., 2014). Individuals that feel extreme tiredness will act in a way that they try to limit the resources they are losing and when they are unable to do so, they will use coping methods to decrease the impact of their exhaustion (Schaufeli & Bakker, 2004b; Thanacoody et al., 2014). As a result, they may become less and less committed to their job and seek out alternatives, like a job elsewhere. Applying the Conservation of Resources (COR) theory, we believe that employees will try to decrease their affective commitment and desire to stay at their current company (Mahmod & Rosari, 2020; Thanacoody et al., 2014). Several research papers have found a negative relationship between emotional exhaustion and affective commitment (Cropanzano et al., 2003; R. T. Lee & Ashforth, 1996; Mahmod & Rosari, 2020; Portoghese et al., 2018; Thanacoody et al., 2014; Tourigny et al., 2013). Meaning, as one's emotional exhaustion decreases, their affective commitment increases (Cropanzano et al., 2003; R. T. Lee & Ashforth, 1996; Mahmod & Rosari, 2020; Portoghese et al., 2018; Thanacoody et al., 2014; Tourigny et al., 2013). Therefore, we formulate the following hypothesis:

Hypothesis 3: There is a negative link between emotional exhaustion and affective commitment.

2.3.4. Mediating Relationship of Emotional Exhaustion Between the Independent Variables and the Dependant Variables

2.3.4.1. Mediating Link of Emotional Exhaustion in the Relationship Between Each Iso-strain Dimension and Affective Commitment

Emotional exhaustion takes place when an individual feels drained of the emotional and mental energy that is required to complete their tasks at work (Koon & Pun, 2018). It is linked to loss of energy and extreme fatigue (López-Cabarcos et al., 2021; Maslach et al., 2016). Psychological demands are the various physical, interactive, or organizational demands that make up one's job (Demerouti et al., 2001; Koon & Pun, 2018). While job demands vary depending on the role and field of work, it can include high pressure and an abundance of tasks to be completed while interacting with numerous stakeholders (A. B. Bakker et al., 2010; Koon & Pun, 2018). Previous research shows that high psychological demands at work may generate emotional exhaustion and result in poor affective commitment (Hang-Yue et al., 2005; López-Cabarcos et al., 2021; van Bogaert et al., 2014; T. a Wright & Hobfoll, 2004). Through their research, Lopez-Cabarcos et al. demonstrate that emotional exhaustion completely mediated the negative link between job demands and affective commitment (López-Cabarcos et al., 2021). This means that without emotional exhaustion there is no negative relationship between psychological and affective commitment.

Decision latitude, the ability to make choices when it comes to tasks at work can have a big impact on working professionals (Fernet et al., 2004; Knudsen et al., 2006; López-Cabarcos et al., 2021). In organizations that have strict policies and procedures as well as a centralized decision-making system in place, employees can feel like they lack the ability to influence (Fernet et al., 2004; Knudsen et al., 2006; López-Cabarcos et al., 2021). This can be linked to emotional exhaustion (Knudsen et al., 2009; López-Cabarcos et al., 2021). Lopez-Cabarcos et al. showed that emotional exhaustion completely mediated the positive relationship between decision latitude and affective commitment (López-Cabarcos et al., 2021). This means that without emotional exhaustion there is no positive relationship between decision latitude and affective commitment.

Social support at work can come from peers and management of all levels and employees typically respond well when their organization recognizes their work and cares for their well-being (Sharma & Dhar, 2016). Such support can come in the form of caring for others, maintain proper working conditions and being fair with all employees (Dhar, 2012; Sharma & Dhar, 2016; Wayne et al., 1997). While López-Cabarcos et al. do not directly research the correlation between social support at work and affective commitment, they do mention that in future research this would be important to examine (López-Cabarcos et al., 2021). In addition, they discuss the implications related to social support and affective commitment in their article (López-Cabarcos et al., 2021). Precisely, they mention the importance of responding to staff's needs to improve their work environment so they can provide the best care possible (López-Cabarcos et al., 2021). They say that these strategies should limit emotional exhaustion and enhance well-being (López-Cabarcos et al., 2021). Finally, on basis of this information, we formulate the following three hypotheses:

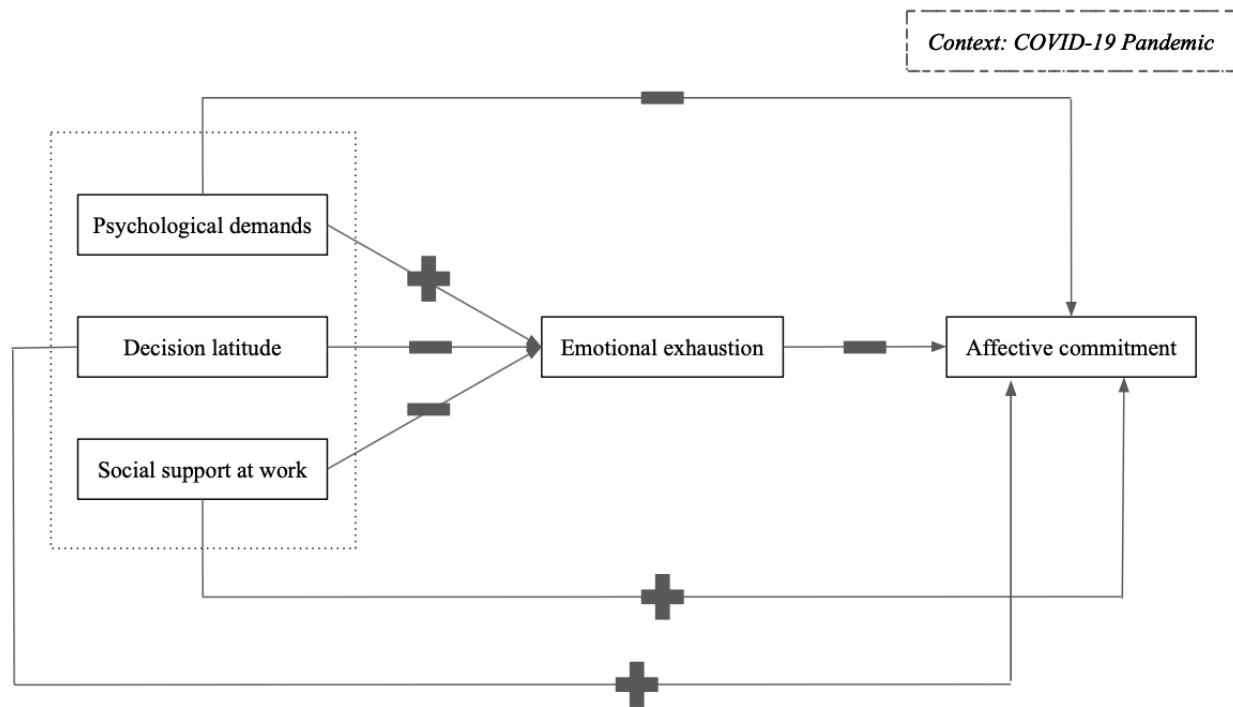
Hypothesis 4a: Emotional exhaustion mediates the negative relationship between psychological demands and affective commitment.

Hypothesis 4b: Emotional exhaustion mediates the positive relationship between decision latitude and affective commitment.

Hypothesis 4c: Emotional exhaustion mediates the positive relationship between social support at work and affective commitment.

Figure 9 below presents the conceptual framework of the research model.

Figure 9. Conceptual Framework of the Research Model



Chapter 3 – Methodology

This chapter presents the methodological choices that were made. First, we summarize these choices, then we outline the study design and justify the measurement tools that were used to collect the data. After, we explain the participant recruitment, data collection process and describe the sample. An explanation of the measurement of the variables as well as the ethical considerations surrounding the research will follow. Finally, the analysis plan is described.

3.1. Methodological Choices

To test our research hypotheses, we collected quantitative data from the Canadian adult remote working population, meaning individuals 18 years and older. Quantitative research is popular in sociological and psychological areas of study (Rashid & Sipahi, 2021). It looks at sections of human behavior that can be observed or measured in a certain group of individuals in a subjective and numerical manner (Rashid & Sipahi, 2021). Quantitative research is often used in situations where there are unsolved questions due to the limited research on the said topic (Polit & Beck, 2012; Rutberg & Bouikidis, 2018). The benefit of quantitative research is that researchers can gather critical and applicable proof about a field of study (Rashid & Sipahi, 2021). Also, the physical data collection process is simpler through quantitative data collection as it often involves using a statistical analysis software (Connolly, 2007; Rashid & Sipahi, 2021). Qualitative research, on the other hand, emphasizes the exploration of the meaning or effect of a phenomenon through methods like interviews and observations (Rashid & Sipahi, 2021; Rutberg & Bouikidis, 2018). Qualitative research methods are lengthier as they may require follow-up interviews or additional observations to gather missing information (Rutberg & Bouikidis, 2018). Because of this, the sample size is usually much smaller than one used in a quantitative research study (Polit & Beck, 2014; Rutberg & Bouikidis, 2018). Prior planning, time and adequate resources are essential to carry out a successful qualitative research study (Polit & Beck, 2014; Rutberg & Bouikidis, 2018). Our decision to go with the quantitative data collection method instead of the qualitative data collection method comes down to responding to our research needs. The quantitative research method allows the compilation of measurable data that responds to our research questions (i.e., does iso-strain in remote workers negatively impact affective commitment via an increase in employee emotional exhaustion during the COVID-19 pandemic? and does emotional exhaustion

has a mediating effect on the relationship between, on the one hand, psychological demands, decision latitude and, social support at work, and affective commitment on the other hand?) (Rashid & Sipahi, 2021). Via a simple way of collecting data, quantitative research allows us to gather key information on a topic that has not been heavily researched from a decent sample size.

3.2. Study Design and Measurement Instrument

3.2.1. Study Design

Our research design is cross-sectional as all data was collected at a given point in time within a sample population (Sedgwick, 2014; Spector, 2019). The advantages of a cross-sectional design study are that it is fast to do and requires fewer time and financial resources than other methods (Sedgwick, 2014). The disadvantage of this approach, compared to a longitudinal design, is that we will not be able to examine the effect of the independent variable on the dependant variable over time (Sedgwick, 2014). As such, we will not be able to establish a causal link between the two (Spector, 2019). In additional, cross-sectional studies are subject to recall bias (Sedgwick, 2014).

3.2.2. Measurement Instrument

Using Qualtrics, we collected data via the questionnaire method. Qualtrics is an online survey platform that allows data and reports to be extracted after a survey is created by the user. Qualtrics does not disclose any personal information (or any other information concerning participants in this study) to other users nor to any third party. To take part in our research project, all eligible survey participants had to be 18 years old and over and working remotely at least one day per week during the time they were completing the survey. The exclusion criteria were to be under 18 years of age and/or not working remotely at least one day per week. The online questionnaire was beneficial as it allowed for working professionals to participate, no matter where they lived in Canada, and it did not interfere with any COVID-19 health restrictions that were in effect during the time of the data collection. Our data collection and analysis process were simplified as we had all the results in one location, on the Qualtrics website, rather than having hundreds of paper surveys to sort through and manually transcribe the data.

The same questionnaire was used for all participants. Once on the survey specific Qualtrics web link, participants were given the option to select their preferred language to answer the questions in. The options were English or French. Then, the participants were given the details on the survey, including the instructions and ethical considerations, such as the purpose of the research, a confirmation of the confidentiality of the responses and their choice to participate as well as opt out of answering any questions they were not comfortable answering. In the instructions portion, the participants were asked to answer the questions without any hesitation, as it would best reflect their first impression. In the same section, the participants were told that by completing the survey, we considered that they were consenting to participating in the research project and for us to use the data collected in our current research and well as future research projects, if needed. The participants were also informed that once they complete the survey, they would be assigned a five-digit random ID. Using that random ID, the research team would be able to email them anonymously, should a follow-up be needed in the future. Finally, participants were instructed and given the contact information of the primary investigator to ask questions or relay any concerns. In total, the survey was made up of 39 multiple choice and open-ended questions. We estimated that the survey would take 15 to 20 minutes to complete.

3.3. Participant Recruitment and Data Collection Process

Several recruitment methods were employed to find participants. First, we sent out personalized emails, text messages and LinkedIn direct messages to colleagues, classmates, family, and friends that met the eligibility criteria. Second, we emailed other HEC Montréal teachers and asked them to distribute the survey to their students. Third, we recontacted our colleagues, classmates, family, and friends to ask them to forward the survey to their network. In all communications, we ensured to highlight the importance of their participation and our availability to answer any questions or concerns they may have. The data collection process took place over a course of eleven weeks from March 17th, 2022, to June 2nd, 2022. On June 2nd, 2022, the survey link was deactivated to close the data collection process. In total, 214 people clicked on the link to the survey. Amongst them, twelve did not fully complete the survey, leaving several questions blank, which could be due to their initial curiosity followed by the realization that they do not meet the survey criteria. We removed those twelve participants from the final sample. In addition, thirteen participants indicated that they work zero (0) days remotely. We removed them

from the sample as their responses did not meet our basic survey objective. Lastly, we removed one participant that did not complete any of the socio-demographic questions. In the end, our sample size was 188 participants. Our sample was considered a convenience sample, as it was selected deliberately for reasons of practicality, time, and cost (Jager et al., 2017). We were also cognizant of the downsides of the convenience sample. Specifically, it could lead to a sampling bias as it is not fully representative of the working population aged 18 years and older in Canada (Jager et al., 2017). Therefore, when it comes to analyzing the results, we must remain vigilant to not generalize (Jager et al., 2017).

3.4. Sample Description

The target sample population was Canadians, aged 18 years and older and working remotely at least one day per week during the COVID-19 pandemic. The data collection allowed us to obtain the results of 188 valid respondents. Since the instructions indicated that participants could opt out of answering any question, some respondents did not answer all the questions. We included all participants that indicated that they worked remotely at least one day per week in the data analysis. Out of the 188 valid survey respondents, the majority were female (58.82%), compared to 41.17% who were male. Half of the sample was in the 18 to 29 years old range (56.91%) and the 30- to 39-year-old range represented the second most prominent participant age group (18.08%). In terms of education, 53.19% indicated that their highest level of completed education was a bachelor's degree and 18.61% indicated that their highest level of completed education was a master's degree. A significantly high number of individuals noted that they worked full-time (86.70%). The second most common response for employment type was part-time with 6.79% of participants selecting that option. In terms of days worked remotely, five days was the top answer selected (62.23%) and four days came in second place (10.65%). While the participants had fifteen sectors of work to choose from, the top two selected were human resources/recruitment (29.78%) and insurance, finance, and accounting services (13.29%).

Since we utilized a convenience sample, the socio-demographic results of our survey do not surprise us. In general, we regularly interact with young professionals who are female as these are the people within our social circle of family, friends, classmates, and work colleagues. In terms of the level of education, we expected that the majority would indicate that they have a bachelor's

degree as their highest level of education as we know who we sent out the survey to and what their education level is. However, it is interesting to note that the percentage of respondents who indicated that their highest level of completed education is a bachelor's degree (53.88%) is not aligned with the Canadian population. A 2016 Statistics Canada report indicated that 22.4% of Canadians aged 25 to 64 had a college or university degree as their highest level of completed education (Government of Canada, 2017). We suspect that the difference between our sample and the general population is mostly due to the way we collected data (by reaching out to people that we know, many of whom were former university classmates). As for the employment status and sector of activity, we understood the objectives of our study and made sure to ask people that would fit that category to respond, to increase the likelihood of participation and successful data collection. In general, our social circle includes individuals that work full-time in the human resources/recruitment and insurance, finance, and accounting services sector, so we anticipated getting more respondents from those areas of work. The open-ended questions did not come as a shock to us. Since most participants were young professionals (30 and under), we expected the average amount of years in the field to be close to eight, with changes in the company happening every few years. The average hours worked remotely per week (39.93) was close to the typical work week of 40 hours.

Table 7 below presents a summary of the main sample description, including the most common response and second most common response found in the results.

Table 7. Main Sample Description Summary

Category	Most Common Response	Second Most Common Response
Gender	Female (58.82%)	Male (41.17%)
Age	18 to 29 (56.91%)	30 to 39 (18.08%)
Highest Level of Completed Education	Bachelor's Degree (53.19%)	Master's Degree (18.61%)
Employment Type	Full-Time (86.70%)	Part-Time (6.79%)
Days Worked Remotely	Five Days (62.23%)	Four Day (10.65%)
Sector of Work	Human Resources (29.78%)	Insurance, Finance & Accounting Services (13.29%)

Note. N = 188

3.5. Measurement of the Variables

Respondents answered questions on a Likert scale to indicate their level of agreement with the statement. Each question corresponded to an indicator of the measurement of the variables. The items and measurements scales came from previous studies in the literature that validated their metric properties. The indicators were translated from English to French by the primary investigator, Gillian Kinnear, so that participants could respond in their preferred language. The following subsections explain the reasoning behind the measurement tools chosen for each variable.

3.5.1. Independent Variable: Iso-strain in Remote Workers

As mentioned in the literature review, iso-strain in remote workers implies that a working professional undergoes high psychological demands and low latitude for making decisions combined with low social support (Höckerberg et al., 2010; Kim et al., 2021). We looked at iso-strain via Karasek's shortened version of the demand control support questionnaire (DCSQ) (Höckerberg et al., 2010). The DCSQ is made up of 17 items subdivided into three dimensions: psychological demands, decision latitude and social support at work (Höckerberg et al., 2010). While different measurement tools have been used to look at job strain, including the 49 item Job

Content Questionnaire (JCQ) questionnaire, the DCSQ, which looks at the workplace setting, is best suited for our research needs and desired outcomes because of the population we are examining (Höckerberg et al., 2010). We chose to measure the concept of iso-strain by breaking it down into its three distinct dimensions, psychological demands, decision latitude and social support at work, rather than as a unique variable. The reason for this decision is that it allowed us to draw interesting correlations between the variables being studied.

The specific questions are detailed in tables 8, 9 and 10 below. Participants were asked to respond to their level of agreement with each individual item on a Likert scale comprising five options to choose from: Never/Almost Never; Rarely; Sometimes; Often; I prefer to not answer.

Table 8. Psychological Demands Indicators

Indicators
1. Do you have to work very fast?
2. Do you have to work very intensively?
3. Does your work demand too much effort?
4. Does your work often involve conflicting demands? †
5. Do you have enough time to do everything?

Note. † While we asked all five of these questions in the survey, question 4 on conflicting demands was removed from during the data analysis process. An explanation is given in the results section.

Table 9. Decision Latitude Indicators

Indicators
1. Do you have the possibility of learning new things through your work? †
2. Does your work demand a high level of skill or expertise?
3. Does your job require you to take the initiative?
4. Do you have to do the same thing over and over again?
5. Do you have a choice in deciding HOW you do your work? †
6. Do you have a choice in deciding WHAT you do at work? †

Note. † While we asked all six of these questions in the survey, we ended up removing questions 1, 5 and 6 during the data analysis process. An explanation is given in the results section.

Table 10. Social Support at Work Indicators

Indicators
1. There is a calm and pleasant atmosphere where I work.
2. We get on well with each other where I work.
3. My coworkers support me.
4. The others understand if I have a bad day.
5. I get on well with my supervisors.
6. I enjoy working with my coworkers.

3.5.2. Mediating Variable: Emotional Exhaustion

Emotional exhaustion explains the expenditure of energy and tiredness that a working professional can experience (S. Kim et al., 2021). Precisely, it comes in the form of feelings of extreme tiredness, weariness, or fatigue due to the cognitive or psychological attempts made in the workplace context (Edú-valsania et al., 2022). We selected emotional exhaustion as the mediating variable. Several authors indicated that emotional exhaustion is the primary element of the burnout construct as it occurs first, followed by the other two dimensions (Arens & Morin, 2016; Bilal & Ahmed, 2017; Maslach et al., 2001). This decision is supported by other researchers who also decided to focus their research only on the emotional exhaustion dimension (Ben-Zur & Michael, 2007; Bilal & Ahmed, 2017; Dicke et al., 2015; Estryn-Béhar et al., 2007; Gandoy-Crego et al., 2009; Klusmann et al., 2008a, 2008b; F. J. Lee et al., 2008; Trautwein et al., 2006). The choice to focus on the main component of burnout, emotional exhaustion and omit the other two components is quite prevalent in recent literature (Abdel Hadi et al., 2021; Anasori et al., 2020; Jiménez-Ortiz et al., 2019).

In our literature review, we examined various tools that measure emotional exhaustion, including the MBI, BBI, SMBM, JD-R and COR Model. However, we opted to use the leading measure of burnout, the MBI, in our research study. In the MBI, the questions are clearly written and comprehensible for all participants, allowing us to measure and obtain accurate results. Since the MBI has various versions, we were able to select the version that was most suitable for the sample population that would be answering the survey. Specifically, we looked at emotional

exhaustion via Maslach’s abbreviated version of the Maslach Burnout Inventory, specific for human services professionals (aMBI-HSS) (Riley et al., 2018). The aMBI is made up of nine items broken down into three sub-sections, emotional exhaustion, cynicism, reduced personal accomplishment (Riley et al., 2018). While the original 22-item human services scale is effective, the shortened version is proven to provide valid and sound convergent and discriminant validity (Riley et al., 2018).

The specific questions are detailed in table 11 below. Participants were asked to respond to their level of agreement with each item individually on a Likert scale comprising five options: Never/Almost Never; Rarely; Sometimes; Often; I prefer to not answer. The survey contained measures of all three dimensions of burnout (emotional exhaustion, cynicism, and personal accomplishment). In our study, we are only interested in the emotional exhaustion dimension.

Table 11. Emotional Exhaustion Indicators

Indicators
1. I feel emotionally drained from my work.
2. I feel fatigued when I get up in the morning and have to face another day on the job.
3. Working with people all day is really a strain for me. [†]

Note. [†] While we asked all three of these questions in the survey, we ended up removing question 3 during the data analysis process. An explanation is given in the results section

3.5.3. Dependent Variable: Affective Commitment

Affective commitment is the positive emotional attachment that one has to their organization, including how one aligns with the company’s objectives, beliefs and values as well as how satisfied they are at work (Chanana, 2021; Meyer & Allen, 2007). We selected affective commitment as the dependant variable. Several authors pointed towards verifiable studies demonstrating that affective commitment, rather than the other two dimensions of organizational commitment, had a strong and clear relationship with workplace outcomes like turnover, employee performance and positive behaviors like assisting colleagues as well as training and sharing knowledge (Cooper-Hakim & Viswesvaran, 2005; Mathieu & Zajac, 1990a; Mercurio, 2015; Meyer et al., 2002; Solinger et al., 2008). After reviewing the literature, we noticed that many articles established affective commitment as the nucleus of organizational commitment and a

critical focal point for the direction of future research (Mercurio, 2015). It has also been shown to be the dimension that provides the most advantages to the organization, leading us to want to learn more about this type of desired behavior in employees that companies seek (Fernandez-Lores et al., 2016; Meyer et al., 2002). For these reasons, we decided to focus our research only on the affective commitment dimension of organizational commitment.

To measure the construct in our study we used Allen & Meyer's tri-dimensional model, which is composed of 24 items placed on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) (Allen & Meyer, 1990; Mousa, 2017). With the objective to accurately forecast organizational commitment today, Allen & Meyer's multi-dimensional model is one of the most popular and effective models to do so (Jaros, 2007; Mousa, 2017). In fact, the model has been tested and is deemed suitable for use at the international level (Khalip & Noraazian, 2016). Via a harmonious link between attitudinal and behavioural definitions of commitment, Allen & Meyer's model suggests that employees encounter organizational commitment through three concurrent mindsets: affective, normative and continuance commitment (Jaros, 2007; Li et al., 2013; Mercurio, 2015; Mousa, 2017). The affective commitment portion looks at how an employee connects on an emotional level with the organization, and this includes their job satisfaction (Jaros, 2007; Mousa, 2017). The continuance commitment dimension describes the cost, whether it be monetary, time, tenure, etc. that an employee must consider if they leave their job (Jaros, 2007; Mousa, 2017). The normative commitment dimension as the employee's choice, from a moral/ethical standpoint towards to the organization (Jaros, 2007; Mousa, 2017). These are all contributing factors as to whether an employee will stay or leave an organization and each have different repercussions (Tosun & Ulusoy, 2017).

In the model, there are eight items corresponding to each of the three dimensions and participants are asked to respond to their level of agreement with the statements from one (1) to seven (7) (Fu et al., 2009). Even though all three dimensions of organizational commitment are examined in this model, affective commitment is said to have the most powerful positive link (Meyer et al., 2002). Since we were only interested in examining the affective commitment portion of organizational commitment, we kept the eight items representing this dimension (Allen & Meyer, 1990). From there, we selected the four statements that were most pertinent to our study (Allen & Meyer, 1990). In addition, we ensured that the statements followed a positive light and

modified it to be all aligned, i.e., instead of asking the participants to respond to “I do not feel like ‘a part of the family’ at my organization”, we modified the statement to “I feel like ‘a part of the family’ at my organization”.

The specific questions that we asked in our survey are indicated in table 12 below. Participants were asked to respond to their level of agreement with each item individually on a Likert scale comprising eight options: Strongly Disagree; Disagree; Somewhat Disagree; Neither Agree Nor Disagree; Somewhat Agree; Agree; Strongly Agree; I prefer to not answer.

Table 12. Affective Commitment Indicators

Indicators
1. I feel like ‘a part of the family’ at my organization.
2. I feel ‘emotionally attached’ to this organization.
3. This organization has a great deal of personal meaning for me.
4. I feel a strong sense of belonging to my organization.

3.5.4. Socio-demographic Variables

Eight socio-demographic variables were asked in the survey to better understand the sample population. These questions were used to describe our sample and compare it to be able to assess the generalizability of our research findings. A comparison with the general population was done in section 3.4. Gender was examined by asking participants, “what is your gender?”. The three options to select from were (1) male; (2) female; (3) I prefer to not answer. Age was examined by asking participants, “what is your age?”. The seven options to choose from were (1) 18 to 29; (2) 30 to 39; (3) 40 to 49; (4) 50 to 59; (5) 60 and over; (7) I prefer to not answer. To look at highest level of education completed, participants were asked, “what is the highest level of education you have completed?”. The eight options to choose from were (1) None; (2) High School Diploma; (3) CEGEP Diploma; (4) Bachelor’s Degree; (5) Graduate Certificate/Diploma; (6) Master’s Degree; (7) Doctoral Degree; (8) I prefer to not answer.

Following those questions, more specific job-related questions were asked. To measure current employment type, participants were asked “what is your current employment type?”. The

six options to choose from were (1) Full-time; (2) Part-time; (3) Contract; (4) Self-employed; (5) Freelance; (6) I prefer to not answer. To measure sector of activity, participants were asked, “in which sector of activity do you work in?”. From there, participants had sixteen options to select from. Notably, (1) Arts, Media & Entertainment; (2) Consulting, (3) Customer Service; (4) Education & Research; (5) Engineering; (6) Healthcare; (7) Hospitality, Travel & Tourism; (8) Human Resources & Recruitment; (9) Information Technology & Services; (10) Insurance, Finance & Accounting Services; (11) Legal; (12) Marketing, Public Relations & Communications; (13) Public Administration; (14) Writing, Editing & Translation; (15) Other; (16) I prefer to not answer. Finally, three open-ended questions were asked, and participants could respond via a numerical value or a short sentence. To measure job tenure, participants were asked “how many years have you worked in that field?”. To measure organization tenure, participants were asked, “how many years have you worked at that organization?” To measure average total hours worked on a weekly basis, participants were asked, “on average, how many total hours do you work per week?”.

The socio-demographic variable indicators are displayed in table 13 and the socio-demographic characteristics of the sample are displayed in table 14.

Table 13. Socio-demographic Variables Indicators

Indicators
1. What is your gender?
2. What is your age?
3. What is the highest level of education you have completed?
4. What is your current employment type?
5. In which sector of activity do you work in?
6. How many years have you worked in that field?
7. How many years have you worked at the organization?
8. On average, how many total hours do you work per week?

Table 14. Socio-demographic Characteristics of the Sample

Gender	Age	Highest Level of Completed Education	Employment Type	Sector of Activity	Job Tenure, Organization Tenure and Weekly Hours Worked
Male	18-29	None	Full-Time	Arts, Media & Entertainment	Open-ended
Female	30-39	High School Diploma	Part-Time	Consulting	
I prefer to not answer	40-49	CEGEP Diploma	Contract	Customer Service	
	50-59	Bachelor's Degree	Self-employed	Education & Research	
		Graduate			
	60 and over	Certificate/Diploma	Freelance	Engineering	
	I prefer to not answer		I prefer to not answer		
		Master's Degree		Healthcare	
		Doctoral Degree		Hospitality, Travel & Tourism	
		I prefer to not answer		Human Resources & Recruitment	
				Information Technology & Services	
				Insurance, Finance & Accounting Services	
				Legal	

Marketing, Public Relations &
Communications

Public Administration

Writing, Editing & Translation

Other

I prefer to not answer

3.6. Ethical Considerations

It is necessary to consider ethics in research for moral reasons and to build trust between the researcher(s) and the participants. A strong level of trust is necessary to ensure that we obtain honest answers in the survey, further ensuring that our data corresponds to our participants' remote work experience. In the context of this study, in March 2022, HEC Montréal's Ethics Committee reviewed the objectives and the conduct of the research and approved them. We were committed to ensure that the participants had the opportunity to answer every question voluntarily and opt out of any questions that they wish to skip. In the instructions, we assured our participants that their responses would be collected and assessed confidentially. They were made aware of the objectives of the research and the survey in a detailed and clear manner.

3.7. Analysis Plan

The purpose of this section is to present the various analyses of the results. In the paragraphs that follow, we will detail the preliminary analyses carried out, as well as the research hypotheses verifications.

3.7.1. Preliminary Analyses

We conducted several preliminary analyses (descriptive, reliability, bivariate and factorial analyses) to verify the congruence between the data collected and the concepts presented in the literature. These analyses allowed us to validate their use for the verification of the research hypotheses.

3.7.1.1. Descriptive Analyses

Descriptive analyses provide an organized overview of the research findings in a sample and are used to ensure that the data collected is consistent to the means and standard deviations (Baillargeon, 2012; Garson, 2012). As such, we calculated the mean and standard deviation for each of our variables and presented them with the bivariate analyses. The mean is a primary central tendency used in research and is obtained by taking the sum of all values divided by the total number of observations made (Kaur et al., 2018). The standard deviation is the square root of the

variance (Kaur et al., 2018). It establishes the spread of values and how close each value is to the average of all the values (Kaur et al., 2018). Low standard deviation indicates that the values are close the average and high standard deviation indicates that the values are more dispersed (Kaur et al., 2018).

3.7.1.2. Reliability Analyses

Reliability analyses are used to assess the internal consistency of the items used in a survey (Bujang et al., 2018). Internal consistency signals to us that the different indicators measured correspond to the same construct (Bujang et al., 2018). To evaluate the reliability of the constructs in the survey, we will measure Cronbach's alpha (α) via IBM's SPSS software. The result of these analyses will be a number between 0 and 1, with a result closer to 1 indicating that the measure is considered reliable (Bujang et al., 2018). There is no consensus around what represents a good reliability coefficient, but a reliability coefficient around $\alpha = 0.90$ can be described as "excellent", a coefficient around $\alpha = 0.80$ as "very good", as well as a coefficient around $\alpha = 0.70$ as "adequate" (Bujang et al., 2018; Kline, 2016). A coefficient below $\alpha = 0.50$ is generally unacceptable in research, as it means that most of the variance in the scale score is linked to chance (Bujang et al., 2018; Kline, 2016).

3.7.1.3. Bivariate Analyses

A correlation is a measure of the degree of association between variables (Asuero et al., 2006; Schober & Schwarte, 2018). Usually, the term correlation is used in the context of a linear relationship between two continuous variables and expressed as a Pearson correlation coefficient, represented by (r) (Perinetti, 2019; Schober & Schwarte, 2018). Bivariate analyses are used to highlight correlations between two variables by comparing their distributions (Perinetti, 2019). Through bivariate analyses, researchers can determine the degree of significance of the relationship between the variables. Therefore, we will use the Pearson coefficient (r) to check the associate between each variable. Bivariate analyses provide a numerical result between -1 and 1 (Baillargeon, 2012; Perinetti, 2019). A result of zero or very close to zero indicates that there is no link between the two variables (Baillargeon, 2012; Perinetti, 2019). A correlation around 0.30 is positive and weak, a correlation close to 0.50 is positive and moderate, and a correlation around

0.70 is positive and strong (Baillargeon, 2012; Perinetti, 2019). Similarly, a correlation around -0.30 is negative and weak, a correlation close to -0.50 is negative and moderate, and a correlation around -0.70 is negative and strong (Baillargeon, 2012; Perinetti, 2019). Finally, a correlation of 1.00 is perfect positive correlation as the value of one variable can be predicted with certainty by knowing the value of the other variable for a given case (Asuero et al., 2006; Perinetti, 2019; Schober & Schwarte, 2018). When the coefficient is positive, it means that the two variables move in the same direction (when one increases, the other increases, and when one decreases, the other decreases), and when the coefficient is negative, it means that the two variables move in the opposite direction (when one increases, the other decreases, and vice versa) (Perinetti, 2019).

A summary of the interpretation of the correlation coefficient is shown in table 15 below.

Table 15. Interpretation of the Correlation Coefficient (r)

Correlation coefficient (r)	Interpretation
r = 0.00 – 0.10	Negligible correlation
r = 0.10 – 0.39	Weak correlation
r = 0.40 – 0.69	Moderate correlation
r = 0.70 – 0.89	Strong correlation
r = 0.90 – 1.00	Very strong correlation

Source: Schober & Schwarte, 2018

3.7.1.4. Confirmatory Factor Analyses

To ensure the construct and discriminant validity of the variables in our study before testing the research hypotheses, we performed Confirmatory Factor Analysis (CFA) using IBM's SPSS Amos 28 software (Byrne, 2010). Construct validity determines the extent to which the survey accurately measures what it is supposed to measure (Civelek, 2018). CFAs enable the researcher to check the quality of fit of the variables within their model. In our case, this would mean the quality of fit of our model when measuring iso-strain in remote workers, emotional exhaustion, and affective commitment. Discriminant validity assesses how two constructs differ (Rönkkö & Cho, 2022). Using SPSS Amos 28, we aimed to evaluate the fit of our model with our data (Civelek, 2018; Coughlan et al., 2008). Following the recommendations made by Coughlan et al., to examine the best fit to the data, we will use SPSS Amos 28 to do the chi-square test (χ^2) and

verification of the degrees of freedom, χ^2/df , RMSEA, SRMR, CFI and PNFI indices (Coughlan et al., 2008).

The chi-square test is a statistical model test that allows the researcher to check the covariance matrices of the population and the sample that was used (Tabachnick & Fidell, 2007). While there is no targeted threshold, it is recommended that the ratio between the χ^2 and the degrees of liberty be under 2.00 (Tabachnick & Fidell, 2007). Root means square error of approximation (RMSEA) is an absolute fit index that looks at discrepancies between the theorized model and the ideal model (Xia & Yang, 2019). The targeted threshold for a close fit is a value greater than 0.05 (Xia & Yang, 2019). A fair fit is a value greater than 0.08 (Xia & Yang, 2019). Standardized Root Mean Square Residual (SRMR) is an absolute fit index that looks at the mean of the standardized residuals (measurement error) of the correlations (Cangur & Ercan, 2015). An acceptable threshold is lower than 0.10 (Cangur & Ercan, 2015). A threshold below 0.05 is even better (Cangur & Ercan, 2015). The Comparative Fit Index (CFI) is an incremental fit index that analyzes the model's relative fit in relation to the theorized model (Cangur & Ercan, 2015). The CFI values range from 0 to 1 and a value above 0.95 is adequate (Cangur & Ercan, 2015). The Parsimony Normed Fit Index (PNFI) is a statistical analysis tool (Coughlan et al., 2008). It is known for providing a goodness-of-fit index by adjusting for degrees of freedom, thus, penalizing for the level of intricacy of the model (Coughlan et al., 2008).

The summary of the adjustment indicator and the targeted threshold is outlined in table 16 below. In addition, the results of these fit indices will be described in chapter 4.

Table 16. Adjustment Indicator and Targeted Threshold

Indicator Type	Adjustment Indicator Name	Description	Targeted Threshold	Source
Statistical Model Test	Chi-square (χ^2)	Looks at the covariance matrices of the population and the sample that was used.	No targeted threshold.	Tabachnick & Fidell, 2007
	Number of degrees of freedom (ddf)		Recommended ratio between the χ^2 and the degree of liberty is under 2.00.	
	Ratio between these two numbers (χ^2/ddf)			
Absolute Index	Root means square error of approximation (RMSEA) RMSEA's confidence interval	Looks at discrepancies between the theorized model and the ideal model.	Value < 0.5 for a close fit. Value < 0.08 for a fair fit.	Xia & Yang, 2019
Absolute Index	Standardized Root Mean Square Residual (SRMR)	Looks at the mean of the standardized residuals of the correlations.	0.10 is acceptable. 0.05 is even better.	Cangur & Ercan, 2015
Incremental Index	Comparative Fit Index (CFI)	Analyzes the model's relative fit in relation to the theorized model.	0.95 is adequate.	Cangur & Ercan, 2015
Parsimony Index	Parsimony Normed Fit Index (PNFI)	Acts as a goodness-of-fit index by adjusting for degrees of freedom, thus, penalizing for the level of intricacy of the model.	No targeted threshold.	Coughlan et al., 2008

3.7.2. Research Hypotheses Verification

To verify our research hypotheses, we employed structural equation analyses using IBM's SPSS Amos 28 software. Structural equation modeling (SEM) is a multivariate technique used in scientific research to look at links between one or more independent variables and one or more dependant variables (Blunch, 2013; Y. Fan et al., 2016; Tabachnick & Fidell, 2001). Its unique research objective is to observe variables that are not directly seen but inferred through indicators (Kline, 2016). To provide pragmatism, it also has a measurement error term that allocates a part of the variance of that measure that does not covary with the latent factor (Kline, 2016). SEM is often used by researchers looking at organizational behavior (Siddique et al., 2020; van Jaarsveld et al., 2010).

Since our objective is to confirm the existing knowledge already in the research, this structural equation modeling is justifiable from a research standpoint. Through this method, the objectives proposed in chapter 2 will be studied to determine whether the quantitative data we collected corresponds to this model. From there, we will be able to either confirm or refute our hypotheses.

3.7.2.1. Relational Hypotheses

Hypotheses 1a to 3 represent relational hypotheses. In addition to looking at the bivariate analyses, which will give us a first indication that these hypotheses are justified, we formally tested them via structural equation modeling (SEM) using IBM's SPSS Amos software. This model provides us with the regression coefficients for the relationships and these will allow us to verify the significance of the links. It serves multiple purposes including calculating the link between a dependant variable and one or more than one explanatory variables (Aiken & West, 1994). In addition, it demonstrates if the variables in question present a statistically significant amount of variance after taking into consideration all other variables that are added to the analysis (Aiken & West, 1994). Hypotheses 1a, 1b, 1c and 2a are confirmed if the regression coefficient is positive and significant and hypotheses 2b, 2c and 3 are confirmed if the coefficient is negative and significant.

The summary of the relational hypotheses' confirmation is presented in table 17 below.

Table 17. Relational Hypotheses Summary

Hypotheses	Confirmed if regression coefficient is
Hypothesis 1a	Negative and significant
Hypothesis 1b	Positive and significant
Hypothesis 1c	Positive and significant
Hypothesis 2a	Positive and significant
Hypothesis 2b	Negative and significant
Hypothesis 2c	Negative and significant
Hypothesis 3	Negative and significant

Note. Hypotheses were tested using structural equation modeling (SEM) using IBM's SPSS Amos software

3.7.2.2. Mediation Hypotheses

Hypotheses 4a, 4b and 4c represent mediation hypotheses. We will test these hypotheses using the AMOS bootstrap method. Used in statistical analysis, bootstrapping allows for researchers to test indirect effects in a sample distribution (Preacher & Hayes, 2008). The method allows for a resampling, where multiple sub-samples of the same size are selected at random and this process is repeated a thousand times, at minimum (Preacher & Hayes, 2008). The objective is to make inference about an estimate and check that the models used are creating accurate and reliable results when it comes to descriptive analysis, mean, correlations and regressions (Preacher & Hayes, 2008).

Chapter 4 – Results

This chapter presents the results of the analyses conducted in chapter 3. The results of the preliminary analyses (descriptive, reliability, bivariate and confirmatory factor analyses) are presented first, followed by the research hypotheses verification (relational and mediation hypotheses).

4.1. Preliminary Analyses

In this section, the results of the descriptive analyses, reliability analyses, bivariate analyses, and confirmatory factor analyses are presented and explained.

4.1.1. Descriptive Analysis

We conducted descriptive analyses to obtain the mean and standard deviation of each of our variables. Participants could opt out of answering any of our survey questions by selecting the “I prefer to not answer” option. Psychological demands, decision latitude, social support at work and emotional exhaustion were all rated on a scale of 1 to 4. Psychological demands had a mean of 2.79 and a standard deviation of 0.61. Decision latitude had a mean of 3.03 and a standard deviation of 0.50. Social support at work had a mean of 3.45 and a standard deviation of 0.48. Emotional exhaustion had a mean of 2.72 and a standard deviation of 0.80. Rated on a scale of 1 to 7, affective commitment had a mean of 4.67 and a standard deviation of 1.55. Days worked remotely was rated on a scale of 0 to 7. We removed the results of participants that indicated that they worked 0 days remotely as their results are not pertinent to our study. From there, the scale was modified to 1 to 7. Our survey results showed a mean of 4.35 and a standard deviation of 1.29. Gender was coded 1 for male and 2 for female and the mean was 1.59. Years in the field had a mean of 8.40 and a standard deviation of 9.76. Organizational tenure had a mean of 5.06 and a standard deviation of 8.60. Weekly hours worked had a mean of 39.93 and a standard deviation of 11.17. Table 18 below provides a summary of the results of the mean and standard deviation.

Age and highest level of education are ordinal questions and working industry is a categorical question, so it is irrelevant to calculate the mean and standard deviation for these

variables. However, to get an idea of the characteristics of the sample, we outlined the frequencies for these variables in tables 19, 20 and 21 below.

Table 18. Descriptive Statistics

Variable	Mean	Standard Deviation
1. Psychological Demands	2.79	0.61
2. Decision Latitude	3.33	0.08
3. Social Support at Work	3.45	0.48
4. Emotional Exhaustion	2.72	0.8
5. Affective Commitment	4.67	1.55
6. Days Worked Remotely	4.35	1.29
7. Gender	1.59	0.49
10. Years in the Field	8.4	9.76
11. Organizational Tenure	5.06	8.6
12. Weekly Hours Worked	39.93	11.17

Note. N = 188 participants

Table 19. Ordinal Variable Frequencies: Age

	Freq.	Percent	Valid Percent	Cumu. Freq.	Cumu. Rel. Freq.
Age	18 to 29	114	55.34%	114	55.88%
	30 to 39	39	18.93%	153	75.00%
	40 to 39	18	8.74%	57	83.82%
	50 to 59	28	13.59%	46	97.55%
	60 and over	5	2.43%	33	100.00%
Subtotal	204	99%	100.00%		
I prefer to not answer	2	0.97%			
Total	206	100%			

Table 20. Ordinal Variable Frequencies: Highest Level of Education

		Freq.	Percent	Valid Percent	Cumu. Freq.	Cumu. Rel. Freq.
Highest Level of Completed Education	None	0	0%	0.00%	0	0.00%
	High School	4	2%	1.95%	4	1.95%
	CEGEP	16	8%	7.80%	20	9.76%
	Bachelor's Degree	111	54%	54.15%	127	63.90%
	Graduate					
	Certificate/Diploma	32	16%	15.61%	143	79.51%
	Master's Degree	38	18%	18.54%	70	98.05%
	Doctoral Degree	4	2%	1.95%	42	100.00%
Subtotal		205	99.51%	100.00%		
I prefer to not answer		1	0.49%			
Total		206	100%			

Table 21. Ordinal Variable Frequencies: Sector of Activity

		Freq.	Percent	Valid Percent	Cumu. Freq.	Cumu. Rel. Freq.
Sector of Activity	Arts, Media & Entertainment	4	1.94%	1.95%	4	1.95%
	Consulting	7	3.40%	3.41%	11	5.37%
	Customer Service	2	0.97%	0.98%	9	6.34%
	Education & Research	10	4.85%	4.88%	12	11.22%
	Engineering	13	6.31%	6.34%	23	17.56%
	Healthcare	11	5.34%	5.37%	24	22.93%
	Hospitality, Travel & Tourism	2	0.97%	0.98%	13	23.90%
	Human Resources & Recruitment	56	27.18%	27.32%	58	51.22%
	Information Technology & Services	21	10.19%	10.24%	77	61.46%
	Insurance, Finance & Accounting Services	26	12.62%	12.68%	47	74.15%
	Legal	4	1.94%	1.95%	30	76.10%
	Marketing, Public Relations & Communications	10	4.85%	4.88%	14	80.98%
	Public Administration	9	4.37%	4.39%	19	85.37%
	Writing, Editing & Translation	4	1.94%	1.95%	13	87.32%
	Other	26	12.62%	12.68%	30	100.00%
	Subtotal		205	99.51%	100.00%	
I prefer to not answer		1	0.49%			
Total		206	100.00%			

4.1.2. Reliability Analysis

Reliability analyses were conducted to verify the internal consistency of the measurement scales used in our study. The Cronbach's alpha is used to determine the internal consistency of a scale (Bujang et al., 2018; Tavakol & Dennick, 2011). The Cronbach alpha is given as a number between 0 and 1, with a result of 1 considered to be very reliable (Bujang et al., 2018; Tavakol & Dennick, 2011). The results of our analyses show excellent coefficients for the measure of affective commitment ($\alpha = 0.92$). As indicated by Bujang et al. and Kline, a correlation coefficient around $\alpha = 0.90$ suggests that the internal consistency of the measure is very strong (Bujang et al., 2018; Kline, 2016). Additionally, the results show very good coefficients for the measures of psychological demands ($\alpha = 0.73$), social support at work ($\alpha = 0.81$) and emotional exhaustion ($\alpha = 0.73$), indicating strong internal consistency of the measure (Bujang et al., 2018; Kline, 2016). Lastly, the results of the analysis show low internal consistency for the decision latitude measure ($\alpha = 0.51$), however it is still acceptable since it is above 0.50 (Bujang et al., 2018; Kline, 2016).

A summary of the results of the Cronbach's alpha (α) for each of the measurement scaled used is presented in Table 22 below.

Table 22. Reliability Analysis

Scale	Cronbach Alphas (α)
Psychological Demands	0.73
Decision Latitude	0.51
Social Support at Work	0.81
Emotional Exhaustion	0.73
Affective Commitment	0.92

Note. N = 188 participants

4.1.3. Bivariable Analysis

Bivariate analyses are conducted to exhibit the degree of association or correlation between two variables by looking at their distributions (Perinetti, 2019). With bivariate analyses, we can

establish the degree of significance, from 0 to 1, of two variables and their distributions via the Pearson coefficient (r) (Baillargeon, 2012; Perinetti, 2019).

Looking at the hypotheses established in chapter 2, hypothesis 1a suggests that there is a negative relationship between psychological demands and affective commitment. As mentioned earlier, a correlation of zero or very close to it establishes no link between the two variables (Baillargeon, 2012; Perinetti, 2019). Looking at our results, we can see that the correlation between psychological demands and affective commitment is very weak, almost zero ($r = 0.05$), and therefore not significant. This is a first indication that a direct positive relationship between these two variables is unlikely. On the other hand, hypothesis 1b proposes that there is a positive relationship between decision latitude and affective commitment. A correlation around 0.30 is deemed positive and weak (Baillargeon, 2012; Perinetti, 2019). Looking at our results, we can see that the correlation between decision latitude and affective commitment is weak ($r = 0.27^{**}$) and significant. This demonstrates that a direct positive relationship between these two variables is likely. Hypothesis 1c proposes that there is a positive relationship between social support at work and affective commitment. A correlation close to 0.50 is considered positive and moderate (Baillargeon, 2012; Perinetti, 2019). The correlation is moderate ($r = 0.48^{**}$) and significant. This indicates that a direct positive relationship between these two variables is expected. Hypothesis 2a proposes that psychological demands are positively linked to emotional exhaustion. Looking at the results, the correlation is moderate ($r = 0.46^{**}$) and significant. This explains that a direct positive relationship between these two variables is probable. Hypothesis 2b states that decision latitude is negatively linked to emotional exhaustion. The results show that the correlation is very weak, almost zero ($r = -0.04$) and not significant. This is a first indication that a direct negative relationship between these two variables is unlikely. Hypothesis 2c indicates that social support at work is negatively linked to emotional exhaustion. Our results show that the correlation is moderate and significant ($r = -0.40^{**}$). As such, a direct negative link between the two variables is probable. Finally, hypothesis 3 states that there is a negative link between emotional exhaustion and affective commitment. The results show that the correlation is moderate ($r = -0.40^{**}$) and significant. This means that a direct negative relationship between these two variables is anticipated.

A summary of the bivariate analyses obtained are presented in Table 23 below.

Table 23. Pearson's Correlation Coefficients

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. PD	1										
2. DL	0.225**	1									
3. SS	-0.140	0.052	1								
4. EE	0.455**	-0.042	-0.397**	1							
5. AC	0.053	0.265**	0.483**	-0.399**	1						
6. WDWR	0.048	0.053	0.047	-0.012	-0.039	1					
7. Gender	0.016	-0.236**	-0.045	0.114	-0.079	0.056	1				
8. Age	0.143	0.292**	-0.071	-0.074	0.195**	0.018	0.010	1			
9. Education	0.125	0.359**	-0.154*	0.003	-0.006	0.082	-0.085	0.158*	1		
10. ST	0.134	0.316**	0.002	-0.052	0.181*	0.049	-0.022	0.853**	0.103	1	
11. OT	0.059	0.180*	-0.094	-0.088	0.137	0.052	-0.057	0.704**	0.084	0.768**	1
12. WHW	0.424**	0.315**	-0.103	0.277**	-0.013	0.314**	-0.076	0.114	0.166*	0.115	-0.007

Notes. N = 188. ** p < 0.01; * p < 0.05. PD = Psychological Demands; DL = Decision Latitude; SS = Social Support at Work; EE = Emotional Exhaustion; AC = Affective Commitment; WDWR = Weekly Days Worked Remotely ST = Sector Tenure; OT = Organization Tenure; WHW = Weekly Hours Worked.

4.1.4. Confirmatory Factor Analysis

Confirmatory Factor Analysis is used to conduct comparisons of different theoretical models to determine the one that best fits the empirical data collected during the survey (Roussel, 2005). As such, construct validity tests examine the variable's discriminant and convergent validity are looked at in a model (Hoyle, 2014). A construct's validity is considered discriminant when the results suggest that the indicators of apparent distinct constructs are not strongly correlated (Hoyle, 2014). A construct's validity is considered convergent when the different indicators connect appropriately on the construct (Hoyle, 2014).

We first built a structural model in SPSS AMOS with every indicator loading on their respective theoretical variable to confirm the factorial structure of the data to the theoretical model. This first structural model is depicted in figure 10. The global fit indices for this structural model were the following: $\chi^2 = 484.08$, $\chi^2/df = 2.00$, RMSEA = 0.07 [0.06 ; 0.08], SRMR = 0.09, CFI = 0.86 and PNFI = 0.66 Table 25 below presents the factor loadings of the indicators on their respective latent variables. While examining the factor loadings, we realized that the relation of some of the indicators to their posited latent variable were weak and sought to improve the model by removing problematic indicators. Figure 10 below represents the initial structural model.

Figure 10. Initial Structural Model

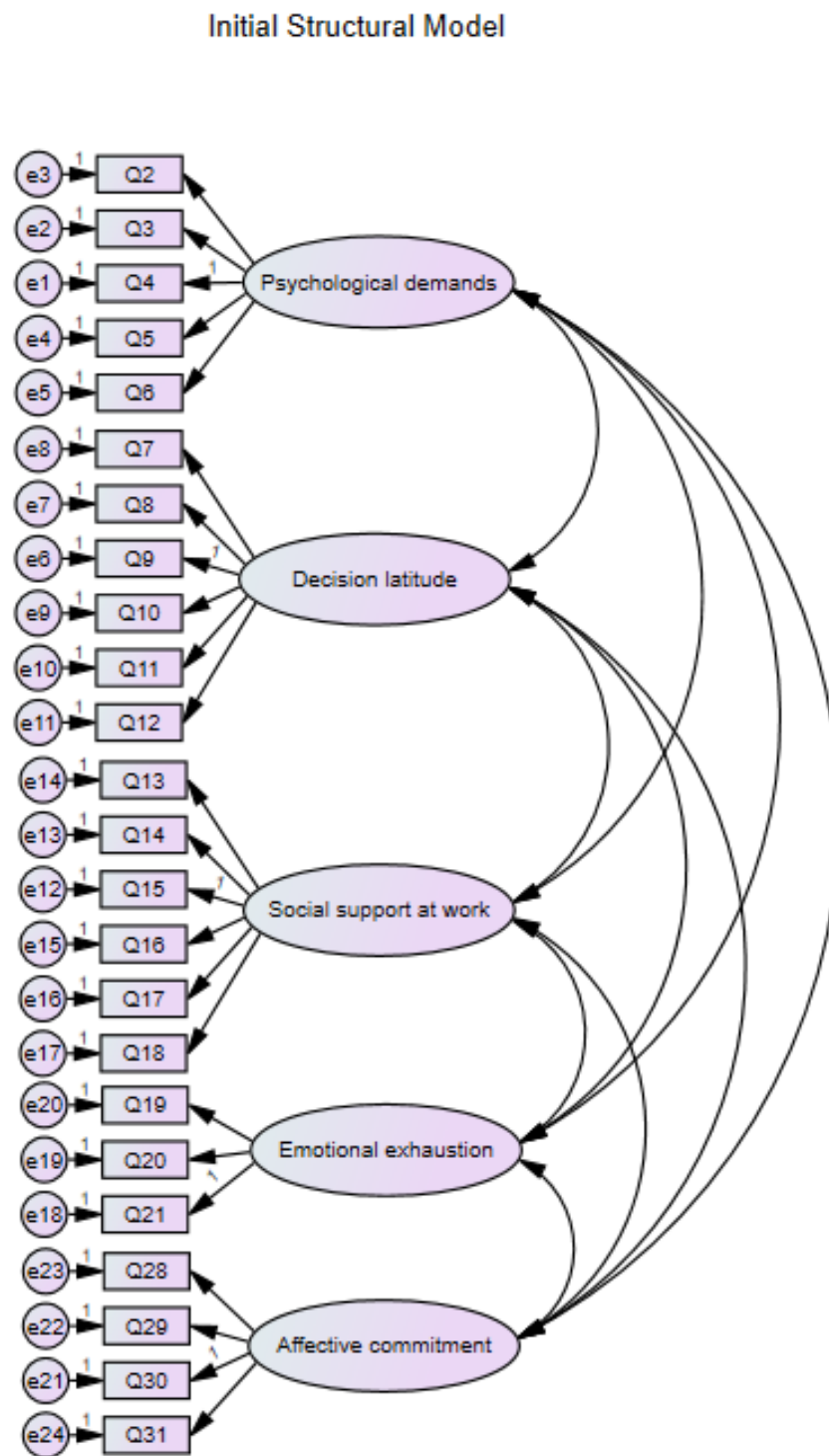


Table 24. Factor Loadings of the Initial Model

Indicator	Variable	Factor Loading
Q2_WorkFast	Psychological Demands	0.56
Q3_WorkIntensity	Psychological Demands	0.66
Q4_WorkEffort	Psychological Demands	0.78
Q5_ConflictingDemands	Psychological Demands	0.43
Q6_EnoughTime	Psychological Demands	0.58
Q7_LearningNewThings	Decision Latitude	0.38
Q8_SkillLevel	Decision Latitude	0.49
Q9_RequiresInitiative	Decision Latitude	0.51
Q10_RepetitiveWork	Decision Latitude	0.51
Q11_HowToDoTheWork	Decision Latitude	0.42
Q12_WhatToDoAtWork	Decision Latitude	0.50
Q13_PleasantAtmosphere	Social Support at Work	0.58
Q14_RelationshipAtWork	Social Support at Work	0.84
Q15_CoworkersSupport	Social Support at Work	0.72
Q16_CoworkersHelpful	Social Support at Work	0.56
Q17_RelationshipWithSupervisors	Social Support at Work	0.56
Q18_FriendlyCoworkers	Social Support at Work	0.70
Q19_EmotionallyDrained	Emotional Exhaustion	0.83
Q20_Fatigued	Emotional Exhaustion	0.71
Q21_StrainWorkingWithOthers	Emotional Exhaustion	0.39
Q28_PartOfTheFamily	Affective Commitment	0.74
Q29_EmotionalAttachment	Affective Commitment	0.89
Q30_PersonalMeaning	Affective Commitment	0.90
Q31_SenseOfBelonging	Affective Commitment	0.90

First, we investigated whether the decision latitude factor would be better represented with five indicators instead of six. Our objective was to improve the factor loading to get it as close to

0.5 as possible. As such, we removed question 7, “do you have the possibility of learning new things through your work?” because the factor loading was 0.38 and we are looking for a factor loading as close to 0.5 and ideally, above 0.5. All the other indicators remained. The impact of this change meant that all the factor loadings slightly changed (small increase or small decrease) to the desired 0.5 amount. Table 30 in appendix 2 shows the factor loadings after this change to the model.

To continue improving the overall representation of the model, and to get the factor loadings as close to 0.5 as possible, we continue to review our options. So, in a second step, we looked at the decision latitude factor variable represented by question 11, “do you have the choice in deciding HOW you do your work?”, we noticed that the factor loading was 0.43. We decided to remove it since we are striving for a factor loading as close to 0.5. All other indicators remained the same. The impact of this change meant that all the factor loadings slightly changed (with a small increase or a small decrease) to the desired 0.5 amount. Table 31 in appendix 2 shows the factor loadings after this change to the model.

While the remaining four indicators under the decision latitude variables were getting closer to the 0.5 factor loading, there was still room for improvement. As a third step, we chose to remove question 12, “do you have the choice in deciding WHAT you do at work?” as we noticed that the factor loading was 0.46. All other indicators remained the same. The impact of this change meant that all the factor loadings slightly changed (small increase or small decrease) to the desired 0.5 amount. Table 32 in appendix 2 shows the factor loadings after this change to the model.

Then, we looked at how we can continue to improve the factor loadings, specifically for the psychological demands’ variable. We made the decision to remove question 5 “does your work involve conflicting demands” since the factor loading was 0.43. All other indicators remained the same. The impact of this change meant that all the factor loadings slightly changed (with a small increase or a small decrease) to the desired 0.5 amount. Table 33 in appendix 2 shows the factor loadings after this change to the model.

Finally, we aimed to remove the lowest overall factor loading to improve the complete model. As such, we removed question 21 under the emotional exhaustion variable, “working with people all day is really a strain for me”. The impact of this change meant that all the factor loadings

slightly changed (small increase or small decrease) to the desired 0.5 amount. Table 25 below presents the factor loadings at the end of this process.

Table 25. Factor Loadings of the Final Structural Model with Removed Indicators

Indicator	Variable	Factor Loading
Q2_WorkFast	Psychological Demands	0.59
Q3_WorkIntensity	Psychological Demands	0.69
Q4_WorkEffort	Psychological Demands	0.78
Q6_EnoughTime	Psychological Demands	0.55
Q8_SkillLevel	Decision Latitude	0.59
Q9_RequiresInitiative	Decision Latitude	0.49
Q10_RepetitiveWork	Decision Latitude	0.47
Q13_PleasantAtmosphere	Social Support at Work	0.59
Q14_RelationshipAtWork	Social Support at Work	0.85
Q15_CoworkersSupport	Social Support at Work	0.72
Q16_CoworkersHelpful	Social Support at Work	0.56
Q17_RelationshipWithSupervisors	Social Support at Work	0.56
Q18_FriendlyCoworkers	Social Support at Work	0.70
Q19_EmotionallyDrained	Emotional Exhaustion	0.87
Q20_Fatigued	Emotional Exhaustion	0.67
Q28_PartOfTheFamily	Affective Commitment	0.74
Q29_EmotionalAttachment	Affective Commitment	0.89
Q30_PersonalMeaning	Affective Commitment	0.91
Q31_SenseOfBelonging	Affective Commitment	0.91

With the problematic indicators removed, two alternative models were compared to the theoretical model presented in chapter 3. All fit indices for these models are presented in table 26, and each model is described below. Model 1 is the theoretical model as presented in Chapter 3. It is composed of five factors. In this model, the first factor, psychological demands are measured by

the four remaining indicators of the measure. The second factor, decision latitude is measured by three indicators after removal of three other problematic indicators. The third factor, social support at work is measured by six indicators. The fourth factor, emotional exhaustion is measured by two indicators after removal of an indicator as indicated above. The fifth factor, affective commitment is measured by four indicators. The fit indices for this model were as follows and indicated acceptable fit to the data: $\chi^2 = 319.94$, $\chi^2/df = 2.24$, RMSEA = 0.08 [0.07 ; 0.09], SRMR = 0.08, CFI = 0.89 and PNFI = 0.68.

In Model 2, we wanted to know if the respondents made an aggregated perception of iso-strain, so we merged the three dimensions into a single latent variable in the model. The following fit indices were present in model 2: $\chi^2 = 599.10$, $df = 149$, $\chi^2/df = 4.02$, RMSEA = 0.13 [0.12 ; 0.14], SRMR = 0.14, CFI = 0.71 and PNFI = 0.57. Overall, these fit indices were poorer than those in Model 1. A chi-squared difference test between model 1 and model 2 ($\Delta\chi^2 = 279.16$, $\Delta df = 6$, $p < 0.001$) demonstrates that model 1 better explains the data than model 2 (Kline, 2016).

In Model 3, we wanted to know if respondents made an aggregated perception of emotional exhaustion and commitment, so we merged these two variables into a single latent variable in the model. In this model, we kept the three dimensions of iso-strain separate, just as in our theoretical model (model 1) because model 2 had shown they were best represented as such. The fit indices for this model ($\chi^2 = 446.73$, $df = 147$, $\chi^2/df = 3.04$, RMSEA = 0.10 [0.09; 0.12], SRMR = 0.11, CFI = .081, PNFI = 0.64) were better than our model 2, but still poorer than our theoretical Model 1. A chi-squared difference test between model 1 and model 3 ($\Delta\chi^2 = 126.79$, $\Delta df = 4$, $p < 0.001$) show that model 1 better explains the data compared to model 3 (Kline, 2016).

We also tried computing these three models before removing problematic indicators in case there was a problem with the global model fit rather than specific indicators. In this scenario, the Model 2 did not converge, and the fit indices of the Model 3 with all the original indicators ($\chi^2 = 631.39$, $df = 246$, $\chi^2/df = 2.57$, RMSEA = 0.09 [0.18 ; 0.10], SRMR = 0.11, CFI = 0.78 and PNFI = 0.61) were worse than those of Model 1.

Having compared these three measurement models, we continued our analyses with Model 1, since it had the best fit to the data.

Table 26. Structural Model Fit Indices

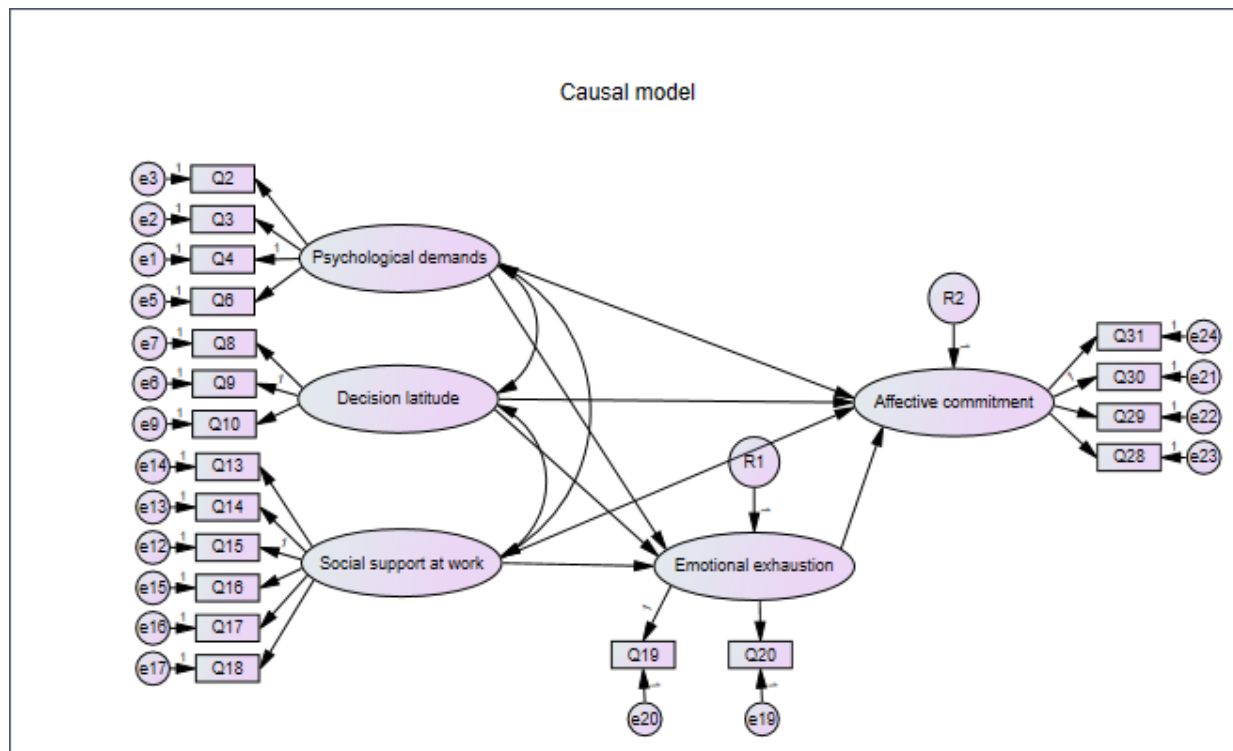
Model	χ^2	df	χ^2/df	RMSEA	SRMR	CFI	PNFI	Model comparison	$\Delta\chi^2$	Δdf
Model 1	319.94	143	2.24	0.08 [0.07 ; 0.09]	0.08	0.89	0.68	Model 1 vs. Model 2	279.16	6
Model 2	599.1	149	4.02	0.13 [0.12 ; 0.14]	0.14	0.71	0.57	-	-	-
Model 3	446.73	0.147	3.04	0.10 [0.09 ; 0.12]	0.11	0.81	0.64	Model 1 vs. Model 3	126.79	4

Notes. N = 188. χ^2 = chi-carré of the model; df = degrees of freedom; RMSEA = Root mean square error of approximation; SRMR = Standardized root mean square residual; CFI = Comparative fit index; PNFI = Parsimony normed fit index; $\Delta\chi^2$ = chi-squared difference; Δdf = change in degrees of freedom.

4.2. Research Hypotheses Verification

In this section, we present the analyses conducted to test our research hypotheses. We first present the results of our relational hypotheses verification (hypotheses 1a to 3), followed by the results of our mediation hypotheses verification (hypotheses 4a to 4c). Figure 11 below represents the causal model.

Figure 11. Causal Model



4.2.1. Relational Hypotheses Verification

Hypotheses 1a to 3 can be verified using our structural model 1.

Hypothesis 1a proposed that psychological demands are negatively linked to affective commitment. Our results showed that the relationship between psychological demands and affective commitment is positive and significant ($\beta = 0.38 *$; $p < 0.05$). Therefore, hypothesis 1a is rejected.

Hypothesis 1b suggested that decision latitude is positively linked to affective commitment. According to our research, the link between decision latitude and affective commitment is positive and significant ($\beta = 0.27 *$; $p < 0.05$). As such, hypothesis 1b is accepted.

Hypothesis 1c stated that social support at work is positively linked to affective commitment. Our results showed that the relationship between social support at work and affective commitment is positive and significant ($\beta = 0.28 **$; $p < 0.01$). Thus, hypothesis 1c is accepted.

Hypothesis 2a proposed that psychological demands are positively linked to emotional exhaustion. According to our research, the link between psychological demands and emotional exhaustion is positive and significant ($\beta = 0.68$ ***; $p < 0.001$). Therefore, hypothesis 2a is accepted.

Hypothesis 2b suggested that decision latitude is negatively linked to emotional exhaustion. While our results showed that the relationship between decision latitude and emotional exhaustion is negative, it is not statistically significant ($\beta = -0.19$; ns). As such, hypothesis 2b is rejected.

Hypothesis 2c stated that social support at work is negatively linked to emotional exhaustion. According to our research, the link between social support at work and emotional exhaustion is negative and significant ($\beta = -0.34$ ***; $p < 0.001$). Therefore, hypothesis 2c is accepted.

Hypothesis 3 proposed that emotional exhaustion is negatively linked to affective commitment. Our results showed that the relationship between emotional exhaustion and affective commitment is negative and significant ($\beta = -0.56$ ***; $p < 0.001$). Thus, hypothesis 3 is accepted.

The summarized results and conclusions are presented in Table 27 below.

Table 27. Results of the Regression Coefficients from the Structural Model

Hypothesis	Standardized Beta (β)	Conclusion
H1a (PD (-) → AC)	$\beta = 0.38$ *	H1a is rejected.
H1b (DL (+) → AC)	$\beta = 0.27$ *	H1b is accepted.
H1c (SS (+) → AC)	$\beta = 0.28$ **	H1c is accepted.
H2a (PD (+) → EE)	$\beta = 0.68$ ***	H2a is accepted.
H2b (DL (-) → EE)	$\beta = -0.19$	H2b is rejected.
H2c (SS (-) → EE)	$\beta = -0.34$ ***	H2c is accepted.
H3 (EE (-) → AC)	$\beta = -0.56$ ***	H3 is accepted.

Notes. PD = Psychological Demands; DL = Decision Latitude; SS = Social Support; EE = Emotional Exhaustion; AC = Affective Commitment.

4.2.2. Mediation Hypotheses Verification

We estimated the indirect effect of emotional exhaustion through different variables using the bootstrap method. The bootstrap method is a statistical procedure that creates re-sampling, allowing multiple subsamples to be drawn (Byrne, 2010). From there, empirical data can be used to look at a variety of parameters including the indirect effect between variables and providing a confidence interval (Byrne, 2010). We used SPSS Amos 28 to perform resampling. First, we estimated the indirect effect of emotional exhaustion through psychological demands and affective commitment (hypothesis 4a). Then, we estimated the indirect effect of emotional exhaustion via the decision latitude and affective commitment variables (hypothesis 4b). Finally, we estimated the indirect effect of emotional exhaustion through social support at work and affective commitment (hypothesis 4c).

Hypothesis 4a proposed that emotional exhaustion mediates the negative relationship between psychological demands and affective commitment. According to our structural model, there is a negative indirect effect between psychological demands and affective commitment (-0.38). The confidence interval at 95% is [-0.91 ; -0.14]. There is a direct positive relationship between psychological demands and affective commitment. This means that as an employee's psychological demands increases, so does their affective commitment, which is counterintuitive. Normally, to determine whether a mediation relationship is partial or total, one must examine the direct relationship. If the direct relationship exists, the mediation is partial, if the direct relationship does not exist, the mediation is total. In the case of hypothesis 4a, the direct relationship exists, but it goes in the opposite direction of what is expected. Therefore, hypothesis 4a is an inconsistent mediation, as it can have a double effect (positive and negative) on affective commitment. As such, hypothesis 4a is rejected. More details supporting this hypothesis verification are provided in section 5.2.4.1..

Hypothesis 4b suggested that emotional exhaustion mediates the positive link between decision latitude and affective commitment. According to our structural model, the indirect effect between decision latitude and affective commitment is positive (0.11). In addition, the confidence interval at 95% is [-0.05 ; 0.44]. Since the confidence interval includes zero, we can conclude that there is no indirect effect between these variables. As such, hypothesis 4b is accepted.

Hypothesis 4c stated that emotional exhaustion mediates the positive relationship between social support at work and affective commitment. According to our structural model, there is a positive indirect effect between social support at work and affective commitment (0.19). The confidence interval at 95% is [0.05 ; 0.42]). Thus, hypothesis 4c is accepted.

The summarized results of the indirect effect estimates, with their confidence intervals are presented in Table 28 below.

Table 28. Indirect Effects Coefficients and Bootstrap Analyses

Hypothesis	Indirect Effect	Confidence Intervals (95%)	Conclusion
H4a (PD → EE → AC)	-0.38	[-0.91 ; -0.14]	Indirect effect
H4b (DL → EE → AC)	0.11	[-0.05 ; 0.44]	No indirect effect
H4c (SS → EE → AC)	0.19	[0.05 ; 0.42]	Indirect effect

Chapter 5 – Discussion

In this chapter, we present an interpretation of the different results obtained in the previous chapter. First, we review the objectives of this thesis. Then, we interpret the results in relation to the hypotheses. After, we look at the theoretical and practical implications of this research. Then, we look at the limits and make recommendations for future research avenues. Finally, we discuss the strengths of the research we conducted.

5.1. Reminder of the Thesis Objectives

This thesis had two main objectives: (1) to explore whether iso-strain in remote workers negatively impacts affective commitment via an increase in employee emotional exhaustion in the context of the COVID-19 pandemic; and (2) to verify the mediating effect of emotional exhaustion on psychological demands, decision latitude, social support at work as well as affective commitment.

As revealed in our literature review, remote work has existed for several decades (Vyas & Butakhieo, 2021). However, there is a lack of research examining the potential implication of iso-strain, emotional exhaustion, and affective commitment on the remote work population in the context of the COVID-19 pandemic. Therefore, our objectives were motivated by the desire to learn more about the relationship between these three variables within the COVID-19 context. In addition, we hope that the results of this thesis will not only bring forth an open discussion in organizations on the impact of some components of iso-strain on emotional exhaustion and affective commitment in remote employees, but also encourage other curious researchers to further explore the links between these concepts.

5.2. Interpretation of the Results

In this section, we summarize the results obtained in our analyses of each of our research hypotheses. To make sense of these results, we formulate interpretations of the significance of the relationships observed.

Table 29 summarizes the results of the research hypotheses tested in this thesis, indicating whether each was accepted or rejected. Each of these results is discussed in the sections below.

Table 29. Summary of the Results

	Hypothesis	Result
H1a	Psychological demands are negatively linked to affective commitment.	Rejected
H1b	Decision latitude is positively linked to affective commitment.	Accepted
H1c	Social support at work is positively linked to affective commitment.	Accepted
H2a	Psychological demands are positively linked to emotional exhaustion.	Accepted
H2b	Decision latitude is negatively linked to emotional exhaustion.	Rejected
H2c	Social support at work is negatively linked to emotional exhaustion.	Accepted
H3	Emotional exhaustion is negatively linked to affective commitment.	Accepted
H4a	Emotional exhaustion mediates the negative relationship between psychological demands and affective commitment.	Rejected
H4b	Emotional exhaustion mediates the positive relationship between decision latitude and affective commitment.	Accepted
H4c	Emotional exhaustion mediates the positive relationship between social support at work and affective commitment.	Accepted

5.2.1. Relationship Between the Independent Variables and the Dependant Variables

Our first three hypotheses surrounded the individual effect of psychological demands, decision latitude and social support at work on affective commitment.

5.2.1.1. Relationship Between the Psychological Demands and Affective Commitment

Hypothesis 1a was related to the relationship between psychological demands and affective commitment. It was proposed that psychological demands are negatively linked to affective commitment. This hypothesis was established based on Karasek's Demand-Control-Person model

which postulates that job demands collaborate to estimate strain (Perry et al., 2018). Job demands are known as the physical, social, and organizational elements of the job that need consistent physical or cognitive effort (Koon & Pun, 2018). Karasek and Theorell's iso-strain conjecture hypothesizes that those who encounter high job demands combined with low decision latitude and low social support will undergo the worst health repercussions (Höckerberg et al., 2010; S. Kim et al., 2021; Perry et al., 2018). A working professional can experience strain when his resources are weakened, making it more challenging for him to meet the job demands and attain the goals he set for himself (Perry et al., 2018). Affective commitment is known as the positive emotional attachment that an employee has to their job, and it is related to the organization's objectives, beliefs and values and their own satisfaction at work (Chanana, 2021).

The results we obtained via the regression coefficient did not match our hypothesis. In chapter 2, we proposed that psychological demands are negatively linked to affective commitment. However, the results of our regression coefficient revealed that the relationship between these two variables is positive and significant ($\beta = 0.38 *$; $p < 0.05$). This is unexpected as a previous study done by Balogun et al. also hypothesized that psychological demands are negatively linked to affective commitment (Balogun et al., 2013).

The link between affective commitment and job demands is examined in Audenaert et al. (2019). In workplaces where employees are expected to contribute more, the motivation is higher since the job demands energize the employee to perform and put in their best efforts (Audenaert et al., 2019; Karasek et al., 1979). Audenaert's article and other similar articles postulate that high affective commitment is achieved when the employee's expected job contributions are high (Audenaert et al., 2019; Hom et al., 2009; Jiwen Song et al., 2009; Tsui et al., 1997). The unexpected results we obtained could be explained by the fact that our remote worker sample may be more engaged and therefore have more pressure at work. Therefore, this would represent reverse causality, meaning affective commitment is positively linked to psychological demands. This cannot be verified in our cross-sectional design. However, it could be verified through a future study.

Moreover, as indicated by the JDC model, it is also possible that the demands themselves are not harmful. Rather, it would be the interaction between psychological demands and decision

latitude in relation to affective commitment that is significant (Åhlin et al., 2018; A. B. Bakker et al., 2010). As such, individuals who are experiencing high job demands are also experiencing a great deal of professional achievement while carrying out their lifestyle (Hervieux et al., 2022; Karasek et al., 1979; Kouvonen et al., 2013). Future analysis and studies are needed to better understand the relationship between job demands and affective commitment.

5.2.1.2. Relationship Between Decision Latitude and Affective Commitment

Hypothesis 1b pertained to the relationship between decision latitude and affective commitment. It was proposed that decision latitude is positively linked to affective commitment. This hypothesis was established based on Karasek and Theorell's 1990 job stress model, the Job-Demand-Control-Support model and Demerouti et al.'s 2001 job stress model, the Job Demand-Resources model (Balogun et al., 2013). Both models include the important concept of job resources, which is the autonomy or control that an individual has in their workplace (Balogun et al., 2013). The degree to which a working professional has control in choosing their schedule, tasks and how they execute them depends a lot on their manager (Balogun et al., 2013; O'Driscoll & Cooper, 2002). Previous studies that examined the link between decision latitude and affective commitment observed that there is a positive link between decision latitude and affective commitment (Balogun et al., 2013; Langkamer & Ervin, 2008). Therefore, as an employee has more decision latitude, they are likely to be more affectively committed to the organization (Balogun et al., 2013; Langkamer & Ervin, 2008). The results we obtained via the regression coefficient matched our hypothesis. The results of our regression coefficient show that the link between these two variables is positive and significant ($\beta = 0.27 *$; $p < 0.05$).

5.2.1.3. Relationship Between Social Support at Work and Affective Commitment

Hypothesis 1c was attributed to the relationship between social support at work and affective commitment. It was proposed that social support at work is positively linked to affective commitment. Social support from others at work, whether it be peers or leaders, can lead to stronger bonds, trust, and overall satisfaction (Jolly et al., 2021; Stan & Vîrgă, 2021). Research

proposes that perceived organizational support (POS) leads employees to believe that their organization cares about their well-being and values their contribution (Eisenberger et al., 1986; Vandenberghe et al., 2004). As a result, the employee acts in a positive way by becoming more committed to their organization, a concept known as the reciprocity norm (Gouldner, 1960; Vandenberghe et al., 2004). Past research has found a positive link between social support at work and affective commitment (Allen & Meyer, 1990; Ruiller & van der Heijden, 2014; Schmidt, 2007; Stan & Vîrgă, 2021; Vandenberghe et al., 2004). The results we obtained via the regression coefficient matched our hypothesis. The results of our regression coefficient showed that the link between these two variables is positive and significant ($\beta = 0.28^{**}$; $p < 0.01$). Our study thus shows that when an employee is adequately supported in the workplace, they are more likely to be emotionally attached to it (Stan & Vîrgă, 2021).

5.2.2. Relationship Between the Independent Variables and the Mediating Variable

Our next three hypotheses surrounded the individual effect of psychological demands, decision latitude and social support at work on emotional exhaustion.

5.2.2.1. Relationship Between the Psychological Demands and Emotional Exhaustion

Hypothesis 2a was attributed to the relationship between the psychological demands and emotional exhaustion. It was proposed that psychological demands are positively linked to emotional exhaustion. Psychological demands are the elements that make up one's job, whether it consists of physical, interactive, or organizational demands (Demerouti et al., 2001; Koon & Pun, 2018). The outcome of such demands consists of elevated stress on the employee (Demerouti et al., 2001; Koon & Pun, 2018). While job demands vary depending on the role and field of work, it can include high pressure and an abundance of tasks to be completed while interacting with stakeholders (A. B. Bakker et al., 2010; Koon & Pun, 2018). Emotional exhaustion occurs when an individual feels drained of the emotional and mental energy that is required to complete their tasks (Koon & Pun, 2018). In the long-term, if an employee experiences high job demands, they may experience high job strain, and feel emotionally tired when it comes to performing their best

at work (Koon & Pun, 2018; van Jaarsveld et al., 2010). Past research has found a positive link between psychological demands and emotional exhaustion (Koon & Pun, 2018; Kim et al., 2021; Melamed et al., 2010). The results we obtained via the regression coefficient matched our hypothesis. The results of our regression coefficient showed that the link between these two variables is positive and significant ($\beta = 0.68$ ***; $p < 0.001$). That is, our study confirms that when an employee experiences an elevated amount of job demands, they are more likely to feel emotional exhaustion (Koon & Pun, 2018; Kim et al., 2021; Melamed et al., 2010).

5.2.2.2. Relationship Between Decision Latitude and Emotional Exhaustion

Hypothesis 2b was attributed to the relationship between decision latitude and emotional exhaustion. It was proposed that decision latitude is negatively linked to emotional exhaustion. Decision latitude is defined as the aspects of the job that permit an individual to make choices on their own and control certain aspects of their work, allowing them to have some autonomy (Kowalski et al., 2010; Rhéaume, 2021). Providing workers the opportunity to make their own decisions can benefit them by alleviating the dangerous consequences of emotional exhaustion (Rhéaume, 2021; Tadić et al., 2015). Overall, research has found a negative link between decision latitude and emotional exhaustion, meaning as decision latitude goes down, emotional exhaustion goes up (Kowalski et al., 2010; Melamed et al., 2010; Rhéaume, 2021). The results we obtained via the regression coefficient did not fully match our hypothesis. While the results of our regression coefficient revealed that the relationship between these two variables is negative, the link between the two variables was not significant ($\beta = -0.19$; ns). Therefore, we rejected hypothesis 2b.

Lourel et al. (2008) employed Karasek's JDC model and the MBI in their research on 101 volunteer firefighters in France. They found a negative relationship between these two variables (Lourel et al., 2008). Unlike our research, Lourel et al. was able to establish a significant link between decision latitude and emotional exhaustion ($\beta = -.35$, $p < .0001$) (Lourel et al., 2008). The implicants of the Lourel et al.'s research declared the importance of paying attention firefighter's needs and providing support where needed so that they can flourish in their roles (Lourel et al., 2008). This takeaway can be applied to other jobs. As stated in the theory, if an employee lacks the possibility of making decisions that impact their work and autonomy, they are unable to

alleviate the dangerous consequences of emotional exhaustion (Rhéaume, 2021; Tadić et al., 2015).

Through our supplementary research into existing literature, we discovered that the interaction between psychological demands and job control at work should elicit significant results when it comes to emotional exhaustion (Schmidt & Diestel, 2011). Future studies will be needed to verify whether the results found in Schmidt's study could be applied to our study. In a future study, it would be interesting to verify whether the interaction between the decision latitude and psychological demands could have generated similar results.

5.2.2.3. Relationship Between Social Support at Work and Emotional Exhaustion

Hypothesis 2c was attributed to the relationship between social support at work and emotional exhaustion. It was proposed that social support at work was negatively linked to emotional exhaustion. The results we obtained via the regression coefficient matched our hypothesis. The results of the regression coefficient revealed that the relationship between these two variables is negative and significant ($\beta = -0.34$ ***; $p < 0.001$). This means that our study confirmed that as social support at work increases, emotional exhaustion decreases.

Social support at work from colleagues can lead to stronger relationships, trust, and satisfaction (Jolly et al., 2021; Stan & Vîrgă, 2021). Previous research studies have found a direct negative link between social support at work and emotional exhaustion (Kim et al., 2021; Melamed et al., 2010). Meaning, individuals that believe they have a high amount of social support from their peers at work or team in general, will likely have less intense feelings of emotional exhaustion (S. Kim et al., 2021). They will be able to get the support they need from their colleagues (S. Kim et al., 2021).

5.2.3. Relationship Between the Mediating Variable and the Dependant Variable

Our next hypothesis surrounds the link between emotional exhaustion and affective commitment.

5.2.3.1. Relationship Between Emotional Exhaustion and Affective Commitment

Hypothesis 3 was attributed to the relationship between emotional exhaustion and affective commitment. It was proposed that emotional exhaustion is negatively linked to affective commitment. The results we obtained via the regression coefficient matched our hypothesis. The results of the regression coefficient revealed that the relationship between these two variables is negative and significant ($\beta = -0.56$ ***; $p < 0.001$). Therefore, our study confirmed that as emotional exhaustion increases, affective commitment decreases.

Turnover intention is linked to an employees' intentional decision to leave an organization (Thanacoody et al., 2014). On the other hand, affective commitment is defined as an employee's emotional attachment to their workplace (Mahmod & Rosari, 2020; Thanacoody et al., 2014). Those experiencing extreme fatigue will try to reduce the resources they are losing and when they are unable to do so, they will use coping methods to decrease the impact of their exhaustion (Schaufeli & Bakker, 2004b; Thanacoody et al., 2014). As such, they may become less commitment to their job and seek alternatives. Applying the Conservation of Resources (COR) theory, research shows that employees will aim to decrease their affective commitment (Mahmod & Rosari, 2020; Thanacoody et al., 2014). Just like our study, other research papers have found a negative relationship between emotional exhaustion and affective commitment (Cropanzano et al., 2003; R. T. Lee & Ashforth, 1996; Mahmod & Rosari, 2020; Portoghese et al., 2018; Thanacoody et al., 2014; Tourigny et al., 2013). Meaning, as one's emotional exhaustion decreases, their affective commitment increases (Cropanzano et al., 2003; R. T. Lee & Ashforth, 1996; Mahmod & Rosari, 2020; Portoghese et al., 2018; Thanacoody et al., 2014; Tourigny et al., 2013). The reason for this is that employees who are experiencing high levels of emotional exhaustion will experience feelings of extreme tiredness (Mahmod & Rosari, 2020). They will also feel as though they are unable or unfit to complete their work tasks, causing them to be less interested in their work and less attached to the organization (Mahmod & Rosari, 2020). A continuous cycle of increased exhaustion and inability to get their daily tasks done on time, will result in decreased affective commitment (Mahmod & Rosari, 2020).

5.2.4. Mediating Relationship Between the Independent Variables and the Dependant Variables

5.2.4.1. Emotional Exhaustion's Mediating Relationship Between Psychological Demands and Affective Commitment

Hypotheses 4a, 4b, and 4c were attributed to the mediating relationship between the independent variables and the dependant variables. Hypotheses 4a proposed that emotional exhaustion mediates the negative relationship between psychological demands and affective commitment. Past research demonstrates that high psychological demands at work may generate emotional exhaustion and result in poor affective commitment (Hang-Yue et al., 2005; López-Cabarcos et al., 2021; van Bogaert et al., 2014; T. a Wright & Hobfoll, 2004). Via structural equation modeling and a hierarchical multiple regression analysis, Lopez-Cabarcos et al. demonstrated that emotional exhaustion completely mediated the negative link between job demands and affective commitment in the 512 healthcare professionals they surveyed (López-Cabarcos et al., 2021). In their literature review, López-Cabarcos et al. discovered that higher than usual workload with minimal time to complete one's tasks, can make it so that employees must work faster and amass unfinished tasks (Kahn et al., 1964; Kozak et al., 2013; López-Cabarcos et al., 2021). Via the job demands-resources theory, López-Cabarcos et al. explains that should this persist in the long-term, it can be challenging and stressful for employees to recuperate, as they are constantly experiencing energy depletion (A. Bakker & Demerouti, 2007; López-Cabarcos et al., 2021; Maslach & Leiter, 2016). The nature of the healthcare professionals' job can be seen through their affective commitment, resulting as an important sequel of emotional exhaustion (López-Cabarcos et al., 2021; Maslach & Leiter, 2008).

For hypothesis 4a, the results we obtained via our structural model illustrated that there is a negative indirect effect between psychological demands and affective commitment (-0.38). In addition, the confidence interval at 95% is [-0.91 ; -0.14]. The emotional exhaustion intervention here is making the relationship negative. Initially, it was positive. Usually, to estimate if a mediation link is partial or total, we must look at the direct relationship between the variables (MacKinnon et al., 2007). In the case that a direct link exists, the mediation would be partial (MacKinnon et al., 2007). In the case that a direct link does not exist, the mediation is total

(MacKinnon et al., 2007). Regarding hypothesis 4a, there is an inconsistent mediation, as a double effect (positive and negative) occur on affective commitment. Due to the inconsistent mediation, hypothesis 4a is rejected. Future studies will be necessary to see if there are other mediators and to fully understand the relationship.

An interesting example regarding inconsistent mediation is provided in the literature (MacKinnon et al., 2007). In MacKinnon et al.'s article, the authors discuss the link between stress and mood, stating that these variables are mediated through coping (MacKinnon et al., 2007). Seemingly, the direct effect is negative as the more stress an individual experiences, the worse their mood tends to be (MacKinnon et al., 2007). Yet, the probable effect of stress on coping is positive, as the more stress an individual experiences, the more they will deal with it (MacKinnon et al., 2007). The implication of dealing with stress on one's mood is positive (more coping, increased mood). Therefore, the indirect effect is positive (MacKinnon et al., 2007). Since the direct and indirect effects will likely neutralize each other, stress will probably have a small total effect on mood (MacKinnon et al., 2007). In comparing the observations made in MacKinnon et al.'s 2007 article to our results, we can see that psychological demands and affective commitment are mediated through emotional exhaustion. The direct effect is negative as the more psychological demands an individual undergoes, the worse their affective commitment will tend to be. Yet, the possible effect of psychological demands on emotional exhaustion is positive. As an individual's psychological demands increases, so does their emotional exhaustion. As such, the implication of handling one's psychological demands on one's affective commitment is positive.

5.2.4.2. Emotional Exhaustion's Mediating Relationship Between Decision Latitude and Affective Commitment

Hypothesis 4b proposed that emotional exhaustion mediates the positive relationship between decision latitude and affective commitment. In organizations with strict policies and procedures as well as a centralized decision-making system in place, employees can feel like they lack the ability to influence, which is linked to emotional exhaustion (Fernet et al., 2004; Knudsen et al., 2006; López-Cabarcos et al., 2021). Past research showed that emotional exhaustion completely mediated the positive relationship between decision latitude and affective commitment (López-Cabarcos et al., 2021). This means that without emotional exhaustion there is no positive

relationship between decision latitude and affective commitment. In López-Cabarcos et al.'s literature review, they emphasize the importance of individuals, particularly those in the healthcare profession, to be involved in making choices surrounding their job conditions (Fernet et al., 2004; López-Cabarcos et al., 2021; Moncada et al., 2005). It is necessary for employees to feel like their ideas when it comes to tasks, policies, and processes matter (Knudsen et al., 2006; López-Cabarcos et al., 2021; Moncada et al., 2005). Past research shows that organizations that have a highly concentrated stream of decision-making from the top executives, does not allow individuals carrying out the day-to-day tasks to share their opinions (Knudsen et al., 2006; López-Cabarcos et al., 2021). This restricted autonomy can cause emotional exhaustion (Bondarouk et al., 2016; Knudsen et al., 2006; López-Cabarcos et al., 2021). Organizations that have the opposite structure, with individuals encouraged to share their thoughts and participate in decision-making discussions on key topics can steer away from emotional exhaustion (Bondarouk et al., 2016; Knudsen et al., 2006; López-Cabarcos et al., 2021). Such employees will have an emotional attachment to and participation in the organization, and a strong desire to work towards achieving collective goals (López-Cabarcos et al., 2021).

For hypothesis 4b, the results we obtained via our structural model show that the indirect effect between decision latitude and affective commitment is positive (0.11). In addition, the confidence interval at 95% is [-0.05 ; 0.44]. Since the confidence interval includes zero, we can conclude that there is no indirect effect between these variables.

5.2.4.3. Emotional Exhaustion's Mediating Relationship Between Social Support at Work and Affective Commitment

Hypothesis 4c proposed that emotional exhaustion mediates the positive link between decision latitude and affective commitment. While López-Cabarcos et al. do not directly research the correlation between social support at work and affective commitment in their study, they do mention that this link would be important to look at in future research (López-Cabarcos et al., 2021). The article discusses the implications related to social support and affective commitment (López-Cabarcos et al., 2021). Precisely, they mention the importance of responding to staff's needs to improve their work environment so they can provide the best care possible (López-Cabarcos et al., 2021). They say that this strategy should reduce emotional exhaustion and enhance

well-being (López-Cabarcos et al., 2021). Shakeel Aslam et al. explored the link between social support and affective commitment in their 2012 study (Shakeel Aslam et al., 2012). They emphasize the importance of the relationship between the employee and the employer in the workplace (Shakeel Aslam et al., 2012). Organizations that care about their staff and ensure a safe, productive, and supportive workplace will have employees that are devoted and excited to work towards the company goals (Shakeel Aslam et al., 2012). The impact of emotional exhaustion on social support at work and affective commitment is that emotional exhaustion would link the social support at work variable and the affective commitment variable.

For hypothesis 4c, the results we obtained via our structural model show that there is a positive indirect effect between social support at work and affective commitment (0.19). The confidence interval at 95% is [0.05 ; 0.42]). An indirect relation exists in the relationship between social support, emotional exhaustion, and affective commitment. There is also a direct relationship between social support and affective commitment (represented by H1c). Therefore, the mediation link is partial because it is both direct and indirect.

5.3. Implications of the Research

This section presents the implications of the research conducted in this thesis. Specifically, we present the theoretical implications followed by the practical implications.

5.3.1. Theoretical Implications

Our study has advanced the knowledge on the implications of iso-strain in remote workers and the relationships with emotional exhaustion and affective commitment within the context of the COVID-19 pandemic. Our results indicate that some components of iso-strain influence various aspects of work outcomes in remote workers, including emotional exhaustion and affective commitment. Past studies have looked at emotional exhaustion combined with other factors, unrelated to this thesis, such as leisure crafting, job performance and workplace bullying (Abdel Hadi et al., 2021; Anasori et al., 2020; Tijdink et al., 2014). Other studies have combined research on emotional exhaustion and organizational commitment in the education and corporate sectors (Ahad et al., 2021; Lapointe et al., 2011; Wullur & Werang, 2020). These studies have not considered the implications of a global pandemic in their research. In addition, job strain on

burnout as a whole was examined in various pre-pandemic studies (Ahola & Hakanen, 2007; Karasek et al., 1979; Melamed et al., 2010; Ruiller & van der Heijden, 2014; Wilkerson, 2009; Wong & Spence Laschinger, 2015). To our knowledge, no other study has looked at whether iso-strain in remote workers negatively impacts affective commitment via an increase in employee emotional exhaustion rates in the context of the COVID-19 pandemic. Moreover, we did not come across any research papers that addressed whether emotional exhaustion has a mediating effect on the relationship between, on the one hand, psychological demands, decision latitude and, social support at work, and affective commitment on the other hand, which is another key part of this thesis.

Moreover, our study was unique as our sample looked at the remote Canadian adult working population (18 years old and over) in over fifteen sectors of activity, including human resources and recruitment, insurance, finance and accounting services, information technology and services, legal, as well as education and research, within the context of the COVID-19 pandemic. No other studies have examined as many sectors of activity within the Canadian adult remote working population. Past studies have limited their research, within the COVID_19 context, to the role of emotional exhaustion and remote work within the corporate and healthcare domains and emotional exhaustion and affective commitment within the healthcare and education sectors (Abdel Hadi et al., 2021; Ahmed et al., 2020; Alshaabani et al., 2021; Chen & Eyouun, 2021; de Klerk et al., 2021; Jung et al., 2021; Wroclawski & Heldwein, 2021; J. Zhang et al., 2022). Our study allows us to compare our results to the results of other sectors.

5.3.2. Practical Implications

This study provides practical implications and invaluable insights for organizations, managers and HR professionals aiming to maintain a positive and healthy workplace for their remote workers as they transition into a post-COVID-19 work environment. A key finding in this study is that psychological demands are positively and significantly linked to emotional exhaustion. This means that organizations must take the necessary steps (i.e., reducing job demands) to prevent emotional exhaustion in their staff. While it is evident that many organizations aim to achieve their objectives and remain competitive on the market, ensuring control on their work environment is critical for employee well-being (Koon & Pun, 2018; Sliter et al., 2011). Our

study showed that decision latitude is positively and significantly linked to affective commitment. This means that employees who have a strong ability to make decisions at work are more likely to remain loyal to that organization. Therefore, designing tasks and responsibilities that promote the ability to make choices will lead to a less emotionally exhausted workforce (Abdel Hadi et al., 2021; Koon & Pun, 2018). Organizations can help employees by providing them resources in the form of social support from peers and the broader leadership team (Abdel Hadi et al., 2021). While this may be done differently in the remote work landscape, regularly checking in on employees to see how they are coping with this new way of work and the job demands is an empathetic and thoughtful way to show support (Abdel Hadi et al., 2021). It is also critical for business leaders to evaluate which practices currently in place are resulting in an emotional connection between the employee and the organization and are promoting employee retention (Mercurio, 2015). Without competent, knowledgeable, and dedicated staff, organizations cannot thrive in our ever-evolving world. The value added of our research shows to organizations the importance of having employees that are affectively committed to their organization. Employees that remain loyal to an organization over the long-term are valuable assets as they know the company, the values, and objectives and are less likely to quit (Mercurio, 2015; Min Park & Rainey, 2007; R. Mowday et al., 1982; Vandenberghe et al., 2017). These employees are less likely to have absenteeism, lower stress, and anxiety (Mercurio, 2015; R. T. Mowday et al., 2013; Solinger et al., 2008; Somers, 2009).

5.4. Limits of our Research

Like most research studies, ours had some limitations. Future research could address these limitations. First, our research followed a cross-sectional design, meaning all data was collected at a given time in a sample population (Sedgwick, 2014; Spector, 2019). While this method has some advantages, like it being fast to do and requiring fewer financial resources than other methods, it also has some disadvantages (Sedgwick, 2014). With such a study design, we were unable to examine the effect of the independent variables (psychological demands, decision latitude and social support at work), on the dependant variable (affective commitment) over time (Sedgwick, 2014). Because of this, we were not able to establish a causal link (Spector, 2019). The results we discuss in this thesis only highlight the existence or nonexistence of a link between the notions studied. Furthermore, our study involves self-reported data, meaning common variance bias had

to be considered in our analysis. Common variance bias occurs when there is a variation in a candidate's survey responses due to the measurement instrument that is used, and not because of the predispositions that the candidate has (Siemsen et al., 2010). In simpler terms, the instrument used creates a bias (Siemsen et al., 2010). As a result, the observed links between the variables under study may be magnified or decreased (Siemsen et al., 2010).

Another limit of our study was the sample size. Even though our sample of 188 survey respondents was large enough to do the analyses we wanted to do, the statistical strength was too low to obtain significant results that might have otherwise been obtained had we had more respondents. A small sample size (in our case 188 valid respondents), can decrease the analytical potential of the data and vigour of the results (Kline, 2016). Because of this, it is challenging to generalize the results obtained to a larger population. Moreover, the use of the convenience sample was another limit to our research. We did our best to reach a broad audience of participants via a variety of recruitment methods such as personalized text messages, emails and/or LinkedIn direct messages to colleagues, family, and friends, and emailing other HEC Montréal teachers asking them to distribute the survey to their students. However, since we reached out to people in our network of contacts, it could have led to a sampling bias as it is not fully representative of the adult remote working population aged 18 years and older in Canada (Jager et al., 2017). Thus, it is essential to remember that these results were obtained from a fixed sample. Therefore, when it came to analyzing the results, we had to remain vigilant to not generalize (Jager et al., 2017).

5.5. Strengths of our Research and Future Research Avenues

As for the strengths of this research, we did not focus our data collection on simply one organization or population, rather, we opened the survey to Canadian adults working remotely at least one day per week during the COVID-19 pandemic. As such, this allowed us to reach a broader audience. In fact, most of the people we contacted were able to complete the survey as they corresponded to the basic survey requirements. This means that our study was versatile. Another strength of our research was that we were able to ensure that participants could respond to the survey anonymously. Therefore, we were able to ensure that our participants could answer the questions freely and honestly. Then, when it came to the data analysis process, the data obtained was not biased by obligation or pressure to participate and not affected by social desirability bias.

Future research could address the limitation that we had by using a cross-sectional design. As such, upcoming research teams can examine similar data via a longitudinal design implementation (Caruana et al., 2015). Through a longitudinal design, more precise data on the characteristics and patterns of the sample population will emerge (Caruana et al., 2015). A longitudinal design provides an avenue to look at cause and effect of iso-strain in remote workers and its impact on emotional exhaustion and affective commitment well beyond the COVID-19 pandemic period (Caruana et al., 2015). Other researchers could strive towards replicating our results by not using a convenience sample and opening their data collection to a broader audience. The respondents in our study corresponded to specific parameters. They were adult Canadians, working remotely at least one day per week during the COVID-19 pandemic. Future research could test whether our results replicate in a different context (i.e., another country) and augment the generalizability of the results obtained. In addition, researchers could build upon our study by including additional variables. For example, they can explore burnout's three dimensions (emotional exhaustion, cynicism and reduced personal accomplishment) as well as organizational commitment three dimensions (affective, normative and continuance commitment) to get a more detailed view on the impact of burnout as a whole and organizational commitment as a whole.

Conclusion

In March 2020, COVID-19 was present in several continents and in the months that followed, its presence and impact increase, leading to many organizations offering remote work to keep their employees safe (Baghchechi et al., 2020; Contreras et al., 2020). With over 3.5 billion individuals working remotely, many wondered what the health implications would be on the workforce and if this way of working would continue long term (Contreras et al., 2020). Interested in the connection between these topics, we sought to bring a theoretical contribution to the literature on the topics of iso-strain in remote workers and the impact on emotional exhaustion and affective commitment in the context of the COVID-19 pandemic through this thesis.

To pursue our objective, we asked and then aimed to answer the following two questions: (1) Does iso-strain in remote workers negatively impact affective commitment via an increase in employee emotional exhaustion during the COVID-19 pandemic? (2) Does emotional exhaustion have a mediating effect on the relationship between, on the one hand, psychological demands, decision latitude and, social support at work, and affective commitment on the other hand?

Our results offer practical implications and invaluable insights for organizations, managers and HR professionals aiming to maintain a positive and healthy workplace for their remote workers as they transition into a post-COVID-19 work environment. Specifically, our results indicate that components of iso-strain influences different aspects of work remote work outcomes, whether it is a negative and significant relationship between social support at work and emotional exhaustion or a negative and indirect effect between psychological demands and affective commitment. This contribution is possible because we looked at the implications of our three dimensions on each other. Past studies have assessed the role of emotional exhaustion and remote work in the corporate and healthcare domains as well as emotional exhaustion and affective commitment in the healthcare and education sectors during the pandemic (Abdel Hadi et al., 2021; Ahmed et al., 2020; Alshaabani et al., 2021; Chen & Eyoun, 2021; de Klerk et al., 2021; Jung et al., 2021; Wroclawski & Heldwein, 2021; J. Zhang et al., 2022). To our knowledge, no other study has looked at whether iso-strain in adult Canadian remote workers negatively impacts affective commitment via an increase in employee emotional exhaustion rates in the context of the COVID-19 pandemic.

Despite its limitations, this thesis provides empirical results that build upon previous knowledge on iso-strain, emotional exhaustion, and affective commitment. We strongly believe that the results of our research will encourage other researchers to dive deeper into the subjects to learn more.

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Appendices

Appendix 1 – Certificate of Ethical Approval



Comité d'éthique de la recherche

CERTIFICAT D'APPROBATION ÉTHIQUE

La présente atteste que le projet de recherche décrit ci-dessous a fait l'objet d'une évaluation en matière d'éthique de la recherche avec des êtres humains et qu'il satisfait aux exigences de notre politique en cette matière.

Projet # : 2022-4888

Titre du projet de recherche : Isostrain in Remote Workers and its Impact on Burnout and Organizational Commitment During the COVID-19 Pandemic

Chercheur principal :

Gillian Kinnear
HEC Montréal

Directeur/codirecteurs :

Mouna Knani; Gaudet Marie-Claude
Professeur - HEC Montréal

Date d'approbation du projet : February 28, 2022

Date d'entrée en vigueur du certificat : February 28, 2022

Date d'échéance du certificat : March 01, 2023

A handwritten signature in black ink, appearing to read "M. Lemelin".

Maurice Lemelin
Président
CER de HEC Montréal

Appendix 2 – Additional Factor Loadings Tables During CFA

Table 30. Factor Loadings After Removing Question 7

Indicator	Variable	Factor Loading
Q2_WorkFast	Psychological Demands	0.56
Q3_WorkIntensity	Psychological Demands	0.66
Q4_WorkEffort	Psychological Demands	0.78
Q5_ConflictingDemands	Psychological Demands	0.43
Q6_EnoughTime	Psychological Demands	0.58
Q8_SkillLevel	Decision Latitude	0.49
Q9_RequiresInitiative	Decision Latitude	0.56
Q10_RepetitiveWork	Decision Latitude	0.46
Q11_HowToDoTheWork	Decision Latitude	0.43
Q12_WhatToDoAtWork	Decision Latitude	0.51
Q13_PleasantAtmosphere	Social Support at Work	0.58
Q14_RelationshipAtWork	Social Support at Work	0.84
Q15_CoworkersSupport	Social Support at Work	0.72
Q16_CoworkersHelpful	Social Support at Work	0.56
Q17_RelationshipWithSupervisors	Social Support at Work	0.56
Q18_FriendlyCoworkers	Social Support at Work	0.70
Q19_EmotionallyDrained	Emotional Exhaustion	0.83
Q20_Fatigued	Emotional Exhaustion	0.71
Q21_StrainWorkingWithOthers	Emotional Exhaustion	0.39
Q28_PartOfTheFamily	Affective Commitment	0.74
Q29_EmotionalAttachment	Affective Commitment	0.89
Q30_PersonalMeaning	Affective Commitment	0.90
Q31_SenseOfBelonging	Affective Commitment	0.90

Table 31. Factor Loadings After Removing Question 11

Indicator	Variable	Factor Loading
Q4_WorkEffort	Psychological Demands	0.78
Q3_WorkIntensity	Psychological Demands	0.66
Q2_WorkFast	Psychological Demands	0.56
Q5_ConflictingDemands	Psychological Demands	0.44
Q6_EnoughTime	Psychological Demands	0.58
Q9_RequiresInitiative	Decision Latitude	0.51
Q8_SkillLevel	Decision Latitude	0.56
Q10_RepetitiveWork	Decision Latitude	0.47
Q12_WhatToDoAtWork	Decision Latitude	0.46
Q15_CoworkersSupport	Social Support at Work	0.72
Q14_RelationshipAtWork	Social Support at Work	0.84
Q13_PleasantAtmosphere	Social Support at Work	0.58
Q16_CoworkersHelpful	Social Support at Work	0.56
Q17_RelationshipWithSupervisors	Social Support at Work	0.56
Q18_FriendlyCoworkers	Social Support at Work	0.70
Q21_StrainWorkingWithOthers	Emotional Exhaustion	0.39
Q20_Fatigued	Emotional Exhaustion	0.71
Q19_EmotionallyDrained	Emotional Exhaustion	0.83
Q30_PersonalMeaning	Affective Commitment	0.90
Q29_EmotionalAttachment	Affective Commitment	0.89
Q28_PartOfTheFamily	Affective Commitment	0.74
Q31_SenseOfBelonging	Affective Commitment	0.90

Table 32. Factor Loadings After Removing Question 12

Indicator	Variable	Factor Loading
Q2_WorkFast	Psychological Demands	0.57
Q3_WorkIntensity	Psychological Demands	0.67
Q4_WorkEffort	Psychological Demands	0.77
Q5_ConflictingDemands	Psychological Demands	0.43
Q6_EnoughTime	Psychological Demands	0.57
Q8_SkillLevel	Decision Latitude	0.57
Q9_RequiresInitiative	Decision Latitude	0.50
Q10_RepetitiveWork	Decision Latitude	0.45
Q13_PleasantAtmosphere	Social Support at Work	0.58
Q14_RelationshipAtWork	Social Support at Work	0.84
Q15_CoworkersSupport	Social Support at Work	0.72
Q16_CoworkersHelpful	Social Support at Work	0.56
Q17_RelationshipWithSupervisors	Social Support at Work	0.56
Q18_FriendlyCoworkers	Social Support at Work	0.70
Q19_EmotionallyDrained	Emotional Exhaustion	0.84
Q20_Fatigued	Emotional Exhaustion	0.71
Q21_StrainWorkingWithOthers	Emotional Exhaustion	0.39
Q28_PartOfTheFamily	Affective Commitment	0.74
Q29_EmotionalAttachment	Affective Commitment	0.89
Q30_PersonalMeaning	Affective Commitment	0.91
Q31_SenseOfBelonging	Affective Commitment	0.90

Table 33. Factor Loadings After Removing Question 5

Indicator	Variable	Factor Loading
Q2_WorkFast	Psychological Demands	0.59
Q3_WorkIntensity	Psychological Demands	0.69
Q4_WorkEffort	Psychological Demands	0.77
Q6_EnoughTime	Psychological Demands	0.55
Q8_SkillLevel	Decision Latitude	0.58
Q9_RequiresInitiative	Decision Latitude	0.48
Q10_RepetitiveWork	Decision Latitude	0.46
Q13_PleasantAtmosphere	Social Support at Work	0.58
Q14_RelationshipAtWork	Social Support at Work	0.84
Q15_CoworkersSupport	Social Support at Work	0.72
Q16_CoworkersHelpful	Social Support at Work	0.56
Q17_RelationshipWithSupervisors	Social Support at Work	0.56
Q18_FriendlyCoworkers	Social Support at Work	0.70
Q19_EmotionallyDrained	Emotional Exhaustion	0.84
Q20_Fatigued	Emotional Exhaustion	0.71
Q21_StrainWorkingWithOthers	Emotional Exhaustion	0.39
Q28_PartOfTheFamily	Affective Commitment	0.74
Q29_EmotionalAttachment	Affective Commitment	0.89
Q30_PersonalMeaning	Affective Commitment	0.91
Q31_SenseOfBelonging	Affective Commitment	0.90

Appendix 3 – Additional Assessment Tools of Burnout

Bergen Burnout Inventory (BBI)

The Bergen Burnout Inventory (BBI) is a short, environment-specific instrument incorporating 15 items with 5 items each calculating the three dimensions of burnout in the workplace (Feldt et al., 2014; Raudenská et al., 2020; Salmela-Aro et al., 2011). The scale presents participants with the option to select their level of agreement with the statement presented (Feldt et al., 2014). Six options are given from totally disagree to totally agree (Feldt et al., 2014). The goal of the BBI is to have a tool that looks at burnout in all types of jobs (Mäkikangas et al., 2021). It is different from the MBI as it measures negative emotional exhaustion, intellectual skepticism, and behavioural scarcity (Salmela-Aro et al., 2011). Another differentiating factor is that the BBI measures the intensity of the three burnout dimensions rather than the frequency of them (Feldt et al., 2014). A version of the BBI, the BBI-15 predicts the sense of deficiency at work (Feldt et al., 2014). High BBI results are linked to low engagement at work (Hyvönen et al., 2009, 2010; Salmela-Aro et al., 2011). A 2011 study on Estonian and Finish managers employed the BBI to look at the three dimensions of burnout (Salmela-Aro et al., 2011). Items of the scale included, I am snowed under with work (EXH1); I feel dispirited at work, and I think of leaving my job (CYN1); I often feel inadequate (INAD1) (Salmela-Aro et al., 2011). Successful implementation of the BBI during Salmela-Aro et al.'s previous research showed that burnout reduced through mediation that took place over a period of one year (Salmela-Aro et al., 2011).

Shirom-Melamed Burnout Measure (SMBM)

The Shirom-Melamed Burnout Measure (SMBM) was created in 2006 (Schilling et al., 2019; Shirom, 2003). It was influenced by Maslach's work as well as the Conservation of Resources (COR) theory, which will be discussed in the next section. To improve upon the questionnaire and include an additional component, the SMBM was created (Schilling et al., 2019). The SMBM differentiates between physical exhaustion, emotional exhaustion, and mental exhaustion (Bianchi, 2020; Maslach & Leiter, 2016; Schilling et al., 2019). The measure is made up of 14 items that are ranked on a seven-point Likert scale from 1 (almost never) to 7 (almost always) (Melamed et al., 2010). In the physical fatigue category, there are six items, and the objective is to look at the deficiency in one's workplace health and prosperity as well as the

concrete physical tiredness (Bianchi, 2020). An example of a physical fatigue item is “I feel physically drained” (Bianchi, 2020). In the emotional exhaustion category, there are three items, and the goal is to investigate relational burnout symptoms (Bianchi, 2020). An example of an emotional exhaustion item is “I feel I am not capable of investing emotionally in my coworkers and recipients” (Bianchi, 2020). In the mental exhaustion category, there are five items (Bianchi, 2020). An example of a mental weariness item is “I feel I am not focused on my thinking” (Bianchi, 2020). The SMBM has fair internal consistency in adults and teenagers (Gerber et al., 2018; Schilling et al., 2019). It correlates well with the MBI-GS and often results in similar scores (Bianchi, 2020; Maslach et al., 2016; Shirom & Melamed, 2006). The SMBM is more theory-directed than the MBI (Bianchi, 2020; Shirom & Melamed, 2006). The SMBM was written in English and then translated for use in French, German, Spanish, Hebrew, Russian, Czech, and Polish (Shoman et al., 2021).

