Remote Work in Early Career: Examining the Federal Public Service

by

Samuel Thomas Kerr

Bachelor of Arts (with distinction), University of Victoria, 2016
Master of Arts, University of Calgary, 2020

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF PUBLIC ADMINISTRATION

in the School of Public Administration

Remote Work in Early Career: Examining the Federal Public Sector

by

Samuel Thomas Kerr
Bachelor of Arts (with distinction), University of Victoria, 2016
Master of Arts, University of Calgary, 2020

Supervisory Committee

Dr. Kimberly Speers, Supervisor
School of Public Administration

Dr. Katya Rhodes, Departmental Member
School of Public Administration

Dr. Henry Smith, Outside Member
Environment and Climate Change Canada

Abstract

The COVID-19 pandemic disrupted how Canada's federal public service worked in a significant manner. In March 2020, hundreds of thousands of public servants transitioned to remote work in the National Capital Region and across the country in a matter of days. This thesis explores the effect that this transition had on individual well-being, worker stress, and organizational outcomes with a small sample in the federal public service. Using semi-structured interviews, it examines the responses of fifteen early career public servants (n=15) to questions about changing job demands and resources, social and technical aspects of work, and preferences on the future of work. It interprets these findings in the context of Bakker and Demerouti's Job-Demands Resources Model (2006), Emery and Trist's (1960) socio-technical system of job design, and Simon's (1990) concept of bounded rationality.

This work found that work-life balance, focus, connection, rewards, and safety/well-being were job resources that workers could use in a remote format, while technology, environment, role clarity/mentorship, work hours, and overwork were job demands. The technical aspect of work productivity improved while no consensus formed for performance, and the social aspect of work support declined, while no consensus formed for career progression. The findings revealed that in aggregate the technical aspects of work improved, and the social aspects declined. Public servants' preferences on the future of work were evenly split between continuing remote work indefinitely or transitioning to a hybrid model, with only one interviewee expressing a preference for fully in-person work. Therefore, this thesis found that hybrid work policies should be designed to capitalize on the advantages and limit the downsides of remote work, that the federal public service should not immediately attempt to return to completely mandatory in-person work, and that the limitations of hybrid work should be recognized. In this context, this research provides preliminary insight into the field of remote work.

Table of Contents

List of Tables

List of Figures

Dedication

I would like to thank Dr. Kimberly Speers for her guidance, and all of the faculty whom I had the pleasure of working with in the School of Public Administration. I found Dr. Evert Lindquist's instruction in Government and Governance, Dr. Katya Rhodes's course in Economics for Policy Analysis, Dr. Emmanuel Brunet-Jailly's Policy Making and Policy Communities course, and Steven Emery's class on Public Financial Management Accountability to be instructive for starting my career in the public service.

Second, I would like to thank the federal public servants whom I have learned from since starting as a student in the organization in January 2021. From my first work term at Environment and Climate Change Canada to my current work at Innovation, Science and Economic Development Canada, I have had the pleasure of working with many hard-working, talented, and dedicated individuals. In particular, I would like to thank Tony Hahn, Manager, and Irma Bala, Senior Trade Policy Officer for their career support. I have also been fortunate to meet representatives of many diverse and innovative companies across Canada's economy, and I am grateful to have learned from this experience.

Third, I would like to recognize the value of my fellow MPA graduate students who undertook this program near the start of the COVID-19 pandemic. While we applied to the MPA program before the pandemic began, we undertook this program during uncertain times but did not abandon our plans for the program. Working with my fellow MPA students was a pleasure, and I was impressed with the work ethic and talent of graduate students in the program. I look forward to staying in touch in the future.

1. Introduction

This thesis examines how early career public servants transitioned to remote work during the COVID-19 pandemic and the effect that this transition had on individual well-being, career progression, and work preferences. It provides options to consider for how the federal public service might respond to the new realities of work in the future. By examining this topic, it contributes to an emerging field of research on remote and hybrid work, career development, and employee well-being.

The following introduction provides a background and issue definition for the work, identifies the purpose, introduces the research questions and scope of the work, reviews the importance of the thesis topic, describes the organization for the work, and provides a positionality statement.

1.1 Background and Issue Definition

In March 2020, the federal public service underwent a historic transition when tens of thousands of public servants quickly adopted remote work in response to the coronavirus pandemic. This shift represented an unprecedented change for the sector since it was the norm for Canada's public service to require workers to live close to and commute to offices to carry out their work where most jobs were geographically concentrated in the National Capital Region. Furthermore, the sector has often been portrayed as inflexible and resistant to change, making the sudden transition to telework even more significant for the sector.

The issue that this thesis addresses is the uncertainty of the effects of the immediate change in workplace (i.e., office to home) or for those who were hired during the pandemic to work in a virtual or hybrid environment. When the shift from the office to remote work took place, anecdotal comments were made in the media about how civil servants were struggling with certain aspects such as technology and social isolation whereas other civil servants appreciated the ability to work at home because they thought their productivity increased and that they saved time on not having to commute to work. This thesis helps to shed light on the effects of remote work and to contribute evidence-based analysis of this shift.

This study made use of confidential semi-structured interviews with civil servants who were undertaking remote work across a range of departments in the federal government to better understand the effect that this transition had on workers. Canada's federal public service employs individuals across a range of departments and agencies and the transition to remote work did not occur across all occupations. For example, The Treasury Board of Canada Secretariat employs twenty-eight occupational groups ranging from auditors to air traffic controllers, to commerce and purchasing agents, border service workers, computer systems analysts, foreign service officers, financial managers, lawyers, researchers, translators, economists and social scientists, and many others (Treasury Board Secretariat, 2022). This thesis, however, focused on individuals who were carrying out policy work during the pandemic and therefore focused on those who transitioned to entirely remote work as a result of the pandemic.

Another important piece of background for this work are the characteristics of public servants who were examined. The public service is a unique work environment in that many individuals

who enter the organization start off in certain positions and stay over their lives allowing for life-course examinations. Many levels Canada's middle and senior public service have had long careers where they work their way from early career civil servants to senior employees and executives. The continuity of careers for public servants has made the field the source of life course examinations. Rather than examining the transition across all careers, however, this work specifically focused on those in early career. The significance of examining early career public servants is not only that it narrows the scope of this work, but also that it may help to better understand an upcoming generation of workers who have been shaped by the unanticipated and historic transition to remote work.

Finally, this work examined how remote work may have affected workers who were new the public service. For these individuals, remote work may have been a formative experience, and may have influenced their career trajectories and early understanding of the workplace. It specifically focused on the pressures, technical and social aspects of work, and preferences for these individuals.

1.2 Purpose, Research Questions, and Scope

Purpose

This thesis attempts to understand the challenges that public servants experienced during the pandemic and how the transition to remote work shaped individual well-being, career progression, and organizational outcomes. It specifically focuses on public servants in early career on the grounds that understanding this cohort of workers is useful for examining those who are frequently overlooked in decision-making and are likely to become the future of the public service.

Research Questions

The purpose of this research was to create further knowledge on remote work as it was carried out in the public service.

The primary research question was: what were the effects of the COVID-19 pandemic on early career federal public servants related to individual well-being, career progression, and work preferences as they transitioned from the office to remote work?

This purpose was further supported by asking three secondary questions, which were:

> **Question 1 –** what new job demands did workers face and what new job resources became available during remote work?
> **Question 2** – what, if any, technical aspects of jobs changed in a remote format, and what social aspects of jobs changed?
> **Question 3** – what were the preferences of workers for remote, hybrid, and in-person work into the future?

Question 1 was designed to determine what areas of work changed during the pandemic, and what aspects of remote work became job demands and resources. Question 2 was focused on what aspects of work changed during the pandemic while recognizing the different routine and social

components in work. Question 3 was designed to draw from ideas on worker preferences and inform decision-making in the public service.

Scope

Rather than examining individuals across all job types and career phase, this work specifically examines early career federal public servants who were carrying out policy work. Narrowing the sample down to those who were both in early career and who were carrying out policy work contained the amount of data that needed to be collected and ensured that the findings would pertain to workers whose voices are often underrepresented in decision-making. It defines "early career public servants" as anyone who has fewer than five full-time years working in the federal public sector and who was born between 1981 - 1996 ("Millennials") or anyone born prior to 1997 ("Generation Z"). This definition was based on the idea that early career can occur at different times in a person's life, depending on when they start working in a field. In practical terms, this work does not examine those who have had careers in the federal public service beyond five years, unless they achieved this as part of "Generation Z," and started working in the field at the age of twenty, which is unlikely given the educational requirements. It also does not examine those working in the field who were born before 1981, as a way of containing the scope of the research. Finally, it specifically looks at those who were working in the Economics and Social Sciences (EC) classification as a way of containing the scope of the research. [1] Chapter 3: Methods and Methodology discusses the sample in greater detail.

The second part of the scope for this work involves defining employees of the federal public service. This work defined the federal public service as the civilian workforce of the Government of Canada. These workers were employed in the central agencies, departments, and other public bodies (such as funding agencies). From the sample, one participant worked from a central agency, the Privy Council Office, one participant worked at a funding agency, the Social Science and Humanities Research Council of Canada, and the remaining thirteen participants worked with six departments. Appendix 3, Table 18, shows an anonymized list of participants working within these central agencies, public bodies, and departments. Chapter 5: Discussion provides some areas for further research into other governments, private enterprises, and not for profits that could be examined into the future.

Finally, in relation to the timeline parameters of this study, all fifteen interviews were conducted in the six months between November 2021 and April 2022. Within the sample, all individuals were working remotely due to the COVID-19 pandemic. This timeline parameter means that this thesis focuses specifically on the period of fully remote work in the federal public service. Chapter 5: Discussion notes that an area of further research that logically follows from this work is a subsequent study of work in the post-pandemic era. Nevertheless, the findings from this work pertain to this specific point in time.

[1] Fourteen recruits worked in the Economics and Social Sciences Services (EC) and one recruit worked in the Commerce (CO) classification. The individual working in the CO classification was working in virtually the same role to the rest of the sample, and therefore was included.

1.3 Importance of Thesis Topic

This thesis contributes to scholarship in the topic area in a few ways. First, it provides insight into how the public service undertook remote work. By using semi-structured interviews with fifteen early career public servants and analyzing these findings through content analysis, it identifies challenges and opportunities, discusses how work changed, and outlines the preferences of workers for future work arrangements. Few studies have accessed this unique population of workers, which makes the findings from this thesis particularly useful.

Second, this work is also valuable in that it provides insight into the COVID-19 pandemic and the shifts to remote work. While a return to normalcy is seemingly inevitable, the pandemic and associated public health measures represented a unique social disruption, and this work contributes towards a body of knowledge that studies this historic event. The full effects of the pandemic on society have not yet been fully understood, and in this way this work contributes to a better understanding of this social phenomenon.

Finally, this work provides unique insights into workers who are starting their careers in the public service. Examining this cohort provides an opportunity to better understand individuals who are often underrepresented in decision-making and who may become leaders in the public service. As Chapter 2: Literature Review will show, there is a considerable amount of scholarship on those in early career as well as the challenges that they face. This thesis contributes to this existing field in addition to providing insights into remote work.

1.4 Thesis Organization

This work is organized into six chapters. Chapter 1: Introduction provides a high-level overview of the issue, purpose, importance of the topic, thesis organization, and positionality of the researcher. Chapter 2: Literature Review provides a review of relevant literature on three areas of scholarship that intersect with this research: works on early career and pre- and post-pandemic scholarship on remote work. It also provides an overview of the theoretical frameworks which guide the rest of the work. Chapter 3: Methodology and Methods discusses the methodology, methods, design of instruments, and methods of analysis. Chapter 4: Findings then outlines the findings from this work, including changes to both the job demands and resources, the changing social and technical factors of jobs, and preferences that were expressed within the interviews. Chapter 5: Discussion then discusses each of the finding's areas in the context of the theoretical framework, summarizes an answer to the research questions, and outlines its limitations as well as areas for further research. Chapter 6: Conclusion & Recommendations then offers a summary of key takeaways from the work and three recommendations that can be applied from the research. These chapters ultimately work together to outline, present, and interpret the key findings of this work.

1.5 Positionality Statement

This thesis was carried out from a unique perspective in at least two ways. First, it is useful to take into consideration my employment status while completing the work. Specifically, when I started the initial work path for this project, I was employed as a graduate student in two work terms, then I received an offer for a casual contract, and finally I became an indeterminate Economics and Social Sciences (EC) employee. The interviews were completed while I was employed in the government as a graduate student or working on a casual contract. Over this time, I was looking for permanent employment, which could have shifted how I engaged participants. For example, when interviewing individuals who might have access to work in other departments, I could have altered my follow-up questions to create a favourable portrayal of myself or the line of work. While I did not use the interviews as an opportunity to prospect for positions, my interest in pursuing the line of work should still be recognized.

Another perspective can be taken on the project in that the bulk of work and interviews were carried out with participants from relatively advantaged educational and employment backgrounds. All the participants were working on policy in the federal government, which provides workers with decent pay, high job security, and the ability to carry out remote work. It was also carried out during lockdowns when essential frontline workers faced risks of contracting coronavirus while other workers faced unemployment. This is not to dismiss potentially challenging working conditions and the disrupted career progression and family lives of the sample, but rather to acknowledge that the coronavirus pandemic affected people in different ways. From my perspective, I was also fortunate to work in this sector, to have access to higher education, and to have sources of income during the COVID-19 pandemic. As a part of creating greater awareness around this topic, it is useful to note that this study was carried out by a person with relative security and designed to study a group that had some advantages during a period of significant social disruption. Further research into other groups' experiences of the pandemic is undoubtedly warranted.

2. Literature Review

2.1 Introduction

The literature that is reviewed for this work can be seen as existing at the intersection of several areas: literature on early career, pre-pandemic literature on remote work, and post-pandemic literature on remote work. While the literature in each of these three areas is substantial, scholarship on early career workers specifically undertaking remote work after the pandemic is sparse, and therefore scholarship from these three thematic areas is useful for this work.

This literature review was organized thematically with further sources under each theme organized chronologically. The search words that were used to gather articles included: "early career," "young workers," "remote work," working from home," and "COVID-19 pandemic" among others. Sources were selected by relevance to this work with some attention to journal impact and research from less well-known journals was included if it was highly relevant to this research topic. Reviewing literature from these three themes was necessary since little research has been done on the precise category of early career workers undertaking remote work in Canada's public service.

2.2 Literature on Early Career

Literature on early career workers is extensive and often focuses on behaviours that are required for success or hardships and difficulties that these individuals experience. For example, De Vos, Clippeleer, and Dewilde (2010) examined "proactive career behaviours" and career progress and success. The authors found that those who demonstrated proactive behaviours in early career generally networked more frequently and acquire valuable experiences that could be used subsequently in their career.

Other scholars have examined the effects of education and employment among young workers. Struffolino (2019), for example, looks at how young workers' education played a crucial role in how they navigate the labour market, and, with reference to this work, the findings suggest that individuals' experiences of remote work relate to their credentials. Struffolino found that young workers with lower educational attainment were more likely to experience career instability. Although this project selected individuals based on their employment in the federal government and their career phase, Struffolino's work is useful in that it draws attention to the relevance of education. The relatively significant effect of education on occupation success may suggest that a worker with less relevant or in-demand education may experience greater challenges with career progression in a remote format. While this study does not directly speak to remote work, it provides useful background on a relevant variable for this work.

In another study, Lambert et al. (2014) examined precarious work schedules among those in early career and concluded that these workers disproportionately had significant schedule fluctuations. They find that women in early career, workers of colour, and those in part-time jobs are particularly at risk of fluctuating schedules of having little input into the timing of their work. While work hours may seem superfluous to this study when considering that all participants were employed in standard Monday to Friday morning until evening schedules, in fact, remote work

caused significant disruptions in work hours for participants across time zones. Lambert et al.'s discussion of precarious work schedules provides valid context for this work, in that by the nature of having the flexibility to work across the country, many workers also experienced disrupted sleep/wake patterns that affected their health and well-being, and created new job-related demands.

2.3 Pre-Pandemic Literature on Remote Work

Pre-pandemic literature on remote work is not new to the public service and teleworkers have existed in the public service for decades, albeit in small numbers. In a more fundamental sense, remote work was omnipresent in the public service when employees in the years following Confederation worked in distant regions and received instructions and report back to headquarters to administer public affairs. Yet remote work as it is commonly understood now has for practical purposes grown with instantaneous communication enabled by telephones and the Internet, and for the purpose of this literature review, remote work can be divided into pre-pandemic and post-pandemic scholarship.

Olson's (1983) work clearly falls into the pre-pandemic scholarship on remote work and attributes the rise of this form of work to falling information technology costs. She defines remote work as being "performed outside of the normal organizational confines of space and time" (Olson, 1983, p. 182). Her work focuses on behavioural and personality attributes of successful remote workers, and in this sense places the impetus on undertaking successful remote work on the individual. She finds that the four characteristics that enable successful remote workers are" self-motivation and self-discipline," "skills that provide bargaining power," "family requirements," and a "preference for few social contacts" (p. 184-185). Although written nearly four decades ago, Olson's work is prescient in that she identifies many themes that are still relevant to this day. The categories that she identifies also overlap with many of the categories that young professionals identify in this study, particularly "self-motivation and self-discipline" and "family requirements."

Staples et al. (1999) examined the effectiveness of remote workers across several organizations and found that workers' self-efficacy plays an important role in performance. Staples et al. outline how "clear trends towards increased virtual work and greater reliance on technology" point towards the need to learn about remote work, but also how data collection and rapidly changing technology has prevented widespread examination of the topic. The result of Staples et al.'s work points to the importance of self-efficacy in workers perceived productivity, job satisfaction, and coping mechanisms in a remote environment. Rather than placing responsibility on workers' preferences as Olson's work does; however, Staples et al. find that the antecedents of self-efficacy rest in the activities of management. The authors emphasize how management provides opportunities for information technology training plays an important role in workers' self-efficacy. Staples et al.'s work provides an accurate prediction about the increased uptake of remote work along with valuable context on the role of self-efficacy for success in the field.

Much later, Koehne et al. (2012) carried out a study that tested the assumption that remote work is isolating. As part of this study, the authors interviewed seventeen individuals about how they were involved in remote work and found that the process of conducting remote work is "actually very social" (p. 1). The authors identify several themes of this form of work including "Work Rhythms

and Time Zone Issues," "Visibility & Evaluation," "Personal Support Infrastructure," and "Personal Connections," each of which overlaps with the themes identified in this work. The authors found that far from being isolating that the workers undertaking remote work who were surveyed applied a variety of tools to thrive in a remote setting.

Klopotek (2017) also examined a pilot study of young remote workers to determine a set of findings about the benefits and drawbacks of this practice. She found that young workers enjoyed the flexible hours and lower commute time, but, unlike Koehne et al.'s work, young remote workers are at increased risk of social isolation and face challenges separating home and work life. Klopotek's work finds that despite abundant communications technologies, social isolation is a significant challenge for young remote workers. This stands in contrast to the previously reviewed work, which highlights the social nature of remote work, and, in relation to this thesis, suggests that social isolation remains a significant challenge.

2.4 Post-pandemic Literature on Remote Work

The second category of literature on remote work are pieces that were written after the onset of the pandemic. While this field is still new, it is expanding rapidly and will continue to grow in the months and years following the beginning of the pandemic. It is worth noting that added to the works that are cited here that many works are forthcoming but are undergoing the lengthy peer review process.

In one of the first studies that examined remote work and the pandemic, Brynjolfsson et al. (2020) provided a high-level overview of remote work during the pandemic and documented the ratio of workers who stayed working in person as well as workers who were most likely to switch to remote work. The authors found that between February and May 2020, over a third of the United States labour force switched to remote work. Those in professional and managerial occupations were least likely to be laid off or furloughed during the pandemic and were most likely to stay working. The authors also found that younger people were more likely to switch to completely remote work. Brynjolfsson et al.'s work is useful in that it provides context on the ratio of workers that are likely to stay fully remote. Concerning this work, it suggests that the sample for this study is not representative of the experiences of the overall population.

In a similar vein to Brynjolfsson et al.'s (2020) work, Angelucci et al. (2020) also examine the effects of the COVID-19 pandemic by specifically examining worker health. The authors use a large nationally representative dataset from the Understanding America Study (UAS) that has been operational since 2014 and includes employment questions, including whether workers were in remote positions, and questions on health status. Using this information, the authors then compare the health status of remote workers and non-remote workers across several variables focusing on respiratory health. Their results show both the extent to which employment fell after the onset of the pandemic, but also health disparities between remote and non-remote workers. The authors find that the economic effects of the pandemic were highest among low-income non-remote households, deepening existing disparities. While Brynjolfsson et al.'s work focuses on the disparity between managerial and professional occupations and manual or service professions, Brynjolfsson et al.'s work, therefore, focuses more closely on economic and health consequences.

Compared to Angelucci et al.'s (2020) work, Buchanan et al. (2021) examined how remote work influenced scientific research in cardiology and concluded that disruptions in access to laboratory materials were a "profound" hindrance to scientific research. According to the authors, remote work limited data collection and interpretation, and in turn, limited new research development. While this research focuses on federal policy work, some parallels exist between the challenges that scientific researchers and employees working in policy may face. One example of this might be the consultation work that is often assigned to policy workers (Mintrom, 2011); in a remote format, spontaneous or one-on-one conversations between stakeholders and government workers may be less common, which may even have the potential to change the discourse on issues. Before the pandemic, many policy analysts handled classified materials at headquarters, but the transition to a remote format and associated security profile limited access and potential research in these areas. While there are undoubtedly differences between cardiological research and policy work, both fields rely on research and collaboration and the disruptions that Buchanan et al. cite therefore could apply to government workers.

Focusing on employee performance and well-being, Shockley et al. (2021) examined the role of effective communication in remote work. Shockley et al. found a strong relationship between communication quality and employee performance during remote work and a connection between high communication quality and improved well-being. Shockley et al. (2021) further distinguish between communication frequency and communication quality and note that communication frequency correlates with burnout, while communication quality is critical for maintaining worker well-being. The author's work is valuable in that it distinguishes between different types of communication and their relationship to performance and well-being.

Galanti et al. (2021) also examined remote work during the pandemic using Bakker and Demerouti's Job Demands Resources (JD-R) model and how it may influence employees' productivity, work engagement, and stress. With the JD-R model as their framework for interpreting results on remote work, Galanti et al. (2021) designed and administered an online self-reported questionnaire to 209 employees between May to July 2020. The authors identified four job demands from analyzing the data: family-work conflict, social isolation, and distracting environment. They also identify two job resources: self-leadership and personal resources. They found that individual circumstances appeared to influence the extent to which workers experienced job demands and resources in the model. For example, individuals schooling young families may report increased family-work conflict, while those with more personal resources can draw on these resources to reduce job demands. Overall, Galanti et al.'s (2021) work is useful for this research in that it independently identified job demands and resources. While the authors used self-report questionnaires rather than semi-structured interviews, the authors use a similar theoretical framework to this research.

2.5 Theoretical Frameworks: Job Demands-Resources, Design, and Preferences

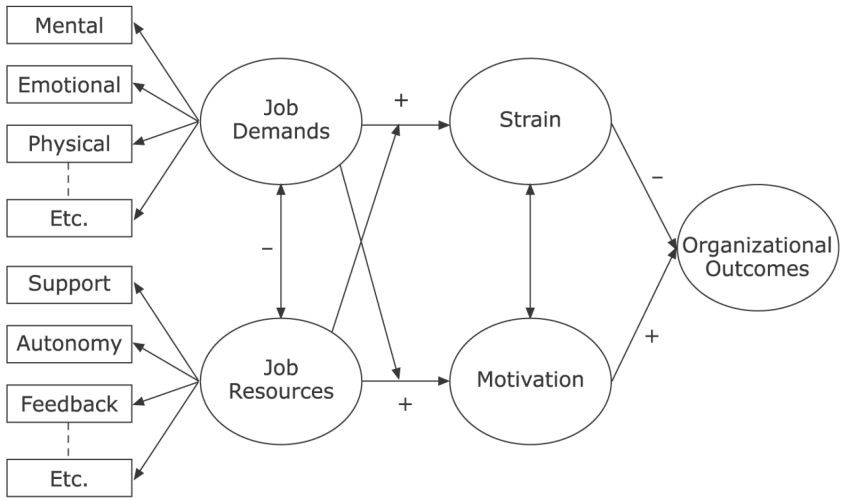
This thesis makes use of the following three theoretical frameworks to frame its arguments. Although other theoretical frameworks can be applied to this work, Bakker and Demerouti's (2007) Job Demands Resources (JD-R) Model, Emery and Trist's socio-technical systems of job design, and Simon's (1990) concept of bounded rationality shed light on job demands-resources,

job design, and job preferences, which are central concepts to understanding remote work. These theoretical frameworks helped to guide data collection and interpretation for this work.

Job Demands-Resources

The first framework that was used to interpret the findings of this work is Bakker and Demerouti's (2007) JD-R model. The premise of Bakker and Demerouti's model is that jobs have both demands and resource components that influence workers' experiences. Bakker and Demerouti (2007) define "job demands" as the "physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological effort or skills" and are accordingly associated with "certain physiological and/or psychological costs" (p. 312). Job resources, in contrast, refer to those "physical, psychological, social, or organizational aspects of the job that are either functional in achieving work goals, reduce job demands, or stimulate personal growth, learning, and development" (p. 312). High job demands without adequate support might lead to strain and burnout, while ample job resources could contribute to worker well-being. Figure 1 shows some of the factors that influence job demands and job resources, and the variables to the left show causes of both job demands and resources.

Figure 1: The Job Demands-Resources Model



The second component of the JD-R model describes the processes that influence organizational outcomes: strain and motivation. In the model, strain refers to the mobilization of sympathetic nervous systems; too much strain can negatively affect performance and in turn organizational outcomes. The authors note that strain can lead to "self-reported absenteeism and turnover intentions" (p. 315). In contrast, motivation results from job resources and can be functional in achieving work goals, reduce physiological and psychological costs, and stimulate personal growth, learning and development. Bakker and Demerouti's model suggests that there is a positive relationship between job demands and strain, as well as job resources and motivation, and that strain negatively affects organizational outcomes while motivation positively affects it. In relation to studying the effects of remote work on public servants, the JD-R model provides a useful

framework in with parameters on both job demands and job resources, which in turn can shape how remote work can be understood.

Karasek (1979) also proposed an early model of strain and is useful to review here as a way of providing context on Bakker and Demerouti's JD-R model. An important takeaway from Karesek's model is that jobs that involve high demands and are not necessarily harmful to workers so long as decision latitude increases with the job—in fact, within this model, the highest satisfaction occurs with "active jobs" where both job demands, and decision latitude are high. In contrast, some of the most challenging jobs are those with high job demands and low decision latitude, which increases the probability of psychological strain and physical illness. Other types of jobs include those with low job demands and high decision latitude, which could be seen as providing insufficient challenge, and low job demands and low decision latitude which might be seen as overly passive. Karasek's model provides useful context for thinking about the JD-R model. Figure 6, Appendix 4, shows the relationship between job demands and decision latitude in this model.

Socio-Technical Systems

The second model that is helpful to better understand remote work is the socio-technical system of job design. The socio-technical system of job design emerged after the Second World War and was a co-collaboration between the social scientists Fred Emery and Eric Trist and it set out to better define how people and society interact through work, instead of developing a mechanical view of work which emphasizes only production. A key component of the socio-technical system of job design is the concept of joint optimization; that is, the idea that jobs need to be designed for both social and technical factors for optimum performance. The theory holds that job aspects in both the social and technical systems need to work together for optimum performance. Concerning this work, the socio-technical system of job design can help understand changes to work in a remote format. Elements of work in the technical subsystem may improve in a remote format while elements in the social subsystem suffer, or vice versa. This discrepancy could affect how satisfied and effective workers are in their jobs. Chapters 4 and 5 will provide further detail on this theory, and how it related to remote work.

Bounded Rationality

A final component of the research for this thesis involves preferences. The interview guide, shown in Appendix 2, developed for the thesis included a section on individual preferences as a way to better understand options for the public service in the future. This section specifically asked participants whether given the option they would continue with remote work indefinitely, wanted to transition to hybrid work, or would want to pursue fully in-person work. While there are many theories through which to examine individual preferences, this thesis uses Simon's (1990) concept of bounded rationality. Rational choice theory underpins classical economics and assumes that individuals calculate the benefits and costs of actions to maximize utility. Modern economics and psychology, however, have shown the limitations of rational choice theory and have provided alternatives to this theory (Herfeld, 2021). Among these new models is the concept of bounded rationality which suggests that individuals rely on heuristics to make decisions under time pressure and with constraints on cognitive resources, which limits their capacity to make rational decisions. Bounded rationality holds that in practice individuals make satisfactory decisions and that optimization is often simply too time-consuming or complex (Simon, 1990). In the context of

this thesis, both rational choice theory and bounded rationality can be used to understand individual preferences for remote, hybrid, or in-person work, but bounded rationality provides the most robust theory for this work.

Bakker and Demerouti's JD-R model (2006), Emery and Trist's socio-technical system of job design (1960), and Simon's concept of bounded rationality (1990) provide a framework for understanding how public servants transitioned to remote work. Bakker and Demeroiti's JD-R model outlines a way of thinking about job demands and resources on workers, and therefore provides a valuable framework for considering the transition to remote work. Emery and Trist's (1960) socio-technical system offers a way to think about the components of jobs in a remote context, and Simon's (1990) concept of bounded rationality provides one way to interpret preferences. As the discussion section of this thesis will show, these models can help interpret and explain the findings.

3. Methodology and Methods

This chapter discusses the methodological approach and the methods that were used to gather information. This research required and received approval from the University of Victoria's Human Research Ethics Board, and has the Ethics Protocol Number: 21-0309.

3.1 Methodology

Most research that has been done in the areas of early career and remote work uses a qualitative approach with some use of quantitative methods. Researchers commonly examine and collect qualitative data, and then provide a quantitative assessment of the ratio of workers who report facing a particular challenge. Stepping back, this methodology makes sense in that studying career phases and how work is conducted necessarily involves assessing human behaviour and experiences. Yet to present their findings, many researchers include a quantitative approach, including presenting response rates, the number of individuals who may have addressed certain themes, ratios of responses, and/or modelling aspects of their findings. This approach provides several benefits in that it allows data to be actively collected, and then interpreted in a useful manner.

Given this common methodological approach, this work follows a similar methodology and relies primarily on qualitative research. Nevertheless, quantitative analysis is still required to determine the total response rate from the panel, present response ratios for job demands and resources, aggregate responses for social and technical aspects of work, and provide an assessment of worker preferences for continuing remote work, adopting a hybrid model, or returning to in-person work. A limited amount of quantitative analysis therefore informs the fundamentally qualitative approach of this research.

3.2 Methods

The primary method that was used to conduct research was semi-structured interviews. Interviews for this study were carried out for approximately six months between November 2021 and April 2022, and due to public health restrictions, the bulk of this work was carried out when public servants were working entirely from home. Due to public health restrictions, the interviews took place remotely and were recorded using a video conferencing platform, and then were encrypted securely on the university's storage system. The interviews took a conversational approach with both the interviewer and participants using a structured exchange.

Sample

The sample of individuals who participated were those who were employed in the federal government and who met the definition of being in their early career phase. This research took a wider definition of early career by defining the concept to mean anyone who has fewer than five full-time years working in the federal public sector and who was born between 1981 - 1996 ("Millennials") or anyone born after 1997 ("Generation Z"). Rather than examining individuals across all job types and career phase, this work specifically examines early career federal public servants who were carrying out policy work. While this project also had access to more senior civil servants from managers to directors, director generals, and assistant deputy ministers, it

specifically examined individuals who were in early career to capture the thoughts and opinions of a group who is sometimes overlooked. Appendix 3 – Participant Characteristics shows the characteristics of this sample in greater detail.

The second aspect of relevance was the sample size. A larger sample has potential to produce a more representative analysis in some fields; however, the nature of semi-structured interviews necessarily contains sample size. For example, questionnaires, surveys, and censuses can potentially collect data on many thousands or hundreds of thousands of individuals while the time-intensive nature of semi-structured interviews contains the number of participants. Nevertheless, most practitioners show that saturation in semi-structured interviews used in this field occurs well before fifteen interviews. Guest, Bunce, and Johnson (2006), for example, show that in qualitative interview research, key themes emerge in first six interviews, while by twelve interviews data saturation has already occurred. Similar results were found during content analysis in this study, with the common job demands and resources emerging during the fifth interview. A larger sample would have provided greater certainty, but the time-intensive nature of semi-structured interviews, transcription, and content analysis contained the sample.

Selection

The third aspect of the sample of this study was the selection of participants. Truly random participation for interviews is difficult, since individuals who respond to an invitation may have particular motives. For example, individuals responding to an interview invitation from a large population may do so if they hold a particular viewpoint. Furthermore, selecting participants directly may create sample bias by reinforcing characteristics of a particular group. Accordingly, this research made use of a snowball sample method where an initial participant referred the researcher to another contact who was also employed in the federal public service. The response rate among these individuals was 0.83; that is, in total the researcher interviewed fifteen individuals and eighteen individuals agreed to be approached.[2] In the three instances was the initial contact not available, the contact referred the researcher to a secondary source who subsequently agreed to be interviewed. Each contact who referred subsequent interviewees was provided with the definitions of those in early career, and a person working in the federal public service when referring the researcher to another contact. While not truly random, the snowball sampling method avoided handpicking participants and allowed the sample to grow organically.

The selection method resulted in the interviews starting at Global Affairs Canada and subsequently spreading outside of this department and across the public service. In total, the sample included participants from four departments: Global Affairs Canada, Environment and Climate Change Canada, Immigration, Refugees and Citizenship Canada, and the Department of National Defence. It also included participants from two agencies: the Social Sciences and Humanities Research Council of Canada and Parks Canada. One participant was from a central agency: the Privacy Council Office. While not representative of all departments, agencies, and central agencies, this selection method still allowed for participation from across the federal public service.

[2] The panel was eighteen and the response rate was 0.83 (15/18).

Characteristics

Apart from sample size and selection, the gender and age of participants should also be considered. Five men, nine women, and one non-binary person participated. This gender ratio approximately reflects that of the federal public service. From March 2017 to March 2021, the public service consisted of 55.4% women and 44.6% men (Canada, 2022). From an age perspective, all those who were interviewed were in early career, and in total eight “Millennials" and seven “Generation Zs” participants took part in the interviews. This age breakdown is not representative of the federal public service, since the average age in the public service is forty-three and the most common demographic are people between forty and forty-nine years old (Canada, 2022). The second most common demographic is individuals between the ages of fifty to fifty-nine, followed by those thirty to thirty-nine (Canada, 2022). Therefore, the gender of the sample approximately reflected that of the public service, but the average age was much younger than the organization, which reflects the initial research focus of the work.

The final trait of this sample worthy of consideration is the level of education of participants. Since this study examined individuals in early career, the average level of education of participants was likely lower than what they might achieve at the end of their careers. Some participants were working on thesis portions of graduate degrees, while others expressed interest in pursuing further education at some point in their life. Despite this fact, the sample had a high level of education. Four candidates had obtained undergraduate degrees as their highest level of education. Ten out the fifteen participants had either achieved or were completing the thesis portion of a master’s degree, and one participant had an earned doctorate. The education level of participants was significantly higher than the Canadian population; in 2016, approximately 22% of Canadians aged 25 to 64 held a bachelor’s degree while those with a master’s degree or earned doctorate represented about 7%, and the number of Canadians with an earned doctorate was less than 1% of the population (Canada, 2017). Breaking down the participant’s education further showed that, most pursued fields related to their work in government—public administration and international relations were the most common fields of study. Other fields of study included political science, history, geography, sociology, commerce, French, international relations, world literature, biology, and earth sciences. Appendix 3 shows an anonymized participant characteristics across the variables gender, education level, length of time in the public service, and other characteristics.

3.3 Design of Instruments

The primary instrument for this thesis was semi-structured interviews. The interviews began by asking public servants about when they started working with the federal government, their job title and classification, whether they belonged to the “Millennial” or “Generation Z” cohort, their length of time in the public service, and what classification they were working in. [3] The second question in this initial interview component asked participants to reflect on the first few months of the pandemic, what their experiences were, and whether they were working at that time. The purpose of these initial questions was to collect relevant information on the sample and to build context for the rest of the interview.

[3] See Appendix 2 – Interview Guide.

This initial portion of the interview was then followed by two sections of questions which were based on Bakker and Demerouti's Job Demands Resources model as a conceptual framework. The JD-R model shows that a series of job demands, ranging from mental to emotional, or physical challenges influence strain while job resources influence motivation, and both strain and motivation affect organizational outcomes. With this in mind, the first part of the interview guide asked participants about the job demands and resources that they may have faced. However, rather than immediately assuming job demands and resources that each public servant experienced, the question was framed by noting that the transition to remote work may have created new challenging and beneficial aspects of work. Participants were then asked, "…do any job demands stand out from your experience of remote work?" They were also asked, "…do any job resources stand out from your experience of work?" In each instance, they were prompted to provide an example and then offer another demand/resource, and another example, until the question reached its natural endpoint. The purpose of this questioning was to organically arrive at job demands and resources from the sample.

Following the first portion of the interview, the second portion asked questions that were based on the socio-technical system of job design as a conceptual framework, which illustrates that jobs are comprised of both social and technical aspects. Within the context of this thesis, the socio-technical model was used to assess whether remote work may cause imbalances in both aspects of work and whether it might negatively affect joint optimization. In this portion of the interview, participants were introduced to a preamble about the technical and social aspects of jobs and then were asked to comment on their experiences of remote work in each area. For example, for technical aspects, participants were asked a question about their productivity, and whether it changed in a remote format. On the social side, participants were asked about their experiences of support and whether it had changed remotely. These questions on the technical and social aspects of work then created new information and context on each area and helped ensure that these two factors for joint optimization could be considered. In the findings and discussion sections, each of these factors was examined to help determine the extent to which social and technical aspects of jobs were affected.

The final part of the interview involved asking participants about their preferences. Participants were introduced to this concept with a short preamble about the role of aggregate individual preferences in organizational decision-making, and then they were asked whether they had the choice they would continue to work remotely indefinitely, transition to a hybrid work model, or work in an in-person environment. As part of this question, participants were asked: "if circumstances permitted, would you continue working remotely indefinitely?" They were also asked the same question about hybrid and in-person work. This question also served as a barometer for the individuals' overall view on remote work; after all, if individuals believe that remote work was hazardous, unpleasant, harmful to career development, or otherwise problematic, their preferences for undertaking certain forms of work would likely reflect this reality. While the first several questions took up the bulk of the interview time, this question was asked at the end of the interviews and was also used as an opportunity for participants to reflect on and summarize their thoughts.

The interviews lasted for an average of an hour, with outliers extending well over an hour. One interview, due to participant time constraints, lasted only thirty-five minutes. The interviews took

place over lunch breaks or after the end of the work day. Many participants noted that completing the interviews helped them better understand remote work.

The basic method that allowed for responses to be analyzed was the use of a video recording platform. Participants were asked to fill out a consent form, shown in Appendix 1 – Participant consent form prior to starting the interview, which stipulated that the interviews were being transcribed and recorded, that their responses were confidential, and that the recordings would be securely stored for a finite period using a university storage platform, and then deleted afterward. Recording each interview was essential for the methods of analysis, which, as the next section outlines, relied on sorting materials to identify key themes that would correspond to job demands and resources or in the case of social and technical components tracking responses to each area.

The researcher used a built-in transcription in the video recording software to assist with transcription prior to content analysis. The first two interviews were transcribed manually, but the following thirteen were carried out using a transcription feature within the video recording platform. Within each meeting, the researcher selected "recording," "cloud recording," and "audio transcript" at which point the software would play an audio message stating that the meeting was being recorded, at which time the interviewer would verbally reconfirm the participant's consent. The software preserved both an audio-visual recording text file of the interviews with time stamps on every few seconds of text, and without attribution to the interviewer or interviewee. The software misunderstood a small number of words and acronyms, but all of the essential material was captured by this initial transcription. Within several hours to a few days after the interview, the researcher listened to the recordings and attributed each portion of the interview to the interviewee or interviewer and replaced any missing words or acronyms. This process verified and "cleaned" the data so that the final transcripts captured the interview dialogue. The researcher securely preserved video and audio recordings on the university's storage platform in case the interview transcripts needed to be compared to the audio-video recording during analysis.

3.4 Methods of Analysis

Content analysis was the primary method of analysis for this work. Stemler (2001) describes content analysis as a "systematic, replicable technique for compressing many [concepts] into fewer content categories based on explicit rules of coding." Holsti (1969) describes content analysis as "any technique for making inferences by objectively and systematically identifying specified characteristics of messages." Content analysis can be defined as a method of research to identify patterns in qualitative data, and in the specific instance of this research, it was used to identify reoccurring themes in interview materials. For this process to be carried out, participants' responses were transcribed into written records of the interviews. This included removing repetition, colloquialisms, and verbal pauses, removing the researcher's dialogue, and taking out social conversation at the beginning or end of the interviews. This step was highly time intensive.

Following transcription, the interviews were divided into headings that corresponded to the Job Demands Resources model, social and technical aspects of work, and preferences. For the first component of work that looked at job demands and resources, five job demands and five resources emerged. For example, technology emerged as one of the first job demands, while work-life balance emerged as one of the first resources. The process of identifying key themes

from the first portion of the interviews was repeated until five job demands and resources were identified. While other job demands and resources emerged, only the most relevant were focused on. The job demands that emerged from the content analysis were work environment, role clarity/mentorship, work hours, technology, and overwork. The job resources that emerged were work-life balance, focus, connection, rewards, networking, and safety. The following chapters will discuss the findings and how they fit into the JD-R model.

In the second portion of the interview that focused on social and technical aspects, two prompts were used to represent social aspects and two were used to represent technical aspects. For the technical aspects of work, the prompts that were used were productivity and performance. For the social aspects of work, these areas were support and career progression. Responses to each category were then coded to determine if a consensus emerged. For example, for productivity, most early career public servants reported that productivity increased in a remote format, while in contrast, most reported decreases in support. The exercise helped determine how individuals responded to remote work in some social and technical respects. These results are subsequently analyzed within a conceptual framework in the discussion section.

The last section of the interviews were similarly sorted along the lines of responses for a preference to continue to work remotely indefinitely, transition to a hybrid format, or pursue in-person work. While participants may have elaborated on their answers, each participant was assigned a value for their preference. For example, a worker who provided a detailed response for a preference for remote work was simply coded as preferring this form of work. The findings section provides the aggregate response rate for each preference as well as samples of where participants elaborated on a specific preference. The discussion section relates the preferences that participants discussed into decision-making theory and interprets the overall findings.

A final component of the methods of analysis for this work was recording who had responded, what department they were working with, how long they had been working in the public service, their job title and classification, education credentials, whether they work working on another time zone, and demographic cohort. Appendix 3 shows this table without identifying information. This table was used to better understand participant characteristics as outlined in the sample section above. Content analysis, coding, and sorting responses were therefore an important part of this work. The following section will discuss the findings that followed from this research.

4. Findings

The findings that followed from this thesis can be broken down into both qualitative observations as well as quantification of how the sample responded and the response rate for each theme. From the semi-structured interviews, the job resources that emerged were work-life balance, focus, connection, rewards, and safety/well-being. The job resources that emerged were technology, environment, role clarity/mentorship, work hours, and overwork. The following section will focus on the findings from the first half of the interviews, while the second section will focus on the social and technical aspects of work, which is followed by participant preferences.

It should be noted that the job demands and resources that emerged from the first portion of the interviews could be easily identified and were often brought up with little prompting, however, the number of responses across content areas varied. With reference to job resources, all respondents referenced work-life balance and focus, while fewer commented on rewards, networking, and safety/well-being. With reference to job demands, almost all public servants commentated on the effects of the environment, technology, and role clarity/mentorship while fewer participants addressed work hours and overwork. Since job demand and resources arrived without prompting, this suggests that some themes could be more salient to sample. The findings section, therefore, lists the themes from those that were raised most to least frequently.

4.1 Job Resources

Work-life balance. The most frequent area that was commented on for job demands was work-life balance, with all respondents referencing this concept in some form, and fourteen out of fifteen respondents citing it as reducing strain or improving motivation. Lockwood (2003) defines work-life balance as a state of equilibrium in which the demand of both a person's job and personal life are equal" (p. 2). Other academics point to the idea that enhanced work-life balance may improve employee retention, motivation and productivity, and result in decreased health care costs, stress, and absenteeism. The first section of interview clearly found that early career public servants cited work-life balance as a job resource.

As Table 1 shows, public servants overwhelmingly referenced work-life balance positively in relation to remote work. From the sample, most public servants referenced having more personal time and the ability to balance the demands of their home and personal lives and reducing strain and improving motivation. As one public servant described, "when I was working in the office before the pandemic, I was spending my time sitting at my desk every day from nine to five and found that draining; I felt really sluggish." Others referenced a central benefit of remote work as getting time back from commuting as decreasing strain. For example, several respondents referenced the hours they saved that then could be reallocated to either personal activities, such as household chores like laundry, or allocating time to leisure or socializing. The respondent who referenced work-life balance negatively referenced feeling confined working from home and how the stresses she experienced were confirmed within the four walls of the room in which she was living. For this respondent, remote work decreased work-life balance and increased strain. However, the majority of public servants in this sample (14/15) reported that they were able to better balance their work and home life in a remote format, and accordingly this emerged as a major theme for the work.

Table 1: Work-life balance

1. Work-life Balance (15) (14+ & 1-)	• When I was working in the office before the pandemic, I was spending my time sitting at my desk every day from nine to five and found that draining; I felt really sluggish. Now I can spend my time getting up and going for a five- or ten-minute walk or I can take a break to stretch. • I get back time in my day. I can use my breaks to run errands and do chores. I think working from home frees up more time to be social, have a clean home, or make a good meal, and I think that is just healthy. • I used to commute forty-five minutes to an hour to get to work every day. So, with all the time I spend commuting, it was close to two hours a day. I have saved a lot of commute time. • I mean [with remote work] I feel like you get more time to see your friends. • I would say that a lot of my friends are from Victoria, and I have made those friends over the years. So, you know, being able to work remotely has allowed me to maintain those connections rather than having to start all over. • With my life now, everything is in the same four walls; there is no distinction... the stress that I have, I keep it within these four walls. My work is always available, and it is much harder to disconnect.

.

Focus. Focus also emerged as a job resource in remote work for most of the early career public servants interviewed. This variable came up to a certain extent in all of the interviews with eleven referencing it as being an asset of remote work, and four expressing it as a hindrance. Most participants contrasted the office environment and its associated distractions with a more controlled home space. As one interviewee put it:

> The office at Parks Canada was incredibly busy; we were densely packed in our cubicles and there were people milling about and chatting, and reaching their heads over to talk, and I thought if you were driving towards a deadline, how would you ever get anything done?

This individual referenced the idea that the office work environment often creates substantial distractions for workers, which can be avoided at home and allow workers to turn off distractions to achieve a result. A related comment on focus came from one public servant who commented that she normally did not work well when people were watching her and that she felt that the home environment reduced the tendency to micromanage workers. This comment referenced how the private home environment might allow workers to focus more, while more formal work environments can create greater pressures of supervision. As with work-life balance, workers' responses pointed to how the job resource reduced strain and improved motivation.

Despite the majority of respondents highlighting improvements in focus in a remote environment, several public servants raised challenges with this variable. These concerns centred around the number of distractions that could be at home as well as with more asynchronous communication in a remote setting. One interviewee reported a temptation to work on personal tasks at home such as checking email, making bank payments, or browsing news and current events. Without an environment of formal supervision, these temptations appeared stronger for this worker. Another

interviewee mentioned diminished focus in her workflow because of delays when communicating with coworkers in a remote work environment; this workers' situation involved her waiting for a response in the evenings when her coworkers had already signed out. Nevertheless, these concerns were for a minority of participants, and they were outnumbered by the responses that underscored focus improving in a remote format. The following table (Table 2) shows select responses:

Table 2: Focus

2. *Focus* (15) (+11 & -4)	• The office at Parks Canada was incredibly busy; we were packed densely in our cubicles and people were milling about and chatting, and reaching their heads up over their desks to talk, and I thought if you were driving towards a deadline, how would you ever get anything done? • I don't think I would be more focused if I was in the office with people watching me closely. I have never liked being micromanaged. • Since I am three hours behind my colleagues in Ottawa, I frequently wait longer for things to get done. The outcomes of what I am working on can be affected. If I need to wait for a response, I have to take a break and it will cause me to lose focus. If I were in an office, I would be able to just lean over my cubicle and ask my coworker. • When working remotely, I am able to get into a very productive flow state; I am able to tune out distractions. • I have a lot more flexibility with my schedule now that I work from home. The office is more rigid and structured in that you must be sitting at your desk for eight hours. Other people see you sitting at your desk, and you can be reprimanded if you are not, and I feel that it is kind of unrealistic. So, this just feels like a more modern way of working • Since I am three hours behind my colleagues in Ottawa, I frequently wait longer for things to get done. The outcomes of what I am working on can be affected. If I were in an office, I would be able to just lean over my cubical and ask my coworker.

Connection. A somewhat surprising job resource that emerged from the interviews was participants reported enhanced interpersonal connection in a remote environment. Unsurprisingly, improved interpersonal connection then had the potential to reduce strain and improve motivation. The mechanism through which this acted were the benefits of being in a less formal environment, improved connection from working near friends and family, and to a more proactive approach to connecting with others. Referencing the value of being in a less formal environment, one respondent described:

> I found that I am able to connect with people better virtually than I would in person… once you have a meeting set up and you are both at home, you are more comfortable connecting genuinely than if you are in the office where formality can prevent you from connecting as quickly.

According to this comment, the more casual nature of working from home allowed workers to connect more closely and genuinely, and ultimately reduced the stress of undertaking remote work. Another respondent noted that "since I am able to work from my hometown, I feel as if I am surrounded by people I know and my family and friends, but if I were to move to Ottawa, I

would not be close to my family, and I'd have to start my friendships all over." Finally, one interviewee reported that remote work was not isolating because "everyone is doing everything that they can to surround themselves in a virtual world." According to this worker, the ubiquity of remote work increased connections between workers who were trying to overcome the isolation that sometimes occurs in a remote format. In total, these responses indicated that enhanced connections might reduce rain and improve motivation.

Although most respondents reported a positive association between remote work and connecting with others, some did not. These respondents tended to report that an aspect of connection was missing in a remote format. As one early career public servant put it, "when I was working at my old department before the pandemic, I felt really connected to my team… we would all go out for lunch together and we sat in the same section, and, you know, those in-person connections were really valuable both personally and professionally." Another respondent explained that "it feels tricky to establish meaningful connections and while we have ways to foster connections, it is not the same as sitting across from your supervisor and being able to take a break and chat together; the whole remote work thing feels a bit individual—I have one direct contact, and I find myself connecting with her most of the time." These responses point to the idea that changes in the ways that people connect could be a downside of remote work, but, nonetheless, the balance of responses, somewhat unexpectedly, pointed to increased connection as a result of remote work. The following table (Table 3) shows select responses:

Table 3: Connection

3. *Connection* (14) (8+ & 6-)	• I found that I am able to connect with people better virtually than I would in person… you know, once you have meeting set up and you are both at home, you are more comfortable connecting genuinely than if you are in the office where formality can prevent connection from forming as quickly. • I think in terms of connecting with people the pandemic and the craziness around it helped to bond people together, because we're all kind of going through the same things together. • I feel that you can still connect with coworkers and that things can still be conversational because everyone is doing everything that they can to surround themselves in a virtual world. • It feels tricky to establish meaningful connections remotely, and while there are ways to foster connections, it is not the same as sitting across from your supervisor and being able to take a break and chat together; the whole remote work thing feels a bit individual—I have one direct contact, and I find myself connecting with her most of the time. • It doesn't actually feel like you are by yourself. I mean in a sense, you are, but yeah, I don't know if that like really translates into how I feel about the work that I'm doing, because if it's individually focused, I'm just going to be focused on what I'm doing. • Since I can work from my hometown, I feel as if I am surrounded by people that I know. Since I live in this space, I am surrounded by my family and friends. If I were to live in Ottawa, I may get to know people through work, but I would be far from my family.

Rewards. The next theme that emerged as a job resource during the interviews were rewards from remote work. Rewards are often traditionally thought of as financial incentives, benefits, or an improved job title, but they can also exist in the form of increased autonomy, flexibility, or work satisfaction. Many individuals reported increased rewards from remote work, which fell into these categories. For example, a large number of early career workers explained that they saved money on transportation, clothing, and food through remote work. As one participant put it, "since you don't have a daily commute, you save money on gas, and you have lower insurance premiums because you are not commuting with your vehicle… and you don't have to buy work clothes, you don't have to eat out, and you save time by not having to drive… they say that time is money, so you save money that way." This comment points to the idea that remote work can enhance motivation to the extent that workers realize financial benefits. Another person interviewed who was just starting out in the field noted that "it would not have been financially sound for me to go to Ottawa, so remote work has allowed me to accept my first work term in this field"—suggesting that remote work could enhance motivation to pursue a career in the public service. Another reward that individuals noted was that they could simply work more. For example, one public servant noted that she had picked up a second job at a restaurant, as she explained, "it is kind of nice to be able to take fifty minutes at the end of the day to get prepared for my shift, and not have to struggle to commute an hour to the office and then my other job." These various rewards could be seen as both enhancing motivation to work while reducing financial strain.

Similar to financially based rewards, another category of reward may be enhanced flexibility and autonomy. Those sampled appeared to be able to use job flexibility to travel or advance their education. As one respondent explained, "this summer I was able to go to a family reunion, and I spent the night at a party, and then the next day I worked at my vacation rental; I was able to work and travel at the same time." This response indicates an upside to remote work in the form of improved flexibility. Another worker explained how remote work allowed her to "connect with people across the country and around the world… I attended a training session in Japan and went to a conference in Europe that I normally wouldn't be able to." These responses indicate the varied nature of rewards that occurred during remote work.

Those who reported a negative relationship between remote work and rewards often described losing some of the perks that were once associated with work. An interviewee noted, "when I went home during the pandemic, I realized that I didn't love my job, and that remote work was almost like working without the perks; in the office, the social aspect of the events, the parties, and the experiences, helped me feel connected to my team; working without them made it almost feel as if I was slogging through the day." Several other respondents noted that office parties were a social glue that held people together and that the social connections that formed in this environment were difficult to replace. Others noted that in the office individuals could easily go out after work to bond, but no similar avenue existed for remote workers. Despite these responses on rewards and remote work, most respondents reported positively on remote work and rewards. The following table (Table 4) shows select responses:

Table 4: Rewards

4. *Rewards* (8)	• Since you don't have a daily commute, you save money on gas, and you have lower insurance premiums because you are not using your vehicle to

(+8 & -1)	commute… and you don't have to buy work clothes, you don't have to eat out, and you save time by not having to drive… they say that time is money, so you save money that way. • I've picked up a job at a restaurant in the evenings and weekends, and I start at 5:30 p.m.; it is kind of nice to be able to take fifty minutes at the end of the day to get prepared for my shift. • It would not have been financially sound for me to go to Ottawa, so remote work has allowed me to accept this position. I do not have an interest in permanent moving; being remote allowed me to accept this position. • A benefit of teleworking is the flexibility; this summer I was able to go to a family reunion, so I spent the night at a party and then the next day I worked at my vacation rental; I was able to work and travel at the same time. • I get to connect with people across the country and around the world… I attended a training session in Japan and went to a conference in Europe that I normally wouldn't be able to. There has been more accessibility overall. I could see that equipment could be a barrier for people, but for me personally remote work has meant that I have more accessibility, more opportunities, more engagement, and more diversity. • When the pandemic started and I began working from home, I realized that I didn't love my job. It seemed that remote work was almost like working without the perks; in the office the social aspect of events and parties added to the whole experience, and it helped me feel connected to my team; working without them made it almost feel as if I was slogging through the day.

Safety & Well-being. The final job resource that emerged among participants was enhanced safety and well-being. A smaller number of respondents brought up this factor as a job resource, but those who did reported a range of benefits from the biological reality of lower exposure to COVID-19, to greater workplace accessibility for the chronically ill or disabled, and the lower potential for being part of a toxic workplace. One public servant with experience working in the sector before the pandemic referenced increased physiological safety. As this respondent put it, "with COVID numbers being what they are, I would be terrified to take transit… when people return to work, I don't imagine that many DGs, ADMs, and DMs will take public transit, and I'm not sure they are thinking through the concerns of working level individuals." For this individual, the ability to continue to work from home reduced strain. Another public servant with a chronic health condition described how remote work opened up opportunities for those who were managing medical conditions, which included both avoiding physical barriers in offices as well as being able to increase the amount of rest that often is not possible when going into an office regularly.

Several public servants discussed perceived increased safety from harassment while working remotely. "Before the pandemic, I was seated close to a coworker who was disruptive, condescending, and a little bit sexist," explained one interviewee. "When we transitioned to remote work," she stated, "I was able to get away from that person; looking back, it was generally

unpleasant." This comment illustrates how remote work can sometimes provide distance for people to escape challenging circumstances. Another public servant reported feeling that the risk of harassment was lower because remote workers "are very visible, because our interactions are traceable, either in writing or group meetings…" She went on to explain how a remote work format could create a digital record of toxic behaviours. Another individual noted that in a remote setting, it is just "easier to avoid coworkers who you don't get along with." This respondent emphasized how working remotely allowed her to reduce interactions with toxic people and in turn avoid a range of conflicts, which may increase safety and well-being.

Despite these accounts of improved safety and well-being, public servants still reported some issues occurring in this area. One interviewee recounted a lengthy meeting where conflict broke out. She went on to explain how "some personalities on my team have a 'unique' way of communicating… they [the three staff] are almost always in constant conflict with each other." "Today, in an hour-long meeting, my manager, the team lead, and a Senior Policy Analyst, were essentially yelling at each other, and I was thinking, 'can we not?'" the interviewee recounted. This respondent went on to note how the conflict was emotionally upsetting, but that "the ability to hang up on that meeting and not see those people was a benefit of working remotely." Nevertheless, most participants reported that the ability to remove oneself from the risk of contracting COVID-19, improved accessibility and greater ability to avoid harassment formed a job resource in a remote environment with the potential of reducing strain and improving motivation. The following table (Table 5) shows select responses:

Table 5: Safety & Well-being

5. ***Safety & Well-being*** (6) (+5 & -1)	• I have not had to have any work-related exposures, and I'm I am grateful for my ability to stay safe from COVID-19. • I think remote work is a lot more accessible for chronically ill or disabled people who have mobility issues. If you have to go into the office and don't have an accessibility ramp or elevator, then it is difficult to accept that job. Remote work can open up opportunities that would not otherwise be available. • In many cases remote workers are very visible because our interactions are traceable, either writing or group meetings… with deliverables all the people who need to know are CC'd, which means that you are going to get fewer unhealthy interactions. • Before the pandemic I was seated close to a coworker who was disruptive, condescending, and a little bit sexist; when we transitioned to remote work, I was able to get away from that person; looking back, it was generally unpleasant. • Today, in an hour-long meeting, my manager, the team lead, and a Senior Policy Analyst, were essentially yelling at each other, and I was thinking, 'can we not? The ability to hang up on that meeting and not see those people for the rest of the day was a benefit of working remotely.

4.2 Job Demands

In summary, the five job resources that emerged from the first half of the interviews can be summarized as work-life balance, focus, connection, rewards, and safety and well-being, and under Bakker and Demerouti's JD-R model (2006) they had characteristics that reduced strain or improved motivation. As the previous section outlined, not all these areas emerged as job resources for all participants, however, on balance they still emerged as having the potential to reduce strain and enhance motivation. The following section examines the job demands that emerged that have the potential to increase strain and reduce motivation.

Work Environment. The work environment emerged as the most commonly cited job demand for public servants, and this demand centred around having more distractions and difficulty separating work and home life. One public servant interviewed, for example, described how at the outset of the pandemic "the people above my apartment started doing renovations, and from eight in the morning to six at night there would be drilling sounds… it was difficult to concentrate and embarrassing." While offices typically have some ambient noise, the employer is responsible for creating decent working conditions, which are not always present in residential housing. Another interviewee noted how his apartment was "extremely hot in the summer" and how "policy work is mental, and if you can't think, you can't work." Both comments illustrate how the work environment may increase strain on workers. Comments addressing the separation between work and home life also emerged as a job demand. One interviewee recounted how his remote work environment confined his activities, as he recounted, "I live in this room – my bed is over there – I work in my room, but you should not work in your room ever, because I've begun associating my room with both sleep and work." Another interviewee recounted how having her workstation close at hand could create a temptation to complete unpaid overtime, "I have to force myself not to log on and finish up work on the weekends; it can be a challenge to maintain work-life balance." The blending of both work and home life in a remote work environment, therefore, had the potential to increase strain and reduce motivation.

Positive descriptions of remote work and the environment appeared to centre around improved flexibility. One individual who had worked in a term position as an analyst and was subsequently hired indeterminately as a biologist recounted, "for my family, we will not move… my wife and young kid would not have moved to Gatineau or Ottawa, so I would probably be working for the provincial or municipal government; the pandemic greenlighted this opportunity." He also expressed concern about how remote work might end in the future with implications for his career stability and development. Another public servant commented on the positive aspects of being able to enjoy a milder climate on the West Coast and family connections while working with colleagues from across the federal government. This individual summarized this benefit by stating, "I have no complaints about my living situation… climate and weather are a big part of my mental health, and I feel lucky that I am able to work from the West Coast." These responses point to positive aspects of remote work and the environment.

Despite these positive responses towards the work environment, the theme on balance still emerged as a job demand. In total, eight individuals interviewed reported negatively on the effects of remote work and the environment, and six reported positively. Increased distractions and difficulty separating work and home life characterized the challenging responses, while comments on focus and improved flexibility characterized positive ones. The balance of responses indicated that the work environment had the potential to drain employees' mental and physical resources

and create stress, which represented a job demand. The following table (Table 6) shows select responses:

Table 6: Work Environment

6. Work Environment (14) (-8 & +6)	• The people above my apartment started doing renovations, and from eight in the morning to six at night there would be drilling sounds… it was difficult to concentrate and embarrassing. • My apartment is sometimes extremely hot in the summer, but at headquarters though the conditions are more controlled, and there are air conditioners and standard ways of controlling the workspace; policy work is mental, and if you can't think, you can't work. • I've thought a lot about situational factors lately. I live in this room – my bed is over there – I work in my room, but you should not work in your room ever, because I've begun associating my room with both sleep and work • I have to force myself not to log on and finish up work on the weekends; it can be challenging to maintain work-life balance • For my family, we will not move… my wife and young kid would not have moved to Gatineau or Ottawa, so I would probably be working for the municipal or provincial government; the pandemic greenlighted this opportunity. • I have no complaints about my living situation… climate and weather are a big part of my mental health, and I feel lucky that I am able to work remotely from the West Coast. • When I was working at my old department at the outset of the pandemic and transitioned to remote work, I was living with two roommates. One was also working from home and the other worked nights and during the day slept. It was hard to coordinate our schedules.

Technology. Next to work environment, participants frequently referenced technology as a job demand. Problems with technology could be divided into issues with the technology itself and related social problems. For problems with the technology itself, a frequent issue that emerged was with equipment speed. One interviewee working as a researcher for the Department of National Defence noted, "the computers and laptops that we are using are very slow; the technology was already out of date before the pandemic, and now we are paying the price for it." Another public servant reported issues with using a work computer while at home "…it took me hours to edit a few pages… I could almost get nothing done, and there was a period where I thought I wasn't even going to be able to get my work done on time." Other interviewees commented on the unpredictable nature of networks that made remote work more difficult: "where I live, there are frequently power outages that can cause me to temporarily lose Internet…" reported one participant, "while not normally a huge problem, an issue that emerges for me is working on files on our shared drive, which can be disrupted." As these statements indicate, barriers with technology could be a major hindrance to work.

The social aspects of technology also emerged as a concern for many participants and centred around how management sometimes impedes the adoption and use of technology in the workplace. One participant remembered back to the beginning of the pandemic and reflected how at a time of crisis how management was slow to permit new technologies from being adopted because of confidentiality concerns. As she recounted, "I remember being annoyed when we learned the message that video conferencing was no longer allowed… I understand the caution with third-party services, but those were the tools that we needed to do our job." She went on explain how at the beginning of the pandemic an existing video conferencing system was in place, but how bugs and issues rendered it virtually unusable, meaning that workers were left without communication tools. Another worker reported that management resisted incorporating new brainstorming tools into their team. He noted, "management will sometimes reference how if we were in person that the team would be able to brainstorm better… well you know, there are virtual brainstorming tools that can be used?" People sometimes don't take the time to think things through." Several individuals also referenced problems with only interacting virtually throughout the day, and how doing so was more psychologically draining and demotivating when compared to communicating with teams in person.

A handful of public servants pointed to positive aspects of remote work and technology. One individual reported how transitioning to remote work helped accelerate her bureau's uptake of new technologies. This public servant working as a Trade Commissioner in Global Affairs Canada reported on how remote work allowed her team to avoid the long-distance telephone calling systems that they used before the pandemic, and instead adopt more modern video chat technologies. Another individual reported how remote brainstorming tools were even more collaborative than before, because of the connected nature of these platforms. Despite these positive reports, most workers reported technology as increasing strain and reducing motivation. The following table (Table 7) shows select responses:

Table 7: Technology

7. Technology (12) (-9 & +3)	• The computers and laptops that we are using are very slow; the technology was already out of date before the pandemic, and now we are paying the price. • The government was not set up for remote work; we were based on the model of coming to the office and emailing documents back and forth. When the entire government shut down over a weekend, our systems were overwhelmed. • Video conferencing fatigue can be a big deal; sometimes I simply cannot look at another video and I am so tired staring at the computer. • Management will sometimes reference how if we were in person that the team would be able to brainstorm better… well you know, there are virtual brainstorming tools that can be used? • Remote work has meant that the folks who want to punch the clock say, "I don't understand the technology," or "I can't tell you what my progress is" so that they can get away with doing less. They can work at half the speed as others and blame technology. Issues with technology are one problem, and another is people taking advantage.

	• I think that the pandemic just like accelerated some of our communication tools; we can actually call Trade Commissioners all around the world in South Africa and Asia, and we can actually get to know them that way.

Role Clarity & Mentorship. Several public servants reported difficulties with mentorship within their roles upon entering the public service as forming a demand of remote work. One individual noted, "I have struggled with mentorship, or what I think of as social learning … if I were in the office, I think that I would have access to more Senior Policy Analysts, Managers, and Directors and get a sense of what they work on and how they prioritize their time." As this policy analyst noted, "I would like to get a sense of how my senior colleagues are spending their time; I really do feel that remote work has slowed my growth." According to this analyst, this also interfered with the ability to feel comfortable at work, despite having strong credentials and considerable work experience. These comments point to the idea that learning could be delayed in a remote environment. Another interviewee outlined how it was difficult to learn from coworkers remotely by explaining that "as humans, we learn by modelling other people; when people are doing something, we pick up that behaviour as part of the learning process, and we try to keep up and make sure that we are not falling behind; remote work reduces one's ability to model others." As this comment indicates, reduced mentorship has the potential to reduce motivation. Other interviewees recounted difficulties with role clarity in a remote format, which can generally be defined as understanding where one fits within an organization and what to prioritize. "When I started at this department," recounted one interviewee, "trying to understand where I was in a remote format was challenging, as well as getting a sense of my role within the broader function of the organization." She went on to explain that if she had the opportunity to meet with and network with her coworkers that it would have been easier to put her work into a broader context. Another individual recounted how remote work made it difficult to see where people were in the organization and explained that "… the government is a big machine, and it can be difficult to get a sense of what people do through a relatively limited software interface." These comments illustrate the job demands that may be created as a result of reduced role clarity.

Although many interviewees reported issues with mentorship and role clarity in a remote format, two responses noted improvements in this area. One interviewee referenced the benefit of spontaneous collaboration for mentorship and role clarity. According to this analyst, remote work presented an opportunity for enhanced mentorship in that it creates fewer costs, as he recounted, "I think that it is easier to be able to listen in to a meeting, compared to having to physically go into the room … I think that the flexibility of being remote has allowed my manager to just flip me a meeting link and say if you have the time, listen to build your knowledge,' and I think that has helped our products develop." This comment illustrates how the flexibility of remote work can improve mentorship under certain circumstances. Another individual discussed feeling insecure about quiet periods in an office. "[At the office] I remember feeling this pressure when I was sitting at my desk and I had no pressing assignments," she recounted, "when working from home, I now feel that, if need be, I can repurpose that time towards learning more." Despite these comments, most responses in the interviews suggested that mentorship and role clarity were a job demand. The following table (Table 8) shows select responses:

Table 8: Role Clarity & Mentorship

8. Role clarity/ mentorship (11) (-9 & +2)	• I have struggled with mentorship, or what I think of as social learning… if I were in the office, I think that I would have access to more Senior Policy Analysts, Policy Managers, and directors and get a sense of what they work on and how they prioritize their time. • …as humans, we learn by modelling other people; when people are doing something, we pick up that behaviour as part of the learning process, and we try to keep up and make sure that we are not falling behind; remote work reduces one's ability to model others. • When I started at this department trying to understand where I was in a remote format was challenging, as well as getting a sense of my role within the broader function of the organization. • The government is a big machine, and it can be difficult to get a sense of what people do through a relatively limited software interface. • Sometimes how tasks should be carried out is ambiguous. I have to write up the question to my manager, and I think that it can be difficult for them to interpret. Asking them in person would be much more direct. • The ability to walk around and visually observe where people worked in the office and what sort of work, they do is really important; it can be difficult to get a sense of what people do through software alone. • When working from home, I now feel that, if need be, I can repurpose that time towards learning more.

Work hours. Work hours also emerged as a job demand from the interviews. Increased flexibility in the location of work ultimately allowed individuals to work in different time zones. In fact, of the individuals interviewed for this study, seven early career public servants were working in a different time zone from the NCR with several working three hours behind headquarters. The seven individuals who were working in different time zones mentioned work hours, and most reported this area as a challenge. One interviewee described the difficulty of working on another time zone as follows: "my department allows me to work between 7:00a.m. – 3:00p.m., Pacific Time, which is not too bad, but sometimes meetings with this division of the DND are set much earlier at 7:00a.m. Eastern Time, which is 4:00a.m. Pacific Time; I am naturally not a morning person, but I think that even morning people struggle to function at 4:00a.m." This large time difference could mean that someone working much earlier could experience fatigue that reduced motivation. Another public servant recounted how senior managers set meetings according to their schedules, regardless of where team members were. "I think it can be inconsiderate to set meetings for the first thing in the morning if you have team members on the West Coast, but if the meeting has been scheduled by someone in senior management, there just isn't much to I will about it," recounted the interviewee. This complaint was fairly common among those working on different time zones, since management, owing to having more years in the field, was almost always located in the NCR while early career workers tended to be more dispersed.

Another category of concern was how time zones could create asynchrony in working conditions: "since I am two hours behind headquarters," noted one interviewee, "there are two hours at the end of the day where if I have a question or need direction, it can be difficult to get help, and

while synching my body to Eastern Time might work, I probably wouldn't be getting enough sleep." This comment points to how solutions to time differences could also create challenges in themselves. A final category focused on remote work and the standard workday in the federal government: "I think I struggle with the fact that I was being paid for 7.5 hours of work a day, but that when the pandemic started, I often feel that I was working less than that because of the efficiency of remote work." This comment indicates that the flexibility of remote work was sometimes offset by the expectations for rigid work hours for public servants. In total then, problems with work hours centred around time differences along with asynchronous working conditions that arise in a remote format.

At least two public servants referenced the beneficial aspects of remote work and work hours, but these comments were not particularly strongly positive compared to those that referenced challenges. One individual commented that the structured nature of work in the federal public service, when compared to the more unpredictable schedules of other fields, provided a significant benefit. As this individual recounted, "when I worked on contract with university student services, I worked shift work, and that was challenging…" In fact, many of those interviewed had worked outside of the sector and were aware of the often-unpredictable nature of work in other fields. Another interviewee noted that her thirty-seven-and-a-half-hour work week provided structure, and seemed to be a positive for her schedule: "I keep a timer on my watch, and every time I take a break, if I step away from my computer, as soon as I close my computer, I start the timer; in this role, I like how we have clearly defined breaks and know exactly how many hours we are going to work in advance." For employees who like structure and certainty, the field therefore provides some degree of certainty with how work can be carried out. Despite these comments on work hours, most responses suggested that this variable was a job demand and ultimately resulted in increased strain and reduced motivation. The following table (Table 9) shows select responses:

Table 9: Work Hours

Work hours (8) (-6 & +2)	• … the problem is that my team is doing a lot more overtime, but we aren't necessarily reporting it, which ends up further increasing the workload because it gives the impression that we can handle it and that everything is fine. • I think it can be inconsiderate to set meetings for the first thing in the morning if you have team members on the West Coast, but if the meeting has been scheduled by someone in senior management, there just isn't much to I will about it. • There are two hours each day where if I have a question, I can't get an answer, or if I have something that's stopping me from finishing a task, I may have to wait until the following day. • When I worked on contract with university student services, I worked shift work, and that was challenging… I don't have much to complain about here. • I keep a timer on my watch, and every time I take a break, if I step away from my computer, as soon as I close my computer, I start the timer; in this role, I like how we have clearly defined breaks and know exactly how many hours we are going to work in advance.

Overwork. Overwork emerged as a final factor that increased the social and psychological demands of work and had the potential to activate the sympathetic nervous system and constitute a job demand (Bakker and Demerouti, 2006). Most problems with overwork involved both unreported overtime and the quantity of work. With reference to overtime, one early career public servant explained, "the problem is that my team is doing a lot more over time, but we aren't necessarily reporting it, which ends up further increasing the workload because it gives the impression that we can handle it and that everything is fine." She went on to note how "the extra funding we received earlier this year has really meant that all of our projects are hitting their deadlines at the same time." As this account illustrates, the flexibility of remote work can disadvantage workers in that it can allow individuals to complete work after hours and make it harder for management to see how much work actually needs to be done.

Connected to the issue of underreported over time and a high quantity of work was the problem of a less clear boundary between work and life. As one individual noted, "there are times when I am called and messaged about work after hours and on weekends, and it's got to the point where I will not give out my personal information—I say, 'if you need to reach me you can call or email me at work between 8:00a.m. – 4:00p.m. on weekdays, but do not contact me when I am not supposed to be working.'" The pressure to work after hours could then be seen as contributing to strain. Another individual reported managing an intense work culture, and as she reported, "the team that I am on will complete work at all hours of the day and night; I get requests to work on something at the end of the day and for the following morning, and I work long after I've supposed to clock off." As this anecdote indicates, remote work appeared to facilitate requests without being paid. These comments therefore point to issues with both completing increased quantities of work and working unreported hours in a remote setting, both of which formed a demand for workers.

While most interviewees reported challenges with overwork, some reported benefits of being in a remote format and handling overwork. These accounts mirror comments under the theme work-life balance. Two individuals reported that at times being in a remote format could increase the amount of time and autonomy they had to carry out their work. As one individual reported, "… as long as I have reached out to ask for additional tasks and I have been proactive in the work that has been assigned… sometimes it is nice to be able to work from home because I can repurpose my time to other tasks or catch up on rest." Another person reported how she had excess free time, which sometimes meant working for less than seven and a half hours in a standard workday. This individual reported, "I struggle sometimes with the fact that I am not working for the full seven and a half hours, and that I may have three or more hours in the day that are really just unstructured," which pointed to an opposite problem to the idea of overwork. In total then, these two comments allude to reduced overwork. Nevertheless, most comments highlighted remote work as a job demand. The following table (Table 10) shows select responses:

Table 10: Overwork

10. Overwork (7) (+5 & -2)	• … the problem is that my team is doing a lot more overtime, but we aren't necessarily reporting it, which ends up further increasing the workload because it gives the impression that we can handle it and that everything is fine. • There are times when I am called and message about work after hours

	and on weekends, and it's got to the point where I am won't give out my personal information—I say, if you need to reach me you can call or remail me at work between 8:00a.m. – 4:00p.m. on weekdays, and during those times I will respond, but do not contact me when I am not supposed to be working. I've gotten better about putting up boundaries. • Despite what people say about government jobs, the team that I am on completes a great deal of work at all hours; I get requests to work on something at the end of the day and for the following morning, and I work long after I've supposed to clock off. • As long as I have reached out to ask for additional tasks and I have been proactive in the work that's been assigned… sometimes it is nice to be able to work from home because I can repurpose my time to other tasks or catch up on rest • I struggle sometimes with the fact that I am not working for the full seven and a half hours, and that I may have three or more hours in the day that are really just unstructured.

As this review highlights, five job resources and five job demands emerged from the interviews. The job resources that emerged were work-life balance, focus, connection, rewards, and safety/well-being, and these job demands could be seen as reducing strain and increasing motivation. The five job demands that emerged were technology, environment, mentorship/role clarity, work hours, and overwork, and increased strain and reduced motivation. As this section showed, participants presented a nuanced picture of the benefits and drawbacks of remote work. The discussion section of this work will analyze these findings in greater detail and presents a modified version of Bakker Demouriti's Job Demands Resource (2006) model. Before proceeding to the discussion, however, it is necessary to examine findings from the second portion of the interview guide.

4.3 Technical Factors

The second section of the interview examined the technical and social aspects of work in a remote setting. As the methods section of this thesis outlined, Emery and Trist (1960) developed social-technical theory to reflect the idea that jobs should not only be thought of in terms of their technical components, but also as part of a social context. With Emery and Trist's work in mind, the interview guide presented two concepts—productivity and performance—to participants to represent the technical aspects of jobs and asked them about changes in this area. Two social aspects of remote work were also identified—support and career progression—and discussed in the context of the work. While these variables were not an exhaustive representation of technical and social factors of work, they still offered insight into how workers felt these aspects of work changed. Responses to each of these areas were recorded to assess how these factors might change in a remote setting.

Productivity. The first question in the interviews that was used to gather information about technical aspects of work asked about productivity. Participants were asked: "productivity, which for the purpose of this discussion can be thought of as the amount of output produced per unit of input, may change during remote work; in light of this fact, do you believe that productivity

increases, decreases, or stays the same in a remote format?" From the sample, ten interviewees reported that their productivity increased in a remote setting, three reported decreases, and two were uncertain of changes in this area. That is, the balance of responses reported productivity as increasing in a remote format.

For the majority of respondents reporting productivity increases, the benefits the recounted centred around greater focus and speed connecting to coworkers. For focus, comments followed the pattern of individuals reporting that being at home was conducive to greater concentration. As one respondent put it, "since I am in a home environment, I find that I am able to more easily enter a state of deep focus, where I have few distractions and where I can really concentrate on the work that needs to get done." This comment provided in response to the prompt on productivity, suggested that focus improves in a remote setting. When asked this question, another public servant provided a longer explanation:

> I know some people who say that what they miss about the office is that they could just pop their head into their coworkers cubical and ask a question, and that can definitely be easier sometimes than having to write out a Teams message or scheduling a time to ask a question. But I also remember when that would happen to me, and I was the person interrupted, and it can really stop your workflow and productivity during the day.

As this individual described, connection in an office environment can also hinder productivity and a more individual and private work environment can be conducive to achieving results. While this interviewee did not discuss disruption that could be created from emails or instant messages, presumably the lag within email and the ability to set status messages provides some focus. Another interviewee recalled the ritual of "printing paper for our binders and sitting in a meeting room," but how the ceremony involved in these in-person events meant that the meetings were more prone to starting or ending late compared to the efficient prescheduled virtual meetings. These comments illustrate some areas where individuals reported productivity increasing in a remote environment.

Compared to the reports of decreased distraction but in line with arguments for higher productivity was the fact that several public servants referenced increased ability to connect with coworkers through instant messaging. These comments claimed a productivity boost to doing so. As one individual put it, "we are always checking our messages, which means if I need to ask a question, I can expect a response pretty much right away, and I can then move forward with what I need to do." This sense of connection seemed to be a large benefit of remote work, at least according to the respondent. Another individual cited the speed of writing Teams messages as a way of achieving results.[4] As he recounted, "I feel that I can quickly send messages to get further information or clarify a key point… I don't think that one needs to take as long to write out as a message as one would over email." This participant went on to explain how Teams messaging helped speed of communication and related this improved speed to enhanced performance.

From the discussion above, it might be noted that the ideals of high productivity from improved focus and high productivity from increased digital connection are at odds. After all, if workers are closely connected, they may be more susceptible to being interrupted. It is possible, however, that either the frequency or magnitude of disruptions change in a remote format. In terms of frequency,

[4] As of late 2021 and early 2022, all of the federal public service was using the Microsoft Teams program to chat, schedule video calls, and communicate.

it is possible that workers can temporarily indicate that they are busy or set aside time to focus, while in an office environment setting up such a time is more difficult. In terms of magnitude, it is possible that an unplanned interruption in an office is several times more disruptive compared to a virtual interruption—receiving a Teams message at home might be inconvenient, but not be as distracting as an in-person conversation. Table 11 shows the responses that interviewees gave for this variable.

Table 11: Responses to productivity as a technical aspect of work

Productivity	• When I am at home, I find that I am able to enter deep focus, and I am really able concentrate on what needs to get done. • I know some people who say that what they miss about the office is that they could just pop their head into their coworkers cubical and ask a question, and that can definitely be easier sometimes than having to write out a Teams message or scheduling a time to ask a question. But I also remember when that would happen to me, and I was the person interrupted, and it can really stop your workflow and productivity during the day. • We are always checking our messages, which means if I need to ask a question, I can expect a response pretty much right away, and I can then move forward with what I need to do. • We used to spend time printing paper for our binders and sitting in a meeting room, and we would wait for the meetings to take place and many of our old rooms didn't even have clocks on the wall; we always seemed to end up going way over our schedule time. • You know, my manager is in my top three favourites in my phone; we talk on files throughout the day, and it really improves my ability to get things done. • I feel that I can send messages quickly to get further information or clarify a key point… there is an element of having to take a lot less time write out as message compared to over email.

Performance. The second question in the interviews that was used to gather information about technical aspects of work asked about performance. Similar to productivity, participants were asked at the outset: "performance, which can be thought of as the extent to which a person does their job effectively or well, may change in a remote setting, with this fact in mind, do you believe that your performance has increased, decreased, or stayed the same in a remote setting?" While interviewees reported increased productivity in a remote setting, no consensus formed with the variable performance. Five individuals reported that their performance may have increased in a remote setting and five reported that it decreased, while six reported no change or were unable to comment on the variable.

For respondents who mentioned performance increasing, these comments centred around decreased distraction, improved comfort, and greater flexibility. Decreased distraction is related to the previously mentioned category of productivity, and several responses overlapped, presumably because having fewer distractions can both improve one's output and quality of work. This finding could be encapsulated by one respondent's comment that noted, "writing, at least for me,

requires sustained attention, and I believe that I produce better, more carefully crafted products when I have fewer distractions." According to this individual, office environments could compromise the quality of a person's products if they had to sustain their focus and manage distractions. The second category of responses centred around enhanced comfort for remote workers. Here, remote workers noted that their job seemed far more comfortable in this format; as one individual noted, "working from home is so much easier, everything is within reach of me, the bathroom and the kitchen are just right there." The participant went on to explain that this improved comfort positively influenced the quality of her work. Another individual discussed how increased comfort improved performance by noting, "I found that I am actually able to connect with people better virtually than I would in person… you know, once you have meeting set up and you are both at home, you are more comfortable connecting genuinely than if you are in the office which often has an air of formality."

Finally, several participants described how their performance appeared to improve with increased flexibility. This line of thinking was generally along the lines that people were most productive at certain times and valued having more control over where and when they worked. As one individual put it, "I would say that my performance increased dramatically when I had more flexibility around when I can work… if I know that I have lots on my plate, or a looming deadline, I'll actually work before bed, since that's often when I think best, and it's handy to be able to have the ability to manage my time." Another individual mentioned the times when she was most productive and noted, "if you are like me, you do better in the afternoon or at night instead of the morning—I think that more flexibility around when I work has improved my performance." These comments sampled some of the responses that pointed to the role of flexibility in improving performance.

Five respondents also noted that their performance declined in a remote setting. These respondents referenced problems across three areas—problems with technology, reduced feedback, and pressure. Several individuals discussed how technological challenges reduced performance. As one individual put it, "performance-wise, as I switch from task to task on my computer, close things down, and then open them up again; I often feel that I am losing time… and while I am waiting for things to close down and then reopen, I can lose continuity in my workflow." Increased reliance on technology, therefore, appeared to significantly affect workflow. Several individuals also noted connection problems at their home office, which could impede their ability to perform and get quality work in on time. Lower frequency and quality of feedback also emerged as an area that influenced performance; as one individual cited, "… I think that my performance presenting findings would be better if I was in person instead of working virtually, and that goes back to reading people; it just seems more challenging to perform in a completely virtual setting where that is much harder." Participants who cited issues with pressure noted how this variable increased in a remote format. One individual described her experience with remote work and pressure as follows, "I feel like because I was onboarded remotely, and I've never met my team closely in-person, performance-related pressures have increased… things seem less intimate than when I was in person and that there is an even greater pressure on me to excel." Others discussed the pressure to disprove assumptions about remote workers; one individual noted that there might be a continued view of remote workers as inclined to be lazy when compared to those working in the office. This respondent outlined, "I sometimes think that the older generation holds the view that remote workers are lazy, and I think that we need to continually disprove that

idea in our work." As this comment alludes to, there might be increased pressure and associated performance fatigue with trying to prove that one is working hard in a remote setting. The following table (Table 12) shows select responses:

Table 11: Response to performance as a technical aspect of work

Performance	• Writing, at least for me, requires sustained attention, and I believe that I produce better, more carefully crafted products when I have fewer distractions. • I found that I am actually able to connect with people better virtually than I would in person… you know, once you have meeting set up and you are both at home, you are more comfortable connecting genuinely than if you are in the office which often has an air of formality. • I would say that my performance increased dramatically with more flexibility around when I can work… if I know that I have lots on my plate, or a looming deadline, I'll actually work before bed, since that's often when I think best, and it's handy to be able to have the ability to manage my time. • If you are like me, you do better in the afternoon or at night instead of the morning—I think that more flexibility around when I work has improved my performance. • Performance-wise, as I switch from task to task on my computer, close things down, and then open them up again; I often feel that I am losing time… and while I am waiting for things to close down and then reopen, I can lose continuity in my workflow. • I sometimes think that the older generation holds the view that remote workers are lazy, and I think that we need to continually disprove that idea in our work.

4.4 Social Factors

The previous section examined the technical side of jobs and two variables that can be used to represent this aspect of work. Returning to the socio-technical framework that was used to guide the second portion of the interview guide, jobs need to be designed to balance both the technical and human components of work to maximize employee well-being and organizational results. As the previous section noted, Emery and Trist (1960) referred to this concept as "joint optimization," which is discussed further in the next chapter. The previous section showed that productivity increased and that there was an ambiguous change in performance, but it is also worth asking what social factors change in remote work. Accordingly, this section examined the variables support and career progression to represent these social factors.

Support. Working remotely may change the amount of support available to workers when compared to in-person work. Accordingly, in the interviews workers were asked the following question: "Support, which can be thought of as the extent to which a worker has access to necessary assistance to feel included in their work, may change in a remote setting; with this fact in mind, do you believe the support you received increased, decreased, or stayed the same in

remote work?" Responses pointed towards significant challenges with social support; one individual reported support increasing, nine reported it decreasing, and four were either unsure or reported no change. Concerns that workers raised around social support could be divided into three categories: issues connecting to management, less spontaneous support among coworkers, and lower visibility.

Connecting with management who might otherwise be a conduit to support in a remote setting emerged as a significant challenge for most workers. As one individual described, social support in a remote setting was far more restricted. In her words, "I feel disconnected from many of my colleagues, especially management, because they seem to be in back-to-back meetings all day, and I only ever have a few minutes to speak with them each week on a Team's meeting." Another individual described a distressing account where management used meetings to argue about team responsibilities, and she described how this practice in a virtual session was disturbing—as this analyst put it "…this week, I was in a team meeting where management was trying to figure out responsibilities for almost an entire hour, and in this session, my manager, the senior project leader, and a Senior Policy Analyst were pretty much yelling at each other… at the end of the meeting I was just done with seeing all of them for the day." This response indicates the extent to which meetings, which can be a primary point of contact for remote workers, can erode support and well-being for remote workers. Finally, remote workers raised concerns about less clear communication between management and employees about the quantity of work. Here, an individual noted, "I think my manager is not in touch as much with just how much work crosses my desk every day and how little time I have; if we were both in the office, I think they would have a much better sense of my workload." This comment illustrates the extent to which management and employees might become disconnected, which could in turn impede available support.

Spontaneous conversations, discussions, or support can contribute to a sense of well-being in one's job, and also emerged as an area of concern for workers. One worker described how meetings became the primary component of social support in a remote format, but that they were too formal to become a replacement for in-person interaction. As this individual noted, "I would say that I have some support from coworkers, but a lot of this interaction is through meetings that are held pretty much every day, but they tend to be very formal, and they don't lend themselves to casual conversations." Another worker commented on how the virtual substitutes for in-person connection seemed far more forced: "before the pandemic, we would go out for lunch as a workgroup, but now we only have virtual meetings." She went on to say, "at the beginning of the pandemic, people used to have virtual coffees, but they seem a lot more forced now… everyone just seems so busy, and you don't want to interrupt them, and it seems a little weird to approach someone and say, 'hey you want to schedule a meeting for a casual conversation'?" Fewer close social connections could therefore be an issue for remote workers who found scheduling meetings difficult. Another early career worker noted that working in person was just more natural and noted, "what I miss about working in the office is the chance to just bump into someone in the hallway and strike up a casual conversation." These comments indicate that virtual work removed unplanned interactions and reduced the opportunity that colleagues otherwise had for support.

Workers also cited difficulties with visibility in a remote setting. Remote workers were often less visible to managers and coworkers who might otherwise provide support. One participant who

worked in consulting before the pandemic described how remote work was far less visible by outlining, "I think that in an office people are far more sympathetic if they see you working long hours and maybe showing up a little earlier and leaving a little later, and then you also have an in-person connection with your colleagues; if you are working remotely, though, it seems like people don't necessarily notice." Less visibility would likely not only influence support but also overall career progression in that remote workers may be noticed less often when compared to someone going into the office. Another issue interviewees reported was that remote workers often were simply not able to connect with others frequently enough. As this person put it, "… when you are sitting in your house all day all by yourself, you know it can get a little lonely; people may not be entirely aware that you are there." For an early career public servant with less seniority and fewer connections, remote work might lead to feelings of being forgotten. These factors then can make remote workers feel less connected and supported.

While issues with adequate support in a remote setting appeared generally challenging, some reported that remote work increased support or created no change in this variable. One individual reported a difficult situation from the office when asked about social support: "I was seated close to a coworker who was really disruptive, condescending, and a little bit sexist, and when we went to remote work, I enjoyed that I was able to get away from that individual." For this participant, the support of an office environment was presumably overshadowed by dealing with a toxic coworker, and therefore support was not salient. Another participant recounted the benefit of how being close to family and friends outweighed any reduced social support in a remote format. Another individual reported how work was not a place where she would draw support and that "I don't necessarily draw support from my coworkers; if we get along, that's great, but I don't necessarily go to them for social support." While most individuals reported problems with social support, these examples provide instances of how support was not particularly salient or could even improve with remote work. The following table (Table 13) shows select responses:

Table 13: Responses to support as a social aspect of work

Support	• I feel disconnected from many of my colleagues, especially management, because they seem to be in back-to-back meetings all day, and I only ever have a few minutes to speak with them each week on a Team's meeting. • This week I was in a team meeting where management was trying to figure out responsibilities for almost an entire hour, and in this session, my manager, the senior project leader, and a Senior Policy Analyst were pretty much yelling at each other…at the end of the meeting I hung up on that call and I was just done with seeing all of them. • I think my manager is out of touch as much with just how much work crosses my desk and how little time I have for other activities; if we were both in the office, I think they would have a much better sense of my workload. • I would say that I have some support from coworkers, but a lot of this interaction is through meetings that are held pretty much every day, but they tend to be very formal, and they don't lend themselves to casual conversations.

	• What I miss about working in the office is the chance to just bump into someone in the hallway and strike up a casual conversation.

Career Progression. Career progression was the second theme examined under the social side of job development. Feeling that one is able to progress and the reality of doing so may help workers stay motivated. During the interviews, respondents were accordingly asked: "career progression, which can be thought of as the learning and personal development activities that an individual can undertake to master their current job and advance their occupational status may change in remote work, in your view do you believe that career progression increases, decreases, or stays the same in remote work?" Similar to the variable culture, responses to career progression were mixed. Five respondents reported that career progression increased, six reported that it decreased, and five were unsure or reported no change in this variable.

For participants who noted that career progression increased, their responses centred around the benefit of enhanced flexibility. This appeared to be the case for many jobs in the National Capital Region (NCR) which became equally available to individuals across the country. Accordingly, this was a common theme that arose across interviews. As one individual put it, "I was drawn to applying to federal jobs because of my M.A. in French, but I would not have gone into the field if I had to move; my partner and my family live on the West Coast, and I would not have moved." This early career worker proceeded to explain how working in the provincial government would have been a likely alternative. Another early career public servant with a young family described how he would not have been willing to relocate by stating that "if I had to move to Gatineau or Ottawa, I would probably be working for the province or a municipal government… the pandemic really green-lighted this opportunity." It is possible that an early experience working with a federal department could shape a person's career trajectory. Along these lines, one individual reflected on accepting a job with Global Affairs Canada, as she stated: "I just think that having worked on policy within the federal government means that there are more opportunities for me going forward, and the fact that I was able to apply and accept this position remotely has been a huge bonus." In this way, the flexibility of remote work may have created opportunities to take on opportunities that would further their careers.

A related benefit of the flexibility of remote work was also individuals' capacity to accept opportunities that would otherwise not be available. One participant described how remote work opened up an opportunity for her: "the beginning of my work at Global Affairs Canada started with an internship I did with the Delegation of Quebec in Paris… Paris is one of the most expensive cities in the world, and that opportunity would not have been open had I had to travel and live there." She went on to explain that she volunteered with the United Nations and the African Bank remotely and that both of these experiences helped with her career development in her current role. As this example illustrates, it is possible that a remote format allows opens up both work and volunteer opportunities that would not otherwise be available which could shape the early trajectory of one's career. Finally, an early career worker cited how in a remote format one can "reach more locations without having to move, and just continue to live in Victoria." These responses then point to some increased flexibility that might be possible as a result of remote work.

While the benefits of enhanced flexibility in a remote format stood out in responses, several obstacles to career progression also arose. These obstacles could be categorized as issues with networking remotely and acquiring necessary experiences. Networking, which involves interacting with others to exchange information and develop professional contacts, is an important component of work, and many interviewees highlighted this. As one individual put it, "networking is very important in this department, you need to network so that you have the information required to advance your career… when we are working remotely, however, I feel that our time is spent on practical and formal things." Another individual mentioned, "it's not necessarily what you know, it's who you know; you must connect with people to find opportunities, and they may link you up with someone who is in a different department… I think that you must do a lot more work to connect with people remotely." Although the public service is based on the principle of merit-based appointments, these comments indicate that networking is vital to career progression.

Other participants reference the benefit of being able to make in-person connections at work. One interviewee described looking for job opportunities and how "it would be much easier to be able to network in the office and have people see my face and put my name to the face that they see on emails and be able to network that way." This comment indicates that workers may rely on personal appeal to advance job opportunities and that being strictly in a remote role could create a barrier. Another person explained how workers normally advance their careers through casual interactions, but that these interactions were limited remotely, as she described: "you may get to know somebody by bumping into them in the kitchen, and then it turns out that they are a DG—I feel like that's the element that is missing in a remote format… those informal interactions can be so important to career progression." The absence of spontaneous interactions could be a serious challenge for workers who are looking to build their networks or acquire relevant information. These responses point to the idea that workers are aware of this challenge.

Another challenge of remote career progression appeared to be difficulty with advancing to a new level within the public service because of insufficient experience. Workers appointed to policy positions in the federal government are often automatically enrolled in a Policy Development Program (PDP), which provides a means of advancing from entry-level to senior positions without having to qualify in a competition. The PDP's provide a path for individuals looking to forward their careers, but challenges appeared to exist with these programs in a remote format. One participant, who held a doctoral degree, described how when she initially joined her team, she was told that she could expect to progress to a senior position within approximately twelve to eighteen months. As she described, "after the twelve months went by, I checked in with our branch's director about advancement to the next level through the Policy Development Program; and she looked at a summary of what I had done, and told me that you are not ready to progress." She then explained, "that was really disheartening because I felt I felt as if I had been given a false sense of the likelihood of advancing through the program." This individual then explained how the experience that she needed to progress included verbally briefing senior management at the Director-General level or above, but that her current team had not been able to provide this experience remotely. It was unclear whether she could have obtained this experience on another remote team, but she emphasized that her experience had been disrupted by limited opportunities during the pandemic.

The responses to career progression highlight the flexibility of remote work as a significant advantage and networking and insufficient experience as a disadvantage. Public servants' response to the effect of remote work on career progression was mixed, with respondents approximately equally divided between outlining increases, decreases, or no change in this variable. This paints a picture of remote work as having certain advantages and disadvantages for career progression, and it is possible that early career workers might capitalize on the flexibility of remote work while limiting the downsides of reduced networking. The following table (Table 14) shows select responses:

Table 12: Responses to career progression as a social aspect of work

Career progression	• The starting point for my work at Global Affairs Canada was an internship I did with the Delegation of Quebec in Paris… Paris is one of the most expensive cities in the world, and that opportunity would not have been open had I had to travel and live there. • I just think that having worked with the government, in a high-profile department, means that there are more opportunities for me going forward, and the fact that I was able to apply and accept this position remotely has been a huge bonus. • Networking is very important in this department; you need to network so that you have the information required to advance your career… remote work seems to only focus time on practical things. • It's not necessarily what you know, it's who you know; you have to connect with coworkers to find opportunities, and they may link you up with someone who is in a different department… I think that you must do a lot more work to connect with people remotely. • It would be much easier to be able to network in the office and have people see my face and put my name to the face that they see on emails and be able to network that way. • You may get to know somebody by bumping into them in the kitchen, and then it turns out that they are a DG[5]—I feel like that's the element that is missing in a remote format… • After the twelve months went by, I checked in with our branch's director about advancement to the next level through the policy development program; she looked at a summary of what I had done and told me that I could not progress.

4.5 Preferences

The final section of the interviews examined preferences for adopting fully remote work, transitioning to hybrid, or returning to in-person work. Interviewees were introduced to the idea by outlining the role that preferences play in decision-making and how aggregate preferences often influence how groups make decisions. They were then asked the question: "if circumstances permitted, would you continue working remotely indefinitely?" Following this question, the

[5] DG stands for director-general. A director-general is an executive who manages a directorate and reports to an Assistant Deputy Minister.

interview then probed workers for their thoughts on hybrid work by asking, "if circumstances permitted, would you transition to a fully hybrid environment?" and also "…would you return to fully in-person work?" Answers from these questions transitioned to the final stage of the interview which allowed respondents to conclude the interview with any missing details or information. This section revealed that most individuals who were surveyed supported either indefinite remote work or a hybrid format. With reference to continuing remote work, individuals cited problems with entirely remote work as being centred around lower social support, less networking, and fewer opportunities to gain experience, while problems with hybrid work involved the social and financial costs of relocating and the loss of flexibility.

Continuing with remote work. Overall, seven participants or just under half of respondents expressed a preference for working remotely indefinitely. The responses they provided highlighted a few key themes: enhanced environmental and social responsibility, the ability to live in a preferred location, and the convenience and structure of remote work. Each public servant who answered this question spent some time explaining their preference and reasons for their answer. While some individuals answered the question directly, others spent more time qualifying their answers so that they could be more easily understood. Several individuals also expressed why their particular circumstances warranted their answers.

The first rationale that emerged for supporting continuing remote work indefinitely involved environmental and social responsibility. Several interviewees raised the point that remote work was more environmentally responsible. When asked about preferences one early career public servants explained, "one of the things that I am really passionate about is work on climate change, and I feel like working remotely and not requiring people to commute to the office can have a really positive effect on our daily greenhouse gas emissions… climate change is a government priority, and I think that remote work is aligned with government and global priorities." Another individual who was interviewed described how he had been affected by heat waves in the past summer, and how these events were "the tip of the iceberg in terms of environmental problems coming our way… governments need to continue to innovate to reduce emissions." According to this individual, environmental issues warranted further action and remote work was one of the ways that the government could lead by example and reduce emissions. These comments pointed to an environmental rationale for carrying out remote work.

Other responses favouring remote work examined the social side of remote work, and how this practice opened up doors to a more geographically diverse and accessible public service. One participant noted, "one of the criticisms of working the federal public service, is that government workers get into the 'Ottawa bubble,' and form a circle of like-minded individuals who share the same perspectives and views on issues" she recounted, "but at the same time the government advocates for a more diverse public service, and I think that drawing workers from across Canada can be really important for forming a more representative federal public service." This comment referenced the idea that a more representative public service was possible when workers were more geographically dispersed. Simply stated, people working in the National Capital Region, and who predominately come from that region, may be less in touch with economic and social circumstances elsewhere in the country. While this interviewee referenced this factor explicitly, positive sentiments towards a geographically dispersed public service occurred throughout the interviews and pointed towards a trend in this area.

Increased accessibility for chronically ill and disabled people also emerged as a rationale for continuing remote work. One participant managing a chronic health condition explained some of the difficulties she faced and also outlined how remote work dramatically improved her accessibility. As this participant described, "I can see how remote work makes positions for the chronically ill or disabled more accessible… if you don't have to try to get into an office without an elevator or a ramp or something, then a job that may not have been available to you before suddenly becomes more accessible. She also explained her experience managing a chronic condition and explained how if an individual experiences illness intensifying, they can "avoid challenges that are associated with taking transit into work when sick." This comment points to a benefit of remote work for managing health conditions in that the standard model of commuting into an office building assumes people have similar health, which may not be the case. While many government buildings have some accessibility features, they are often not widely updated to the extent that they should be. Remote work in turn opens up opportunities to those managing health conditions. These three areas of improved environmental responsibility, geographic representation, and accessibility therefore emerged as rationales for remote work.

The next theme that individuals cited when asked about continuing to work remotely indefinitely was the ability to live in a desired location closer to family and friends or outside of a metropolitan centre. One early career worker noted, "for me, most of my social connections are here, so I think that remote work actually positively affects my mental health and well-being and I have been able to maintain my social connections rather than having to start over." Another participant explained how she was much better off by being able to "stay with my family and friends in Montreal… I've been to other Canadian cities as well, but I always feel like this is my home." Similarly, an early career worker reflected on how she missed having "more time to see her friends and build relationships with them." These comments reveal how many individuals valued staying close to home to maintain social connections. Another area that workers raised was remote work and the possibility of living in remote or lower cost of living areas. As one participant outlined, "I would continue to telework indefinitely if circumstances permitted… my dream is to have a homestead away from the city and busy areas; I want to live off the grid and in nature providing I have electricity and Internet." This individual went on to explain how he would need to be a fully remote worker to realize this objective, since hybrid work would require on-site visits that would make living in such an area difficult and costly—remote work in this way might allow an individual to achieve an alternative lifestyle. Another individual reflected on the possibility of living in a rural area someday, and as she described, "I think I would like to end up back in the countryside; during the pandemic people moved out of cities and into more rural places, and I think that a lot can be gained from doing that." She went on to note how her sibling was living in a tiny apartment in the middle of a city when the pandemic started, but once pandemic restrictions began, she decided to move into her parent's rural home. For this individual, the ability to live in a rural area during a chaotic period brought considerable benefits. This sample of comments illustrates the value that individuals placed on flexible locations.

A final theme that emerged from public servants who were asked about continuing remote work indefinitely centred around flexibility and convenience. One participant explained the importance of flexibility by noting that "I would continue to work remotely indefinitely if possible; this sort of work has lots more independence and autonomy when compared to my last job, and I feel that

it lends itself well to being done entirely remotely." This early career worker went on to explain how in her view jobs with independence could be done from home, while highly monotonous work might be better performed in an in-person environment where social support might provide variety. Another individual expressed her preference for fully remote work by noting that this format often allowed for a more predictable schedule, and explained this preference as follows: "I prefer being fully remote because I like routines, I like the routine of being able to start work at exactly the same time every day and not having to worry whether my bus was running late or whether I will be interrupted in the office—I like how remote work allows me to get into a routine and just get things done." Another individual explained how working entirely from home provided greater comfort and ease by noting that "I would continue to work remotely indefinitely if I had the choice, because I think that the added flexibility and the fact there is no commute means that the pros outweigh the cons…I have everything set up properly and I would not enjoy going back to the office, but that is not to say I don't like seeing my coworkers." Finally, several participants cited the inconvenience of an increase in connectivity problems in the office; as one noted, "the IT at 111 Sussex has always been poor, and since the pandemic there just seems to be more and more issues with this infrastructure; frankly working from home just means less hassle." As this comment illustrates, many remote workers preferred this way of working because they felt that they had better control over working conditions in this format, and this challenge helped inform individuals' preference for staying fully remote. These rationales therefore emerged as a distinct rationale for continuing fully remote work; as the following section will show, the advantages of pursuing hybrid work centred around different themes.

Pursuing hybrid work. Seven out of fifteen participants expressed a preference for carrying out hybrid work, and their responses generally centred around regaining the social element of work and the ability to more quickly pick up on social learning to achieve personal career objectives. Overall, public servants appeared to express considerable interest in and tolerance for hybrid working arrangements, while at the same time recognizing its limitations for individuals who would need to relocate to adopt the practice. It is also worth noting that six out of the seven individuals who expressed a preference for hybrid work were living within commuting distance to their office, and were not located in another time zone.

The benefits that clearly emerged for a hybrid model centred around remote work and greater opportunity for social interaction. Participants who expressed preference for this option often outlined how they would prefer more opportunities for spontaneous interactions at work. As one individual noted, "I think that I would prefer hybrid work because of the chance to build the personal connections that seem to be missing in a remote format, and then these interactions would give me something to look forward to." If these personal interactions were spontaneous, they might allow individuals to connect more frequently and genuinely, and potentially advance their careers by doing so. Another individual explained how hybrid work offered a considerable benefit by noting, "I think that the main thing that I would change about my work situation is the opportunity to go into the office a few times a week or month; I just find that much of the spontaneous interactions are missing in an entirely remote format." Another participant noted how a hybrid model could reduce some of the challenges with entirely remote work by noting, "in my view, hybrid is really a sweet spot, even being in the office one day a week seemed to take away that sense of disconnection that I sometimes felt when I was working entirely remotely." This

comment highlighted the trade-offs that were associated with in entirely remote work and underscores the importance of an improved sense of social connection for choosing hybrid work.

The opportunity to learn from others through observation also emerged as support for the preference for a hybrid work model. One participant described the importance of mirroring behaviour in hybrid work, in her words, "when you work at home you have no external type of, you know, 'projection'; I feel like as humans we like to copy; when people are doing something we want to do it too, and we don't want to look like we are lacking." This worker then went on to explain how a hybrid format could provide an opportunity to learn from colleagues while realizing the benefits of enhanced work-life balance and capitalizing on the flexibility of remote work. Another individual referenced social learning by explaining how she felt her opportunity for learning had been disrupted during lockdowns. As she noted, "I really feel that my growth as an analyst has been stunted by working entirely from home … if I were in the office, I would learn faster and I would feel more competent, and in turn, that would lead to opportunities to advance." She then used this example as a rationale for pursuing hybrid work because this format would include improved opportunities to gain relevant experience. Finally, a defence analyst working in a hybrid format expressed a preference for doing so by pointing to the fact that he felt that the in-person activities and work culture of an office was stronger. As he expressed, "every afternoon we will go for a hike, and in the course of that hike we don't talk shop, but we just try to get to know each other better—we also have events like soup in the kitchen every Wednesday and Friday, and that allows us to connect as a team," and he went on to note how these group activities helped team members better understand an organization's culture. Workers who expressed a preference for a hybrid format highlighted the importance of being with coworkers to learn through observation and to pick up an organization's culture. Both of these aspects of remote work appeared to be easier in a remote format.

These two responses focusing on the benefits of more social interaction and having more opportunities to learn from others formed the basis of rationales for hybrid work. As was noted earlier, it should be noted that six out of the seven individuals who advocated for hybrid work were living near their place of employment, meaning that they could make this change less disruption to their daily lives. This, of course, raises the important point that work preferences in many cases depend on individual circumstances. Those expressing a preference for hybrid work appeared to have lower costs associated with this practice.

Returning to in-person work. Finally, in the preferences section of the interviews, respondents were asked about their thoughts of continuing with remote work, transitioning to hybrid, or returning to fully in person work. Only sample responded expressed a preference for fully in person work, while the other fourteen expressed their preference for entirely remote work or for a hybrid model. This individual was working near his location of work in the NCR.

The individual who expressed a preference for fully in person work qualified his response by noting that if he was not in the same city as the office that he would not necessarily have the same view. Nevertheless, he explained, "there are so many latent functions of being in person that are lost when going to remote work like shared ideas and creativity, making friends, building connections and networking effectively that are just lost in a fully remote format." In this participant's unique situation, he was working fully remotely within the same city and noted that

"doing remote work when I could be doing the same thing in person is kind of depressing… I feel like I am losing so many opportunities for very little gain." He further elaborated that if one's first experience with the government was through remote work, then it might dissuade someone from following that line of work because they would associate it with looking at screens all day with little interaction. According to this individual, the networking opportunities, collaboration, and structure of working in-person format formed a clear rationale for this type of work. While only one early career worker cited a preference for in-person work, this argument nevertheless warrants attention, particularly because these challenges with remote work might be present for others. The following chapter will discuss some of the reasons that individuals might express these preferences.

4.6 Summary

This chapter examined the findings that arose from analyzing the interview data. The first portion of the interviews guide identified five job resources associated with remote work: work-life balance, focus, rewards, and safety/well-being. This portion of the interviews also identified five job demands: technology, work environment, role clarity/mentorship, work hours, and overwork. The following chapter discusses these job demands and resources within the JD-R model, and proposes a modified version of this model that represents the findings for this sample.

Following this first portion of the interview guide, the interview then turned to examining how the balance between technical and social aspects of jobs might change in a remote format. This section looked at two themes to represent the technical aspects of jobs—productivity and performance, and two areas under the social aspects of jobs—support and career progression. For the technical aspects of jobs, workers reported enhanced productivity and mixed reports on performance. For the social aspects of jobs, workers reported challenges with support and for career progression. The following chapter will discuss these findings within the context of the socio-technical model in greater detail.

The final portion of the interviews focused on worker preferences, and found that respondents were equally divided between working remotely indefinitely and carrying out hybrid work, with only one respondent advocating for a fully in-person format. The responses for fully remote work cited the benefits of improved environmental and social responsibility of remote work, the ability to live in a desired location, and improved convenience and structure in a remote setting. Advocates for hybrid work cited opportunities for social interaction and increased opportunities to learn from observation. The respondent who referenced the benefit of in-person work pointed out how social, networking, and creative functions of work were lost in an entirely remote format. The next section will discuss these preferences in greater detail.

5. Discussion and Analysis

This previous chapter presented the data that was collected through the interviews and then extracted using content analysis. It identified job demands and resources, the social and technical aspects of work, and presented individual preferences. This chapter places the data within the context of the theoretical frameworks that were outlined in Chapter 2, *Theoretical Framework*. As Chapter 2 outlined, the Job Demands Resources model, socio-technical systems theory, and bounded rationality guided this work. This chapter has three discussion areas which place the findings within the theoretical framework, and notes some limitations with each framework. The first discussion area presents a modified JD-R model in relation to this work. The second discussion area summarizes the findings for the social and technical aspects of work, and discusses joint optimization. The third discussion area outlines the preferences from this work, and uses the concept of bounded rationality to help explain how individuals express their preferences, as well as the idea of social desirability bias in research. Finally, this chapter returns to the research questions posed in Chapter 1 and summarizes how they have been answered in this work.

5.1 Thematic Areas

Job Demands and Resources

Bakker and Demerouti's Job Demands Resources (JD-R) model (2006) suggests that certain aspects of jobs are inherently protective against stress while others contribute to a stressful environment. This model provides an alternative to Karesek's early job demand control that only focused on the control and demand aspects of jobs.[6] The JD-R model adds to this work by showing the relationship that exists between job demands and resources, and also includes strain, motivation, and organizational outcomes. Figure 2 shows Bakker and Demerouti's JD-R model (2006).

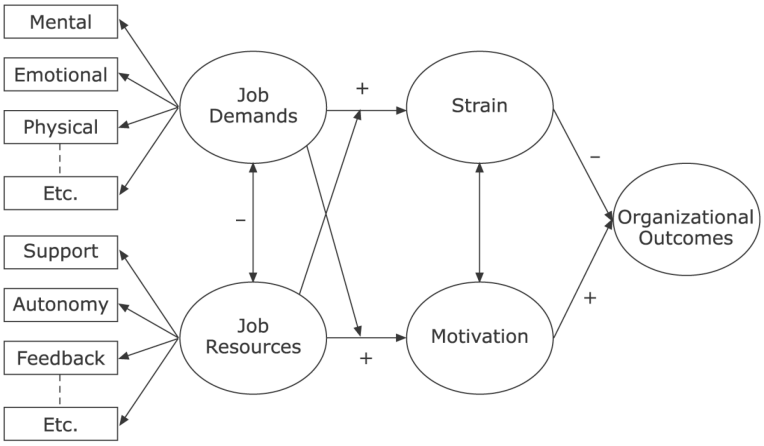
Bakker and Demerouti's JD-R model (2006) discusses job resources as having a few key characteristics in that they are:

- Functional for achieving work goals;
- Reduce the physiological and psychological costs of work; and,
- Stimulate personal growth, learning, and development.

The original JD-R model proposes includes job demands and resources, which are shown on the left boxes of the model are labelled "mental," "emotional," and "physical" for job demands, and "support," "autonomy," and "feedback" for job resources. See Figure 2 (below).

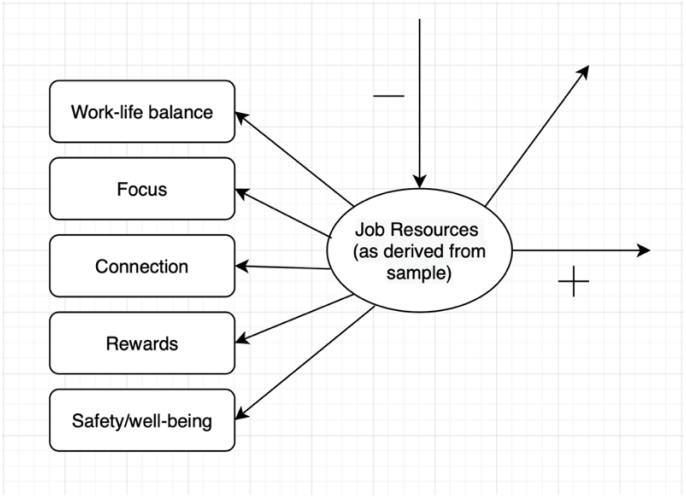
[6] See Appendix 4 – Miscellanea for Karasek's Job Demand Control Model.

Figure 2: Bakker and Demerouti's JD-R model (2006)



The findings section, however, identified new job resources that emerged in a remote work environment for the sample. Specifically, these were work-life balance, focus, connection, rewards, and safety/well-being. Figure 3 shows the five themes that emerged from the fifteen semi-structured interviews that were unique to the sample within the context of the JD-R model. As with the original JD-R model, the arrow pointing horizontally and to the right of "Job Resources" leads towards "motivation" and has a positive relationship to this variable, while the arrow pointing up and to the right leads towards "strain" and exists in a negative relationship. Within the model as each of these resources increases, motivation increases while strain decreases. It is important to note that these job resources might not apply to all workers, and that they speak specifically to the sample of early career federal public servants who were examined in this work. Moreover, within this model not all of the job resources were referenced at the same rate or had the same response. This modified version of Bakker and Demerouti's JD-R model, however, clearly connects the themes in the first portion of the interviews back to the model while at the same time proposing new job resources in remote work.

Figure 3: Positive aspects of remote work represented as job resources



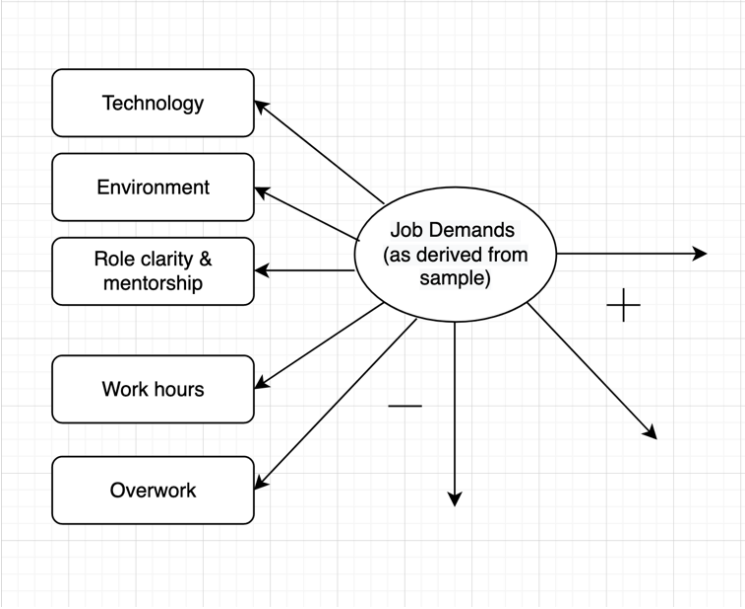
In the same way that that the Bakker and Demerouti's JD-R model identifies "job resources" it also identified "job demands." In their 2006 article, the authors note how job demands:

- Have the potential to exhaust employees' mental and physical resources;
- May lead to the depletion of energy; and,
- Can be associated with health problems through activation of the sympathetic nervous system.

The job demands that emerged were technology, work environment, role clarity and mentorship, work hours, and overwork and can be placed within these categories. For example, increased problems with technology could cause "exhaustion of the employees' mental and physical resources," the "depletion of energy," and "health problems associated with the activation of the sympathetic nervous system." A technical problem preventing one from making a deadline could "lead to the depletion of energy." Issues with the work environmental could also be associated with the "exhaustion of the employees' mental and physical resources" and with "health problems through activation of the sympathetic nervous system." The other issues of role clarity/mentorship, work hours, and overwork are also each strongly associated with these variables.

Figure 4 shows these job demands placed within Bakker and Demerouti's JD-R model. Rather than the arrow pointing straight to the right being positively correlated to motivation, it correlates with strain, and the arrow pointing diagonally downward and to the right negatively correlates with motivation—that is, as job demands increase motivation decreases. Much like job resources, the job demands examined here are not weighted perfectly equally. For example, during the interviews, role clarity/mentorship and work hours emerged as significantly negative, while the effect of the work environment was less so. As with job resources, each job demand illustrates a type of challenges, rather than being perfectly representative.

Figure 4: Challenging aspects of remote work represented as job demands



This analysis therefore places the job demands and resources that were identified within this study within the framework of the JD-R model. A clear advantage of using this model is that it offers a way to link the themes that emerged about remote work into a framework for thinking about strain and motivation. That is, the model shows that job demands are positively linked to strain and negatively motivation and organizational outcomes, and that job resources are positively linked to motivation and organizational outcomes and negatively linked to strain. The JD-R model therefore helps one visualize how variables can be connected to each other as well as other larger outcomes. Despite the value of connecting job demands and resources, it is useful to more closely look at each demand and resource that emerged from this work. What job resources and demands were the most strongly rated? What was the response rate for these variables?

Job Resources. Job resources had a different response rate for each variable. The response rate that was most uniformly positive was safety/well-being with all six of the individuals who raised this variable providing a positive response. Work-life balance also emerged as a beneficial area with fourteen out of fifteen early career public servants referencing positive effects in this area. Eight individuals cited rewards positively, pointing to a relatively positive response rate for this variable. In contrast, eleven out of fifteen participants cited improvements with focus positively, which resulted in a slightly lower score than focus. Finally, eight out of fourteen individuals referenced increased connection as a job resource in remote work, indicating that it was the lowest-rated job resource among the sample.

Table 13 summarizes both the positive reference rate and the response rate for each job resource. As this table and the accompanying information makes clear, job resources from this study were not uniformly distributed. It is useful to note then that the job resources that can be placed in Bakker and Demerouti's JD-R model had different response rates.

Table 13: Score of respondents across five job resources:

Theme	Score (higher score means more beneficial effect)	Reference rate (n=15)
Work-life balance	93%	15
Focus	73%	15
Connection	57%	14
Rewards	87.5%	9
Safety/well-being	100%	6

Job Demands. From all of these job demands, work hours were the most uniformly rated job demand with seven out of eight participants citing issues with it in a remote format. This was particularly true for the sample since many were working in different time zones, as a result of having fewer ties to the National Capital Region.[7] Workers pointed out how being on a different time zone could disrupt their circadian rhythms, and create asynchronous communication. After work hours, role clarity/mentorship had a strong response, with approximately eight out of eleven respondents who raised this issue citing it as an issue. Then technology emerged as a significantly

[7] In total, seven out of fifteen early career public servants in the sample were doing so during the interview period from November 2021 – April 2022. Appendix 3, Table 18, shows this information.

challenging issue with nine out of eleven workers reporting difficulty connecting remotely with others or maintaining a consistent connection. Overwork was a similarly difficult variable with many participants citing issues with the amount of assigned work. Finally, the work environment was a commonly cited variable, although the ratio of individuals citing a significant issue with this variable remained lower.

Table 14 summarizes both the reference rate and response rate for the job demands variable. As this table and the accompanying information make clear, the significance of job demands were not uniformly distributed. A caveat to the modified JD-R model in Figure 5 then is that do not reflect the positive reference rate for each job demand.

Table 14: Score of respondents across five job demands:

Theme	Score (higher score means more challenging effect)	Reference rate (n=15)
Environment	57%	14
Technology	75%	12
Role clarity/mentorship	82%	11
Work hours	88%	8
Overwork	71%	6

Limitations of the JD-R Model. As this section outlined, the JD-R model provides a useful way of thinking about how individuals experience remote work. However, at least two facts should be kept in mind when considering this model as a conceptual framework. First, it is important to note that the end process of the JD-R model is organizational rather than individual outcomes. Second, as has been outlined here, the model provides an approximate rather than precise gauge of job demands and resources.

The first potential problem with Bakker and Demerouti's JD-R model (2006) is that its end result is organizational outcomes. In their work, Bakker and Demerouti outline a dual process whereby job demands and resources lead to strain and motivation, and both of these variables influence organizational outcomes (see Figure 2). The authors cite several studies, including one by Hakanen et al. (2006) which showed that increased job demands can be a driver of burnout, and approximately use this as a proxy for strain. They also link their work to Bakker et al. (2003b) and Bakker et al. (2004b) which showed that job demands, and resources influence absenteeism and turnover while resources are generally linked to improved performance. The authors go on to outline how the variables in the JD-R model feed into worker performance, which ultimately affects organizational outcomes. However, the JD-R model's linkage to organizational outcomes may be misleading, since the focus of this study has been on the effects of remote work on career public servants rather than how remote work influences the end organization. While the latter topic is worthy of consideration, this study has focused on personal outcomes for workers. The end process of the JD-R model is not particularly salient to this work and therefore this model could be adapted to reflect this reality.

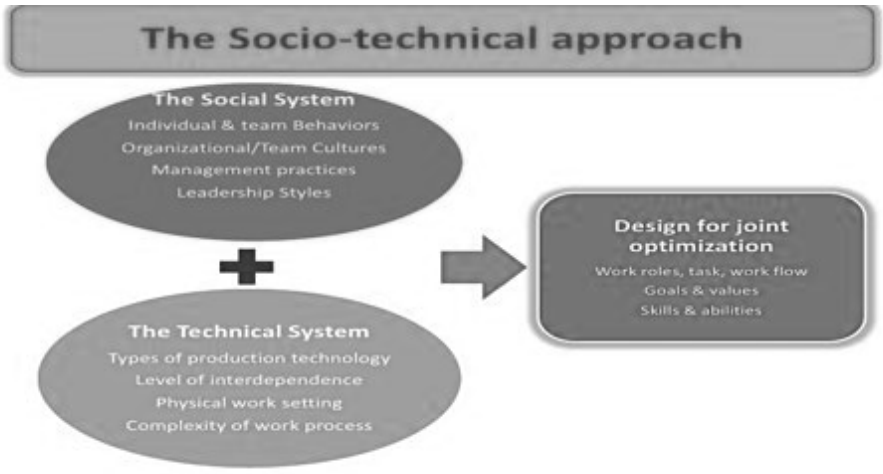
A second limitation of the JD-R model as a theoretical framework is that doing so can obscure a more detailed analysis of each of the themes as discussed in the findings. As Table 13 & Table 14 showed, each job demand or resource was not seen as uniformly challenging or beneficial. The

JD-R model provides one way of looking at how these aspects feed into a broader framework of work against stress and motivation, but it does not convey the response rate for each variable. Despite these two limitations of the JD-R model, it still provides a way to think about job demands and resources as part of a larger context, and helps explain how both variables relate to strain and motivation. Furthermore, the model can be adopted to remote work with little difficulty.

Social and Technical Aspects of Work

The second half of the interviews were guided by Emery and Trist's (1960) socio-technical system of job design. Socio-technical theory was designed in the World War II era and was based on observations of English coal miners that drew the distinction between the social and technical components of work. Taylor (1973) who adopted socio-technical theory as a way to advance the human aspects of jobs, described the framework as "not a friendship system, but rather the coordinating and integrating buffer between the technical transformation process and the demands and constraints [of the job]" (Taylor, 1973, p. 21). Moreover, Taylor (1973) suggested social aspects of a job involve an assessment of the internal role of an individual within a network, the cross-boundary role of a person, and how a person interacts within the environment. In contrast, the technical aspect of a job involves the functional objectives of the work process or how the organization sees the work progressing. Technical aspects of jobs tend to be concerned with how the work is performed on a day-to-day basis and the productive outputs and structure of work that are used, while the social aspects focus on leadership individual and team behaviours within the organization.

Figure 5: A representation of the socio-technical approach to job design



While the socio-technical approach has limitations that are discussed here, the basic idea of the model divides work into social and technical systems and provides some structure to think about how remote work is carried out. Accordingly, the second half of the interview prompted workers to think about both technical and social considerations of remote work. It should be noted that aspects of Emery and Trist's (1960) work has been somewhat repurposed here. The end objective of socio-technical systems was to design jobs for "joint optimization" so that technical systems do not overwhelm social systems. The objective of this research, however, is not job design, but rather an assessment of how remote work influenced early career public servants. Implications for

job design could follow from the findings of this thesis, however, it is beyond the immediate scope of this work. Nevertheless, the ideas within socio-technical systems provide a basic framework for thinking about how aspects of work changed in a remote format.

As Chapter 5 outlined, the second half of the interviews asked the sample about the technical and social aspects of jobs. To test for technical aspects, workers were asked about their thoughts on productivity and performance which were equated to the technical aspects of jobs. Interviewees were introduced to the idea by receiving a short description of Emery and Trist's socio-technical theory of job design and the basic idea that jobs were comprised of two elements. Following this, they were prompted to consider the categories productivity and performance, which each had a short description, along with a question about the effects that remote work may have had. Respondents were then probed with the question, "can you provide an example?" and/or "another example?" This helped ensure that the participants could fully explain their thoughts on each area. All participants who were interviewed offered responses to their thoughts on each variable, which appeared to demonstrate a high level of engagement with the interviews.

Technical Aspects. Early career public servants' responses to the variables of productivity and performance differed. Specifically, as the findings section showed, the results indicated increased productivity in a remote environment driven by improved focus and increased connectivity. In total nine respondents reported that their productivity increased, four reported that it decreased, and two were unsure or offered ambiguous responses. The idea behind this variable was generally that workers reported fewer distractions and an enhanced capacity to focus in a remote format. The variable performance, however, did not create a clear consensus with five individuals reporting increased performance, five individuals reporting decreased performance and six individuals reporting that they were unsure of the relationship. Table 15 summarizes workers' responses to each variable in the interview guide.

Table 15: Aggregate responses of early career public servants to the technical aspects of work:

Variable	Aggregate Response
Productivity	Positive
Performance	No consensus

These findings show that the technical aspect productivity improved while no consensus formed around performance. The positive aspect of improved productivity in a remote environment might still be obtained in a hybrid format by scheduling tasks that require extended concentration for at-home days. Performance might also be optimized by improving remote work technology, providing tools and equipment for optimal remote work, and providing opportunities for spontaneous interactions between coworkers. In short, the different responses to the variables productivity and performance could point to the responses that organizations could take to improve the efficiency of work. As this analysis demonstrates then, the technical aspects of work had positive responses to productivity while no similar consensus formed for performance.

Social Aspects. The responses of early career public servants to the variables of support and career progression were mixed and slightly negative when compared to technical aspects. Support emerged as a problematic variable in a remote setting with only one individual reporting that

support increased, nine reporting it decreased, and four stating that they were unsure. Support seemed to be negatively affected by spontaneity and visibility. As one respondent put it, "I feel disconnected from many of my colleagues… they seem to be in back-to-back meetings all day, and I only ever have a few minutes to speak with them each week on a Teams meeting." Responses to career progression were mixed in a remote setting with five individuals reporting that this variable increased, six reporting that it decreased and five outlining that they were unsure. Those who reported greater career progression typically cited increased flexibility and associated career opportunities while those who referenced declines in this variable typically noted that limited in-person networking created a barrier to advancement in a remote setting. In total then, these responses pointed to a more mixed understanding of these social aspects of work in a remote format.

Table 16: Responses of early career public servants to support, culture, and career progression in remote work:

Variable	Aggregate Response
Support	Negative
Career progression	No consensus

Similar to the technical elements of work, insight into how social components suffered might point to how to reduce the deleterious aspects of remote work. For example, social support that could be formed through deeper connections could be established by planning individual one-on-one or group sessions for team members to get to know each other more closely. Hybrid activities could also enhance opportunities for spontaneous interactions that are sometimes lost in a remote format. Departments looking to alleviate problems with career progression could carve out time to network remotely or adopt a hybrid model that encourages workers to connect in an office. Policy Development Programs that were designed before the pandemic could be updated to remove requirements that are difficult to obtain through remote work. In short, adjustments could be made to ensure that support and career progression are not neglected in a remote environment.

Aggregate Findings. Similar to the analysis section for the first half of the interview guide which examined job demands and resources, it is also worth examining this data from a higher-level perspective. In aggregate, that showed that the results for the technical aspects of work of productivity and performance were mixed, while the social aspects of work were slightly negative. These findings point to the idea that the routine aspects of a job can be carried out relatively efficiently remotely, while work's intangible social aspects may suffer. Intuitively, this observation makes sense to the extent that certain technical aspects of work can improve considerably while social components cannot be resolved as easily. A general pattern that emerged from this section was that early career public servants recognized strong inherent benefits to remote work, while also recognizing its deficiencies.

Opportunities and Challenges with Joint Optimization. As the introductory component to this section outlines, Emery and Trist's (1960) socio-technical approach to job design involves joint optimization. Joint optimization is the idea that the both the technical and social aspects of jobs can be balanced for optimal performance. Baxter and Sommerville (2011), summarize joint optimization as taking the "human, social and organization factors as well as technical factors in job design into account" (p. 4). With reference to remote work in the federal public service, a

hybrid model might be one way to facilitate joint optimization. Adopting remote work for tasks that necessitate productivity and sustained attention while making use of improved feedback in an in-person environment and to enhance team performance may improve the social aspects of work. Similarly, a hybrid model across the variables support and career progression could improve the social elements of work. Therefore, in when considering how to achieve joint optimization, an argument could be made of making use of a hybrid model.

It is worth noting, however, that throughout this study early career public servants expressed concerns with hybrid work. This research took place when fully remote work was still mandated, and accordingly approximately half of participants were outside the NCR. For these individuals, they noted that pursuing hybrid work would require them to uproot their lives and incur financial costs of relocating and losing existing support network, only to work one to two days a week in the office. However, seven out of the nine individuals who were NCR referenced hybrid work favourably; that is, all of the individuals who reported a preference for hybrid work were in the NCR. As one respondent who was in favour of hybrid work put it, "personally, I would like to go to a hybrid model of going into the office a few days a week… just to get that experience that I've missed out on, and to get more in-person interaction." Those who were outside of the region, however, took a far less positive view of the practice—these respondents expressed concern with the cost of relocating and the relatively limited perceived benefits. One participant summarized this concern by noting that hybrid work would be "the worst of both worlds, where I lose all the benefits of living close to family and friends, while at the same time spending most of my week alone in a new city teleworking." The idea of hybrid work as a solution for joint optimization then seems to have significant downsides. As the next chapter of this thesis will discuss how flexible work arrangement within the federal public service could facilitate worker motivation and improve organizational outcomes.

The second section of the interview guide therefore raised several interesting findings, the most notable of which was that productivity appeared to improve while performance approximately stayed the same in a remote environment, while support declined and career progression changed ambiguously. Applying Emery and Trist's concept of "joint optimization" to these findings indicates that to compensate for social losses in a remote format that hybrid work could be used to overcome some challenges. While hybrid work may improve some aspects of work, however, many of those interviewed outlined that hybrid work would significantly disrupt their personal lives and therefore was an imperfect solution. Remote work therefore had the potential to create trade-offs for social components of work, while hybrid work as a solution did not appear to be a perfect alternative.

Preferences for Remote and Hybrid Work

The final section of the interview examined preferences for continuing fully remote work, transitioning to a hybrid model, or returning to in-person work. As the findings section outlined, seven respondents referenced their preference to pursue remote work indefinitely, seven expressed a preference for hybrid model, and one respondent expressed a desire to transition to completely in-person work. Table 17 summarizes these findings across the three preferences, and shows the percent of respondents who answered for each variable.

Table 17: Early career public servants' preferences for the future of work:

Preference	Percent of respondents	Sample (n=15)
Continue fully remote work	46.5%	15
Transition to a hybrid model	46.5%	15
Return to in-person work	7.0%	15

To better understand these responses, it is useful to interpret them within the context of a theoretical framework. As Chapter 2 outlined, Simon's (1990) concept of bounded rationality is most useful for interpreting these results. Before examining this concept, however, is necessary for first examine rational choice theory, which was the precursor to bounded rationality, and underpins classical economics and conventional theories about decision-making.

Rational Choice Theory. Rational choice theory emerged alongside classical economics in the eighteenth century and contains assumptions under Adam Smith's theory of free market economics was formed (Oppenheimer, 2008). In essence, rational choice theory argues that self-interest drives decision-making. A principle of rational choice theory is that individuals choose between alternatives by maximizing the expected value of their actions (Oppenheimer, 2008). This assumption underpins classical economics, which emphasizes that individuals and entities act to maximize utility. One concept that emerges from classical economics is the idea of a benefit-cost ratio, which offers one representation of how expected benefits can be compared to expected costs. The benefit-cost ratio can be represented as:

> Benefit-cost ratio = (Σ Present value of all expected benefits)/(Σ Present value of all expected costs)

Using a benefit-cost ratio, if an action has a value greater than one, then it should be carried out; if the value is less than one, then it should not be carried out. While benefit-cost ratios are commonly used for organizations assessing the viability of projects, individuals can still use this instrument. If they did, they would decide whether to undertake remote work by summing up all of the discounted present benefits of doing so and dividing these by the total of all discounted expected costs. The benefits of remote work here could be thought of as the ones that arose from the interviews: improved work-life balance, focus, connection, rewards, and safety and well-being. The expected costs of remote work could be thought of as technology, role/clarity mentorship, work hours, overwork, support, and feedback. Under rational choice theory, an individual would perform this calculation, and provide an answer.

Applying a benefit-cost ratio to the findings section would suggest that around half of respondents had discounted present benefits from remote work that were greater than their discounted present costs. The ratio for these participants would be greater than one, which would explain their decision. Many of the benefits of remote work were contingent on individuals' circumstances, preferences, and values, which would be taken into consideration in a benefit-cost equation. Similarly, for individuals who preferred in person work, the discounted costs of this form of work would outweigh the discounted benefits when compared to a fully remote format. The benefit-cost ratio is just one example of a decision-making rationale that an individual might apply under rational choice theory. The basic idea of rational choice theory is that individuals make decisions to maximize the expected value of their actions.

Limitations to Rational Choice Theory. While rational choice theory can be used to explain preferences, one problem with rational choice theory is that individuals often cannot assess the benefits and costs of decisions. With reference to remote work, this criticism could point to the idea that individuals may misjudge the benefits of undertaking remote work. For example, an individual who expresses preference for remote work may express the expected benefits of saving commuting time is particularly salient, while deemphasizing the cost of reduced networking and social support. Modern psychology has outlined the ways in which salience can skew decision-making, and trying to make an estimate of the benefits and costs is susceptible to this problem. An important limitation of rational choice theory then is that individuals may be influenced by the wrong information when making decisions.

Apart from the problem of being able to distinguish between alternatives, a connected issue with rational choice theory is that individuals might not know their own utility function to make an optimal decision. Put simply, even if individuals are not influenced by misplaced salience on certain benefits and costs, they may not know how much utility they will get from a choice. This issue can be most clearly illustrated by the fact that nine out of the fifteen individuals interviewed did not have in-person office experience before starting remote work, which points to the fact that they cannot easily compare remote work with an alternative when expressing a preference. Rational choice theory requires adequate information for individuals to make decision, but the early career works who were surveyed often did not know the alternative well. Therefore, they cannot be assumed to be optimizing in a perfectly rational way.

Rational choice theory therefore can be one way to understand individual preferences. Despite the advantages of using this model to account for individuals' self-interest, rational choice theory does not account for salience in decision making or for the fact that people may not understand their utility functions. In short, rational choice theory has advantages but also limitations as a way to understand preferences.

Bounded Rationality. An alternative conceptual framework that can be used to understand preferences is bounded rationality. The American political scientist and psychologist Herbert Simon (1990) proposed the term bounded rationality to account for the idea that individuals do not make perfectly rational decisions because of inevitable limitations on both knowledge and cognition. While rational choice theory emerged with the development of classical economics in the eighteenth century, bounded rationality uses insights from cognitive psychology that revealed that limitations on cognitive capacity, time, and available information significantly skew decision-making. When faced with inevitable limitations, individuals often must rely on heuristics, which are an approach to decision-making that emphasizes the role of shortcuts. Cognitive psychology has revealed that people often make decisions using heuristics rather than relying on rational choice models. Simply stated, the complexity of decision-making requires individuals to use approximations rather than benefit-cost analyses. A consumer choosing between two products, for example, may choose a brand product as a shortcut for quality, even if there is limited evidence that the brand name product is better in the specific instance. Bounded rationality, therefore, emphasizes the idea that individuals rely on shortcuts and approximations given limited time and cognitive resources.

Applying bounded rationality theory to the preferences section of this thesis might indicate that individuals' choices about whether to pursue remote work indefinitely, adopt a hybrid model, or practise in-person work should not automatically be seen as rational. The responses provided in this section can be influenced by factors like salience, whereby individuals offering up a response are influenced by how easily an idea comes to mind. A person expressing a preference for remote work may do so because it is easy to think of time savings from commuting, but more difficult to think of the loss of social interactions. Individuals may also feel time pressured to offer responses, and therefore offer one quickly and rationalize it after the fact. In short, applying bounded rationality to findings from this section underscores the fact that the preferences that people express reflect limitations in cognitive capacity, time, and information.

Social-desirability bias. It is also worth noting that the response to the preferences section of the interview guide could be influenced by social-desirability bias. Social-desirability bias suggests that the universal human need for approval leads individuals to over-report "good behaviours" and under-reporting "bad behaviours" (Grimm, 2010). For example, research shows that when people are asked about their incomes that they may overstate their income if it is low to convey a greater degree of affluence or underestimate their income if it is high to convey modesty. Similarly, when asked about environmental responsibility, people may over-report environmentally conscious behaviours such as recycling (Barker et al., 1994). When asked about their preferences for the future of work, social desirability bias could therefore influence individual responses.

One instance of social desirability bias is that it may lead individuals may over-report their desire to work in a hybrid model providing that this was the stated policy of most departments by late 2021 and early 2022 to be seen as conforming with workplace policies. When offering up a response then, individuals could change their preference from being fully remote to being hybrid. Furthermore, remote work has historically been associated with stereotypes such as lower levels of worker effort, multitasking, or lack of enthusiasm for the tasks at hand (Staples, 2001). The second instance where social desirability bias may occur is by virtue of the fact that interview participants' identities were confidential, but not anonymous. When asked about their preferences, respondents may have overemphasized their desire for hybrid work, to offer the interviewer the seemingly most socially acceptable answer. Social desirability bias may have been limited if this question about preferences was asked anonymously and through a survey instrument. However, the complexity of administering an anonymous survey, and the lack of detailed responses that would be provided through semi-structured interviews limited the use of this instrument.

5.2 Answering the Research Questions

The research question that guided this thesis can be divided into three parts, which reflect each area of the interview guide. These can be summarized as:

> **Question 1 –** what job demands did workers face and what job resources became available during remote work?
> **Question 2** – what, if any, technical aspects of jobs changed in a remote format, and what social aspects changed?
> **Question 3** – what were the preferences of workers for remote, hybrid, and in-person work in the future?

Question 1
This question can be answered by returning to the job demands and resources section in Chapter 4: Findings and Chapter 5: Discussion. Chapter 4 showed the results of the content analysis of this thesis that demonstrated that workers who participated in the study reported new job resources in a remote environment. These were improved work-life balance, increased focus, greater connection, more rewards, and enhanced safety/well-being. Similarly, Chapter 4: Findings showed that workers reported new job demands. These were a more challenging environment, difficulties with technology, and problems with role clarity/mentorship, work hours, and overwork. These areas were arrived at by transcribing the fifteen interviews and applying content analysis to the findings. Chapter 5: Discussion then placed these job demands and resources within the context of the JD-R model, and proposed a modified JD-R model for the remote workers who were examined within this study. Figures 4 and 5 in Chapter 5 showed this modified JD-R model. Chapter 5 also discussed some limitations of the JD-R model, despite its benefits.

Question 2
This question was also answered by returning to Chapters 4 and 5 of this thesis. Chapter 4: Findings outlined the responses that participants provided to each of the sub-areas for technical factors, productivity, and performance, and showed that these factors in aggregate improved. Chapter 4 also showed that the social factors support and career progression in aggregate declined. Then Chapter 5 discussed some limitations of the socio-technical model and discussed challenges and opportunities for joint optimization. Chapter 6: Conclusion and Recommendations discusses the implications of this finding in recommendations 1, 2, and 3.

Question 3
This question can also be answered by looking at Chapters 4 and 5 of this thesis. Chapter 4: Findings explained that seven respondents favoured continuing with fully remote work, seven individuals preferred hybrid work, and one individual preferred returning to fully in-person work. Chapter 5: Discussion then these findings within the theories of rational choice and bounded rationality. It suggested that Simon's (1990) concept of bounded rationality provides a solid foundation on which to look at the findings. It also discussed the problem of social desirability bias. Chapter 6: Conclusion and Recommendations contains the results that follow from this research question on preferences in recommendations 2 and 3.

5.3 Limitations and Further Research

Limitations of the Research
This research has several limitations that should be acknowledged. The total sample for this work was fifteen early-career public servants (n=15), and on the surface, this sample may seem small for a qualitative study. However, each interview averaged just over an hour such that the total interview time approximated twenty hours. To apply content analysis, each interview needed to be transcribed, which averaged approximately an hour and a half per interview for a total of approximately twenty hours. Finally, content analysis required the researcher to go through the fifteen transcripts to identify certain words, themes, or concepts that were present in the interviews, which totaled at least two hours per transcript or thirty hours in total. In total, the researcher, therefore, spent at least seventy hours in the data collection, transcription, and

preliminary analysis phase, which prevented the recruitment of even more participants into the study. Therefore, the findings should be seen as illustrative of the sample rather than as perfectly representative of the population. Far from invalidating the research, however, the in-depth nature of this research is both a strength and limitation: to this date, no similar study has been published on early career federal public servants undertaking remote work. Large surveys of work preferences among public servants have been performed, however, these studies rely on survey methods, which are different from the methods here.

This research included some uncertainties with data collection and sampling. At the outset of this research, the sample was initially going to be selected through a recruitment email, however, the department expressed reservations about sponsoring the recruitment of employees for research. After several weeks of back-and-forth communication about a departmental call-out email, the researcher used another sampling method where an initial recruit would refer the researcher to subsequent participants. This snowball sampling method was outlined in detail in Chapter 2: Methodology and Methods, and is used when populations are difficult to reach, and it is difficult to know the full population (Parker and Scott, 2020). An important limitation of snowball sampling, however, is that it is a non-probability sampling method, meaning that individuals who are recruited may have characteristics that are non-representative of the population. To generate a probability sample, the researcher would identify members of the target population, assign number a number to each participant between one and the total population number, generate random numbers, and interview each member of the population. This sampling method was not feasible because identifying the total population would be difficult or impossible, doing so would require accessing personal information such as start dates and birth dates, and there would be no guarantee that all selected respondents would participate in the interviews. Nevertheless, if there was a way to generate a probability sample, doing so would have the possibility of representing the population.

Another limitation of this research involves inherent limitations present in qualitative research. The main research collection method, semi-structured interviews, is subjective in that the timing of interview questions may have varied slightly, and through the fact interviewees' responses may focus on answering certain questions more thoroughly. After the interviews and transcription took place, the researcher then sorted responses and identified the presence of certain words, themes, or concepts to within the text. This process necessarily involves interpretation since the researcher needed to identify common themes from text. The researcher's perspectives, opinions, and biases can change content analysis such that separate researchers might identify different themes. A commonly cited limitation of qualitative research is that results may not be replicable, and in this way, if another researcher performed the same study, it is possible that they might identify difference themes (Tuval-Mashiach, 2021). This limitation is not unique to this study, but rather reflects a common drawback of qualitative research.

Further Research

Further research on this topic should be carried out in a few areas. The first area that could be carried out would be to conduct a similar study. Similar results from a different study could help reveal the validity of this work. Apart from this, further research could be conducted on different demographics. Studying those in early career, as defined in Chapter 1, *Scope*, and elaborated on in Chapter 3, *Sample*, narrowed the participants for this research, and provided insights into the

perspectives of employees who are often underrepresented in senior management and who are candidates for future leadership roles in the public service. Despite this rationale, little is known about other demographics, such as how senior public servants adopted remote work. A logical continuation of this study would be to research how those in mid- and late-career undertake remote work or a comparison of how different demographics adopted this practice. This work showed that those in early career face a range of challenges, but individuals in different age cohorts may do so as well, and examining this group could produce recommendations for a wider population and better decision-making.

It should also be noted that this study did not select participants for demographic characteristics beyond those who were in early career in the federal public service. Accordingly, it does not reveal much about the perspectives and preferences of those who are part of an underrepresented gender, visible minority status, and ability/disability within the public service. Research into remote work among underrepresented groups could provide useful insight into the experiences of these populations, who are often underrepresented or neglected. This research on remote work could also be extended to other governments, private enterprises, not-for-profits, and other entities. Working conditions vary across organizations, and the findings of this work specifically speak to the demographic under consideration and the organization that was studied.

This research could also be carried out into the post-pandemic period. As Chapter 3: Methodology and Methods outlined, this research took place during a narrow six-month window between November 2021 and April 2022 when policy work in the federal government was still being carried out entirely remotely; interviewees discussed their experience transitioning to remote work and practising it, but did not have experience with return-to-work initiatives. In the fall of 2022, however, most departments started to implement a return to the office initiative, which necessarily has the potential to shift individuals' preferences and experiences. As time passes, research should be conducted on remote and hybrid work since the depths of the pandemic. It is possible, for example, that the long-term adoption of hybrid and remote work will gradually change job demands and resources, the social and technical components of work, and worker preferences. For example, in response to efficiency gains, organizations with hybrid or remote work may increase their volume and pace of work, thereby reducing job resources such as "work-life balance," "focus," "connection," and "rewards" while exacerbating job demands such as "work environment," "role clarity/mentorship," "work hours," and "overwork." Further research on remote work during different periods is therefore a natural extension of this work.

Finally, larger studies could be carried out on the effects of remote work on public servants. This research used semi-structured interviews and content analysis with fifteen early career public servants, however, larger studies that seek to understand the effects of remote work on the public service, and other organizations, should also be conducted. Shortly after the interviews ended for this research in April 2022, the Canadian Association of Professional Employees released the results of its "Return-to-Office Survey," which collated the responses of eleven thousand members to multiple-choice questions on work arrangements, preferences, productivity, and other questions on a remote format. The response rate to CAPE's "Return-to-office Survey" was forty-nine percent, and, among other things, it showed that the majority of members wanted to continue remote work full-time. Its much larger sample size was a clear advantage of the work; however, the lower response rate of forty-nine percent and the associated potential to present skewed results

through non-response bias limits the study. The CAPE study also did not allow individuals to describe their experiences and thoughts, but rather captured responses through multiple-choice questions. Despite these limitations, research with large sample sizes is useful for understanding remote work. This type of research does not necessarily conflict with content analysis, but is rather complementary to understanding the topic.

6. Conclusion & Recommendations

This research's results can be broken down into several components that focus on the findings of the job demands-resources model, social and technical aspects of work, and preferences. From the first portion of the interviews, five job resources emerged: work-life balance, focus, connection, rewards, and safety and well-being. Similarly, five job demands emerged: work environment, technology, role clarity and mentorship, work hours, and overwork. This section showed that there were both advantages and downsides to remote work. The next section examined the social aspects of work as represented through career progression and support and the technical aspects of work as represented by productivity and performance, and, in aggregate, found that the social aspects of support and career progression declined in a remote format while the technical aspects improved. The preferences section revealed that seven out of the fifteen individuals who responded expressed a preference for working remotely indefinitely, seven individuals had a stated preference for hybrid work, and one preferred fully in-person work. This section highlighted individual responses and how they expressed their preferences.

The discussion section then examined the findings in the context of the conceptual frameworks. This section showed a breakdown of responses for job demands and resources in Tables 14 and 15 and presented a modified version of Bakker and Demerouti's JD-R model with job demands and resources that were shown in Figures 3 and 4. This section then discussed socio-technical systems theory and which aspects of jobs are best done remotely and which aspects can be performed well in person; it noted that designing jobs for joint optimization might involve the integration of both the social and technical systems through hybrid work. It then discussed the findings of the preferences section in the context of both rational choice and bounded rationality and noted that individuals' preferences can be seen as an expression of their utility, but also as part of an imperfect decision-making process with limitations on cognitive capacity, time, and information. It further discussed how social desirability bias could skew the findings of the work. The discussion section, therefore, contextualized the findings of the work in closer detail.

Several recommendations can be drawn from this research and can serve as a guide for how the federal public service can address the new reality of work. It should be noted that this project was started while the researcher was working at Global Affairs Canada, which expressed interest in being a client, however, a recommendation from the department suggested that the project should not have a client, and therefore the project went ahead without one. Furthermore, the researcher then accepted another position with Innovation, Science and Economic Development meaning that regular contact with the initially interested directorate slowed. Despite the absence of a formal client, several recommendations still can be drawn from this work and applied to the federal public service. These recommendations can be summarized as: 1) design hybrid work policies to capitalize on the advantages and limit the downsides of both remote and in-person work, 2) do not immediately return to in-person work with no options for hybrid work, and 3) Acknowledge the limitations of hybrid work for some employees while offering alternatives.

6.1 Recommendation:

Design hybrid work policies to capitalize on the advantages and limit the downsides of both remote and in-person work.

A reoccurring theme in this research was that both remote and in-person work carried unique advantages and drawbacks in the federal public service. The ability to improve work-life balance, focus, rewards, and safety/well-being, and improve productivity were clear benefits of remote work. In contrast, factors that appeared to push workers towards in person work were technology, the work environment, role clarity/mentorship, work hours, and overwork. Productivity and performance also on aggregate increased while feedback and career progression in aggregate suffered. This information paints a nuanced view of remote and in person work, rather than one that definitively shows one way of working as better.

If leaders move towards a hybrid work environment, some aspects of work could be planned for remote workdays and others for in-person work so as to capitalize on the advantages and limit the downsides of both remote and in-person work. For example, tasks requiring sustained attention and deep focus such as drafting policy documents or analyzing legislation could be reserved for remote days. In the course of the semi-structured interviews, employees expressed that their ability to carry out these tasks improved significantly when working from home. In contrast, days where mentorship and feedback occur could be reserved for in-person days. Reoccurring branch or directorate meetings could be scheduled for in office days, as well as regular check-ins with colleagues. Similarly, activities with a networking component could be planned for in office. In fact, throughout the interviews, the value of in-person work for these activities repeatedly emerged, and therefore a logical recommendation that follows from this thesis would be is to take advantages of the benefits and limit the downsides of both forms of work. Organizational awareness around this fact could therefore help individuals realize the benefits of both forms of work.

6.2 Recommendation:

Do not immediately return to mandatory in-person work with no options for hybrid and remote work.

A reoccurring theme that emerged in both the first, second, and final portion of the interview guide was that remote work delivered some valuable benefits that could not easily be replaced. In the course of approximately twenty hours of interviews, and countless hours applying content analysis it was clear that remote work had advantages across multiple work areas, and that returning to fully in-person work as it had been carried out before the pandemic would mean losing these benefits. It should be noted that these findings closely lend themselves to the type of work that the sample was undertaking—all the workers interviewed except for one individual working in the Economics and Social Sciences classification, and all of the individuals interviewed were carrying out policy-related work. Accordingly, this recommendation should not be applied to all individuals in the public service—indeed, many classifications within the public service need to physically be at work to most effectively carryout their objectives, and the option to work remotely is not relevant for these classifications.

For the sample of workers who were studied, however, this researcher revealed that there were benefits of remote work to various aspects of workflows and processes that should not be overlooked. From the first half of the interview guide, the themes that emerged as most beneficial

from the sample were work-life balance, focus, rewards, and safety/well-being, and for each of these themes, an overwhelming majority of participants identified the benefits of being able to work remotely as useful in their roles. For example, with work-life balance one participant succinctly put it "I get back time in my day… I now have more time to be social, or make a good meal, or have a clean home, and I think that is really healthy." This sentiment occurred in various forms during the interviews. Other participants cited the benefit of having more time to spend with friends, while some noted that the loss of commuting time improved their energy levels. The benefits of remote work could also be seen in the other themes such as focus, rewards, and safety/well-being, and in these areas the benefits appeared to be long-standing. The second half of the interview guide also revealed strengths for workers in the technical aspects of jobs such as productivity, which emerged as an area where individuals cited decreased distraction while working from home and improved ability to enter a deep workflow. Several people pointed to the fact that coworkers interrupted workflow less often in a remote format given that focus tools and scheduled meetings were an option. Workers therefore cited productivity increases in a remote setting.

While the findings and discussion section of this thesis addressed problems with working remotely, these issues did not overwhelm all the positive aspects of remote work rendering it obsolete. In fact, issues with technology, role clarity/mentorship, work hours, overwork, feedback, and support all emerged with the caveat that this practice also produced considerable benefits. Although one individual expressed a preference for returning to fully in-person work, even this individual acknowledged that remote work conferred unique benefits to work-life balance that may not be achieved in a fully remote format. The reality of the benefits might be reflected in the equal split between participants on whether to continue working remotely indefinitely or adopt a hybrid format at the end of the pandemic. The results from the preferences section therefore points to the widespread perception of a benefit for this aspect of work.

The collective findings of this thesis therefore indicate requiring workers to return to mandatory in-person work with no options for hybrid or remote format would deny them a range of benefits to their work-life balance, focus, and rewards while also undermining benefits to productivity that can help the organization overall. While the sample for this project was relatively small, interviewees clearly outlined the rationales for their preference for some forms of remote work. Returning to fully-in person work would result in individuals losing the benefits of this form of work and potentially harm employee well-being. Therefore, this course of action could push staff into other sectors that provide more flexible work arrangements or create interdepartmental employee turnover as workers change jobs to find the flexibility of remote work in other departments. Based on the widespread benefits offered and the possible negative consequences of such a mandate, leaders within the public service should not attempt to return to mandatory in-person work without having options for hybrid and remote work. As the next recommendation will discuss, work policies should also be put in place to acknowledge the limitations of hybrid work and offer alternatives.

6.3 Recommendation:

Acknowledge the limitations of hybrid work for some employees while offering alternatives.

Another clear theme that emerged from this thesis was that many workers approved of hybrid work, but realized that this work arrangement would not fit with their situation. In fact, eight out of the fifteen individuals who participated in the interviews were located in another location from where they were carrying out remote work. These individuals were living in British Columbia, Manitoba, and Ontario, but were working for organizations in the NCR, and cited how remote work enabled them to join the federal public service when situational factors would have otherwise prevented them from doing so. As the findings section of this thesis detailed, most of these individuals did not want to move to another province or region because of an established residence and network of family and friends, and some could not relocate unless they were willing to leave a spouse, partner, or child in their home province.

The geographic dispersal of workers was particularly strong for this sample, because many of these individuals started working shortly before or following the onset of the pandemic, and had not established strong ties to the NCR. Workers who started after the onset of the pandemic, were reluctant to relocate if they were working entirely remotely. Similarly, for workers who started before the pandemic, many reported moving back to their home province largely because they could leverage the flexibility of their location to their advantage. However, many hybrid work plans have been designed by senior public servants; these decision makers are typically employed at the highest rungs of the organization, and most have resided in the NCR for decades where they acquired progressive experience to qualify to become a member of its senior ranks. These individuals are far more likely to be removed from the everyday experiences of early career workers who reside outside of the NCR, and may overlook the fact that hybrid work often requires relocation. In short, a hybrid work model certainly achieves the best of both worlds for individuals who have strong ties to the region, but it does not work as well for those individuals who have to relocate to undertake the practice.

Decision makers should therefore recognize that hybrid work may not be equally accessible for all workers, particularly those in early career who have not formed ties to the NCR. This should be anticipated as a potential hurdle to hybrid work, and it is possible that certain sectors of work in the federal government could be carved out for fully remote positions. Doing so would open positions for individuals who are tied to other regions and are unable to relocate to pursue hybrid work. It would be important, however, that some workers are not seen as being afforded special privileges; rules and regulations around virtual positions would therefore need to be made with equity in mind. It is also worth noting that remote work frequently involves a network effect where efficiency increases with the number of adoptees. Similarly, in-person work also involves a network effect in that more individuals in an office increases the benefits of spontaneous interaction, mentoring, and collaboration. This may become a difficulty for entirely virtual positions if more people return to in-person work and interactions increasingly occur offline. During the interviews one respondent described a scenario where an individual was required to commute an hour every day to an office where she would work remotely while entirely alone. While the subject of the account was not a public servant, the account illustrates a limitation of a partial hybrid environment where workers are physically present in the office, but work almost entirely remotely. If alternatives to remote work are widely adopted by individuals, having too few team members in an office at once could undermine the network benefits of in-person work, and reduce the efficacy of the model.

Notwithstanding the above, management should still recognize that the public service became increasingly geographically dispersed over the pandemic, and that hybrid work will not completely solve the future of work in the public service. To illustrate this point, in the interviews one respondent described hybrid work as representing the "worst of both worlds" where he would lose proximity to his young family while travelling across the country only to spend most of his week working remotely. This scenario reflects the fact that a hybrid model is more appealing for public servants who are located close to their offices and do not have many hurdles for adopting the practice. However, this work has made clear that many workers in early career are located across the country. Accordingly, making fully remote work positions available to workers who face unique life situations could ensure a more successful transition of the workforce moving out of the pandemic era, providing that these arrangements are thoughtfully designed.

These three recommendations emerge from the findings of this research and can inform decision makers on how to proceed on future work. At the time when this study was conducted, the future of work in the public service was unknown, but from carrying out these interviews it became clear that the pandemic created job demands and resources for workers, shaped social and technical areas of work, and created divergent preferences. It is possible that as the early career workers studied here carry on with their careers, that they will be shaped by the unique circumstances that they experience when starting in the public service. While this project has provided a unique window on a demographic group of public service workers, further research on other remote workers, who work across a range of other governments, in the private sector, and not for profits is certainly warranted. Furthermore, research on the post-pandemic period is undoubtedly useful as a way to shedding light on the long-term adoption of remote and hybrid work. This research has therefore started the process of examining a topic that warrants further study.

References

Angelucci, M., Angrisani, M., Bennett, D., Kapteyn, A., Schaner, S. (2020). Remote Work and the Heterogeneous Impact of COVID-19 on Employment and Health (27749). National Bureau of Economic Research. https://www.nber.org/papers/w27749

Bakker, A. and Demerouti, E. (2006). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology 22*(3): 309-328.

Bakker, A. Demerouti, E., Schaufeli, W. (2003). Dual process at work in a call centre: An application of the job demands-resources model. *European Journal of Work and Organizational Psychology 12*(4): 393-417.

Bakker, A.B., Demerouti, E. and Verbeke, W. (2004b), "Using the Job Demands-Resources model to predict burnout and performance." *Human Resource Management*. 43, 83-104.

Bakker, A.B., Demerouti, E., De Boer, E. and Schaufeli, W.B. (2003b), "Job demands and job resources as predictors of absence duration and frequency." *Journal of Vocational Behavior*, Vol. 62, pp. 341-56.

Barker, K., Fong, L., Grossman, S., Quin, C. Reid, R. (1994). Comparison of Self-Reported Recycling Attitudes and Behaviour with Actual Behaviour. *Psychological Reports 75*(1): 571-577.

Baxter, G. and Summerville, I. (2011). Socio-technical systems: From design methods to systems engineering. *Interacting with Computers, 23*(1): 4-17.

Buchanan, N., Aslaner, B. Adelstein, J. MacKenzie, D., Wold, L., and Gorr, M. (2021). Remote Work During the COVID-19 Pandemic: Making the Best of It. *Physiology 36*(1): 2-4.

Brynjolfsson, E., Horton, J., Ozimek, A., Rock, D., Sharma, G. TuYe, H. (2020). COVID-19 and remote work: an early look at US data. NBER Working Paper (27344 JEL No. I15): 1-25.

Education in Canada : Key results from the 2016 Census. (2017, November 29). https://www150.statcan.gc.ca/n1/daily-quotidien/171129/dq171129a-eng.htm

De Vos, A., De Clippeleer, I. and Dewilde, T. (2009). Proactive career behaviours and career success during the early career. *Journal of Occupational and Organizational Psychology, 82*(4): 761-777.

Emery, F. & Trist, E. (1960). Sociotechnical Systems Theory. In Miner, J. (Eds.), *Organizational Behaviour: Essential Theories of Process and Structure* (1st Edition). Routledge.

Galanti, T., Guidetti, G., Mazzei, E, Zappala, S., and Toscano, F. (2021). Work From Home

During the COVID-19 Outbreak: the Impact on Employees' Remote Work Productivity, Engagement, and Stress. *Journal of Occupational Environmental Medicine 63*(7): 426-432.

Grimm, P. Social desirability bias. *Wiley International Encyclopedia of Marketing.* Retrieved June 2, 2022, from https://onlinelibrary.wiley.com/doi/book/10.1002/9781444316568

Guest, G., Bunce, A., Johnson L. (2005). How Many Interviews Are Enough? An Experiment with Data Saturation and Variability. *Field Methods, 18*(59): 59-82.

Hackney, A. Yung, M., Somasundram, KG, Nowrouzi-Kia, B., Oakman, J., Yazdani, A. (2022). Working in the digital economy: A systemic review of the impact of work from home arrangements on personal and organizational performance and productivity. *PLos One 17*(10): 1-25.

Hakanen, J., Bakker, A., Schaufeli, W. (2006). Burnout and Work Engagement Among Teachers. *Journal of School Psychology, 43*(6): 495-513.

Herfeld, C. (2021). Revisiting the criticisms of rational choice theories. *Philosophy Compass, 17*(1): 1-20.

Hinds, P & Elliott, BE (2021, February 1). WFH Doesn't Have to Dilute Your Corporate Culture. *Harvard Business Review*, 1-10.

Holsti, O. (1969). *Content Analysis for the Social Sciences and Humanities.* Addison-Wesley Publishing Company.

Karasek, R. (1979). Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly 24*(2): 285-308.

Koehne, B., Shih, P., Olson, J. (2012). Remote and Alone: Coping with Being the Remote Member of the Team. *Session: Distributed Teams II*: 1257-1266.

Klopotek, M. (2017). The advantages and disadvantages of working remotely from the perspective of young employees. *Scientific Quarterly "Organization and Management" 4*(40): 39-49.

Lockwood, N. (2003). Work/Life Balance: Challenges and Solutions. *SHRM Research Quarterly, 1*(2): 1-10.

Mintrom, M. (2011). *Contemporary Policy Analysis.* Oxford University Press.

National Bureau of Economic Research – Working Paper 27344. (2020). COVID-19 and Remote Work: An Early Look at USs Data – Working Paper 27344. https://www.nber.org/papers/w27344

Occupational groups for the public service. (2018, October 16).

https://www.canada.ca/en/treasury-board-secretariat/services/collective-

Olson, M. (1983). Remote Office Work: Changing Work Patterns in Space and Time. *Communications of the ACM* 26(3): 182-187.

Oppenheimer, J. (2008). Rational Choice Theory. In *The Sage Encyclopedia of Political Theory* (8) *Sage.*

Parker, C., Scott, S., and Geddes, A. (2019). Snowball Sampling. *SAGE Research Methods Foundations*: 1-13.

Shockley, K., Allen, T., Dodd, H., Waiwood, A. (2021). Remote Worker Communication During COVID-19: The Role of Quantity, Quality, and Supervisor Expectation-Setting. *Journal of Applied Psychology, 106*(10): 1466-1482.

Simon, H. (1990). Bounded Rationality. In Eatwell, J., Milgate, M., & Newman, P. (Eds.), *Utility and Probability* (1st ed., pp. 15-18). The New Palgrave.

Staples, D., Hulland, J., Higgins, C. (1999). A Self-Efficacy Theory Explanation for the Management of Remote Workers in Virtual Organizations. *Organization Science, 10*(6): 758–776.

Staples, S. (2001). A Study of Remote Workers and Their Differences from Non-Remote Workers. *Journal of Organizational and End User Computing 13*(2): 3-14.

Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research, and Evaluation, 7*(17), 1-16.

Struffolino, E. (2019). Navigating the early career: The social stratification of young workers' employment trajectories in Italy. *Research in Social Stratification and Mobility 63*(100421): 1-59.

Taylor, J. (1975). The Human Side of Work: The Socio-Technical Approach to Work System Design. *Personnel Review 4*(3): 17-23.

The University of Chicago: School of Social Service Administration. (2014). Report on precarious work
schedules among early-career employees in the U.S.
https://crownschool.uchicago.edu/sites/default/files/uploads/lambert.fugiel.henly_.precarious_work_schedules.august2014_0.pdf.

Tuval-Mashiach, R. (2021). Is replication relevant for qualitative research? *Qualitative Psychology, 8*(3): 365-377.

Appendices

Appendix 1 – Participant consent form

Figure 6: Participant consent form:

University of Victoria

Participant Consent Form

Remote work in early career: examining the federal public sector

Purpose and Objectives
You are invited to participate in a study entitled Remote work in early career: examining the federal public sector. The purpose of this research project is to explore the effects of remote work on early career federal public servants. The objective is to improve understanding of remote work in the sample group.

Importance of this Research
Research of this type is important because it may help employers and policymakers better adjust their approach to remote work. Further studying the experiences of early career public servants has the potential to create new knowledge on a group who will become the next cohort in the workforce and in turn understand the challenges that they face.

Participants Selection
You are being asked to participate in this study because you have been identified as an early career public servant working in the federal public sector who might be interested in responding to and participating in this research. Your responses to this research will be strictly confidential and will not be shared without your consent.

What is involved
If you consent to voluntarily participate in this research, your participation will include responding to a series of questions about your experience and perspectives on undertaking remote work during the COVID-19 pandemic. This will take place in an interview format and will focus on social elements of your work and career development. This study only asks for a time commitment of approximately one hour, and takes the form of a semi-structured interview.

Audiotapes, written notes, and observations will be taken. A transcription will be made.

Inconvenience
Participation in this study may cause some inconvenience to you, including the stress associated with completing the interviews. Additionally, risks may include lost time that you experience and incur from participating in this study.

Risks
There may be risks in this study. You will be asked about both the challenging and beneficial aspects of remote work. Examples of subjects of questions in this study include asking you about issues you encountered in remote work, situational factors that affected you during the pandemic (including living arrangements, parenting/homeschooling, and living arrangements), and your well-being. These questions can be sensitive in nature and could create psychological and/or emotional distress. If you experience distress, you are allowed to skip any question and/or withdraw your participation and all or part of your responses in the study.

If you experience psychological distress from completing this study and after you withdraw, you can contact the Employee Assistance plan using the GAC Intranet. Please note, if you do not have access to the GAC intranet, contact Daniel Campeau at 613-617-6873 or by email at Daniel.campeau@international.gc.ca.

Benefits
The potential benefits of participating in this research include an opportunity to articulate your experiences undertaking remote work and your understanding of it, to contribute to an improved social understanding of remote work on early career public servants, and to contribute to research that may inform policies on remote work.

Template Revised November 2019

Voluntary Participation
Your participation in this research must be voluntary. If you do decide to participate, you may withdraw at any time without consequences or any explanation. Your participation in this study is separate from your involvement in your department. If you do withdraw from the study your data will be used only if you give permission—if you do not specify what you would like done with your data, it will not be included. You are also allowed to skip questions that you do not wish to answer.

On-going Consent
To make sure that you continue to consent to participate in this research, you will be withdrawn from the study and remove your responses at any time. At the halfway mark of the interview, the interviewer will ask you if you would like to proceed.

Anonymity
Your name will be removed from any interview material and your identity will not be disclosed or published unless you would like it to be. However, the researcher will know your real identity through the course of the interview, and in turn, this will limit your anonymity to the researcher. Nevertheless, the researcher will not disclose your identity in the study as it takes place, and will ensure that your responses are strictly confidential.

Confidentiality
Your confidentiality and the confidentiality of the data will be protected. Your name will not be included in any final written materials, and notes/recordings will be stored securely on the University of Victoria's encrypted and password-protected research storage system. Please see the "What is Involved" section for information on the security of your data.

Dissemination of Results
It is anticipated that your confidential responses result of this study will form part of a thesis that can be accessed by researchers and interested persons through the University of Victoria's thesis repository. Additionally, findings from this thesis may be a part of scholarly articles or conferences on this topic with complete protection of all aspects of its subjects' identities.

Disposal of Data
Data from this study will be erased from the University of Victoria storage systems after the publication of the thesis. Your names will not be recorded on transcriptions, and your contributions will be made confidential.

Contacts
You may raise any concerns you might have with the ethical implications of this research by contacting School of Public Administration at padirect@uvic.ca or 250-721-8084 and/or the Human Research Ethics Office at the University of Victoria at 250-472-4545 or ethics@uvic.ca.

Your signature below indicates that you understand the above conditions of participation in this study, that youhave had the opportunity to have your questions answered by the researchers, and that you consent to participate in this interview.

_____	_____	_____
Name of Participant	*Signature*	*Date*

Template Revised November 2019

Appendix 2 – Interview Guide

Interview Guide

My name is Sam Kerr, and I am a student at the University of Victoria studying remote work. This interview will be used as part of a research project on how the public service transitioned to remote work during the pandemic. Your responses are confidential and in no way will your identity be revealed in the research; halfway through the interview, you will have an opportunity to reassess if you want to proceed.

The interview will be divided into four parts: an introduction, an open-ended section on job demands and resources in work, a section on the social and technical aspects of work, and a section on preferences.

Do I have your consent to proceed?

Introduction

1. I would like to have some preliminary information on who you are and where you are working. If you feel comfortable, can you start by please describing what department you work with?
    a. When did you start working with the federal government?
    b. Can you please provide your job title and classification?
    c. The "Millennial" cohort can be defined as anybody born between 1981 and 1996, while the "Generation Z" cohort can be defined as those born between 1996 and the 2010s. If you are comfortable answering, what cohort do you belong to?

2. The first few months of the COVID-19 pandemic were a historic moment to live through. Please take a moment to think back to this time.
    a. What was going on with you at this time?
    b. Were you working or studying then?

Job Demands and Resources

1. The transition to remote work may have created new challenges for workers. These challenges might be described as "job demands," which are the physical, psychological, social, and organizational aspects of a job that require sustained physical and/or psychological effort and are therefore associated with certain physiological and/or psychological costs.

    a. In your view, do any job demands stand out from your experience of remote work?
    b. Can you provide an example?
    c. Do any further factors stand out?
    d. Another example?
    e. …

2. The transition to remote work may have also created new benefits for workers. These benefits might be seen as job resources, which reduce the physiological and psychological costs of work and are functional for achieving work goals in that they stimulate enhanced work ethic and create an environment for greater personal growth, learning, and development.

a. In your view, do any job resources stand out from your experience of remote work?
b. Can you provide an example?
c. Do any further factors stand out?
d. Another example?
e. …

Technical & Social Factors

Emery and Trist (1960) argued that jobs can be divided into technical and social components. Technical aspects of jobs tend to be concerned with how the work is performed on a day-to-day basis and the productive outputs and structure of work that are used, while the social aspects focus on leadership individual and team behaviours within the organization.

Technical Factors

1. Productivity, which can be thought of as the amount of output produced per unit of input, may change during remote work; in light of this fact do you believe that productivity increases, decreases, or stays the same in remote work?
    a. Do you believe that productivity changes during remote work? If so, how?
    b. Can you provide an example?
    c. Another example?
    d. …

2. Performance, which can be thought of as the extent to which a person does their job effectively or well, may change in a remote setting; with this in mind, do you believe that your performance has increased, decreased, or stayed the same in remote work?
    a. Do you believe that performance changes during remote work? If so, how?
    b. Can you provide an example?
    c. Another example?
    d. …

Social Factors

1. Support, which can be thought of as the extent to which a worker has access to necessary assistance to feel included in their work, may change in a remote setting; with this fact in mind, do you believe the support you receive increased, decreased, or stayed the same in remote work?
    a. Do you believe that support changes during remote work? If so, how?
    b. Can you provide an example?
    c. Another example?
    d. …

2. Career progression, which can be thought of as the learning and personal development activities that an individual can undertake to master their current job and advance their occupational status may change in a remote format. In your view is career progression likely to increase, decrease, or stay the same in remote work?
    a. Do you believe that career progression changes during remote work? If so, how?
    b. Can you provide an example?
    c. Another example?

d. …

Preferences

1. Preferences guide our decision-making and in aggregate individual preferences can shape policies. For example, if many employees prefer entirely remote work, organizations may adopt this format to attract and retain employees; in contrast, if most employees prefer in-person work, organizations may adopt policies to facilitate this preference.
    a. If circumstances permitted, would you continue working remotely indefinitely?
    b. If circumstances permitted, how about adopting a hybrid work environment?
    c. If circumstances permitted, would you return to fully in-person work?

2. Thank you for participating in this interview, your responses will feed into a study on how remote work has been carried out among early career public servants.
    a. Is there anything that you felt has been left out in the interview?
    b. If you feel comfortable, do you mind me asking what field(s) you studied?
    c. Do you have any comments or suggestions for subsequent interviews?

–End–

Appendix 3 – Participant Characteristics

Table 18: Anonymized participant characteristics across seven departments:

6	7	8	9	10	11	12	13	14	15
Woman	Woman	Woman	Man	Man	Man	Man	Non-binary person	Man	Woman
EC	EC	EC	EC	EC	EC	EC	EC	EC	CO
Evaluation Assistant	Desk Officer	Junior Trade Policy Analyst	Policy Analyst	Junior Analyst	Junior Economist	Policy Analyst	Junior Analyst	Junior Policy Analyst	Signature Events Assistant
Social Science and Humanities Research Council	Global Affairs Canada	Global Affairs Canada	Immigration, Refugees and Citizenship Canada	The Department of National Defence	Environment and Climate Chance Canada	Immigration, Refugees and Citizenship Canada	Environment and Climate Change Canada	Environment and Climate Change Canada	Global Affairs Canada
1.5	1	4	3	1	1	2	1	1	1
Generation Z	Millennial	Generation Z	Millennial	Generation Z	Generation Z	Millennial	Millennial	Generation Z	Generation
Master' s Ongoing	Master' s Ongoing	Undergradua te	Undergradua te	Master' s ongoing	Master' s ongoing	Master' s ongoing	Masters	Master' s ongoing	Undergradua te
Political Science, Public Administratio n	Commerce, Public Administration	International Affairs	Political Science, International Affairs	Tourism, Public Administratio n	Public Administratio n	Public Administratio n	French / Public Administratio n	Science / Public Administratio n	World Literature
No	No	No	No	No	Yes	No	Yes	Yes	Yes
Yes	No	No	No	No	Yes	No	Yes	Yes	Yes
No	Yes	No	Yes	No	Yes	No	No	No	No

Participant	1	2	3	4	5
Stated gender	Woman	Woman	Woman	Woman	Woman
Classification	EC	EC	CO	EC	EC
Job Title	Junior Policy Analyst	Policy Analyst	Junior Trade Commissioner	Junior Analyst	Technical Writer
Department/Agency	Privy Council Office	Parks Canada/ECCC	Global Affairs Canada	Global Affairs Canada	The Department of National Defence
Approximate length of time in the public service	2	2	1	2	1
Demographic Cohort	Millennial	Millennial	Generation Z	Generation Z	Millennial
Level of Education	Masters	Doctorate	Undergraduate	Undergraduate	Master's Ongoing
Educational Field (undergraduate, graduate)	Sociology, Public Administration	Geography	International Affairs	Commerce	History, Public Administration
Working in another time zone?	Yes	No	No	Yes	Yes
Physically outside the national capital	Yes	No	Yes	Yes	Yes
Worked in professional environment before?	Yes	No	Yes	Yes	Yes

Appendix 4 – Miscellanea

Figure 7: Karasek's (1979) Job Demand Control Model: