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# Bringing multiple job holding out of the moonlight: Understanding the heterogeneity of multiple job holders in Aotearoa New Zealand

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### **Abstract**

Multiple job holding is a form of non-standard work for which research reports mixed experiences for those individuals involved. It has been suggested that heterogeneity among multiple job holders may explain the divergence in reported experiences. The aim of this research was to explore this heterogeneity to develop a meaningful, nuanced method for conceptualising multiple job holders which can be utilised for future research, policy development and practice.

A two-study, mixed methods research design was utilised. As a methodological precursor to the main study (study two), an investigation was undertaken to shed light on how multiple job holders select their 'main job' (a requirement in most quantitative research in this area) as the traditional methods for this selection were considered somewhat arbitrary and potentially inaccurate. Thus, a semi-structured interview design using vignettes was employed to explore the criteria used by multiple job holders when directed to select a main job. Study one concluded that an extensive array of criteria were used and therefore one main job indicator should not be imposed universally. Rather, the most appropriate method should be to allow individuals to self-select their main job, while at the same time capturing their rationale for the selection.

Incorporating this method of main job indicator selection, the second and main study utilised a quantitative cross-sectional survey design that captured situational variables and outcomes. Latent class analysis showed that, based upon their situational factors, four distinct types of multiple job holder were identified. These ranged from those with markedly positive situations (the privileged type) and in contrast, those forced into the practice with negative situations (the compelled type). Furthermore, and as predicted, the more negative types experienced more adverse outcomes.

This research achieves its intended purpose around conceptualising the diverse types of multiple job holder that exist. Specifically, it advances knowledge about multiple job holding by suggesting that these people constitute a highly heterogeneous population — one that should not be subject to generalisations or assumptions — and that their experiences appear

to be shaped by the nature of their situations. In doing so, the research provides a more nuanced illustration of these unique groups of individuals that can be utilised by future researchers, policymakers and practitioners/employers alike to more appropriately understand multiple job holders.

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"When something bad happens, you have three choices. You can let it destroy you, let it define you or you can let it strengthen you."

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# Glossary of key terms, concepts and abbreviations

Main job The phrase "main job" is often used in the context of

asking a multiple job holder to select one of their multiple

jobs to focus on (e.g. for survey questions). The criteria as

to what denotes a main job is variable in research to date,

but common criteria include the job that provides the

most income or hours of work, or the job in which one

has worked the longest. The variability of this criteria is,

indeed, a key point of focus for this research. This is

known as the **main job issue** – see below.

Main job indicator The factor(s) or criteria used by an individual when

selecting a main job; the basis upon which they make

their selection – e.g. (the main job is the job that has the)

most income.

Main job issue An issue identified in this research, relating to the

common requirement for multiple job holders to select a

"main" job, out of their multiple jobs. Specifically, this is

regarded as an issue due to the arbitrary and variable way

in which individuals are generally asked to make their

selection.

MJH Multiple job holding.

Multiple job holding The concurrent holding of more than one job – a job being

an undertaking that an individual carries out with the

expectation of financial remuneration in return for their

labour.

MJHer Multiple job holder.

Non-standard work/NSW Any form of work that diverges from the traditional,

standard concept of holding one, permanent, full-time

job.

**Psychosocial work** Aspects of the work environment that relate to the way

environment factors in which work is designed, organised and managed. In

contexts outside of the work environment, the phrase "psychosocial" is often used to describe matters relating to an individual's interface with the social context in which they exist. In this thesis, the term is used strictly in relation to the work environment, as described above.

**Psychosocial hazards** 

A psychosocial hazard arises when one or more psychosocial work factors are experienced adversely by an individual; the hazard is something with the potential to cause harm.

Psychosocial risk

The potential for a psychosocial hazard to cause harm to an individual; the likelihood that the harm will actually occur.

Work

Used to describe the act of partaking in labour in exchange for remuneration, including what can be described as employment. The phrases work and "workers" (to describe individuals engaging in work) are used in favour of employment and employees, given that many forms of labour exchange occur outside of what may be legally deemed an employment situation (e.g. as a contractor where there an exchange of services, rather than a legally-protected employment relationship).

# **Chapter 1: Introduction**

## 1.1. Orientation to the research and its rationale

Atypical forms of work that were once commonly witnessed in the nineteenth and twentieth centuries are once again experiencing a resurgence, spurred by technological advances and globalisation, among other factors (Quinlan et al., 2001b). Many of these changes in the work landscape are being touted as the "future of work" – as promising, pioneering shifts to work as it was once known, often facilitated by technology. However, the true extent of the implications that these arrangements carry for workers is often glossed over in favour of romanticising the flexibility and novelty of such arrangements. For example – a key element of many non-standard work arrangements is flexibility, but often the flexibility available is employer-driven to enable cost savings at the expense of stable, predictable work and income for individuals (Quinlan et al., 2001b). While there certainly are benefits to be had by workers from such arrangements, it is argued that the full spectrum of experiences and outcomes needs to receive equal cognisance – beyond just favourable forms and examples of non-standard work.

One form of non-standard work that has received slightly less attention than others from researchers – possibly due to its complexity as a phenomenon – is the practice of multiple job holding. As the label suggests, this refers to the concurrent holding of more than one job by an individual. Prevalence of multiple job holding appears to have remained fairly stable over time. In New Zealand, 7.3% of the workforce were reported to hold multiple jobs as at June 2019 (Statistics NZ, 2019a). International prevalence rates are fairly similar, generally at around 5-8% of the workforce (Bailey & Spletzer, 2020; Bamberry & Campbell, 2012; Conen & Stein, 2021; Klinger & Weber, 2020; Kostyshyna & Lalé, 2019; Kottwitz et al., 2017; McKenzie, 2017).

The practice of multiple job holding first piqued my interest in the course of my work as a lecturer, when I encountered students holding multiple jobs. With a strong, innate drive to improve the wellbeing of workers and make work a more positive experience, I became curious about the outcomes experienced by those who, like the students I met, worked in multiple jobs. Hence, I turned to the extant literature to gain a better understanding of the

practice. In seeking to understand the results of this practice for those who partake in it, previous research that has been undertaken on this topic has reported mixed results. There has not been consensus as to whether this practice is generally positive or negative for workers (nor, their employing organisations) – and the divergence in experiences reported has perplexed researchers. Positive outcomes reported include enhanced professional competence in one's jobs (Betts, 2005), wider social networks (McClintock et al., 2007), greater variety that enriches one's life (Caza et al., 2017) and increased income – to either fulfil a financial necessity and avoid poverty (Scott et al., 2020), or to save for luxuries (Pere, 2007). However, concerningly, those negatively affected by the practice report increased injury rates – both in and outside of work (Marucci-Wellman et al., 2014b) – higher work family conflict (Boyd et al., 2016), and longer working hours resulting in less free time for leisure and less sleep (Marucci-Wellman et al., 2016). It has been suggested this divergence can be explained by the diversity of those who partake in this practice (Bamberry & Campbell, 2012) – that despite many being classified under the overarching term of multiple job holders, there may be different types of multiple job holder – and evidence is starting to emerge in support of this (Bouwhuis et al., 2018c).

Concurrent to the rise of non-standard forms of work (of which multiple job holding is one, albeit one that appears to be remaining fairly stable in prevalence), there is increasing interest and investment in the topic of psychosocial risk in the workplace. Psychosocial risk can be described as the potential for harm to arise from adverse experiences of the way in which work is designed, organised and managed, as well as the social context within work takes place (Leka et al., 2008). Concern for this subject is particularly widespread as greater emphasis is being placed on managing the mental health impacts of work – an area that has generally been neglected previously in favour of more straightforward and visible risks – particularly those associated with safety incidents (Hasle & Zwetsloot, 2011).

Psychosocial risk is said to result from adversely experiencing psychosocial work environment factors. Factors comprising the psychosocial work environment include (but are not limited to) the level of control or influence afforded to workers, the demands (of many kinds) placed upon them, and the recognition or reward on offer (Leka et al., 2003; Leka et al., 2015). Essentially, psychosocial work environment factors describe one's experience of their job

(Way, 2020). In this vein, it can be reasonably assumed that engaging in the practice of multiple job holding will inherently alter the psychosocial work environment that one experiences (indeed, one would be expected to experience the psychosocial work environment uniquely across each of their jobs). In seeking to better understand the experiences of those who hold multiple jobs, the concept of the psychosocial work environment therefore presented a valuable perspective through which to consider the practice of multiple job holding.

True understanding of multiple job holding as a practice is arguably hindered somewhat by the lack of consensus around the impacts that the practice has on those who partake in it. In turn, this lack of understanding may be preventing appropriate action from taking place to support those who are vulnerable to negative situations of MJH. Therefore, this research undertook to develop a conceptualisation of multiple job holders that could be used to better understand the diverse types of individuals who comprise the multiple job holding population. Theorising, based on available evidence, that there may be factors inherent in the situation of multiple job holders that may explain the different outcomes experienced, this research approached the above task by investigating the situations of multiple job holders. More specifically, it examined how the outcomes of multiple job holders were influenced by their situations. To achieve this, the overarching objective of this research was:

To explore the heterogeneity of multiple job holders in order to develop a meaningful, nuanced method for conceptualising these individuals, which can be utilised for future research, policy development and practice

This overall objective was achieved through conducting two distinct but complementary studies (the design for which is briefly summarised later in this chapter in section 1.2). The first of these studies was necessary to understand and address an identified methodological issue that could have hindered the task at hand. The second study was then intended to directly test for the existence of different types of multiple job holders – based on their situations – determining whether the outcomes experienced differed across the various types.

This chapter summarises the overall research design that was employed (section 1.2), the significance of this research in relation to the contributions it has made (section 1.3) and then finishes with an outline of the structure through which the research will be outlined in the rest of the thesis.

### 1.2. Research design

This research was designed from a pragmatic epistemological position. This worldview prioritises utility as the goal of knowledge creation; proponents in recent history have positioned pragmatism as a superior vehicle for creating change, through research (Parvaiz et al., 2016). As explained by Wicks and Freeman (1998), "the key question for pragmatists is whether or not information (scientific data, a novel, a treatise on ethics) is useful—useful in the sense of helping people to better cope with the world or to create better organizations" (p. 129). In line with this, pragmatists are reflexive in their choice of research designs and methods; the best methodology is the one that most effectively solves the problem at hand, through the knowledge that it generates (Wicks & Freeman, 1998). There were two clear problems identified that this research needed to address – discussed over the subsequent two pages. In line with my worldview of pragmatism, I sought a research design that would solve the two distinct but interrelated problems most effectively. The most appropriate design for this purpose was a sequential mixed methods design. Exploring the nuanced "main job issue" discussed on the following page required a qualitative methodology that could appropriately capture participant perspectives on this issue. In contrast, investigating the presence of different types of multiple job holder and whether their outcomes may differ called for a quantitative survey design, of such a scale that statistical power could be achieved to accurately test the hypotheses.

The research design was complex and represented a sizeable task — having to master two highly contrasting methodologies. To those with differing epistemologies, this contrast may seem puzzling. Interpretivists who prefer qualitative methodologies for their ability to capture rich insights, grounded in the meaning that participants assign to the phenomena at hand, may struggle to reconcile the use of the large-scale quantitative survey of study two. Similarly, those who firmly identify as positivists and prefer the use of impartial, psychometrically validated scales as part of generalisable quantitative studies may not see the need or utility

of the qualitative study one, which utilised vignettes as part of a semi-structured interview design. However, even after much consideration, from my epistemological stance as a pragmatist – driven by problems, rather than wedded to particular methodologies – I simply could not rationalise a design that was any different to the one executed here.

The first of the problems identified, as briefly mentioned later in section 2.2.4.3. and covered more fully in chapter four, was the main job issue. Conventionally in past research, namely survey research or similar, multiple job holders, due to likely varied experiences across different jobs, have been required to select one job in relation to which they will answer questions. However, when considering how this would be undertaken for a survey in the current research, it emerged that the criteria usually employed to direct multiple job holders to select one, "main" job was arbitrary and researcher-driven. There was not generally consideration of what a "main" job may mean to multiple job holders themselves. The study that would become study two sought to capture multiple job holders' experiences, to advance understanding around these individuals. Utilising an arbitrary criteria (that could be meaningless to an individual) for selecting a main job would, therefore, contradict the purpose of this study. This issue precluded the effective undertaking of study two, and therefore it required resolution before the second, main study of this research could proceed. To this end, study one was designed in order to explore how multiple job holders would select their "main" job when asked to do so. It was anticipated that by exploring this concept, a method/criterion for directing participants to select a main job could be developed. Such a method would be superior, as it would be based on evidence directly from the individuals affected, rather than arbitrary criteria imposed upon all participants. Thus, the objective for the first study was:

To determine the most appropriate method for directing multiple job holders to select a main job, by investigating which factors are taken into consideration by multiple job holders when faced with such a task.

In aid of this objective, data were collected using a qualitative semi-structured interview design. The interviews also featured the use of vignettes to present situations of fictional multiple job holders, for which participants were asked to select the characters' main jobs.

This design allowed for easy discussion of an issue (the main job issue) that otherwise would be rather abstract to discuss.

After the study one objective was achieved and it was concluded that the most appropriate way for participants to select a main job was through self-selection, the second, main study could then proceed. This study was intended to address the second problem identified – that the vastly differing experiences of multiple job holders was likely to be inhibiting the ability to effectively understand this population of workers as a whole, particularly due to fairly minimal evidence around factors that may influence these experiences. On the basis that developing a conceptualisation could facilitate better understanding of multiple job holders, this second study sought to investigate whether different types of multiple job holder may exist – who could be assigned into different types based upon their situational factors. In addition to this, to prove the utility of any identified types, it was then necessary to test for any differences in outcome experienced among the different types. Given these two elements of study two, there was an overall objective, followed by two sub-objectives – A and B:

To investigate why the experiences of multiple job holders differ, through the achievement of two sub-objectives:

- A) To determine whether different "types" of multiple job holder can be identified based upon their situational factors, including their experience of the psychosocial work environment
- B) To investigate whether the outcomes experienced differ between the different types of multiple job holder identified

To achieve these objectives, study two involved collecting data from multiple job holders using a quantitative, cross-sectional survey that asked extensively about their individual situational factors – such as their reason for MJH – and a complete range of psychosocial work environment factors in their main job.

### 1.3. Significance of the research

This research makes an original contribution to the knowledge around multiple job holding in two fundamental ways. The first of these is through the development of a meaningful method through which to direct multiple job holders to select a main job for which they will focus on when responding to survey questions. This method was developed through exploration of the

thought process around how multiple job holders select a main job (study one), which produced the finding that a notable diversity of criteria was used, meaning that no one criteria should be applied for all multiple job holders. Furthermore, it was found that the criteria used to denote what should be seen as a main job was contingent upon the multiple job holder in question's own situation. Based on these findings, it was concluded that self-selection of one's main job, with measurement of the criteria used by the individual, was the most appropriate method of selecting a main job. This appears to be the first time that dedicated investigation of this issue has taken place in the literature. The second fundamental contribution is the development of a nuanced conceptualisation of multiple job holders – that illustrates the heterogeneity in this population, and suggests that the outcomes experienced by these workers are contingent upon the nature of their situation.

This research is also the first to synthesise the two subject areas of multiple job holding and psychosocial risk in a comprehensive manner, exploring the psychosocial work environments of these individuals as part of their situations. Furthermore, this is the most extensive empirical, quantitative investigation of the wellbeing and experiences of multiple job holders to have been conducted in New Zealand. It is also the most extensive of any research on multiple job holding in New Zealand conducted in the last decade.

Additionally, there are also three clear ways in which this research extends upon existing knowledge. In developing a conceptualisation of multiple job holders that accounts for the heterogeneity of this population, the research supports the earlier findings of Bouwhuis et al. (2018c) and the suggestion by Rouault (2002) that multiple job holders are a diverse population. By utilising the job-demands-resources (JDR) model (Bakker & Demerouti, 2017), this research has found support for the JDR model within this particular population. Lastly, given the context within which this research unavoidably took place, it contributes to the body of knowledge around undertaking research in crisis contexts — i.e. the COVID-19 pandemic. In particular, it demonstrates strategies used to undertake and continue research during significantly disruptive times. For example, its use of vignettes to separate participants somewhat from the present climate is particularly applicable in this way.

### 1.4. Thesis structure

This thesis contains six chapters, inclusive of this introduction. In the subsequent chapter (2), a brief overview of the topic of non-standard work is provided – of which multiple job holding is one form. A comprehensive review of the literature around multiple job holding then follows, culminating in the suggestion that multiple job holding appears to result in a vast range of outcomes. The chapter highlights that there is no consensus as to whether the phenomenon is either particularly beneficial or detrimental, but that further investigation as to the factors that shape multiple job holders' outcomes may aid in better understanding this divergence in outcomes. In chapter three, part two of the literature review provides an overview on the relevant theories in the area of psychosocial risk is then provided, in relation to its salience as a lens through which it may prove fruitful to investigate multiple job holding further.

Chapter four details the first of the two studies that comprise this research; a study borne out of a methodological issue identified in part one of the literature review (chapter two) and that is relevant to effectively addressing the overarching research question of this thesis. In past research when multiple job holders have been required to respond to questions in relation to one of their jobs, they have generally been asked to select their "main" job to focus on. As argued in section 2.3.5.3 of the literature review and in chapter four, the criteria traditionally used are arbitrary and may not be appropriate for undertaking truly meaningful research involving multiple job holders. Accordingly, the study outlined in chapter four examines how multiple job holders make a choice of a main job when asked to do so. The study concludes that the most appropriate method of directing multiple job holders to select their main job is to allow self-selection. This method is thus utilised in study two outlined in the subsequent chapter (five). Chapter three is the first of the two studies to provide clear indications that multiple job holders are a heterogeneous population, and sweeping generalisations should not be made in relation to these individuals.

Chapter five outlines the second (and main) study undertaken for this research – a large-scale, quantitative survey conducted to determine whether different types of multiple job holder could be detected based upon their situational factors, and then if so, whether outcomes differed across these various types. This study identified four distinct groupings or types of

multiple job holder – ranging on something of a spectrum from most vulnerable to most privileged. There were two types that clearly presented markedly positively and negatively (the privileged and compelled types, respectively). The privileged class experienced the best health and work-related outcomes, while the compelled class experienced precisely the opposite. Another type, the peripheral class, appeared overall to have a fairly neutral experience of multiple job holding. The remaining type, the striver class, was perhaps the most intriguing – in that they were more prone to certain negative situational factors, but also experienced other factors positively – and as a result, reported fairly concerning health outcomes but positive work-related outcomes.

The final chapter (six provides an overall discussion of the entirety of the findings for this research. While studies one and two were each designed to achieve separate objectives and had contrasting methodologies to do so, they both helped to achieve the overall research objective — to develop a conceptualisation of MJHers by exploring their heterogeneity. Together, both studies provided compelling evidence in support of the claim that multiple job holders are a heterogeneous population, prone to differing outcomes contingent upon their situations. Chapter six also highlights the contributions made by this research, its limitations, and areas that appear expedient as the subject(s) of future research. The primary implication of the general findings outlined in chapter six is that, given their heterogeneity, sweeping assumptions and/or generalisations must be avoided when undertaking research amongst these individuals. This is also pertinent when considering and making decisions regarding those who hold multiple jobs; it should not be assumed that this practice is neither entirely beneficial nor detrimental. Rather, this appears to depend on the situation of the individual multiple job holder - based on the conceptualisation developed in the course of this research.

# Chapter 2: Literature review part one – An overview of multiple job holding

#### 2.1 Introduction

As outlined in chapter one, the phenomenon of multiple job holding is by no means an emerging concept. It has been present in the labour market for some time, and its relevance is increasing due to a general rise in non-standard forms of labour more broadly. In the decades across which this practice has been studied, divergent findings have been reported. These findings have differed particularly around the drivers for entering into multiple job holding, its consequences and more broadly, overall judgements by researchers on the merits of the practice. Therefore, this chapter will provide a review of the literature on multiple job holding, drawing together the range of diverging findings from the literature to date. These include the diverse range of consequences of MJH, and the equally diverse motivations for partaking in the practice. Factors that appear to shape these consequences are discussed, in order to understand and explain why some individuals appear to thrive in multiple job holding situations, while others appear to suffer – a key question in the field. This literature review (in its two parts) culminates in the suggestion that the perplexing differences in MJHers' experiences may be explained by their situations and, in turn, that the concept of the psychosocial work environment provides a germane lens through which these situations can be examined.

Given that the present literature review is required to span two separate and sizeable bodies of literature, the review is fairly substantial in its length. Therefore, to increase clarity and readability, the literature review is split into two parts. The first of these parts is the present chapter two, part one – where the field of multiple job holding, as a form of non-standard work, is comprehensively examined. This chapter starts by looking at the practice of multiple job holding, beginning with an overview of non-standard forms of work in section 2.2 – of which multiple-job holding is one. Multiple job holding will then be discussed in relation to its definition and ways in which it is frequently categorised (section 2.3.1.), manifestation in the local context (section 2.3.2.), prevalence (section 2.3.3.) and characteristics (2.3.4.). Following these contextual elements, motivations for undertaking the practice are then outlined

(section 2.4.), in addition to consequences/impacts of the practice (section 2.5.) and, importantly for the present research, factors that may influence the impact on individuals (section 2.6). This chapter, part one of the literature review, culminates in the suggestion that different types of multiple job holder may exist, and that these different types may explain the divergence in experiences across individual multiple job holders.

The subsequent chapter three, part two of the literature, then provides an outline of the psychosocial work environment and psychosocial factors as a potential source of risk within the occupational health and safety domain and further explanation around what the psychosocial work environment entails (section 3.2.). Part two of the literature review is then concluded with a synthesis of the above areas to signal the value of examining the impact that multiple job holding may have in relation to the psychosocial work environment (section 3.4.).

#### 2.1.1. Literature search overview

Extensive efforts were undertaken to form a complete illustration of research on multiple job holding, from its early coverage up until its most recent sources. To achieve this, a wide variety of terms that have been previously used to cover the topic of multiple job holding were incorporated. No date parameters were set, in order to capture the earliest work on multiple job holding.

- "Multiple job\*"
- "Moonlighting" / "moonlighter"
- "Second\* job"
- "Dual job\*"
- "Second\* employment"
- "Double work"
- "Plural career"
- "Parallel employment" / "parallel career"
- "Side hustl\*"

This search was repeated throughout the course of the research in order to obtain the most recent results, and included publications available through the respective databases up until

December 2020. The search was restricted to the English language. Sources were included if, based on their abstracts, they appeared to be focussed primarily on the practice of multiple job holding (e.g. sources where multiple job holding was mentioned tangentially, such as being one covariate among a broader, unrelated study, were excluded). Additional sources were obtained through snowballing when detected in the reference lists of the sources obtained to date. Through this method, two non-English sources (one in Dutch and the other in German) were also detected. An exception was made for these two sources, after their citation in English sources indicated that they contained information that was crucially additive to the present research<sup>1</sup>, and use of automatic translation software confirmed this.

Regarding the literature in other areas, namely those of psychosocial risk and non-standard work, a more targeted approach was undertaken. The scope for the field of psychosocial risk literature was defined through a combination of supervisor discussion and consultation with academic experts<sup>2</sup> in the field of psychosocial risk. Similarly for research on non-standard work, the scope of this literature was defined using sources deemed to be "key" to the particular focus on the topic that this research required (i.e. giving a high-level overview of non-standard work as context to multiple job holding). Review articles on non-standard work were sourced, in addition to sources that discussed health/welfare impacts of the practice upon workers. Additional snowballing took place when articles deemed relevant to the research focus were identified in the citations of initial sources.

### 2.2. Non-standard work

Non-standard work is an overarching term that describes forms of work that diverge from the so-called "traditional" concept of holding one, permanent, full-time role. This includes work that is part-time, casual or fixed-term and temporary employment. It also extends to on-call employment (including zero hour contracts), self-employment, telework, holding more than

<sup>&</sup>lt;sup>1</sup> Dorenbosch et al. (2015) appeared to be the first to find that one's motive for multiple job holding could influence their outcomes, while Kottwitz et al. (2019) were the first to explicitly ask multiple job holders to select a main job, and to enquire as to the basis upon which they made their selection. The latter, in particular, made a crucial contribution to the subject of enquiry from study one.

<sup>&</sup>lt;sup>2</sup> In the early stages of this research, I was able to meet and spend time with academics at the Asia Pacific Centre for Work Health and Safety who are regarded as pre-eminent experts in the field of psychosocial risk. These early conversations and continued contact served to direct my focus on specific theories within the psychosocial risk domain that were regarded as the foundational, key theories.

one job concurrently and working outside standard business hours – including shiftwork and night work (Statistics NZ, 2013; Walker, 2011). Additionally, situations where there is a triangular relationship between the worker and their employer – such as through an employment agency/labour hire situation – are also regarded as non-standard (De Cuyper et al., 2008). It is worth noting that many non-standard work arrangements, as noted above, share a common feature of being impermanent – indeed, some specifically define non-standard work arrangements as involving non-guaranteed, impermanent work (Howard, 2017). However, in this thesis, non-standard work is used to describe all forms of work diverging from the single, full-time, permanent job – as described at the start of this paragraph.

It is imperative to begin by acknowledging that non-standard work is certainly not a new concept, or novel to the twenty-first century, as it may occasionally be considered in the literature when non-standard work is discussed in relation to the "future of work" (Santana & Cobo, 2020; Tamers et al., 2020). While forms of non-standard work are present in trends relating to the future of work, elements of non-standard work – particularly the flexibility that will be discussed further below – have roots firmly in labour history. Although standard employment prevailed for much of the twentieth century (Spoonley, 2004), prior to this and as aptly noted by Quinlan et al. (2001b, p. 509):

"Insecure or fluctuating employment, small workshops, home-based work, self-employment, and other arrangements that would now be termed contingent work or precarious employment were widespread, even pervasive, in most if not all industrialized countries in the 19th and early 20th centuries."

More recently, market shifts from the mid-1970s began to contribute to the changes that have ultimately led to the present situation where non-standard work has experienced a resurgence (Quinlan et al., 2001a). Labour markets globally are experiencing a reorientation. Spurred by intensifying globalisation, continued advancements in technology and a subsequent outsourcing of manufacturing to developing nations, organisations have been driven to seek new ways of gaining a competitive advantage (Osborne & Warren, 2006; Quinlan & Sheldon, 2011). These organisations have been faced with changing demands – both quantitatively (relating to changes in the amount and/or cost of labour) and qualitatively

(relating to the substance of work that needs to be undertaken, often in order to innovate) (Bernhard-Oettel et al., 2017). As a result, both quantitative and qualitative forms of flexibility have been utilised by organisations to meet these demands. To achieve quantitative flexibility, many organisations have sought to cut costs by adopting a lean approach that utilises flexible, casualised forms of labour, thus minimising labour costs (Bouville & Alis, 2014; Spoonley, 2004). Qualitative flexibility can be achieved by obtaining labour that precisely matches the required skills and abilities for any given task at hand (Bernhard-Oettel et al., 2017), which may be seen in, for example, the use of expert contractors or freelancers. However, it is important to note that flexibility of labour is also subject to demand from employees, many of whom prefer to undertake their work in these ways to provide greater work-life balance (Dupuis & McLaren, 2006). Through these processes, we are once again seeing a rise in the prevalence of non-standard forms of work.

### **2.2.1** Contingent and precarious work

Contingent work refers to the work of "those who do not have an implicit or explicit contract for ongoing employment." (Bureau of Labor Statistics, as cited by Mullins Jr, 2020). It is a broad term used to describe work that, by its nature, is expected to be impermanent generally at the behest of the organisation (Landsbergis et al., 2014). A similar but not completely synonymous phrase is that of precarious work. There are differing conceptualisations of precisely what precarious work entails. However, it is widely accepted to describe work that is insecure, low-paid and involves a distinct lack of protections for the workers who partake in it (Burgess & Campbell, 1998; Hannif & Lamm, 2005; International Labour Organization, 2016; Koranyi et al., 2018; Vives et al., 2010). Whereas contingent work is marked by an objective lack of permanence, precarious work is more subjective, and tends to describe a broader, vulnerable state. A seminal actor in the recent discourse on precarious work, Guy Standing (2014) popularised the phrase 'precariat' to describe workers who found themselves in a growing class of precarious workers. Spurred by the drive for labour market flexibility that resulted from neoliberal agendas enacted in the 1980s, many workers have found themselves in highly contingent, precarious work situations - often with very little certainty around their hours of work, future work prospects, or nature of their work tasks (Standing, 2014).

In the wider context of non-standard work within which this discussion takes place, it is important to distinguish between the labels of non-standard, contingent and precarious work. Numerous forms of non-standard work certainly can be described as precarious in their nature, and there exists a great deal of overlap between non-standard work arrangements and the dimensions of precariousness (Sargeant, 2016). However, not all non-standard forms of work are contingent or precarious – despite the tendency by some to use the phrases interchangeably (International Labour Organization, 2016). As noted by Sargeant (2016, p. 5), "it is hardly fair to connect all the forms of employment which differ from the standard employment relationship with precarious employment that is generally associated with the uncertainty, insecurity and instability." Furthermore, it may be argued that not all contingent forms of work are precarious – when one considers the dimensions that are said to describe precarity. For example, one dimension of precarious work is the sufficiency of one's income and their ability to cover basic needs and unexpected expenses with it (Vives et al., 2010). An individual may be in a contingent, impermanent arrangement such as that of a contractor or subject matter expert employed on a fixed term contract – but equally, they may be able to command high remuneration in exchange for their specialist skills or knowledge. Such an individual is not comparable to those in temporary work who struggle to earn a liveable income. Lastly, there may well be aspects of precariousness in more traditional, standard forms of work – and thus it is counterproductive to synonymously label non-standard work as precarious (International Labour Organization, 2016). This final matter around precarity in standard work arrangements will not be explored here, as it is not of key relevance given that the entirety of this thesis seeks to examine one particular form of non-standard employment (the holding of multiple jobs).

As with non-standard work more broadly, precarious or contingent work itself is also not a new phenomenon. However, as aptly identified by Sargeant (2017), a new element of contingent work is the role that technology often now plays in facilitating its rise in prevalence. The creation of apps and platforms through which the consumer can obtain ondemand services has created a "pseudo employment market where workers are said to be independent self-employed receiving work from and providing services via a digital platform created by the company." (Sargeant, 2017, p. 5).

### 2.2.2 Health Impacts of non-standard work

It is worth noting that a large portion of investigation into these impacts has focussed on contingent or precarious work – which, as per the definition adopted in this thesis (cf. the start of this section, 2.2.), is not the only form of non-standard work. As a result, many of the findings discussed in this section relate to temporary arrangements – although the existence of other arrangements, such as part-time work, is also acknowledged.

Research that has examined whether certain types of non-standard work arrangement are associated with poorer health outcomes has not been conclusive (Walker, 2011). For example, when examining past research, Schweder et al. (2015) found that negative outcomes associated with non-permanent work were more frequently reported when physical health was measured. However, diverging results were more likely when measuring work-related injury or psychosocial outcomes. This suggests that such outcomes may be prone to more subjectivity — and perhaps more significantly influenced by contextual or situational factors. At times, those on temporary or fixed-term contracts report even better health outcomes than their permanent counterparts (Guest et al., 2006; Ray et al., 2017) — perplexing some in the field, given that insecure work has frequently been linked to negative outcomes (Shoss, 2017). It appears as though the worker's level of choice or willingness towards their non-standard work situation may impact their attitudes towards and experience of the situation.

This complex association between insecure work and health outcomes suggests that these potentially precarious forms of work are vastly diverse in their nature and thus are hard to accurately "measure" or otherwise quantify (Bosmans et al., 2017). This is reinforced by the findings of Schweder et al. (2015) in their study of the injury rates and psychological wellbeing of seasonal workers. In contrast to the often adverse outcomes experienced by temporary workers, they found no significant differences in psychological wellbeing between the seasonal workers and their permanent counterparts. The aforementioned authors suggest, therefore, that seasonal work may often be less precarious than other forms of temporary work — as many workers are often re-hired each year for the season. However, as further evidence of the heterogeneity of temporary workers, the seasonal workers in the above study reported higher injury rates than permanent workers. Importantly, this difference only

became apparent after adjusting for the shorter durations of employment of these workers, which highlights one challenge of researching health and related impacts for non-standard workers.

Another form of non-standard work is working outside of standard business hours — including night work, weekend work and other shiftwork arrangements (Piasna, 2018). Night work in particular appears to have disruptive impacts on the health and wellbeing of workers. Such individuals are more vulnerable to negative psychosocial work environments than those working standard hours, potentially experiencing risks such as increased workplace violence, lower control over their work and less support from supervisors (Fischer et al., 2019). Shift workers also appear more prone to poor health following injury — more so than those working standard hours who are also injured (Wong et al., 2015). Although not directly relating to health but rather, likely to have an indirect impact, Piasna (2018) found that work undertaken outside of standard hours was likely to be of greater intensity. Furthermore, Piasna (2018) reported that this intensity was reduced in situations where the worker had control over their work schedules — rather than this control being held by their employer. This highlights the potential for the individual's specific situational characteristics to impact their overall experience of non-standard work.

### 2.3. Understanding multiple job holding as a unique subset of non-standard work

One important form of non-standard work is the concurrent holding of multiple jobs by one individual. As is common with non-standard work in general, arriving at a consensus for defining the act of multiple job holding can at times be difficult, or at least the subject of some confusion and debate. Historically, multiple job holding has largely been perceived as "moonlighting" – holding an additional, often part-time role on top of a standard, full-time role – predominantly to increase income (Sappa et al., 2015). Traditional views of this kind of work can be seen even through its moniker. The term "moonlighting" conjures up imagery of a worker engaging in their main role by day, and then by night/outside standard working hours, partaking in a second form of employment – possibly to the detriment of their main role (Guest et al., 2006). As the world of work is changing, so too is the concept of the traditional role. Multiple job holding can no longer solely be typecast as the concept of one main "day job," complemented by an extra role carried out in the worker's spare time – what

has traditionally been termed as moonlighting. Instead, given the aforementioned shifts in labour, individuals are being induced to take on multiple, fragmented roles concurrently; combining various jobs to make a living. While the term moonlighting is still used by some to describe this phenomenon, the phrase "multiple job holding" appears to now be the most common moniker.

In essence, the definition of multiple job holding is simple at its core. In the literature, it is generally regarded as the holding of more than one income generating/paid job by an individual (Webster et al., 2018). The income generating aspect is important, as this can include self-employment/business ownership. While this may not always provide the owner/self-employed with a regular salary/wage per se (particularly in the early stages of running a small business), it is still intended to generate income/directly increase the individual's net worth as a job would.

Other terms include second job holding (Zangelidis, 2014), or secondary employment (McKenzie, 2017). More recently, one phrase that has derived from particularly contemporary forms of the practice is the label "slash." It originates from one having more than one occupation, so one is, for example, a teacher / (slash) singer or similarly, to be a "slashie" (Hannah, 2019; Wei, 2020). Similarly and slightly more commonly, the phrase "side hustle" is used to describe a job that one acquires in addition to their primary career, generally deemed to be on the "side" - thus not as substantial a role, but often one that may include selfemployment or other forms of entrepreneurship (Scott et al., 2020; Sessions, 2019). When discussing the practice in particular industries, often industry-specific terms are also used. The phrase dual-practice is frequently used to denote a practitioner in the healthcare industry, generally a specialist such as a doctor, engaging in multiple roles (Moghri et al., 2016). In the agricultural sector, pluriactivity describes (generally) a farmer/farming family, who undertakes extra employment outside of the family farm as a means of diversifying their income source (McClintock et al., 2007). Beyond this, other terms are used interchangeably in an arbitrary fashion. These include but are not limited to the phrases second-jobbing (Gill, 2014), dual job holding (Doucette & Bradford, 2019; Paxson & Sicherman, 1996), double work (Lundborg, 1995), plural careerists (Kock, 2020), and other assorted amalgamations of these words.

A key facet of non-standard work that has significant overlap with multiple job holding is gig employment. It borrows its name from the music industry, reminiscent of musicians performing "gig" after gig to receive an income (Marucci-Wellman, 2018). Gig work involves the individual undertaking numerous one-off jobs, or "gigs". This can manifest in different forms, such as the self-employed freelancer, or the serial employee who undertakes one short-term employment contract after another (Sargeant, 2017). Although it existed in other forms long before the existence of today's technology and digital platforms, gig work is now often used to describe work undertaken through these platforms - known as "platformmediated gig work" or simply, platform work (Vallas & Schor, 2020). Within this, there are two further distinctions. The work can be on-demand app-based work such as that of a rideshare driver, who as a contractor provides transport for an individual who seeks them out via an app (Sargeant, 2017). Alternatively, this work may be "crowd work" - where labour is "crowd sourced," or sought through the publicising of work opportunities on electronic platforms (De Stefano, 2015). The latter form more often than not tends to involve greater autonomy for the workers in question, while the former often features more intervention from the intermediary – i.e. the company running the app (Howcroft & Bergvall-Kåreborn, 2019).

Although there are key distinctions between the two, gig work is often used to describe situations of multiple job holding. All gig workers are not necessarily multiple job holders, and vice versa, however some individuals do engage in gig work (such as that of a ride-share driver) as part of a multiple job holding situation. Research on gig work by CIPD (n.d.) indicates that most gig workers in the UK are doing so as part of a multiple job situation, with only 25% of respondents reporting that their gig work role is their "main" job. Interestingly and of concern, those reporting financial difficulties (73%) were slightly more likely to report that gig work wasn't their main job compared to those who did (60%). Gig work in its contemporary form, involving multiple projects undertaken by workers, differs from the traditional concept of moonlighting in the sense that gig workers will often tend to switch between projects and employers rapidly — continuously undertaking new projects. In contrast, moonlighting in its more traditional form tends to be thought of as one, often full-time, "day" job alongside another additional job (Doucette & Bradford, 2019).

The acquisition of multiple roles or contracts to create one's career is also sometimes labelled as "portfolio work" (De Stefano, 2015). Characterised by the possession of multiple roles across multiple employers to build up a "portfolio" of jobs, the practice has been said in the past to be increasing due to both organisations and workers desiring greater flexibility (Clinton et al., 2006; Renna & Oaxaca, 2006). More recently, it has also been suggested that acquiring a (sometimes diverse) portfolio of jobs in this way allows the individual to reduce their risk of economic hardship that could result from the loss of one job (Hlouskova et al., 2017). Such work often involves the "knowledge worker." This is an individual with a specific set of expertise, or knowledge, that generally puts them in high demand from organisations (Guest et al., 2006). This usually occurs in a manner akin to a commercial relationship exchanging a product for payment – generally spanning multiple clients/organisations for whom services are provided (Wood & Michaelides, 2016). However, the holding of multiple contracts is certainly not exclusive to a more privileged portfolio worker whose intellectual capital often puts them in a reasonably favourable position. Perhaps of more concern is the individual who does not possess the same degree of bargaining power, and thus has less mobility and volition in the matter (Harvey et al., 2017; Manyika et al., 2016). Such individuals may find themselves in more precarious work situations, with less certainty and stability, even despite their multiple contracts. Although these forms of work are lauded as providing flexibility to workers, the reality of these situations for more vulnerable workers means that the flexibility available is only truly beneficial to the party that pays and directs the worker (Berg et al., 2018).

### **2.3.1.** Multiple job holding and precarity

Precarious forms of work are significant areas of concern for both researchers and the broader community – including the present researcher. However, in expressing concern about these forms of work, it is imperative that non-standard work arrangements – including that of multiple job holding – are not all assumed to inherently be precarious. According to the International Labour Organization (2012), some of the factors that may signify a precarious employment situation are "uncertainty as to the duration of employment, multiple possible employers or a disguised or ambiguous employment relationship, a lack of access to social protection and benefits usually associated with employment, low pay, and substantial legal and practical obstacles to joining a trade union and bargaining collectively" (p.27). In the

context of multiple job holding specifically, making such an assumption does a severe disservice to understanding this type of work as a whole, as well as those who undertake it.

Widely accepted dimensions of precariousness, as fully outlined in section 2.2.1., are often found in multiple job holding situations; particularly when these situations include one or more temporary or casual work arrangements (Jonsson et al., 2020). Equally, however, in some regards many of the working conditions and other factors experienced by multiple job holders are the antithesis of precarity – such as greater potential for skill development and broader social networks (Bouwhuis et al., 2018a). This has been the subject of active debate among those studying non-standard work and multiple job holding very recently (Bouwhuis et al., 2018b; Koranyi et al., 2018).

As pointed out by Bouwhuis et al. (2018b) in an editorial response to Koranyi et al. (2018), the definition of multiple job holding itself is simple – an individual holding more than one job. This relates to the number of jobs that an individual holds, and is inherently separate from the construct of precariousness, which relates to the nature of each of those jobs. The specific conditions of the multiple job holder's employment situation may vary extensively, and thus these specific factors must be looked at before a judgement about precariousness can be made. It may even be that an individual can elevate themselves from a situation that would traditionally be considered precarious, due to the nature of one or more of their jobs, to a beneficial position achieved by the combination of their roles.

### 2.3.2. Local context

Extensive research on MJH has taken place locally in the past, with a comprehensive research programme state-funded from 2001 to 2007 to investigate the phenomenon of MJH in New Zealand, with particular focus on its consequences for those involved and their families, and subsequent implications for policy and wider society (McClintock et al., 2007; McClintock et al., 2004; Taylor et al., 2006; Taylor et al., 2003). Given the importance of the rural economy and agricultural sector in New Zealand, much of the research placed an emphasis on this industry. However, in more recent years, data on this matter has been largely restricted to prevalence figures provided through the national Census and other Statistics NZ sources — including the data sources discussed in the subsequent paragraph. As a result, there has been

less attention paid to exploring the phenomenon in depth; particularly in relation to motivations for holding multiple jobs and the impacts of doing so.

As with non-standard forms of work in general within the local context, there is a paucity of data available around the matter of multiple job holding. The little recent, available data is largely descriptive, and lacking investigation into underlying causes and consequences of the issue. In the June 2017 quarter, the Household Labour Force Survey (HLFS) reported that 6.1% of the total working population (approximately 154,200 people) in New Zealand held more than one job in the week prior to responding to the survey (Statistics NZ, 2016, 2017b). A rudimentary analysis of Linked Employer-Employee Data (LEED) from Statistics NZ indicates that proportionately, the agriculture, forestry and fishing, accommodation and food services and health care and social assistance industries appear to have the highest prevalence of multiple job holding (Statistics NZ, 2017a). There has also been anecdotal discussion around this phenomenon in the New Zealand media. Public cognisance around rising inequality is growing, and unions have expressed concern that those in the situation of working multiple jobs are being driven to do so by rising costs of living and an inability to cover this cost working in only one role, often at minimum wage (Council of Trade Unions, 2013; Towle, 2016).

More recently (June 2019 quarter), the Household Labour Force Survey (HLFS) reported that 7.3% of the total working population (approximately 195,400 people) in New Zealand held more than one job in the week prior to responding to the survey (Statistics NZ, 2019a). This represents a slight increase on the same quarter two years prior — when rates were at 6.1% (Statistics NZ, 2016, 2017b). According to the HLFS those holding multiple jobs were more likely to be women, have parental/caregiving responsibilities, or be aged 45 and above (Statistics NZ, 2019a). The same data from Statistics NZ indicates that the most common industries for multiple job holders to be working in are those of arts, recreation and other services; agriculture, forestry and fishing; healthcare and social assistance; education and training and lastly, retail, accommodation and food services.

### 2.3.3. Prevalence

Consistent with other forms of non-standard work, accurately measuring the prevalence of multiple job holding is problematic. As mentioned above in section 2.2, differing definitions

tend to be used with respondents commonly asked to self-identify based on whether they held more than one job within a given period of time – such as the past week, month or year (Bamberry & Campbell, 2012). These and other issues will be discussed in more detail below, in section 2.3.4.

Large portions of the published MJH rates are collected through official census and representative population surveys. Although they may represent under-reporting due to the limitations detailed in section 2.3.5. below, these data sets can be regarded as a useful illustration of the scale of the phenomenon, at least at its minimum. Internationally, prevalence rates in developed countries similar to New Zealand including Australia (Bamberry & Campbell, 2012; McKenzie, 2017), Germany (Klinger & Weber, 2020; Kottwitz et al., 2017), Canada (Kostyshyna & Lalé, 2019), the UK and Netherlands (Conen & Stein, 2021), and US (Bailey & Spletzer, 2020), sit around 5 to 8%. This is consistent with New Zealand's aforementioned official prevalence rate of 7.3%. However, within these reported figures, it is worth noting that various self-report definitions were used. Some asked specifically whether the respondent had held more than one job in the week leading up to the survey (ABS 2009a, as cited by Bamberry & Campbell, 2012). Some simply asked individuals if they held more than one role, with no quantifying time period (Kottwitz et al., 2017); while for others the time period in question could not be found – signifying the lack of attention that has been given by some to the intricacies of the definition (Bureau of Labor Statistics U.S. Department of Labor, 2013; Hirsch et al., 2017; McKenzie, 2017). Drawing from broader definitions that were more inclusive of informal types of work than traditional definitions, Glavin (2020) identified a 30% increase of multiple job holding from previous rates captured 8 years earlier.

Although rates of MJH appear to be fairly stable in recent years, the prevalence of non-standard work forms in general, such as part-time work, is increasing as employment becomes increasingly casualised (Howard, 2017). Therefore, it is likely that this could contribute to an increase in multiple job holding, as workers seek to reconstruct their career to a level that is desirable in terms of working hours and remuneration, by piecing together multiple roles (Marucci-Wellman et al., 2014a). This idea is supported by Conen and Stein (2021, p. 3), who suggest that there may be an increase in the practice of multiple job holding due to "the 'renaissance of self-employment', the emergence of click-working in the gig

economy and the blurring of the boundaries between dependent and independent employment." Furthermore, as noted by Glavin (2020), an increase in the prevalence of gig work may be contributing to an increase in multiple job holding rates – given that gig work is often part of a multiple job situation. Similarly, Kostyshyna and Lalé (2019) suggest that the flexibility now afforded to organisations from technological advancements may make it more viable for individuals to manage different work schedules and commitments of multiple employers.

### 2.3.4. Characteristics of the multiple job holding workforce

Certain industries appear to be predisposed to the occurrence of MJH. Often, this is due to the structure of the job – the work hours and schedules available. This seems to be the case in industries such as hospitality, teaching and emergency services where shifts can be shorter and more fragmented, as well as taking place at unconventional hours (Amirault, 1997; Osborne & Warren, 2006). Public sector employees have been reported to have a higher incidence of MJH than the general working population – with 9.3% of these individuals holding multiple jobs, compared to only 5.3% of the wider working population (Brunet, 2008). Specifically within the public sector, teaching in particular has received an immense amount of attention as a profession, due to its high rates of the practice (Ballou, 1995; Fitchett et al., 2016; Hamel, 1967; Hipple, 2010; Jamal et al., 1998; Parham & Gordon, 2011; Pearson et al., 1994; Sappa et al., 2015; Winters, 2010; Wisniewski & Kleine, 1984). Firefighters also report remarkably high rates of the practice (Boyd et al., 2016). Multiple job holding is also common among those in creative industries, with the artist featuring as a prominent type of multiple job holder, causing this industry to receive a high level of researcher interest. Artists are known to frequently hold multiple roles, often in the form of a more stable "day job" that provides security of income and then allows the individual to undertake their artistic pursuits on top of this (Lindstrom, 2016; Osborne & Warren, 2006). The phenomenon is also frequently witnessed in the agricultural sector, with "pluriactivity" or the undertaking of multiple activities – both on and off the farm – frequently occurring as a means for agricultural families to diversify their income sources (Fiorelli et al., 2007; Goodwin & Mishra, 2004; Taylor et al., 2003).

Findings around gender distribution of multiple job holders have been mixed, with familial composition appearing to have an influence. Both locally and internationally, women appear more likely to hold more than one job than men (Bamberry & Campbell, 2012; Martinez et al., 2014; Sliter & Boyd, 2014; Statistics NZ, 2017b; Wu et al., 2009). It has been suggested that this is due to the increased flexibility that multiple, part-time arrangements can provide for women wishing to balance work and family responsibilities (Pere, 2007). Interestingly, this finding is contradicted among teachers – among whom male teaching staff are more likely to hold additional jobs than their female counterparts (Fitchett et al., 2016; Šťastný et al., 2021). However when links between familial composition – i.e. presence of children and/or partners - and multiple job holding are tested, men appear more likely to undertake MJH given the presence of dependent children, while women are less likely to do so (Kimmel & Conway, 2001; Wu et al., 2009). Relationship status also appears to influence the likelihood of multiple job holding, with those who are partnered/married usually less likely to undertake the practice (Amuedo-Dorantes & Kimmel, 2009; Fitchett et al., 2016; Marucci-Wellman et al., 2014a). Another pattern identified with regard to gender is the finding by Bruns (2019), that women whose partners are incarcerated are more likely to hold multiple jobs. This is particularly so for those who lived with their partners (prior to their incarceration), and those whose partners were incarcerated for three months or longer.

Consistent patterns around age and propensity to hold multiple jobs have not been well identified. Recent local statistics indicate that those over 45 are more likely to hold multiple jobs (Statistics NZ, 2017b). In contrast, internationally the opposite is apparent, with younger workers more likely to do so (LaMontagne et al., 2012; Wu et al., 2009). Interestingly, younger workers who are starting out in their careers appear more likely to seek multiple jobs for financial reasons, while older workers seem to do so for more intrinsic reasons – potentially as the latter are more likely to have achieved a desired level of financial stability (Dickey et al., 2011; Sliter & Boyd, 2014).

## 2.3.5. Complexities in understanding multiple job holding

As is common with forms of non-standard work more broadly, understanding both the prevalence and other features of multiple job holding can prove troublesome. The key issues behind this are the potential seasonality/fluctuating nature of multiple job arrangements, the

often informal nature of jobs within the arrangement and the potential for diverging/unclear definitions of the phenomenon (specifically in relation to the tendency to "measure" one, main job). These are elaborated on further under the following three headings.

### 2.3.5.1. Seasonality/rotation group bias

One key element to be considered in relation to asking an individual if they have multiple jobs is the time period (if any) attached to the question. The time period used in itself can lead to differences in reported prevalence. For example, censuses/labour market surveys tend to either ask if respondents have held more than one job in the past week — as the commonly utilised Current Population Survey dataset does (Hipple, 2010). Sometimes, this could be instead given the parameter of the past month (Webster et al., 2018), or even the past year (Bamberry & Campbell, 2012). Often, the various jobs that an individual undertakes as part of their MJH situation can be seasonal or otherwise casual/fluctuating (Marucci-Wellman et al., 2014b). Given this, underrepresentation is highly possible using these parameters; an individual who worked more than one job last week may not be doing the same in the reporting week (Hirsch et al., 2017).

Evidence to support this has been presented by Hirsch and Winters (2016b), who were able to prove that multiple job holding prevalence rates suffer from a phenomenon known as rotation group bias. This is "the tendency for labor force statistics to vary systematically by month in sample in labor force surveys" (Krueger et al., 2017, p. 1). As further explained by Krueger et al. (2017, p. 1):

In the Current Population Survey (CPS), for example, households residing at an address selected into the sample are interviewed for four consecutive months, not interviewed for the next eight months, and then interviewed for an additional four months. In any given month, there are eight rotation groups in the sample, depending on the month in which their dwelling was first selected into the sample. Each rotation group should form a representative sample of the population, with the same labor force characteristics, apart from sampling errors. This is not the case, however.

In examining 22 years of data on multiple job holding from the CPS, Hirsch and Winters (2016b) found that levels of rotation group bias were particularly severe for multiple job

holding. Reported multiple job holding rates dropped significantly after the first and fifth months that participants were surveyed. The authors suggested therefore that it could be worth checking with those who had previously indicated that they did hold multiple jobs, to see if they still do in these later months. As long as this issue continues, the authors stressed that reported prevalence rates for multiple job holding are likely being significantly underestimated – thus, the phenomenon is indeed greater than we may believe.

#### 2.3.5.2. Informality/non-taxation

The frequently non-standard nature of additional jobs means that they often exist as part of the "informal economy," particularly when they are part-time or casual, or otherwise non-traditional (Doucette & Bradford, 2019). Those who work in multiple jobs have been found to be more likely than single job holders to work in these informal jobs (Bruns & Pilkauskas, 2019). Thus, these arrangements may not be subject to tax and other formalities of traditional "above board" employment and therefore are not captured in the usual state reporting channels, such as those obtained from taxation records (Council of Trade Unions, 2013). Furthermore, even if asked outside of the context of tax/income reporting, the individual working in this way is likely to be reluctant to admit to holding multiple jobs — especially if asked through data collection that is somehow government affiliated, such as labour force surveys (Averett, 2001). Researchers conducting data collection completely independently from the government may elicit more trust from these individuals than government-initiated researchers (Baba & Jamal, 1992). This may potentially go some way in explaining higher prevalence rates that have been reported by academic researchers than labour force surveys and the like.

### 2.3.5.3. "Main job" issue

When a study seeks to collect data around the experiences/outcomes that an individual has in their multiple job situation, the question is often prefaced with the phrase "In your main job..." (Bamberry & Campbell, 2012). This is done out of a need to collect data on one of the individual's multiple jobs — often for convenience. At times, the phrase "primary job" is used instead of "main job" (Scott et al., 2020). However, the selection of this one main or primary job is far from straightforward, as differing criteria/definitions for such a job are used (Cole & Gumber, 2020; Scott et al., 2020). At times, further clarification may be provided — such as denoting that the job in which the individual worked the most hours in

the past week (or month, etc) should be considered the main job. This is the definition used by the USA's Current Population Survey, which is adopted by many others (Hipple, 2010; Hirsch et al., 2017; Hirsch & Winters, 2016a; Piasna et al., 2020; Renna, 2006; Webster & Edwards, 2019), or that it should be the job in which one earnt the most (University of Essex Institute for Social and Economic Research, 2018). At other times, the job that the individual held first/has held for the longest time period may be treated as the main job (Bamberry & Campbell, 2012). If no such parameter is given, it may be left up to the individual to decide which job they deem to be the main one (Doucette & Bradford, 2019; Kottwitz et al., 2017). This creates the potential for a significant amount of subjectivity in relation to the definition of a main job. The issue outlined here — of individuals having to select one of their jobs as being the main one — will henceforth be referred to as the *main job issue*.

Further complicating matters, an individual may have no perceived "main job." Increasingly, multiple job holding situations are comprised of multiple part-time/casual roles, rather than one full-time role supplemented by the latter – which may have indicated a clear "main" role (Bamberry & Campbell, 2012). Although outside of the topic at hand in this section, very rarely the experiences of an additional job are also collected, prefaced with something along the lines of "In your second job..." – although for the purposes of this matter, the same logic applies; which job is the main, and which the second? While it may seem fairly inconsequential in contrast to other issues outlined in this chapter, it is argued that this issue should, in fact, be treated as a key matter in the course of research in this field. In the case of research which seeks to understand the experiences of those holding multiple jobs, this issue has the potential to obfuscate desired findings – reducing the efficacy of such research efforts. Accordingly, this issue represents a key point of focus for this research and will be revisited again at the conclusion of this chapter, and for the entirety of chapter four.

## 2.4. Motivations for multiple job holding

In the literature, an extensive array of motivations or reasons have been reported for individuals to engage in multiple job holding. This is not surprising, given the suggestion in chapter one that there are diverse types of multiple job holders. In early research, these individuals were often categorised in relation to their motivations for holding multiple jobs. Contemporarily, motivations for MJH often still feature in the few endeavours that have been

made towards understanding the different types of individuals who may comprise the multiple job holding population. Therefore, given the importance of the various motivations for partaking in the practice of multiple job holding, this section reviews motivations depicted in the literature.

As discussed earlier, multiple job holding was traditionally viewed narrowly, in terms of the moonlighting phenomenon. The moonlighter undertook additional (often part-time) work in the evening, or otherwise extramurally to a main, full-time job – generally to supplement their income (Jamal & Crawford, 1981). Early research on the practice of moonlighting placed a great deal of emphasis on the worker's financial motivations for seeking additional work. Accordingly, this early research would often categorise the moonlighter as being either financially or non-financially motivated, albeit with a great deal of emphasis on financial motives. However, as the field of moonlighting research developed, increasing numbers of studies found in some cases there were no differences in salary earned from the main job, among those who held multiple jobs, and those who did not (Ballou, 1995). This prompted more attention to be given to examining the potential array of other reasons that individuals may hold multiple jobs – if not for money, why?

The volume of research in the area grew to incorporate findings on non-financial motives, such as those of personal/career development and a craving for variety (Jamal et al., 1998). Concurrently, so too did cognisance that the forces driving individuals to engage in multiple roles extend far beyond a binary conceptualisation of financial versus non-financial motives. Although it still remains somewhat common to treat motivations in this dichotomous manner of financial and non-financial (e.g. Dickey et al., 2011), arguably this is overly simplistic (Bamberry & Campbell, 2012). In reality, there are a vast array of different motivations within the broader categories of financial and non-financial that have emerged from the extant research. These various categories of motivations for holding multiple jobs will now be discussed.

Much of the early work on motives for multiple job holding took the position that there must be one prevailing motive that could explain the individual's decision to moonlight. However, as the field of research on motives grew, so too did the acknowledgement that various motives could co-exist (Conway & Kimmel, 1998).

#### 2.4.1. Financial motivations

Both in the previously mentioned early research and that of more recent times, financial reasons of some form are generally the prevailing reason that individuals cite for having more than one job — usually to cover basic living costs or debt, or save for the future (Boyd et al., 2016). Consistently across multiple studies, at least half but generally closer to 60% of multiple job holders said they were doing so for financial reasons (Dickey et al., 2011; Hipple, 2010; Kimmel & Powell, as cited by Renna & Oaxaca, 2006).

Within the financial motive, more detail on the individual's situation can explain further their decision to hold multiple jobs – or how many hours they will work in their various jobs. In their investigation of how behavioural factors of the individual affects their multiple job holding participation, Hlouskova et al. (2017) found that three factors had an impact, based on the premise that seeking and engaging in multiple job holding could be a risky activity. The first of these was the individual's level of loss aversion. More loss-averse workers preferred not to take risks and thus if the "safer" option for guaranteeing continued income was to stay in a single job, they were likely to do just that. The second factor was the reference level (e.g., this could be a particular individual) to which they compared their income. An individual whose income in their main job matched that of their reference level would be less likely to hold multiple jobs, but this is reversed if the reference level varied at all, and if the return offered by MJH was high enough.

Within the broad domain of financial motives, there are numerous sub-categories of motive. Some workers rely on the income from multiple job holding to make ends meet and/or pay off debt (Hipple, 2010), or they utilise the practice as a form of insurance against employment or income insecurity (Guariglia & Kim, 2004; Wu et al., 2009). However for others, the situation is much less pressing. Rather, the income from their multiple jobs enables more disposable income for advancing their standard of living or to save for future luxuries (Pere, 2007).

## 2.4.1.1. Hours constraint

The concept of the constrained or non-constrained worker is perhaps the most frequently discussed perspective within financial motives. Shishko and Rostker (1976) purported to be able to predict an individual's propensity for holding multiple jobs using a labour supply curve involving the exchange of leisure time for income/financial reward. It was proposed that the individual would seek extra work if the hours provided by their primary job were constrained to a level insufficient to meet their desired level of income, *if* the income from the secondary job was at a level that the individual believed sufficient to compensate for the forgoing of their leisure time. Furthermore, it was also claimed that as income from moonlighting increased, so too would the uptake of the practice, while increased income available from the primary job would decrease moonlighting.

According to this approach, the worker is "constrained" if the level of work available in their main role is incongruous with the individual's desired income level (Renna & Oaxaca, 2006). The constrained worker would seek an additional job as the hours offered in their main role alone could not enable them to work as many hours as they wanted, in order to achieve the level of income they desired (Dickey et al., 2011). Those not fitting into this financially-driven motive but engaging in the practice for other, non-financial reasons, were known as unconstrained or heterogeneous (Shishko & Rostker, 1976). As this aspect of the constraint hypothesis fits instead into non-financial motives, this will be elaborated on later in section 2.4.2 along with further discussion of non-financial motives.

An important point to note was raised by Hirsch et al. (2016), who claimed that thinking of the constraint hypothesis in terms of only an hours-constraint was not wholly accurate. Those working in a job that provides a salary may not have a constraint on hours, per se, but rather a constraint on the total income they are able to earn on that job — as their salary is generally fixed (with the exception of periodic salary increases/promotions). Therefore, even though many salaried workers may find themselves working additional hours due to demands of their roles, the income they receive in turn is constrained to their agreed salary. Government salaries that are reportedly failing to keep up with rising costs of living appear to drive many workers from the public sector to take on an additional job (Brunet, 2008). This is particularly

visible among the teaching profession, of which low pay is a highly publicised issue with overseas and locally, in New Zealand (Fitchett et al., 2016; Roy, 2018).

Arguably, this motive may be considered as that of most concern — in that the quality of employment is degrading (towards precariousness) with increases in casualisation (Marucci-Wellman et al., 2014a), and remuneration is failing to keep pace with rising costs of living. This appears to be keenly felt among those in traditionally lower-paid roles, such as hospitality and teaching (Fitchett et al., 2016; McClintock et al., 2004). This finding is not universal even across these professions, with some choosing to engage in MJH regardless of remuneration. However, it is worth noting that those who feel that they have no choice but to hold multiple jobs appear to be more likely to do so due to insufficient income, while those with greater volition in the matter are less likely to be primarily driven by income (Raffel & Groff, 1990). The same has held true even in recent investigation of this matter (Bouwhuis et al., 2018c).

## 2.4.1.2. The economy as a driver (and thus a motive)

Operating largely with the constraint hypothesis in mind, economists have attempted to understand MJH within the context of the wider economy. Many have attempted to test whether multiple job holding rates can be linked to business cycles, i.e., the state of the economy (Hirsch et al., 2016). It is often predicted that multiple job holding would be procyclical in nature – that is, it would increase in prevalence during times of economic prosperity but decrease in times of recession. This hypothesis was supported by Zangelidis (2014), but in other cases, such predictions have not eventuated (Hirsch et al., 2016). Alternative predictions are that it would be countercyclical (decreasing during prosperity, increasing during recession) or acyclical (not adhering to any clear cycle) (Hirsch et al., 2016). Most of these studies have reported that multiple job holding is generally acyclical (Amuedo-Dorantes & Kimmel, 2009; Hirsch et al., 2016). However, Amuedo-Dorantes and Kimmel (2009) did find that, while for males multiple job holding is acyclical, for females it appears to be procyclical - suggesting that females tend to respond to increased employment opportunities that are presented during times of economic prosperity. According to Asravor (2021), multiple job holding appears to have increased in Ghana due to the adverse economic impact of the COVID-19 pandemic - suggesting in this case that the practice may be countercyclical. In particular it appears to have been primarily used here to compensate for income lost by a reduction in hours and/or income in the primary job, followed by being used as a strategy to hedge against increased job insecurity and economic uncertainty.

The lack of conclusiveness around multiple job holding's relationship with the macroeconomy arguably signifies that this phenomenon is one ensconced in a broad and diverse landscape of individual circumstances. Perhaps in trying to predict the behaviour of humans, even when such behaviour involves the often-quantifiable matter of the labour market and its trends and figures, more attention needs to be given to the individual workers themselves and the personal factors that may shape their situations.

#### 2.4.1.3. Insecurity protection

There are mixed results around multiple job holding being used as a kind of insurance strategy against insecurity of income and/or employment.

Those with a non-permanent employment contract have been found to be more likely to hold multiple jobs (Böheim & Taylor, 2004). This is applicable even more so in the face of roles becoming increasingly casualised, particularly in the cleaning and personal care professions (Bamberry & Campbell, 2012; Masterman-Smith & Pocock, 2008). In seeking to examine how multiple job holding rates would be affected by a recession, Zangelidis (2014) found that overall, it would decrease during a recession (being procyclical). However, in the face of long-term unemployment rates in the labour market, rates of multiple job holding could rise. Zangelidis proposes that this may suggest that workers will try to seek out a second job if they perceive that they may soon face the risk of unemployment as the rate rises around them.

In Russia, multiple job holding has been found to serve as a substitute to having savings, as a buffer in case of unexpected and sudden expenses (Guariglia & Kim, 2004). Pluriactivity in the agricultural sector has been found to provide a means for farming families to diversify their risk and more effectively cope with fluctuations in farming income that can occur seasonally, or due to changes in the price of goods produced by the farm (Fiorelli et al., 2007; Goodwin & Mishra, 2004; McClintock et al., 2007). For those in the artistic community, MJH is an established phenomenon that allows the artist to pursue their creative calling despite the unpredictable income that this tends to bring (Menger, 1999). Although this can be viewed

negatively in the sense that the worker has not been able to achieve gainful employment in their area of specialty (often after completing tertiary training to do so), some have noted that this additional income relieves the pressure associated with artistic production (Lindstrom, 2016). In this way, the artist can create art at their own pace without the pressure of having to make a living solely from the field. It has been suggested that a similar effect may be present as an advantage of politicians' moonlighting – in that maintaining career prospects outside politics may reduce the pressure to be re-elected, and thus encourage more independence as a politician (Geys & Mause, 2013). This possibility is echoed by Mai (2020), who found that German politicians with higher external incomes (from their additional jobs outside of parliament) were more likely to cast votes that dissented from their party's line. It was suggested that such individuals were less afraid to do so, given that their external income provided a form of "safety net" if disciplined by their party. Similar impacts were found beyond single industries also – with workers being able to participate in jobs that they enjoyed that may have insufficient hours, such as teaching, while maintaining another more profitable job (Bamberry & Campbell, 2012). In this sense, defining one's own ideal situation by selecting multiple jobs could be seen as a form of worker empowerment. However, equally this could also arguably be viewed as disempowerment where the individual is no longer able to sustain themselves through a single, full-time job, due to increasing casualisation and diminishing quality of work.

Some have argued against the possibility that job insecurity in the main job could encourage multiple job holding, based on their findings that workers' levels of satisfaction with the security of their main job did not influence their likelihood of MJH (Bell et al., 1997; Böheim & Taylor, 2004; Wu et al., 2009). Each of these studies used the worker's satisfaction with the job security in their main job as a proxy for job insecurity itself. However, arguably a worker's satisfaction with their level of job security in their main job is not a valid measure of their actual job security in the main job. Seemingly neglected here are the elements of the worker's choice/contract preference. A worker may, for personal reasons, be perfectly content to be in a job that is "insecure" in some way — whether that relates to contract permanency, or other aspects such as perceived organisational change/uncertainty in the near future (Guest, 2004). Although detailed discussion is outside the scope of this chapter's purpose, the individual's perceived future employability is one example of a factor that could cause the

individual not to be concerned about an insecure job (Vives et al., 2010). In short, the possibility that an individual may hold multiple jobs to protect against job insecurity should not be completely discounted, and using different methods to measure job insecurity should be considered.

## 2.4.1.4. Saving for something/affording luxuries

The wider category of financial motives is often treated synonymously with a "forced" situation of multiple job holding. That is, those engaging in the practice for financial reasons are often classed as non-voluntary multiple job holders. While in many cases the individual will have no choice but to hold multiple jobs to meet their basic financial needs, this is too simplistic an assumption to make for all with financial motives. Some may enjoy the extra financial resources that come from their multiple jobs, without feeling bound to their situation. Instead, they are able to afford optional luxuries or achieve a different lifestyle as a result of their extra income — but without the extra income they could still afford a basic standard of living. In this way, the practice may also be used to provide a monetary boost—fulfilling a financial "want" rather than a "need." This was seen locally among the whānau of Māori multi job holders interviewed by Pere (2007). In addition to those who could not afford the basic costs of living without holding multiple jobs, there were some who undertook the practice as it enabled a higher standard of living for their whānau.

Financial motives have, overall, remained as the prevailing motivation for taking on additional jobs. However, the significant amount of work from labour economists that has gone into testing economic theories of multiple job holding have found that these financial motives alone cannot explain the phenomenon. Many in the past have attempted to employ traditional economic theory of labour supply to explain the individual's decision to hold multiple jobs (Robinson & Wadsworth, 2007). However, while at times this holds true, there is evidence to suggest that this simply cannot be applicable to every individual's multiple job holding situation. The logic and assumptions applied in the labour economics domain simply cannot fully explain the decision made by these unique individuals.

## 2.4.1.5. Energic/opportunity versus deprivation/constraint hypothesis

Seminal work in the area of MJH was carried out by Jamal (named here as he was the most frequent primary author across these works) and various colleagues across the 1980s and

1990s (Baba & Jamal, 1992; Jamal, 1986; Jamal et al., 1998; Jamal & Crawford, 1981). In these works, two competing hypotheses were posed to understand the multiple job holder in terms of their motives, and whether the phenomenon of multiple job holding should be considered a positive or negative one. These two supposedly competing hypotheses around motives span both the financial and non-financial domains, and so are placed here in-between the two subsections.

The first of these was the energic/opportunity hypothesis, that defined the multiple job holder as a unique, energetic individual who inherently seeks "more" out of life – and thus is attracted to a multiple job situation to fulfil this desire for challenges and wider experiences. Along this trajectory, multiple job holding is regarded as a positive phenomenon – one that the individual is not pressured into due to financial reasons, but rather one that they choose for the reasons mentioned above. This element of choice was also regarded to be key to the positive experience of multiple job holding. Because this individual was opting into the lifestyle by choice, they were proposed to be positively impacted by it.

The other hypothesis proposed was that of deprivation/constraint — which stated that multiple job holders held numerous jobs due to an inability to reach a sufficient income level with only one job — and thus these individuals were inherently marginalised and would likely be vulnerable to negative outcomes of this labour practice. If Jamal and colleagues, in their investigation, found that multiple job holders experienced more negative outcomes than single job holders, then this hypothesis would be proven.

In their various pieces of research that compared outcomes of single and multiple job holders in order to test these competing hypotheses, the authors predominantly claimed support for the energic/opportunity hypothesis as the prevailing theory. This claim was made given the findings over the course of these studies, on the basis that multiple job holders did not generally experience more adverse outcomes than their single job holding counterparts — as would have been expected if multiple job holding was indeed a negative phenomenon, as had been suggested in the past. Specifically, across studies of non-managerial workers (Jamal & Crawford, 1981), firefighters, blue-collar workers (Jamal, 1986), and teachers (Jamal et al., 1998), multiple job holders did not differ from single job holders with regard to (physical and

mental) wellbeing, job satisfaction and intention to leave. Furthermore, for some variables, more favourable outcomes were in fact reported by the multiple job holders. Among the teaching sample, single job holders reported higher burnout and stress, while multiple job holders engaged in more course preparation – implicitly treated as one measure of teacher efficacy (Jamal et al., 1998). Multiple job holders among the sample of blue-collar workers and firefighters reported greater job satisfaction (Jamal, 1986). Furthermore, these workers and the sample of non-managerial multiple job holders spent more time engaged in voluntary organisations outside of work— such as church groups and unions — than those with only one job (Jamal & Crawford, 1981).

Given that other work on motivations for holding multiple jobs has found financial motives to generally be the most prevalent (Boyd et al., 2016), assumptions regarding the generalisability of the energic/opportunity hypothesis across all multiple job holders should be made with caution. However, the value of Jamal and colleagues' findings of these unique individuals is not dismissed. Rather, it is argued that there is value in considering both the non-financially motivated, heterogeneous multiple job holder alongside the one who is financially driven due to economic pressures.

Additionally, Jamal and colleagues frequently included the caveat that a self-selection effect was likely to be present. They explained their findings by suggesting that those who were not the "energic" type of individuals, those who did not desire and could not manage the demands of multiple job holding, were likely to exit the situation fairly quickly. However if this is true, arguably this is something we should be highly concerned about in the pursuit of healthy work - particularly if these individuals did, in fact, need to hold multiple jobs for any reason. Such individuals not being able to access the employment situation that they needed should be cause for concern. A useful exercise in relation to this would be to explicitly ask individuals for their motives for MJH. This would allow for the explicit investigation of whether there exists any relationship between motivations for MJH and outcomes — rather than making assumptions about motivations for MJH, based on outcomes.

## 2.4.2. Non-financial motivations

As the body of research on motives grew, focused largely on those in the financial category, some began to acknowledge that, despite the best efforts of labour economists, economic theory and considerations could not appropriately explain the decision to hold multiple jobs for all those who engaged in the practice (Conway & Kimmel, 1998). Initially these were categorised broadly – with the term "heterogeneous" being used to describe any motive that was not financial. From this perspective that is converse to the concept of the constrained worker, the unconstrained worker does not face the issue of insufficient income and/or hours provided in the main job, and instead seeks an additional job for other reasons (Shishko & Rostker, 1976). Given the diversity with which these non-financial reasons can be categorised, a worker with these motives is said to fall under the "job heterogeneity" or heterogeneous category (Dickey et al., 2011). These motives ranged from a desire for self/career-development, flexibility, or variety, to a means of eventually escaping one's current, main job. Each of these non-financial motives will now be discussed, beginning with brief discussion of the initial broad categorisation of heterogeneous motives.

#### 2.4.2.1. Career transitions

For those who (for some reason) wish to move out of their main job, obtaining an additional job can facilitate a transition into another employment situation or different vocation altogether in a number of ways. This has been reported as one of the most frequently cited motives for MJH, beyond the most common financial ones (Dickey et al., 2011; Jamal et al., 1998; Renna, 2006).

The practice of MJH potentially enables workers to upskill, learning more about an industry/job that they are considering transitioning into and potentially providing a necessary grounding where the worker may currently lack experience or other training (Fitchett et al., 2016; Panos et al., 2011; Paxson & Sicherman, 1996). Frequently, this appears to take place in the context of transitioning to self-employment. This allows the worker to keep the stability of their main role by building up the various forms of capital – financial, social and intellectual/skill-based – conducive to self-employment (Bamberry & Campbell, 2012; Dickey et al., 2011; Guariglia & Kim, 2006). In this way, the worker can utilise the arrangement to their advantage, to increase mobility in the labour market.

Teachers in particular are frequently reported to be dissatisfied with both their pay and working conditions and as a result, to be seeking to exit the profession (Fitchett et al., 2016). As a result, this group seems to be particularly likely to use multiple job holding as a means of trialling new professions, gaining experience and even gaining the confidence to make the shift (Parham & Gordon, 2011). Furthermore, teachers whose second job is outside the education sector report higher intention to leave their teaching job (Fitchett et al., 2016). This may provide further support for the notion of teachers escaping through multiple job holding. It appears therefore that multiple job holding may prove beneficial on two fronts when it comes to making the shift to a new job. Firstly, the individual can gauge their suitability for and satisfaction with the new job, and whether they do indeed wish to continue pursuing it. Furthermore, the risk associated with making job or career transitions is likely to be significantly decreased – as the individual still has the primary role to rely on, should the new, additional role not prove suitable for any reason.

## 2.4.2.2. A 'boost' or even relief from the main role (complementarity)

Some have been found to engage in additional roles to complement or otherwise aid their situation in their primary role in some way. This appears to be particularly common among those involved in teaching – both at school and university level – with secondary employment outside the education sector providing "real-world" experience that can increase educators' credibility and industry knowledge of the subject they teach (Fitchett et al., 2016; Sappa et al., 2015). Šťastný et al. (2021) suggest that teachers who engage in private tutoring may do so early in their careers to build their experience and competence – based on their finding that private tutoring was more prevalent among those with less experience, and that it was not linked to dissatisfaction with income. Also present among teaching staff is the theme of workers utilising additional jobs as a means of escapism or distraction from their main role – particularly as being in the classroom carries certain types of emotional demands (Fitchett et al., 2016; Sappa et al., 2015; Wisniewski & Kleine, 1984). Similar impacts have also been found for those in the healthcare sector – including health professionals seeking relief from bureaucracy in their main role by taking on another job elsewhere (Raffel & Groff, 1990). Furthermore, those in healthcare are often required, or at least expected, to also engage in complementary work alongside their medical practice – which may include clinical research or teaching. In the case of New Zealand health professionals, multiple job holding fulfilled a requirement but also provided greater job enrichment (McClintock et al., 2004).

## 2.4.2.3. Seeking variety/challenge

The trend of the multiple job holder as being in pursuit of extra challenges, variety and enjoyment is another strongly presented one of the various "heterogeneous" motives for engaging in MJH. According to Hipple (2010), 18% of multiple job holders held a second job for the enjoyment it brought them – the highest ranked of the non-financial motives in the particular study.

The desire for variety is frequently cited among discussion of heterogeneous motives in relation to MJH. In their study of "elite" (highly educated) multiple job holders in Finland, Järvensivu (2020) found that these individuals sought out multiple jobs as a way to undertake meaningful work and that they shunned jobs where they did not feel they made an impact, or could develop themselves. Interestingly, some workers have gone as far as to suggest they feel incapable of focussing and performing well when restricted to only one role – rather, they feel that they need to fill multiple jobs to remain happy (Caza et al., 2017; Osborne & Warren, 2006). Some of these individuals even expressed that they felt multiple job holding was the only way they could truly "be themselves" – comparing the feeling that comes from juggling their multiple jobs as a "rush" or a "high" (Caza et al., 2017). Often, these individuals completely dismissed financial reasons for having more than one job, stressing that the variety and new experiences that MJH brings were the most important factors in their decision (Bamberry & Campbell, 2012). For some, the additional job was said to help break up the monotony or routine associated with working in only one job (Jamal & Crawford, 1981). This was reported by farmers, who would often have significant portions of their lives immersed in/consumed by farm work. They would usually be living on or very near to their working farm – as well as often having been raised in the industry by their parents before then inheriting/taking over the farm (McClintock et al., 2004).

The concept of the heterogeneous (i.e. non-financially motivated) multiple job holder as a unique, energetic individual who seeks challenges in their work was also largely the basis of

Jamal et al. (1998)'s work on the energic/opportunity hypothesis that was discussed above in section 2.4.1.5.

### 2.4.2.4. Flexibility in schedule

Combining multiple employment contracts, at least one of which is almost always going to be part-time, affords MJHers the ability to arrange their work schedules to facilitate flexibility. This is a motivating factor particularly for those with children or other family obligations. For example, women with childcare responsibilities may prefer two part-time jobs rather than one that is full-time (Averett, 2001; Panos et al., 2014). However, this is not limited to parents with young children. Those nearing retirement also preferred to have multiple jobs as they sought to reduce their working hours and have greater autonomy – particularly so when one of their jobs involved self-employment (Robertson et al., 2008).

#### 2.4.3. Measurement of motives

One key issue complicating the ability to clearly measure/capture the motivations held by multiple job holders is that of the potential for these motives to overlap. The reasons that these individuals have for holding multiple jobs are certainly not always mutually exclusive (Marucci-Wellman et al., 2014b); different reasons may apply to one individual (Bamberry & Campbell, 2012). Whether these reasons are of equal/similar importance or not, they still factored into the individual's decision and potentially therefore shape their experiences – and thus can't be dismissed. Additionally, particularly in qualitative studies in which the individual appears to discuss multiple motives (McClintock et al., 2004), one "main" motive isn't asked for. Rather, the individual is more broadly asked why they engage in the practice. We don't know therefore if the various motives are of equal importance – or if such a delineation could even be made by the individual.

To date, much of the extant research (particularly that from the labour economics domain) has frequently made assumptions about the multiple job holder's reasons for doing so. For example, Conway and Kimmel (1998) did not have access to data on the actual motivations for MJH when they attempted to develop a model to estimate labour supply for multiple jobs. Therefore, their categorisation of workers as being either financially motivated (constrained) or motivated by other factors (non-constrained) was based on estimations made using

complex labour supply equations, difficult for one not immersed in labour economic theory to comprehend.

Similar assumptions, albeit regarding different motives, were also made by Jamal et al. (1998) and Jamal and Crawford (1981). While the pivotal nature of their work is acknowledged, it is questionable whether this can be regarded as an accurate reflection of workers' motivations for engaging in MJH – when, in actuality, they weren't asked directly about their motivations. As acknowledged by the authors as a limitation, assumptions were made regarding the workers' motivations based on their reported outcomes. Multiple job holders who experienced positive outcomes were assumed to fall into the energic/opportunity category and were thus deemed to be holding multiple jobs by choice, for non-financial reasons. Those experiencing negative outcomes were assumed to be categorised within the deprivation/constraint category, and to be forced into holding multiple jobs out of financial necessity. In their studies, the authors claimed support for the energic/opportunity hypothesis – that multiple job holders were unique, challenge seeking individuals – on the basis that those they surveyed predominantly had positive outcomes. However, given both the assumptions that were made and the point raised above – that motivations needn't be mutually exclusive – it is argued that all multiple job holders cannot be assumed to share this motive.

There is a wealth of research on the reasons for having more than one job. Unsurprisingly, when one considers the divergence of findings on other variables, such as consequences, there is not agreement about one single predominant motive. What is clear, however, is that the motives for undertaking this practice are diverse – possibly as much so as the individuals who choose to work in this way. It is argued that certain motives should not be given priority merely because they appear more prevalent in the findings. Rather, it is important to consider every motive that may drive an individual to hold multiple jobs – as if it matters to that individual, it may likely shape their experiences of the MJH situation.

# 2.5. Consequences of multiple job holding

Research has not been entirely conclusive one way or another regarding whether holding multiple jobs as a practice is beneficial or detrimental to those involved, due to the broad

range of consequences that have been reported to result from the practice. For some, holding one or more additional jobs can actually act as a resource, enhancing one's quality of life and even job performance, or other sentiments towards work (Betts, 2005; Caza et al., 2017). Conversely however, this juggling act can act as a demand, negatively impacting both the worker's professional and private lives (Boyd et al., 2016; Parham & Gordon, 2011). This matter has perplexed researchers and policymakers in the past (Bamberry & Campbell, 2012), but arguably this diversity of consequences should not come as a surprise – just as there are also a wide range of reported motivations for holding multiple jobs (as illustrated in section 2.4). Rather, differing outcomes are to be expected – given the argument that there exists diverse types of multiple job holders. In order to illustrate this point, the consequences and outcomes reported to result from multiple job holding, according to the literature, are reviewed in this section. These reported consequences are first summarised in Table 1 below, and then discussed in full – categorised according to the manner in which they impact these individuals.

Table 1: Overview of literature on consequences of MJH

Work-related consequences	Intention to leave (2.5.1)			
	Professional competence & job performance			
	(2.5.2)			
	<ul> <li>Job satisfaction (2.5.3)</li> </ul>			
	• Health and safety (2.5.4) – with some mention			
	of individual health outcomes			
	<ul> <li>Psychosocial work environment (2.5.5)</li> </ul>			
Individual/welfare consequences	Personal financial consequences (2.5.6)			
	• Time use (2.5.7)			
	Work-life balance/work-family conflict (2.5.8)			
	• Lifestyle enhancement (2.5.9)			

#### 2.5.1. Intention to leave/commitment to the organisation

In a study of the teaching profession, those holding more than one job were more likely to intend to leave the profession – with this being exacerbated more so among those whose second role was outside of the education sector (Fitchett et al., 2016). Parham and Gordon (2011) also reported higher intention to leave and seek out a new career among teachers,

and went further by exploring the reasons for this. The teachers felt undervalued in their roles and undertaking other jobs outside of the sector had shown them other career possibilities. However, when intention to leave was measured outside the teaching profession, multiple job holders were not significantly different from single job holders in relation to this (Jamal & Crawford, 1981), or even reported lower intention to leave than the latter (Jamal et al., 1998). Beyond the industry worked in/type of employee; those in the other studies were nonmanagerial employees (Jamal & Crawford, 1981), and blue collar workers and firefighters (Jamal et al., 1998). It is possible that other characteristics of the job may have influenced outcomes here – potentially such as income and working conditions. However this can only be speculated on, given that these were not captured in the above studies. This concept was, however, explored somewhat by Balachandran and Wezel (2020). They found that inter-firm mobility was higher for multiple job holders working in larger, established organisations. However, the opposite was true for multiple job holders in smaller, less mature organisations - in that these individuals were actually less likely to depart the organisation. It is suggested that for those in younger organisations or who otherwise have shorter tenure, their primary job may be more appealing and garner more loyalty – but that this may diminish for older, more rigid organisations or jobs where individuals may feel they have exhausted their prospects.

Those who hold multiple jobs are often subject to criticism whereby their commitment to the main role is called into question; particularly for those in high profile public-facing positions such as policing (McKenzie, 2017). However, countering these criticisms are studies noting that the commitment of such employees appears no different to that of those with single jobs (Guest et al., 2006; McKenzie, 2017). Zickar et al. (2004) found that among those with two jobs, levels of commitment across their jobs did not significantly differ – displaying more obligation to stay/continuance commitment in their main role, but similar feeling of wanting to stay/affective commitment in both roles. Arguably, in cases where those with multiple jobs do report lower commitment or increased intention to leave the profession (Baba & Jamal, 1992; Fitchett et al., 2016), it is unknown to what extent this may be an outcome of their status as a multiple job holder. Rather, it is possible that such individuals may have entered into MJH *due* to their lessened commitment towards remaining in the profession. Therefore,

there may be value in examining the individual's motivation for entering into the MJH situation in relation to the subsequent outcomes of MJH.

The concept of one's motivation for holding multiple jobs relating to their intention to leave one of their jobs was explored by Seidel (2019) in relation to German apprentices. It was discovered that when apprentices required a secondary job to meet their basic living costs, they were more likely to exit their apprenticeship role. This appears to be the first study to explore the impact that the motivations or drivers for holding multiple jobs may have on one's propensity to leave one of their jobs. It suggests that one's situation – particularly where one appears to be driven into holding multiple jobs out of necessity – will impact their outcomes.

## 2.5.2. Professional competence and job performance

Job performance and one's competence as a worker can be directly affected by the act of MJH. In essence, an individual is almost certainly going to be changed or impacted in some way by their multiple job holding situation. It is highly likely, then, that an employee will bring the impact of these changes into the workplace, through the behaviour, attitudes and skills they exhibit in their work (Jamal et al., 1998). When the various jobs are similar, synergy may be achieved in that the worker can use many of the same skills across roles, while learning unique things from each role that may benefit the other (Betts, 2005). One multiple job holder specifically commented that her work as a writer enhanced her work as a teacher, and vice versa (Caza et al., 2017). There is evidence of MJH improving their ability to cope with issues while teaching, providing additional stimulation and experience, and promoting problemsolving skills (Fitchett et al., 2016; Sappa et al., 2015). MJH also provides an opportunity for educators to enhance their credibility when the additional role is complementary to their area of teaching, such as an industry role. A training effect can also occur, where the individual is able to acquire new skills and abilities in one role and utilise this intellectual capital in their other roles (Paxson & Sicherman, 1996). Concerns and negative views held by both school management and the public appear somewhat unfounded, given the finding by Jamal et al. (1998) that multiple job holding teachers didn't appear to be less involved in their job, spend less hours teaching or teach fewer students. However, for some it appears that holding an extra job can impact on the time they have to prepare for class – with 67% of this sample reporting that their performance as a teacher was negatively impacted by the act of MJH

(Parham & Gordon, 2011). In Brown et al. (2019)'s study, half of their survey respondents felt that their teaching performance would improve if they no longer had to work in an additional job (or jobs) outside of teaching. With starkly different results across the same role and industry, one is prompted to ask which underlying factors could be shaping these experiences.

There have also been implications reported in relation to professional competence specifically for those in the health sector. Health workers in New Zealand felt that their multiple jobs enhanced their opportunities for professional development – particularly when the roles were complementary, such as those of practicing medicine and undertaking teaching/research (McClintock et al., 2004). However, implications for job performance aren't always positive. Public-sector (i.e. taxpayer-funded) workers such as physicians are one group that has been subject to particular criticism. Engaging in both public and private healthcare practice is common for physicians. However, critics claim that the ability of a surgeon (for example) to earn additional income, generally at a higher hourly rate, outside of public practice will effectively decrease the level of public health service provision (Socha & Bech, 2011).

#### 2.5.3. Job satisfaction

Results are yet again mixed across the various studies that have captured job satisfaction. Among teachers, job satisfaction levels have been found to be higher (Jamal et al., 1998), similar (Pearson et al., 1994), and worse (Fitchett et al., 2016). Although this divergence is confusing and – in itself – does not do much to advance understanding, an interesting detail is the finding that teachers with a second job outside of education fared the worst – giving insight into the factors that may shape these experiences. Seemingly the first to measure satisfaction across both jobs, Zickar et al. (2004) found similar levels of satisfaction across both jobs – highlighting in their explanation that looking at motives for multiple job holding could help us to better understand these differences or similarities. Delving further into the concept, in addition their finding that multiple job holders were generally less satisfied with their jobs, Kottwitz et al. (2017) also discovered that these individuals were more prone to negative outcomes (dissatisfaction included) as a result of lacking information at work. This suggests that receiving relevant and timely information may have been of heightened importance for these individuals. It should be noted that most studies of multiple job holders'

job satisfaction levels have only measured this in their primary job (Jamal et al., 1998) – which may in part explain the difference in findings or at the very least, suggest a worthwhile consideration for future measurement.

### 2.5.4. Health & safety outcomes

There appears to be implications for both the physical and mental health and safety of those holding more than one job – both specifically in relation to the workplace, and also beyond it. Outcomes have been measured in relation to both single and multiple job holding comparison groups, and also between subgroups of multiple job holders.

Multiple job holders have been found on multiple occasions to be at greater risk of injury on the job (Alali et al., 2017; Dong, 2005; Dong et al., 2015; Marucci-Wellman et al., 2014b). This was found to hold true even when controlling for hours worked — which partly accounted for increased injury, but not fully. This counters the argument that these workers may work more hours and thus be more likely to be injured simply out of probability (Marucci-Wellman et al., 2014b). In addition to fatigue, which the aforementioned authors argue is not the sole factor, this could be due to an increase in time-pressure placed upon workers, less experience in each role and a lower level of safety training or other resourcing afforded to non-standard workers, who are often given lesser status in the workplace (Aronsson, 1999; Underhill & Quinlan, 2011; Virtanen et al., 2005).

One of the four studies mentioned previously that reported increased chance of injury appeared to use the phrase "multiple jobs" to describe those who held multiple jobs in a year – without differentiating whether these jobs were held concurrently at any time. Thus, it must be noted that the findings from this particular study may be slightly less applicable to the present research given that not all those regarded as multiple job holders will fit the definition employed here (Dong et al., 2015). However, a finding of interest from the aforementioned study was that chance of injury rose as the number of jobs held in that year did — with those working five or more jobs at risk of injury twice as much as those who only held one or two. Again, this finding may not be overly relevant for the reason mentioned previously, but it does speak to the reasoning that having to encounter and adjust to more work environments may be a risk factor.

A particularly interesting addition to the findings of Marucci-Wellman et al. (2014b) on work-related injury of multiple job holders is that these individuals were also more likely to be injured outside of work, compared to those with only one job. Furthermore, individuals with some level of higher education were less likely to be injured at work than those without higher education, but overall – regardless of being a multiple job holder or not – were more likely than all other groups to be injured outside of work. This suggests that engaging in multiple jobs may increase the personal pressure felt by these workers, and that the task of juggling these roles may adversely impact even their non-working hours. It appears that the act of multiple job holding does possess a kind of spill-over effect into how these individuals embark upon their personal lives.

Illness has also been measured but, before it can be discussed, an important note must be made. Distinguishing between work and non-work injury is much more straightforward than doing the same for illness, as injury is generally more immediate in its manifestation and physical evidence can point to the cause – as indicated by the findings noted above. However, when considering the mental or even physical health of multiple job holders using common mental health variables or measures of sickness absence, it cannot be definitively said which cases may be "work-related," i.e. caused by work. It is also worth noting that data may be subject to the "healthy worker effect" – in that those who experience poor health find themselves unable to continue holding multiple jobs, or even holding a single job – and thus these individuals leave the workforce and are not captured in the research (Bouwhuis, 2020; Bouwhuis et al., 2017b). It is with this caveat in mind that the following findings should be considered.

The holding of multiple jobs can at times impact mental health in the workplace, although the findings are less congruent than those of physical welfare. This is perhaps due to the hard-to-measure nature of occupational mental health, and also likely the relatively small number of studies on this particular issue (Leka et al., 2015). Burnout and job stress have been the primary variables measured in relation to this. In early studies, those with multiple jobs were found to either be similar to single-job holders in terms of job stress (Pearson et al., 1994), or even better off, experiencing lower job stress and burnout (Jamal et al., 1998). Similarly, no

significant differences were found between single and multiple job holders regarding psychosomatic health problems and mental health (Jamal et al., 1998; Jamal & Crawford, 1981). In Jamal et al. (1998)'s aforementioned study however, differences did exist between groups of multiple job holding teachers – with those undertaking an additional job outside of education experiencing more job stress and burnout than those with an additional job in the education sector. Stress was also reported by teachers in a study by Parham and Gordon (2011), among a range of other health complaints. Outside of explicitly work-related mental health, Bruns and Pilkauskas (2019) found that in the case of low-income mothers holding multiple jobs, there appeared to be an increased likelihood of experiencing depression and also potentially higher dissatisfaction with life. Furthermore, and in support of the possibility that these outcomes may be influenced by multiple job holders' situations, mothers working longer hours (45 or more a week), working non-standard hours and earning less were more likely to experience these adverse outcomes. Perhaps most severely of all reported mental health outcomes, police officers in Ghana who held additional jobs were found to be approximately four times more likely to report suicidal ideation than their colleagues who held only single jobs (Quarshie et al., 2020).

Beyond mental health, signs of general ill-health were reported by multiple job holding teachers, in a qualitative investigation by Parham and Gordon (2011). As mentioned previously, it appears as though such research designs are able to extract more detail about the experiences of participants. All five teachers interviewed felt that having more than one job negatively impacted their health, specifically citing in addition to fatigue, "poor diets, a lack of time for exercise, frequent minor illnesses, and putting off medical appointment" (Parham & Gordon, 2011, p. 50).

In terms of how poor wellbeing may manifest as work absence, Bouwhuis et al. (2017a) longitudinally measured long-term sickness absence rates among both single and multiple job holders. Overall, they reported no significant differences. This is not entirely surprising in a sense, given that historically multiple job holders have not reported higher absenteeism than others (Jamal et al., 1998; Jamal & Crawford, 1981). This prompted the authors to undertake further investigation, on the basis that outcomes may vary between different groups of multiple job holder (Bouwhuis et al., 2018c). They captured a variety of situational factors

including the reasons for MJH, whether the individual would rather have one job and the demands and resources present in jobs – among others. On this basis, four groups of multiple job holder emerged – and the "vulnerable" group who did not want to have multiple jobs and worked in high-demand low-resource environments, reported significantly lower physical and mental health than other groups. This concept is supported by the work of Dorenbosch et al. (2015a), who found that one's motivation for holding multiple jobs influenced the levels of burnout experienced by multiple job holders.

An additional, particularly recent consideration for the occupational health of those holding multiple jobs is the COVID-19 pandemic. Although this is not a consequence of multiple job holding as such, it has emerged that multiple job holding carries clear implications in light of the pandemic. Baughman et al. (2020) reported that in the United States, multiple job holding is common among direct care workers and nurses where low pay and/or insufficient hours provided in one job can drive these workers to hold multiple jobs to obtain a sufficient income. As the above authors note, this is concerning given that the virus appears to be commonly spread through direct human contact and furthermore, that individuals (i.e. care workers) can transmit the virus while asymptomatic. Therefore, movement of these workers between facilities poses a risk for potentially prolific virus transmission. Similar concerns were cited in Australia, after an enquiry into Melbourne's embattled isolation and quarantine facilities found that the use of privatised security meant that these guards could be moonlighting outside of their facilities – acting as vectors for virus transmission (Fowler et al., 2020). Locally, district health boards in New Zealand took over the staffing of managed isolation and quarantine facilities after concerns arose around the use of private providers – including reports of nurses working in these facilities alongside their public-facing jobs in hospitals (Witton, 2020).

As with other variables there is a diversity of findings on the health and safety outcomes of multiple job holders — and from these findings emerge some situational factors and measurement considerations that are worth noting.

# 2.5.5. Psychosocial work environment factors

The psychosocial work environment consists of factors relating to the design and organisation of work, and its social aspects — and this is discussed later in chapter three. There has not been much examination of the psychosocial work environments of these individuals, at least explicitly, with this concept in mind. However, some insights on their working conditions can be gleaned from the literature.

Some multiple job holders are able to achieve enhanced working conditions/work environment factors that suit their preferences, through their combination of jobs. This is at times also cited as a reason for partaking in MJH in the first instance. These beneficial outcomes appear to be particularly experienced by certain types of multiple job holder – such as the portfolio worker or the hybrid worker, who is self-employed in at least one of their jobs. Portfolio workers cite greater freedom and autonomy in carrying out their tasks – which may be a function of their status as a knowledge worker, who is in demand for their unique skillset/knowledgebase (Clinton et al., 2006).

However, at the same time, these individuals may suffer when it comes to workplace relationships/social interaction. Some portfolio workers experienced a lack of belongingness to their various work environments – feeling like outsiders (Clinton et al., 2006). Other negative experiences of working conditions were also evident. Those working in two different companies, even performing a similar role, may have to grapple with contrasting and potentially conflicting organisational cultures and norms (Bamberry & Campbell, 2012).

Although conceptualised as investigating job quality, recent work by Piasna et al. (2020) measured factors including job security, autonomy, work pressure and control over working time for multiple job holders. While the phrase psychosocial work factors was not used at all, these factors of job quality clearly overlap with what can be regarded as psychosocial factors. Piasna et al. (2020) found, overall, that multiple job holders were more likely to hold jobs of poor quality than single job holders – particularly with poorer income levels, job security and career prospects. On this basis, the authors suggested that these adverse factors may serve to "push" individuals into taking up multiple job holding. However, it was also noted that multiple job holders appeared to experience some factors more favourably than single job

holders — namely "wider scope for exercising skills and discretion, and a higher degree of control over and flexibility in working hours." (Piasna et al., 2020, p. 10). Within their sample of multiple job holders, the authors found further divergence — detecting six different clusters of multiple job holders based on quality factors of their primary jobs. These clusters ranged from those with lower quality jobs in many areas, through to those in more favourable situations with high quality jobs. Given the clear relevance of this study to the present research and its interest in the psychosocial work environment, the six clusters identified by Piasna et al. (2020, p. 11) are reproduced below in Table 2.

Table 2: Piasna et al. MJH job quality clusters

	Autonomous	Under	Balanced	Insecure	Low	Vulnerable
		pressure			discretion	
Income	1669	1523	1316	1093	1110	1024
Prospects	82.8	81.2	54.5	37.4	54.5	31.5
Pressure	66.0	59.0	66.1	60.5	59.8	57.4
Skills	82.8	61.2	71.9	70.4	36.7	33.4
Unsocial	82.4	77.4	82.0	80.4	79.2	79.1
hours						
Flexibility	70.8	40.1	61.6	62.7	33.0	26.4

Note: Job quality measured on a scale of 0-100, income in euro.

## 2.5.6. Personal financial situation

It is logical that, given that multiple job holding (or moonlighting, as it was traditionally known in its earlier years of investigation) was regarded as something done to increase one's income, it has clearly reported financial implications. Obviously, this tends to be in the form of increased income, although different individuals experience this somewhat uniquely. Scott et al. (2020) found that holding multiple jobs can prevent low-income families from experiencing poverty, particularly when it is done consistently rather than sporadically. For artists, who hold an additional job alongside creating art, their situation can provide financial liberation and therefore significantly enhance their artistic freedom – and subsequently their enjoyment of the artistic process (Lindstrom, 2016; Menger, 1999). This freedom was also experienced by farmers/farming families who engaged in pluriactivity to diversify their income streams and hedge against uncertainty that seasonal price fluctuations could bring (Fiorelli et al.,

2007; Goodwin & Mishra, 2004; McClintock et al., 2007). For farming families, this also had positive implications for retirement of the older generation, while enabling succession, and for the farm to be passed on (in a financially viable state) to the new generation (Robertson et al., 2008). In this way, it appears that multiple job holding allows individuals to elevate themselves to a level of financial satisfaction/security they may not have otherwise achieved.

For those working in more casualised multiple job situations however, experiences are not as positive. Among portfolio workers, worrying about the source of one's next income could be a source of stress — as sometimes they may have multiple contracts/projects at once, and other times, only one or none (Clinton et al., 2006). This is certainly not limited to a multiple job holding situation and can be found in any type of precarious employment situation (and multiple job holding, indeed, is not always precarious). However, given that multiple job holders can be portfolio workers or otherwise frequently partaking in more casual forms of labour (Marucci-Wellman et al., 2014a), it is worth considering.

In developing countries where poverty and unemployment are prevalent, multiple job holding appears to be utilised particularly to cope with an adverse economic climate. Seeking out an additional job was identified by Mwaura (2017) as a way for Kenyan youth to proactively manage their futures in the face of high unemployment and uncertainty. Similarly in Cameroon, Bikoue (2020) suggests that multiple job holding acts as something of a remedy to falling wages and an insufficient pension scheme for retirees.

## 2.5.7. Time use

Multiple job holders do, in general, appear to work longer hours in totality (i.e. across all jobs) than those with only one job. Hipple (2010) reported that multiple job holders in the United States worked an estimated average of 11 more hours per week (46.8 hours) than their single job holding counterparts (35.8 hours). These findings have been consistently echoed by others — perhaps the only variable which seems to be reported entirely consistently (Amuedo-Dorantes & Kimmel, 2009; Basner et al., 2007; Böheim & Taylor, 2004; Clinton et al., 2006; Marucci-Wellman et al., 2014a; Newell & Baines, 2006; Robinson & Wadsworth, 2007). The same was found to be true for mothers who were working in multiple jobs, who worked longer hours than their counterparts working only in one job (Bruns & Pilkauskas,

2020). Concerningly according to Basner et al. (2007, p. 1089), these individuals weren't benefiting – at least financially – from these long hours; "people working in multiple jobs worked longer and slept less to earn the same amount of money as people with one job". However, this could indicate that those working in multiple jobs are in lower-wage roles to begin with – and thus must take on multiple roles simply to achieve parity of income.

In addition to increasing the number of hours worked, multiple job holding also inherently changes the schedules of those engaged in the practice. Multiple job holders are more likely to work outside of standard work hours, including nightshifts and weekends (Marucci-Wellman et al., 2014b). Additionally, these workers also tend to expend more time on work activities – both in terms of hours spent actually working and also travelling to and from their roles (Marucci-Wellman et al., 2014b; Newell & Baines, 2006). Juggling the various schedules of their jobs can pose a challenge for these individuals, who face issues such as short-notice given for shifts (Bamberry & Campbell, 2012). The authors noted that for these workers, it was not the time burden itself that seemed troublesome. Rather, it was the actual act of having to manage the demands of potentially conflicting schedules in the context of their wider personal lives. As a result of this increased time pressure, these individuals reported having less time for household and other personal activities.

There have been a variety of impacts reported on the personal time of multiple job holders. Of particular concern is the finding that multiple job holders receive notably less sleep than their single job holding counterparts, which in itself carries implications for worker health and wellbeing (Marucci-Wellman et al., 2016). Multiple job holders in general appear to be busier, in terms of the multiple (work and non-work) commitments they juggle. In New Zealand, multiple job holders were found to be studying, undertaking care of others and engaging in voluntary work more frequently than those who only worked in one job (McClintock et al., 2007). Marucci-Wellman et al. (2014a) found that such individuals even spent their days off differently to single job holders. They spent less time sleeping and engaged in leisure activities, and more time travelling and engaged in other income-generating tasks, such as rental properties and hobbies/crafts able to be monetised. In their early works on multiple job holding, Jamal and colleagues found on more than one occasion that multiple job holders spent more time on personal causes, such as voluntary organisations, than others (Jamal et

al., 1998; Jamal & Crawford, 1981). These patterns of personal time may be due to the increased schedule flexibility that multiple job holding can offer. Although focussed on portfolio workers rather than multiple job holders as a whole, those working for themselves undertaking projects for multiple clients said that this type of work gave them greater autonomy over their time to be more spontaneous (Clinton et al., 2006). These findings suggest that despite the potential negative impacts of being busy, multiple job holders can achieve numerous things with the spare time they have left.

# 2.5.8. Work-life balance/work-family conflict

Multiple job holders generally appear to have a poorer work-life balance due to the need to juggle multiple commitments. The increased hours of work and busy-ness mentioned above in section 2.3.7. leave less time for recovery, and thus the worker is constantly left having to "catch up" on other priorities in their life (Sliter & Boyd, 2014). The antisocial hours commonly associated with the practice appear to exacerbate this (Osborne & Warren, 2006), as does the matter of working long hours (Robertson et al., 2008). Mellor and Decker (2020) similarly found that work-family conflict increased with the number of jobs held, and that this possibly caused individuals to perceive their performance as poor which then increased stress. Furthermore, while work-family conflict (WFC) may have negative impacts for any employee who experiences it, multiple job holders appear to be more prone to these negative outcomes. In the first study to examine whether WFC and its impacts may interact across multiple jobs, Boyd et al. (2016) found that WFC was indeed interactive – in that experiencing WFC from the second job could actually exacerbate impacts of any WFC experienced due to the first job. This indicates that the presence of WFC among multiple job holders gives cause for concern.

However, as with many other outcomes, the experience is not entirely bad. **Among** New Zealand multiple job holders, work-life balance was found to be negatively impacted. However, interestingly, most participants were in the situation by choice, and also felt that the benefits of their employment situation were sufficient to justify the costs of reduced work-life balance (McClintock et al., 2004). Portfolio workers seem to have a similar experience; finding it difficult to balance their various life domains generally, but finding this much easier when given greater autonomy over their work life and hours (Clinton et al.,

2006). Therefore, it would be unwise to simply assume that multiple job holding is inherently bad given the time burden it creates is likely to make it more difficult to balance one's work and home/family lives. Rather, it is worth considering whether there are any unique situational factors that may ameliorate these negative outcomes or perhaps make them worthwhile for the individuals.

#### 2.5.9. Broad lifestyle enhancement

In some areas of the worker's personal life, such as friendships and undertaking study, the act of MJH seems to actively provide enhancement – in that the multiple jobs provide interaction with a wider range of individuals, and also more flexibility for study, respectively (McClintock et al., 2007). Some multiple job holders reported that the relationships with their partners and family were enhanced by the sharing of new experiences/stories from the additional jobs. Having a broader life now gave them more to discuss, and they felt more interesting as a result (Robertson et al., 2008). For others, holding multiple jobs was crucial to their own sense of identity and self-esteem – allowing them to feel as though they were expressing their most authentic selves (Caza et al., 2017). In the case of those mentioned above, holding multiple jobs did not only *not* carry negative impacts – but actively promoted positive outcomes.

#### **2.5.10.** A consideration around consequences

Although there is cause for concern particularly when negative consequences are reported, it is unknown to what extent the experiences of multiple job holders may be an outcome of their status as a multiple job holder. An example of this is the finding that multiple job holding teachers reported higher intention to leave the profession (Fitchett et al., 2016; Winters, 2010). Rather, it is possible that such individuals may be holding multiple jobs in the first instance due to their lessened commitment towards remaining in the profession and desire to transition out of it. Therefore, there may be value in examining the individual's motivation for entering into the MJH situation in relation to the subsequent outcomes of MJH.

Another issue to consider in relation to consequences is the nature and extent of the impact they may have on individuals and the roles that the individuals carry out. Research by Boyd et al. (2016) indicates that the impact resulting from holding multiple jobs is interactive, rather than just simply being additive from combining various jobs. Interactive effects were found in the relationship between work-family conflict experience in each job, and the

emotional exhaustion, physical symptoms and life exhaustion experienced among a group of firefighters. The possibility for one's work role to conflict with one's personal life has been extensively studied; some attention also has been given to this matter, of work-family conflict, in multiple job holders (Boyd et al., 2016; Mellor & Decker, 2020; Statistics NZ, 2019a). What does not appear to have been investigated, however, is the potential for crossover between one's various jobs; whether that is experienced negatively as a conflict, neutrally, or even positively in terms of cross-job facilitation.

## 2.6. Factors influencing consequences of MJH

As illustrated in sections 2.4 and 2.5, there exist an extensive array of reported motivations as to why individuals partake in multiple job holding, and the reported consequences of the practice. As suggested in these earlier sections, this diversity of motivations and consequences is arguably explained by the existence of diverse types of multiple job holders. In particular, this disparity in consequences has, at times, perplexed researchers. However, rather than representing a dilemma that requires solving through seeking a consensus as to whether the impacts of multiple jobholding are, overall, either definitively positive or negative, this disparity is argued to be reflective of the diverse types of individuals who comprise the multiple job holding population.

In seeking to conceptualise the different types of multiple job holder that are argued to exist, it is useful to first outline factors that have been suggested to influence the consequences that are reported to result from multiple job holding. There has been some attention given to this issue in the research, particularly in recent years. Factors that have either been proposed or empirically tested to have an impact on the experiences of multiple job holders will now be discussed.

#### 2.6.1. Choice

One way in which MJH can be dichotomised is through the element of the individual's choice in their employment situation. This appears to be closely linked to one's motivations for seeking multiple jobs. While those who feel bound to undertake multiple jobs are more likely to do so to meet essential living costs, those who act under their own volition are more likely to simply be seeking an extra financial buffer – for discretionary spending or saving for a goal (Osborne & Warren, 2006).

Where there is little (perceived or actual) choice, there is crossover with the constraint motive. This sees workers compelled to undertake additional work due to some kind of economic limitation, such as insufficient hours or remuneration provided by the main role (Renna & Oaxaca, 2006). Those who undertake MJH out of financial necessity are arguably the most vulnerable group, and therefore possibly of the most concern. Such individuals may have been forced into their situation and are in such a vulnerable position that they have no other means whatsoever to earn a basic living (Jamal & Crawford, 1981). For these individuals, even being asked about the concept of choice may seem absurd and even condescending.

Negative consequences of the practice such as poorer work-life balance appear to be exacerbated particularly for this group, given their reliance on the income from their various jobs (McClintock et al., 2007). Individuals in this group may also have more negative perceptions generally of their situation. This was identified by Lindstrom (2016) in the case of artists who were required to take on additional employment outside of their artistic endeavours, in order to meet their basic financial needs. This group had more negative experiences of their additional non-artistic job than those who had not entered into the situation out of financial necessity.

An important consideration, however, is that choice (or rather a lack of) may not always be mutually exclusive with financial necessity. While it is likely to be the most common reason that individuals feel they have no choice but to hold multiple jobs, individuals may feel compelled for other reasons also. An example of this is Caza et al. (2017)'s finding that some participants believed holding multiple jobs to be truly integral to their identities. If they were not able to do so, they would feel inauthentic and under-stimulated – they desperately craved the variety and challenge. Another example could involve the individual who is holding multiple jobs as an exit strategy, as many have been found to do (Dickey et al., 2011; Fitchett et al., 2016; Jamal et al., 1998; Panos et al., 2011; Paxson & Sicherman, 1996; Renna, 2006). The individual may feel very strongly about exiting their current role, possibly even due to harm it may be causing them (not just physically, possibly mentally). They may, therefore, view taking on an extra job to up skill as their only way to escape.

Although the matter of choice has been a somewhat limited area of focus in relation to MJH, fairly extensive work has occurred around the matter of volition in relation to temporary employment. This matter of choice appears to be important in relation to outcomes associated with such employment. Relatively unsurprisingly, temporary workers who are in such a situation by choice experience more positive outcomes than those who would prefer to be in permanent employment (Connelly & Gallagher, 2004; Guest, 2004). However, an interesting addition is the finding that those who have proactively chosen a temporary situation may experience even more positive outcomes than permanent employees. Such individuals are more likely to be in their situations in a kind of "default" choice, where the employment situation is accepted as the norm and perhaps not questioned (De Cuyper & De Witte, 2008).

It is worth noting at this point that the element of choice is not necessarily a binary variable, of the worker either having a choice in their situation or not. Rather, the decision may be viewed by the individual as both a choice and a necessity. This was noted by McClintock et al. (2004) who found that this was the case among a non-negligible portion of farming, healthcare and hospitality workers. Furthermore, the element of choice may change during the duration of the multiple job holding. It may start out as a necessity but then later become a choice, as the individual decides to continue holding multiple jobs even after they no longer strictly need to (Robertson et al., 2008).

#### 2.6.2. Inter-job similarity

The degree to which the worker's various jobs are similar will inherently alter the nature of their work situation. In discussing this issue, Sliter and Boyd (2014) propose that the similarity of the various jobs held may have an impact on individuals. This may be in the sense that similar roles would arguably carry fewer intellectual demands as the worker is not forced to transition between roles so dramatically. Conversely, this may be in the sense that working in diverging roles may in fact provide some sort of relief, through variety, from the demands of the other role(s). This appears to manifest amongst education sector employees, with Sappa et al. (2015) finding that those undertaking additional jobs outside of education experienced positive outcomes, including less stress. Conversely, Fitchett et al. (2016) found that those whose other job was outside of the education field reported significantly more negative

outcomes. These individuals received on average, lower pay, and were also less satisfied with their jobs and more prone to burnout than those with additional jobs related to teaching.

# 2.6.3. Individual motivations for undertaking MJH

It is clear from examining the literature (discussed previously in section 2.4) that there are a diverse array of individual motivations for engaging in the practice of multiple job holding. However, these have largely been studied in a descriptive manner, with fairly limited attempts to examine relationships to other variables. As mentioned above in section 2.4.3, much of the work on motivations suffers from the "assumption" issue where the worker's reasons for holding more than one job are inferred through a proxy (i.e. whether they would still hold multiple jobs if their income increased) – such as the work of Raffel and Groff (1990). In the case of Jamal et al. (1998) this was reversed – and the motivations of multiple job holders were assumed, based on the outcomes they experienced. More recent studies that have gone beyond making assumptions regarding individuals' motives. As a result, they have been able to pinpoint potential links between the multiple job holder's motivations for engaging in the practice and the outcomes they experience (Dorenbosch et al., 2015b; Webster et al., 2018).

Webster et al. (2018) acknowledged the role that motives for MJH may have to play in shaping the individual's experiences of the phenomenon. They found, in a correlational post-hoc analysis, that those reporting non-financial reasons for MJH were more likely to be more engaged in both their main and secondary jobs (with no such association reported for those with financial motives). Despite the correlational and post-hoc nature of the analysis, a key strength of this study was that participants were explicitly asked for their motive for holding more than one job, unlike many past studies where assumptions were made.

In another study that explicitly asked participants for their reasons for multiple job holding, Dorenbosch et al. (2015b) found that those who were working in multiple jobs out of financial necessity were more likely to experience burnout than those with other motives. Additionally, on average they reported lower job satisfaction, less enthusiasm in their work and perceived themselves to be less employable (should they need to get a new job in the future). Those

who held multiple jobs because they enjoyed the variety or used it as a source of personal development reported the most positive outcomes.

#### 2.6.4. Category of multiple job holder

In seeking to understand how personal factors relating to the multiple job holder could impact their outcomes, Bouwhuis et al. (2018c) utilised a questionnaire that captured an extensive range of these factors, as well as health-related outcomes, among multiple job holders. Many factors were accounted for in the analysis – eighteen, to be exact (see Bouwhuis et al., 2018c), "Table 1"). These were including but not limited to one's main reason for MJH, whether they would prefer one job instead, job satisfaction, number of years in MJH, contract type, job demands and resources, and financial status – including whether the individual was the main income earner for their household.

Latent class analysis was used to detect underlying groupings in the survey sample. This involved participants being grouped according to the 18 factors that were captured. The following four groups outlined in Table 3 below were identified, generally consisting of the following factors and experiencing the following health outcomes (see bottom row, in bold). In summary, Bouwhuis et al. (2018c) found that the vulnerable group of multiple job holders experienced the most adverse outcomes and in essence, were the most marginalised. The vulnerable group was characterised by factors such as holding multiple jobs out of necessity (not by choice, preferring one job), having low autonomy but high work demands, experiencing more disadvantages from their situation than advantages and feeling unable to change their situation. This largely confirms what has been outlined above earlier in this section.

Table 3: Summary of groups identified by Bouwhuis et al.

	Vulnerable	Indifferent	Satisfied combo	Satisfied hybrid
Most cited motive(s)	Financial necessity	Hours constraint; meeting expenses	Enjoyed combination	Enjoyed combination Wanted to start business Variety
Job satisfaction	Lower than others	Generally satisfied	Highest	High
Preference	One job	Multiple jobs	MJ	MJ

Advantages/ disadvantages	Disadv. outweighed any	Experienced few of either	Experienced advantages	Experienced advantages
Job demands	adv. High	Low	Most had high quant. demands, average had high phys. demands	Low
Autonomy	Low	Medium	High on average	High
Experienced financial difficulties	Yes	Medium	No, often had money left	No, often had money left
Felt able to change life/situation	No	Medium	Yes	Yes
Avg weekly work hours	34, often outside office hours	27	43, often outside office hours	45, often outside office hours
Health outcomes	Lowest out of all groups	Comparable with other groups excl. vulnerable	Comparable with other groups excl. vulnerable	Comparable with other groups excl. vulnerable

# 2.6.5. Future direction for examining buffers of the MJH-consequence relationship

Two recent studies, as discussed above, have attempted to gauge the impact that situational factors, such as one's motive for multiple job holding, have had on outcomes experienced by these individuals (Bouwhuis et al., 2018c; Dorenbosch et al., 2015b). Bouwhuis et al. (2018c) did so through investigating the presence of different "types" of multiple job holder – with the types consisting of situational factors of the individuals. Both of these are deeply valuable and necessary additions to the knowledge base on MJH. However, they have both focused on this issue as it presents in The Netherlands. Therefore, there is value in examining this matter on a wider population – i.e., in the context of the Southern hemisphere. Furthermore, there is potential to refine the way in which multiple job holders are categorised in terms of their factors.

The study that perhaps comes closest to objectives of the present research is that of Bouwhuis et al. (2018c). However, this study did not look at situational factors in terms of their roles as antecedents in the relationship between multiple job holding and outcomes. Rather, arguably some of these factors could be regarded themselves as outcomes – such as job satisfaction and advantages/disadvantages experienced. There could be value in aiming to understand how situational factors – that is, those inherent in the multiple job holder's situation – influence the outcomes that these individuals experience. For example, is the

multiple job holder who does so for financial reasons *more* or *less* satisfied than one who is instead motivated by the variety and enrichment that the practice brings? Furthermore, how do other factors such as choice manifest in this equation? Is the multiple job holder who does so for financial reasons, but by choice, going to have a more positive experience than one feels they have no choice but to hold multiple jobs to meet their financial obligations?

## 2.6.6. Towards a conceptualisation of multiple job holders

Although from the extant research one can glean insights on the various ways in which multiple job holders can be categorised, and some limited evidence exists on how different "types" of multiple job holder experience their situations, there have been limited attempts to synthesise these areas of knowledge. Most commonly, the multiple job holder is dichotomised at an aggregate level as being driven by either financial or non-financial motives — but this neglects to acknowledge the wider array of situational factors as noted above. Valuable and noteworthy recent work by Bouwhuis et al. (2018c) that sought to distinguish between groups of multiple job holders in terms of their personal factors and health outcomes did make a significant advancement in this regard (discussed above in sections 2.6.4 and 2.6.5).

Given that the experiences of multiple job holders differ so starkly, there is a need to better understand the individuals who comprise this diverse worker population. Understanding the reasons for these differences is key to this. As demonstrated in section 2.6 above, there is evidence to suggest that factors specific to the situations of individual multiple job holders can impact the outcomes they experience. Therefore, there may be value in developing a conceptualisation of multiple job holders that takes into consideration these situational factors. Doing so may provide an illustration of different "types" of multiple job holder that exist. If such a conceptualisation can be achieved, it could then be used by those with an interest in multiple job holding to aid in more effectively understanding the individuals who partake in this practice.

In order to be able to develop such a conceptualisation, an appropriate lens must be found through which the work situations of these individuals can be examined. The measurement of individual situational factors is more straightforward (e.g. motivation for multiple job

holding, as in section 2.6.3). Conversely, capturing the nature of an individual's work situation poses more of a challenge, particularly given that such a lens or framework must be suitable for any of the broad range of jobs that multiple job holders may undertake. Ideally and for a similar reason, such a lens would also provide a comprehensive illustration of the work environment. Given that the task of detecting different types of multiple job holder would be fairly exploratory, it is not known which specific aspects of one's work may be of most relevance in potentially distinguishing these different types. Thus, a widely-applicable and wide-reaching measure of the work environment is required. Such a framework exists, in the form of the psychosocial work environment concept that will now be introduced immediately below.

# 2.7. Recap of the literature on multiple job holding

Part one of this literature review has provided an overview of the research on the practice of multiple job holding – one specific form of non-standard work. To achieve this, a brief outline of the phenomenon that is non-standard work was given (section 2.2). Non-standard work appears to be growing, often (but not exclusively) features impermanent, contingent arrangements (section 2.2.1) and carries unique implications for the health of those who partake in it (section 2.2.2). Multiple job holding, or the concurrent holding of multiple jobs, is one form of non-standard work (section 2.3) There exist a wide range of reported motivations for partaking in multiple job holding. Most commonly, multiple job holding is financially driven (section 2.4.1). This includes more dire situations, such as those who require the extra income as a result of receiving insufficient income in their first job (sections 2.4.1.1 and 2.4.1.2), as well as those who seek an additional job to provide a form of insurance against insecurity in their first job (section 2.4.1.3). However, importantly, there are also many nonfinancial motives (section 2.4.2). These include to enable one to transition into a new career (section 2.4.2.1), to enhance their abilities in their original job (2.4.2.2) and to provide flexibility that one, full-time job perhaps could not (section 2.4.2.4). Investigation into the practice of multiple job holding has produced evidence of wide-ranging consequences (section 2.5). Some who hold multiple jobs appear to thrive as a result, with positive outcomes including higher professional competence (section 2.5.2), the ability to afford luxuries (section 2.5.6) and wider social networks (section 2.5.9). However, for others, there are concerning adverse impacts. These include increased chance of injury both within and outside

of work (section 2.5.4), higher work-family conflict (section 2.5.8) and less time available for sleep and leisure (section 2.5.7).

The overview of the extant knowledge around multiple job holding is concluded with discussion of the factors that have been reported to have some impact on the consequences experienced by those holding multiple jobs (section 2.6). This is of particular interest, given the diversity of experiences that is argued to be attributable to the existence of diverse types of multiple job holder. Two factors that emerge particularly in this regard are the matters of choice (the individual's degree of choice in their MJH situation; section 2.6.1) and the multiple job holder's reason for doing so (2.6.3). Another emerging concept that appears promising in terms of explaining the experiences of multiple job holders is that of the "category" or type of multiple job holder – whereby it appears that different types of multiple job holder may have different experiences (section 2.6.4). This subsection 2.6 concludes by suggesting that, given the broad range of experiences of multiple job holders and the emerging evidence as to how their situations may shape their experiences, a more nuanced conceptualisation of this diverse population is needed. Furthermore, such a conceptualisation should account for the situational characteristics of these individuals (given, as is starting to emerge from the literature, the influence that MJHers' situations appear to have on their experiences). In the subsequent chapter three, part two of this literature review, the psychosocial work environment (PSWE) concept is introduced. This is done in order to demonstrate the utility of the PSWE concept as an appropriate lens through which the situation of multiple job holders can be appropriately examined.

# Chapter 3: Literature review part two – The psychosocial work environment lens

## 3.1. Introduction

This chapter builds on the earlier suggestion in chapter two that differences in MJHers' experiences may be explained by their situations, by culminating in the finding that the concept of the psychosocial work environment provides a germane lens through which the situations of multiple job holders can be examined. In seeking to understand the causes of these differences further, the concept of the psychosocial work environment and psychosocial risk are introduced and summarised. Given that the concept of the psychosocial work environment encompasses one's experience of the design, organisation and management of work (Leka et al., 2003), this review then proposes its relevance and appropriateness for exploring the diversity in experiences of multiple job holders.

The psychosocial work environment encompasses a broad array of factors relating to the design, organisation and management of work, and its social/relational aspects (Leka et al., 2015). These factors can be more effectively understood via the wider categories of work content – what happens in one's role – and work context – the situation in which work occurs, as put forward by Leka et al. (2003) (see Figure 1). It is important to note that psychosocial factors are not inherently hazardous in themselves. These factors can be experienced positively, negatively or even neutrally (Way, 2020).

Psychosocial hazards can arise when these factors are experienced negatively by the individual, and the presence of hazards brings risk – from which harm to the individual can occur. Way (2020, p. 2) defines psychosocial hazards as "aspects of work design and management which have the potential to cause stress-mediated harm." One way to conceptualise risk is as "the overlap between a hazard and a vulnerability" (Haslegrave & Corlett, 2005, p. 809). Adopting these definitions, psychosocial risk can be viewed as the potential for harm that is created by the interaction that occurs between the various psychosocial work environment factors (outlined in Figure 1) when experienced negatively (hazards), and the individual worker and their own personal circumstances (vulnerabilities).

These definitions are summarised in Figure 1. This personal facet includes the individual's capabilities and qualities and culture that determines their behaviour, in addition to the societal context in which they reside (International Labour Organisation, 1986).

Psychosocial factors			
Work content:	Work context:		
Job content	Career Development, Status and Pay		
Workload and Work Pace	Role in the Organisation		
Working Hours	Interpersonal Relationships		
Participation and Control	Organisational Culture		
	Home-Work Interface		

Reproduced from Leka et al. (2003)

#### **Psychosocial hazards**

When psychosocial factors are experienced adversely, giving them the potential to cause harm

e.g. excessive workload

#### Psychosocial risk

The chance that harm will occur as a result of a psychosocial hazard

#### Influenced by factors such as:

- Individual capacity to cope
- · Organisational culture and response
- Nature of other psychosocial factors e.g. are there high levels of control and/or high levels of supervisor support available to the worker, that may help them to cope more effectively with high workload?

Figure 1: Key psychosocial definitions

# 3.2. Psychosocial factors as potential health and safety risks

In New Zealand, attention around health and safety is increasing with the enactment of the Health and Safety at Work Act in 2016. The Act is intended to, among other aims, increase managerial accountability for H&S – a significant deficit that was found to have contributed to the events of the Pike River mining disaster in 2010 (McInally, 2014). Of relevance to the discussion around non-standard work in chapter two, those working as contractors at Pike River were found to be particularly vulnerable during the catastrophic explosion (Lamare et al., 2015). Although the new legislation signals a move in the right direction with regard to managerial accountability for harm (Dabee, 2017), researchers and the government regulator, Worksafe, have noted that there is a bigger emphasis on the safety of workers (Hasle & Zwetsloot, 2011; WorkSafe New Zealand, 2016). As a result, the ongoing health of

workers and threat of harmful prolonged exposure is under-emphasised (WorkSafe New Zealand, 2016).

One of the issues with effectively managing work-related health is the difficulty that comes with its measurement, which is confounded by multi-factorial and additive contributory elements as well as their often gradual onset following exposure to these elements (WorkSafe New Zealand, 2016). This is equally pertinent in the case of work-related mental health; a concept that has arguably been neglected in the New Zealand context to date (Health Research Council, 2020). However, there is growing disquiet nationally about this historic neglect of mental health issues in general (New Zealand Government, 2018), including its manifestation within and resulting from the workplace.

With the growing acknowledgement in New Zealand that the function of managing workplace health and safety must place as much emphasis on promoting the ongoing health and holistic wellbeing of workers as it does on protecting their safety, the concept of psychosocial risk management is receiving a higher level of cognisance (Leka et al., 2015). Psychosocial risk management involves assessing psychosocial hazards (adversely experienced psychosocial factors, as noted above in Figure 1), and the potential that they will cause harm to one or more individuals (Bergh et al., 2016; Howard, 2017). Importantly, the outcomes that can result from psychosocial risk span across the spectrum of worker welfare – causing stress and harming mental wellbeing, but also resulting in physical ailments – including, for example, both (gradual onset) musculoskeletal disorders and other (more sudden) physical injuries (Swaen et al., 2004; Zadow et al., 2017).

A key challenge with psychosocial risk is the difficulty in measuring and conceptualising the issue. The impacts that work design and organisation may have on those involved is not straightforward to measure, and any outcomes for an individual will always be moderated by their specific situational characteristics (Probst et al., 2016). Furthermore, psychosocial work environment factors are by no means inherently hazardous/negative, or positive. A factor such as the level of control a worker is given may have positive outcomes — an appropriate level of control may benefit the worker, but having either a lack of control or an excess may cause negative outcomes (Bernhard-Oettel et al., 2017; Karasek, 1979; Rick & Briner, 2000).

# 3.3. Measuring psychosocial work environment factors

The task of measuring the presence of psychosocial factors in the workplace in addition to their potential impacts is not straightforward; not least because of their relative opacity in comparison to other workplace factors, as well as their potential to be subjectively experienced between individuals (Probst et al., 2016). However, there exist some key constructs that have formed the basis for the contemporary understanding of the psychosocial work environment as it is known today. Although these are by no means an exhaustive list, they are the constructs that have been accepted as being central to the modern conceptualisation of the psychosocial work environment and its potential consequences. They culminate in an acknowledgement that a healthy work environment is one that affords individuals adequate levels of control and support in their roles and rewards them fairly for effort expended, while not creating excessive demands and while operating a workplace where individuals are treated in a procedurally fair manner.

# 3.3.1. Demand control support (DCS) model

In the original demand control model of job stress, Karasek (1979) posited that mental strain was the result of the individual having high work demands and low levels of decision latitude (control) over their work situation. Johnson and Hall (1988) then proposed an extension to this, known as the demand control support model, introducing the dimension of social support that had not previously been considered as part of the demand control model. Their findings suggested that those experiencing low levels of social support experienced higher levels of strain/were impacted more adversely when faced with situations of high demand and low control.

## 3.3.2. Effort reward imbalance (ERI) model

Proposing another dimension through which job stress could be viewed, Siegrist (1996) found that adverse cardiovascular symptoms were more likely to occur in conditions that saw a worker expending a high level of effort, while receiving what was perceived as insufficient reward in return.

#### 3.3.3. Job demand resource model

Inspired by both the DCS and ERI models, but with a desire to extend upon these given the view that the job demands and resources that both included were limited (Bakker &

Demerouti, 2017), the job demand resource model was proposed (Demerouti et al., 2001). The JDR model indicated that job demands and resources each contributed to burnout in separate ways, via a dual pathway. Demands were said to relate specifically to exhaustion and so when demands were excessive, they would cause exhaustion via what was termed the health impairment pathway. Conversely, resources were said to relate to engagement (or a lack thereof), and therefore when resources were low, workers would become disengaged via what was termed the motivational pathway. Furthermore, in the years following the emergence of this model, a third proposition was supported; that an interaction effect was possible, where high resources could buffer the potential negative impacts associated with high demands (Bakker & Demerouti, 2017).

## 3.3.4. Organisational justice

Although less pronounced in the psychosocial work environment literature, the concept of organisational justice is also relevant. Initially tested by Elovainio et al. (2002), it was found that those who perceived higher levels of justice around decision-making procedures and the treatment of individuals in the workplace were less likely to report adverse health outcomes (in the form of self-reported health, minor psychiatric disorders and reported sickness absence).

#### 3.3.5. Copenhagen Psychosocial Questionnaire (COPSOQ)

Lastly and most importantly, the COPSOQ tool for measuring psychosocial factors warrants introduction. The Copenhagen Psychosocial Questionnaire, or COPSOQ, draws inspiration from each of the aforementioned constructs that depict aspects of the psychosocial work environment and is the preferred method that this research will employ to measure psychosocial factors. COPSOQ is a widely used tool that encompasses a broad range of factors relating to the psychosocial work. It aims to measure experiences of the psychosocial work environment broadly and holistically, as well as its associated outcomes. One of the factors that makes COPSOQ unique, and perhaps therefore so widely used, is its broad applicability and versatility; it is intended for use by both practitioners in the workplace and researchers and thus, is available in three different lengths to suit these various purposes. Another integral benefit, relevant to this research, is its extensive content that facilitates a holistic and comprehensive measurement to be taken of the participant's psychosocial work environment.

Rather than subscribing to any one theoretical model, such as the popular DCS, ERI or JDR models which measure particular sub-aspects or facets of the psychosocial work environment (Bakker & Demerouti, 2007; Demerouti et al., 2001; Siegrist, 1996), the developers of the tool specifically intended for it to be "theory based, without being based on one theory" (Kristensen et al., 2005, p. 447). The original tool was based on seven prevailing, key theories of psychosocial work factors; "(i) job characteristics model, (ii) Michigan organizational stress model, (iii) job demands-control-social support model, (iv) sociotechnical approach, (v) action-theoretical approach, (vi) effort-reward imbalance model and (vii) vitamin model" as outlined by Kompier and cited by Kristensen et al. (2005).

Validation studies over time have indeed proven that the instrument does align with the key theoretical perspectives on psychosocial risk. For example, Berthelsen et al. (2018) found support for the construct validity of COPSOQ by examining it in relation to the immensely popular and highly-utilised job-demand-resource model of job strain. When categorising the relevant scales within COPSOQ into the categories of demands and resources and capturing outcome variables, it was found that the demands and resources measured by COPSOQ did follow the expected paths. That is, broadly speaking, demands could lead to increased negative outcomes but resources could lead directly to positive outcomes, while also indirectly alleviating negative outcomes by reducing the burden posed by demands. Overall, congruent validity was also found for COPSOQ by comparing it to the ERI model that measures efforts exerted by the employee in relation to the rewards they feel that they receive in return. Nuebling et al. (2013) found that the ERI and COPSOQ (I) measures were largely consistent in their results when compared across a homogeneous sample (over the course of a population-based study, either the ERI or COPSOQ questionnaires were distributed to participants in alternate weeks). However, it did appear that COPSOQ had superior predictive ability in terms of outcomes such as burnout. This is likely to be attributable to COPSOQ's more comprehensive and broad nature in terms of its content (Nuebling et al., 2013). This indicates that COPSOQ is consistent and compatible with two key popular and modern measures in the area of psychosocial risk, but also suggests that COPSOQ appears to have an advantage over these due to its wider scope.

Another strength of COPSOQ is its developments over time, which have seen the tool adapted to cater for the changing world of work through adjustments to its content. A recent revision has seen the creation of the third version of COPSOQ, or COPSOQ-III. This revision was the subject of a lengthy and comprehensive process undertaken by the international COPSOQ network, out of a common acknowledgement that changes to the world of work and certain trends necessitated a more current edition of the tool that could be sympathetic to these trends. As noted by Burr et al. (2018), the following new dimensions were introduced:

- Control over working time (reintroduced)
- Insecurity over employment
- Insecurity over working conditions
- Harassment in social media
- Illegitimate tasks
- Work engagement
- Demands for hiding emotions (reintroduced)

The other novel aspect of the latest version is the distinction of each item as either being a core, medium or long (version) item. This concept of core items is new, and denotes that at a bare minimum, all national adaptations should contain items marked as "core" – as well as any items marked "middle" and "long" that are deemed relevant to the national context. A key priority of the COPSOQ network, and in turn an advantage of the tool, is the encouragement of international validation to allow for comparisons (Burr et al., 2018). The importance placed on all national versions including at least these core dimensions was intended to facilitate this international comparability, with a view to increasing the knowledgebase of international validation studies.

Although previous work on multiple job holding, such as the studies noted above in section 2.5.5., have considered aspects of their psychosocial work environments, no studies have looked at the psychosocial work environment comprehensively in its entirety in relation to multiple job holding. Therefore, given its robustness and comprehensive nature, COPSOQ III provides an appropriate means to comprehensively capture psychosocial work environment factors of multiple job holders. Through this, these psychosocial factors can be considered

alongside other individual, situational factors of multiple job holders, in determining whether different types of multiple job holder can be detected based on their situations (i.e. these factors).

# 3.4. Literature review summary

#### 3.4.1. Chapter summary

Part two of the literature review, presented in this chapter, has focussed on the concept of the psychosocial work environment. The psychosocial work environment refers to factors that encompass the design, organisation and management of work. Psychosocial hazards arise when psychosocial factors are experienced negatively, and can cause adverse outcomes both for physical and mental health. In light of the harm that these hazards can cause, there is obvious interest in being able to measure psychosocial factors in the work environment (section 2.8), as part of an effort to manage psychosocial risk – the likelihood that individuals will be harmed by these psychosocial hazards. Key theories relevant to the measurement of psychosocial factors and their associated risks are discussed (sections 3.4.1 – 3.4.5). Particular focus is given to the COPSOQ measurement tool (section 3.4.5) given that its highly comprehensive nature and ability to measure elements of all previously discussed psychosocial factor frameworks make it the preferred psychosocial factor measurement tool for this research.

#### 3.4.2. Research agenda

As outlined in the previous chapter two, particularly in sections 2.4 to 2.6, past research on the practice of multiple job holding has produced variable results on key elements of the practice. The research depicts a vast array of motives and divergence in the outcomes (consequences) experienced. From this, there have been factors identified that appear to influence the outcomes experienced by those who partake in the practice. This variability is highly problematic, particularly if one is seeking to understand the practice of multiple job holding as a whole and plan a response accordingly. Those who aim to undertake research on this population, who encounter these individuals in practice (in the workplace) or who are responsible for relevant policy responses will be seriously hampered in their efforts due to this variability. Such individuals are likely to be interested in whether the practice of multiple

job holding is a positive or negative one. Yet, there remains a lack of knowledge around the diverse types of multiple job holder that exist and how their experiences may differ. Accordingly, it is essential to develop an appropriate conceptualisation that can be used for such purposes — one that is meaningful and nuanced, that can capture and advance understanding around the palpable diversity of this population.

In order to develop such a conceptualisation, it is useful (and arguably necessary) to understand what causes the experiences of multiple job holders to be positive or negative. Accordingly, there is value in investigating the factors that may shape these diverse experiences. It has been suggested that the heterogeneity of the multiple job holding population may be responsible for the divergence of outcomes. Therefore, investigating whether there may exist different "types" of multiple job holder, based upon the factors inherent in their situations, may present a fruitful means through which to attempt to better understand why their experiences tend to differ so starkly.

To this end, the situational factors of multiple job holders that may be relevant and have some influence on multiple job holders' experiences, need to be identified. In addition to factors that directly represent the individual's circumstances of multiple job holding (e.g., reason for doing so, whether doing so by choice or not, hours of work) the concept of the psychosocial work environment (PSWE) represents an area underexplored in relation to multiple job holding. Furthermore, it is a field that can logically be suggested to be relevant to the holding of multiple jobs. As psychosocial factors relate directly to the design and management of work, they are an appropriate means through which to measure one's experience of a work environment. Holding multiple roles inherently creates a starkly unique work environment; the worker is literally juggling their duties to multiple employers.

In addition to the appropriateness of using the PSWE as a way to capture individuals' experiences at work, combining the study of multiple job holding with the concept of the PSWE presents a unique, under-explored opportunity. Although investigation around the prevalence and impacts of psychosocial factors in the workplace is increasing and such studies have been able to provide insight on how the various psychosocial work environment factors can impact individuals (and their employing organisations), there has been little

acknowledgement of the unique work environment that is created by multiple job holding. As previously mentioned, psychosocial factors can be experienced in both positive or negative (or even neutral) ways. Thus, it may be that this research uncovers factors that can produce a positive psychosocial work environment in the context of multiple job holding.

Accordingly, investigation should be undertaken that utilises both general situational factors of multiple job holders (e.g. their reason for doing so), and their psychosocial work factors. By capturing these situational variables, it can be determined whether – as expected – different "types" of multiple job holder exist, based on these variables. If distinct types are indeed identified, outcome variables should then be tested across the different types. This will then provide insights as to whether the existence of different types of multiple job holder can explain the diversity in experiences of this population.

The comprehensive nature of psychosocial factors means that many variables will need to be captured. Given this, it would be impractical to measure all of these variables for each of the participants' multiple jobs. As outlined more fully in chapter four, doing so would result in a prohibitively long survey, and would also be problematic for analysis. Therefore, these variables should be captured in relation to only one of their jobs – their "main" job. However, there exists one specific issue that may act as a barrier to effectively and appropriately undertaking this investigation: the main job issue outlined previously in section 2.3.5.3. Therefore, as part of the aforementioned investigation, this main job issue should be explored further as it pertains to the ability to collect meaningful data on the situations and experiences of multiple job holders. If an arbitrary criterion for participants to select their main job was instead used, the research proposed for the above investigation would not faithfully be working to advance understanding around the heterogeneity of multiple job holders – as it is intended to do.

# 3.4.3. Research objectives

Following the above outline of the agenda for the present research, the overarching research objective for this thesis is:

To explore the heterogeneity of multiple job holders in order to develop a meaningful, nuanced method for conceptualising these individuals, which can be utilised for future research, policy development and practice

The sub-objectives set in order to effectively achieve the overarching objective, above, are as follows:

- Study one: To determine the most appropriate method for directing multiple job holders to select a main job, by investigating which factors are taken into consideration by multiple job holders when faced with such a task.
- Study two: To investigate why the experiences of multiple job holders differ, through the achievement of two sub-objectives:
  - A) To determine whether different "types" of multiple job holder can be identified based upon their situational factors, including their experience of the psychosocial work environment
  - B) To investigate whether the outcomes experienced differ between the different types of multiple job holder identified

# Chapter 4: Study 1 – main job issue

## 4.1. Introduction & study rationale

Traditionally when an individual answers questions about one job, they are asked to select one, "main" job in relation to which they will respond to the questions – as outlined in section 2.2.4.3. This is something done generally out of convenience – particularly with the use of quantitative tools, where it would be impractical and perhaps not even feasible to ask individuals to respond to questions about each of their multiple jobs. This selection of one job is also important as analysis based upon values for each of one's multiple jobs would likely be cumbersome and possibly, prohibitively complex. Indeed, in the main study two that was initially intended to be the first study for this thesis, data were being collected on numerous psychosocial factors from participants' work environment.

Thought was given to whether it would be feasible to collect these factors for each of the participants' jobs. However, beyond resulting in an impractically long questionnaire, there did not appear to be a means for analysing these multiple values in a way that would be conducive to the research objectives. Any attempt to add the values to be a summed total would not result in valid, comparable data where participants had different numbers of jobs. Averaging the values for each participant could result in the loss of nuance in the data. That is, in a study that sought to meaningfully understand how multiple job holders experience the psychosocial work environment (as part of their situations), "averaging" the psychosocial factors from a MJHer's multiple jobs seemed contradictory to this and to my pragmatic epistemology that drove me to seek the best method for solving the problems at hand (Wicks & Freeman, 1998). Furthermore, even looking beyond these potential issues, the very real potential that such a long survey tool would impact completion rates and/or data quality could not be overlooked (Galesic & Bosnjak, 2009; Liu & Wronski, 2018). These issues were not conducive to achievement of the objective of this research (to develop a meaningful, nuanced conceptualisation of multiple job holders). Therefore, it was deemed necessary to direct participants to select one job; a "main" job, as it is often known.

Therefore, I was required to select the method to be used for directing participants to select their main job. I referred to practices adopted in previous research for this. The most

traditional method, often utilised by Government statistics among many others, appears to involve asking individuals to treat the job in which they worked the most hours in the past week as their "main" job (Hipple, 2010; Hirsch et al., 2017; Hirsch & Winters, 2016a; Piasna et al., 2020; Renna, 2006; Webster & Edwards, 2019). However, the other ways in which this distinction has been made are:

- To ask the individual to treat the job in which they have worked the longest as their "main job" (Bamberry & Campbell, 2012)
- To ask the individual to treat their highest paying job as their "main job" (University of Essex Institute for Social and Economic Research, 2018).
- To ask the individual to self-select their "main job" with no qualifiers (Doucette & Bradford, 2019; Kottwitz et al., 2019).

While these may be valid ways of selecting a main job, depending on the circumstances of any given situation, arguably using criteria around the most hours worked, longest tenure or highest paying job may be somewhat arbitrary (Kottwitz et al., 2019, p. 55). This may also be somewhat dependent upon the context in which one is being asked to select a "main" job; i.e. what is being measured in relation to the main job. Often, this is done in relation to measurement of health or wellbeing outcomes, or related aspects of their own personal experience (Bamberry & Campbell, 2012; Bouwhuis et al., 2018c). While it does seem possible that the job in which one works the most hours (the most prevalent main job indicator) could impact them the most, this is not certain. Rather, there may be value in instead asking multiple job holders to select a main job themselves – not based on arbitrary criteria that is pushed upon the individual by an external party, i.e. the researcher. This practice was undertaken by Kottwitz et al. (2019). They asked individuals to identify which of their multiple jobs they considered to be their "main" one, and to then explain the rationale for their choice. However, this still creates variability – because the term "main" could mean different things to different people. This is a key issue identified by Renna and Oaxaca (2006, p. 11), who note that there would be problematic ambiguity in allowing individuals to self-select their main job. Indeed, this was evident in Kottwitz et al. (2019)'s findings. Individuals selected their main job on the basis of:

- The one they spend the most time in
- The one with the most contractual entitlements/stability

- The one providing the most income
- The one that brings the most satisfaction
- The one they feel most obligated towards
- The one they have been in the longest
- The one in which they feel they achieve the most (are most effective)

Conversely however, some could not select one main job – due to both jobs taking a similar amount of time, or both providing a comparable sense of achievement. There is clearly divergence in various individuals' rationale for selecting a main job – supporting the idea that individuals perceive the idea of a "main" job differently. Therefore, it is worth exploring this concept further among multiple job holders.

As suggested above, it is argued that traditional methods of selecting a main job may be arbitrary. Furthermore, they may not best serve the purposes for which investigation is frequently undertaken — most commonly to gain a deeper understanding of multiple job holders and their experiences. These methods of choosing a main job are overwhelmingly driven by the researcher, and little is understood about how multiple job holders themselves may perceive their multiple jobs, particularly in relation to regarding one of them to be a "main" job over the others. Specifically, it is unclear which factors may be significant to the individual in the decision-making process around which of their jobs would be a "main" one — or if they are even able to select only one. To ensure the robustness of the subsequent study two, it was deemed important to first explore this — the *main job issue* — to determine the most appropriate method of main job selection for study two. To this end, the present study sought to address the following research objective:

To determine the most appropriate method for directing multiple job holders to select a main job, by investigating which factors are taken into consideration by multiple job holders when faced with such a task.

The following chapter outlines the precise way in which this research aim was addressed, commencing with a discussion of the overall research design. The participants included in this study and the way in which they were sampled and recruited is then covered. This is followed by a discussion of the materials employed and the procedure for using these, as well as the data analysis technique. The findings are then outlined, followed by a discussion of the

implications that these findings carry and a conclusion, identifying how the findings from this study will inform the subsequent study.

# 4.2. Methodology

#### 4.2.1 Research design overview

As outlined in section 1.2, this research was undertaken from the perspective of a pragmatic worldview – that seeks to, above all else, address tangible problems using the best research method available for the specific problem faced. The problem in question here was the main job issue (outlined in the previous section) and so the methodology was developed in such a way that would most effectively gather insights to aid in addressing this problem. Accordingly, a qualitative study heavily focused on eliciting rich insights around how multiple job holders assigned meaning to their multiple job situation was deemed to be most appropriate for achieving this study's research objective. To others who may definitively position themselves as either interpretivists or positivists, the overall research trajectory may seem paradoxical. This may be especially so given that at this stage, such importance is being placed on individual multiple job holders' perceptions, while at a later stage in study two data were objectively collected from multiple job holders using a quantitative study, employing psychometric scales. However, from a pragmatist's perspective, this trajectory is indeed logical. Qualitative investigation was required to gain a better understanding around the main job issue (Cresswell & Poth, 2016). This had to be done in order to improve the fidelity of the subsequent quantitative study – in that the most appropriate method for determining which job respondents should be asked to focus on as the main job when answer questions would be determined. Before large-scale quantitative investigation could be undertaken, with the aim of better understanding the experiences of multiple job holders, the main job issue had to be resolved first.

The present study was intended to address this clear methodological issue regarding the selection of one job in relation to which multiple job holders would focus on when responding to questions about their work situation. To do this, it was deemed necessary to explore the thought processes undertaken by multiple job holders when they are asked to select a main job. The most appropriate design for this was an exploratory, qualitative interview study, comprising of two distinct segments. The first of these segments involved the presentation of

brief vignettes outlining various (fictional) multiple job holding situations. For each of these situations, respondents were asked to identify which job they regarded as the hypothetical individual's "main" job (along with discussion of the rationale for each response). In the second segment, semi-structured interview questions were posed to respondents around their various jobs, which of these they regarded as their main job, and the reason for their choice.

#### 4.2.2. Data collection contextual considerations: COVID-19 pandemic

While the overall direction and design of this study was conceived prior to the COVID-19 outbreak, the substantive and final stages of research design and the entire stage of data collection unavoidably occurred during the height of the pandemic response. Locally, this time saw phased lockdown controls, resulting in many organisations not being able to operate, or at least having to operate very differently as the situation progressed and cautious attempts were made to revert to pre-pandemic state. For workers, the implications of this included widespread job loss in some sectors, or the reduction in hours and income for many, in addition to the extensive insecurity of future employment prospects (Walls, 2020).

Furthermore, the proportion of individuals working from home significantly increased, with around 29% of the workforce able to work from home (Olsen, 2020). This presented its own challenges in many ways, including the blurring of work-home boundaries (Cooke, 2020). A wage subsidy was made available by the Government to all employers who experienced a COVID-related revenue decline of 40% or higher, to enable employees to remain employed by their organisations during downturn or closure due to the lockdown measures (Work and Income New Zealand, 2020). This meant that while lockdown measures were in place, employees were (in theory) still being paid, even if they were not undertaking their work – although they may have been receiving lower income than usual. 58% of jobs received the initial wage subsidy from the first round of lockdown measures, while 16% of jobs received the wage subsidy extension provided after a resurgence in August (Ministry for Social Development, 2020). Data collection for this study commenced in June 2020, when the country's initial response measures were starting to be relaxed, and continued until August, when a second lockdown was announced after a resurgence of the virus. The final four interviews, in fact, took place in the week immediately following the return to lockdown, and

some were delayed as a result. In concise terms, the time period for the study can be summarised as a time of overwhelming uncertainty.

Globally, many research projects were being disrupted and either postponed or terminated altogether, due to an inability to continue research activity in-person (Akard et al., 2020). The use of technology, specifically for participant recruitment and data collection, provided unique and invaluable opportunities for some studies to continue – in a way that adhered to physical distancing measures and ensures the safety of researchers and participants alike (ibid).

Although the present study did not relate directly to illness or physical wellbeing, it was inevitably impacted to at least some extent by the circumstances of the time. Most evidently, this related to the cessation of employment, or in some cases, the total loss of employment. As of the commencement of data collection in June<sup>3</sup> 2020, the national unemployment rate was at 4%, while underutilisation was at 12% - compared to 3.9% and 11%, respectively, as at the same time in 2019 (Statistics NZ, 2019b, 2020a). However, it is worth noting that the relative stability of the unemployment rate in June was likely in part due to wage subsidies in place preventing redundancies from occurring at that point in time. By the September quarter when wage subsidy provisions were ending, unemployment had risen to 5.3% - an increase of 32.5% from the previous quarter (also the duration of data collection), and the largest quarterly increase on record (Statistics NZ, 2020b). Although there were not official statistics available around any change to local multiple job holding rates, it was expected that the general increase in job loss may have resulted in fewer people holding multiple jobs than there would be in typical circumstances. As suggested by Spurk and Straub (2020), those in more precarious forms of gig work (which can often form part of a multiple job holding situation) such as rideshare drivers were likely to be experiencing work cessation due to COVID. However, such workers were potentially not being accounted for in official unemployment statistics or associated financial aid, due to the nature of their work. This was the most obvious implication for the present study; that fewer respondents may have held

<sup>&</sup>lt;sup>3</sup> The figure given here is for the quarter ending June 2020.

multiple jobs, and furthermore, that fewer respondents may have been currently working at all. In acknowledgement of this, the inclusion criteria for the study was slightly relaxed, to avoid excluding individuals who may have at the time been on hiatus from work, due to lockdown, and/or those who had been made redundant from one, or more, of their jobs altogether.

While the circumstances of the time undoubtedly shaped the research context to some extent, it appeared that the most significant impact for the study came from the implications that the situation had on employment. Specifically at the time of data collection, it appeared that this was primarily around:

- the decrease in labour market participation, due to redundancies
- possible increase in workload for those working in essential industries e.g.
   healthcare, food processing & manufacturing, supermarket workers
- employees working from home, where they were able to
- temporary cessation in work activities from those who were unable to work from home, but who had not been made redundant (including those receiving the wage subsidy)
- increased uncertainty around future job security

The above implications required consideration in three ways. Firstly, the research had to be conducted, and data analysed, with cognisance that responses may have been impacted by the current climate. Secondly, the circumstances may have impacted upon certain respondents' abilities to participate in the research – e.g. some may have had more time than usual and be more able to participate, while some (particularly essential workers) may have less time and therefore be less able to participate in the research. Furthermore, increased requirements to stay at home may have meant that respondents had to balance participation with home/family commitments. Therefore, flexibility was required on the part of the researcher – accepting the possibility that interviews could be interrupted by family members, and that interviews may have had to be rescheduled – even at short notice. This did occur; three participants were interviewed with young children/siblings in the room or trying to enter the room, while another had to reschedule their interview at the last minute

due to childcare issues connected to working from home. None of these issues caused any significant problems and were able to be accommodated.

Lastly, the circumstances at the time could have affected eligibility to participate in the research – depending on the inclusion criteria used. In the short term, the temporary cessation of work activities for many during COVID alert levels 4 and 3 (the most stringent levels of 'lockdown' utilised in New Zealand) may have meant that inclusion criteria requiring individuals to "currently" be working in multiple jobs could have excluded a significant proportion of the multiple job holding population – as one or more of individuals' workplaces may not have been open/operating. Even if individuals were not working but still receiving income from an employer (i.e. through the wage subsidy), they may not have deemed themselves to be currently "working" and thus would perhaps not self-identify as currently holding multiple jobs. Furthermore, an increase in unemployment due to redundancies may have meant that fewer individuals were holding multiple jobs. This could have resulted in a reduction in the number of eligible participants – i.e. those who were currently holding multiple jobs. Therefore, the decision was made to relax the inclusion criteria for the study somewhat – as discussed further in section 4.2.3.

#### 4.2.2.1. General principles of disaster/crisis research

Disaster research, as a field, involves undertaking research with participants who have experienced some form of crisis or disaster, first-hand (Sayre, 2006). Although the present study was not in itself intended to focus on crisis/emergency contexts, it became inevitable that the principles of doing research in a crisis had to be considered – given that the research at hand could not be deferred until such a time when the COVID-19 pandemic no longer affected society. The situation at the time of data collection (and still later, at the time of writing) was fairly unique, at least in recent times/during the time in which I have been in the workforce and conducting research. The search for relevant literature to provide guidance on undertaking research in these unique circumstances predominantly produced research for which the focus/question(s) under study directly related to disasters – including terrorist attacks, natural disasters or public health emergencies. While this was not the case for the present study, the disaster research field seemed to be appropriate to draw from. Principles that emerged from this aforementioned search were therefore being applied to the present

study, namely, how to continue research that was planned prior to the current crisis situation, (but) that was not directly investigating the crisis situation.

A useful, local example to draw on was that of the Christchurch earthquakes, in 2010-2011. Researchers undertaking investigation in this context emphasised the need for flexibility and adaptability in the planning of research – given that circumstances could change quickly and unforeseen issues could arise (Hall et al., 2016). Research methods should also not inconvenience participants – care should be taken to ensure that they are "user-friendly" (Sayre, 2006, p. 231). There were also important ethical considerations around undertaking research in a crisis context, that also required consideration for the present study - even though it did not seek to investigate the crisis itself, and did not contain objectively intrusive or personal content. Most importantly, it was key that participants were not harmed or disadvantaged in the course of the research. In itself, this is a basic tenet of research ethics – but it became even more relevant in a crisis situation, given that participants were more likely to be vulnerable and marginalised by the situation and events occurring around them (Sapat & Esnard, 2017). Hall et al. (2016) suggests that researchers should not benefit from the research more so than their participants, or at least that the balance of power should be distributed equally between the parties. To this end, in addition to offering an incentive for participation, the participant's convenience and comfort was considered throughout the process. This included offering flexibility in interview times – being willing to be available at a time most convenient to participants, including weekends. During the interviews, it was also observed often that participants enjoyed talking about their multiple job holding situations – and would often discuss their history of holding multiple jobs in relation to their lives in quite some detail, willingly and unprompted. While these digressions may not have related closely to the study objectives, they provided interesting insights into the broader practice of multiple job holding, and it was very clear that these participants were enjoying sharing their stories. For this reason, participants were never redirected back to the questions or discouraged from speaking freely. This impact may have been enhanced because interviews were taking place during a time when in-person social contact was still fairly scarce, if not explicitly limited. Many participants also commented that they enjoyed the cognitive exercise - such as Participant Five, who expressed: "it's actually good fun to me...I'm enjoying it."

# 4.2.2.2. Appropriateness of vignettes for research during a crisis

In addition to their other advantages, as outlined in section 4.2.4.1.1., vignettes had clear potential as an appropriate tool for conducting research during atypical situations – such as the COVID-19 pandemic.

It is widely acknowledged that vignettes provide a useful means of studying matters that may be difficult to measure; they are "particularly useful for situations that are rare or hard to measure in reality." (Sapat & Esnard, 2017, p. 134). Often, these difficulties are due to topic sensitivity or an abstract/complex phenomena (Barter & Renold, 2000). However, this was also true in the context at the time of study design. Circumstances at the time were starkly different from what would be regarded as "normal" life, and it certainly appeared as though this would be the case for some time to come. At the time of study design, and even months later at the time of writing, it was not clear how long it could have been until circumstances returned to anything resembling "normal." In any case, even a "normal" state in the future would likely be different to what it was pre-COVID. In light of this, vignettes offered the ability to distance a matter from circumstances at the time to some small extent. Although, undeniably, a study and its participants will still be impacted by the context in which it is taking place, vignettes can be carefully constructed by the researcher to reflect a different reality. Instead of reflecting directly on their own situation or own experiences – which will almost inevitably be altered in unprecedented circumstances - participants are instead responding to a hypothetical situation. Because the researcher creates the vignette themselves and manipulates the content according to what they want participants to focus on and/or respond to, they are likely to possess greater control over the research process. While participants will still be likely to relate the vignette to their own situation – as is to be expected, if the vignette is relatable and realistic (Skilling & Stylianides, 2019) – the researcher has the power to frame how this reflection takes place, using the vignettes.

Consider hypothetically, for example, a participant being asked about their own current multiple job holding situation. Let us consider that the participant usually has two jobs, although they have not worked in one of these jobs lately, due to the level four alert lockdown. They have still been able to work in their other job remotely, from home. If they were asked which of their jobs they regarded to be their "main" job, in the current situation,

they may be likely to regard the job in which they have still been able to work remotely as their main job. Even if this hypothetical participant's circumstances were different – e.g. both of their jobs allowed them to work from home, or neither of their jobs did – their response to this "main job" question would be inevitably shaped by the current situation. Now, consider instead that the participant has been presented with a hypothetical situation – a vignette – of another multiple job holder. The vignette contains numerous contextual clues (none of which are related to COVID/a crisis situation) upon which the individual can base their selection of the character's main job. Furthermore, when introducing the vignette, the participant could be explicitly instructed to consider the vignettes separately to the current COVID context – to imagine them taking place before/separately to the current events. Given that the situation is already fictional, it may be easier for participants to envision them separate to the current context (easier than, for example, asking them to imagine their own circumstances separately to the current context).

Although the use of written vignettes (like those in the present study) could not be found in relevant disaster research literature, some comparison can be made with the work of Sayre (2006), who used video vignettes to explore the purchasing decisions of individuals who had lost their homes and possessions in a mass bushfire event. The videos depicted actors, of similar demographic to participants, discussing their fictional scenarios of purchasing belongings, post-disaster. The authors found that this method successfully prompted discussion from participants; many of whom appeared to closely identify with and even show concern for the fictional characters. In this way, a highly sensitive topic was able to be explored in a way that was less emotionally taxing on respondents than other traditional methods, such as interviews or focus groups, may have been. Although the present study was not undertaken in such a sensitive context or on such a sensitive subject, it appeared that the use of hypothetical vignettes could offer a non-invasive, more appealing experience for participants.

# 4.2.3. Participants

Although the current study did not subscribe to the traditional, quantitative, experimental vignette methodology, principles of this approach were still considered – given that this study was intended to inform subsequent quantitative investigation. One key principle was the

sampling strategy to be employed. In the case of experimental vignette studies, it is recommended that the sample used should be generalisable (Aguinis & Bradley, 2014). Purposive sampling was used, with the goal of achieving a sample that was broadly representative of multiple job holders in New Zealand; i.e. with similar gender balance and spanning industries identified as being more prevalent in multiple job holding arrangements where possible. However, flexibility was required with this — as the COVID-19 alert level at the time of data collection did appear to impact the availability of some professions (namely those in essential industries such as healthcare and supermarkets).

The unusual context within which the study was conducted required consideration in regard to sampling – particularly the inclusion criteria used. As outlined above in section 4.2.2, the COVID-19 pandemic posed fairly significant implications for labour markets – among numerous other aspects of society. It was expected that fewer people may hold multiple jobs at the time of the study than they would have pre-COVID. As a result, recruitment of suitable participants could have been more difficult – especially with stricter selection criteria, such as a requirement to currently be holding multiple jobs. Therefore, the selection criteria was slightly relaxed from what it may have otherwise been in a different context.

Participants were sought who had held more than one job at any point within the past six months, for a duration of at least four weeks or more. Extending the timeframe within which participants must have held multiple jobs to the past six months meant that those who may have only recently ceased multiple job holding, due to the current circumstances, were still eligible. The six-month timeframe was conducive to ensuring participants still had a somewhat recent experience of the practice and so would be more able recall their experience. The minimum duration of four weeks excluded those who may have been engaged in more than one job only temporarily, as a transitional measure – e.g. fulfilling the required notice period of one job before moving to another. Four weeks is commonly used in New Zealand as the duration of the notice period that an employee must give to their employer before leaving to commence another job – thus this was a logical minimum duration to employ for the present study (Ministry for Business Innovation & Employment, 2020).

Given that the study was intended to explore this issue in the New Zealand context, the selection criteria also included that the individual usually worked in New Zealand. The qualifier "usually" was used so as not to exclude those who may at times be required to travel for work, or who may undertake some work online, while still being primarily employed in New Zealand. Lastly, participants were required to be at least 18 years of age.

Participants were recruited through social media and other electronic channels, such as email listservs, where relevant parties were willing to distribute the study recruitment advertisement. As well as general social media advertisement, this was also done through union networks. Other non-union groups were also approached to share the recruitment advertisement through their social media/electronic channels. These groups were primarily student unions (to access the student population, who appear to be predisposed to holding multiple jobs) and a Facebook group set up for rideshare drivers in New Zealand - an emerging population that also seemed predisposed to holding multiple jobs, with rideshare driving being one of their jobs. This range of methods was used to gain a widespread cross section of multiple job holders in New Zealand as far as possible. This use of electronic means was important and realistically, the only viable channel at the time when New Zealanders were still being asked to stay home as much as possible. Many workplaces were still closed or had strict distancing measures when employees were at work, while universities were still facilitating online-only learning for most students – so physical recruitment strategies, such as poster drops, were not possible at present. Furthermore, for most of the study planning stage, I was required to work from home and not allowed to access my office.

To encourage participation, participants were offered a \$10 gift card. This was a means of acknowledging participants' time – particularly as multiple job holders have previously been reported to be busier, on average, than workers with only one job (Marucci-Wellman et al., 2014a; Marucci-Wellman et al., 2016).

The final total of participants was 15 – at which point saturation was deemed to have been reached, and thus recruitment and data collection ceased. This figure was decided upon through Guest et al. (2020)'s method – as outlined in more detail in section 4.2.6 – which

determined that after 15 interviews the rate of new themes emerging was sufficiently low to signal saturation had been reached.

#### 4.2.4. Study materials and procedure

The following section combines discussion of the materials (i.e. vignettes and semi-structured interview questions) employed in the present study, interlinked with the procedure to be followed for delivering both the vignettes and semi-structured interview questions. These two elements are combined primarily due the nature of the framework for vignette research that is followed (Skilling & Stylianides, 2019). Outlined fully below in Table 5, the framework offered comprehensive guidance for all relevant considerations for vignette research – albeit in a way that combines development of the materials to be used, as well as the procedure that should be followed when using the materials in question.

#### 4.2.4.1. Segment 1: vignettes

Vignettes are "short descriptions of a person or social situation which contain precise reference to what are thought to be the most important factors in the decision-making or judgement-making processes of respondents" (Alexander & Becker, as cited by Weber, 1992, p. 138). All vignettes generally have the same core features – in that a hypothetical situation is presented to participants, in order to prompt their response to questions that require a decision of some form to be made (Schoenberg & Ravdal, 2000). However, beyond this, the researcher is able to craft the vignettes in a way that is conducive the achievement of their own unique research objectives and context.

The first segment of this study utilised vignettes as a means to prompt participants' thought and discussion of the main job issue — specifically in relation to the factors that they considered when asked to select one, main job. The remainder of this section will offer an analysis of the use of vignettes in research, followed by a comprehensive outline of all issues considered in the development and implementation of the vignettes.

#### 4.2.4.1.1. Vignette advantages

Vignettes have, on multiple occasions, been praised for their role in studying behaviours or perceptions that may not be clearly visible or observable (Aguinis & Bradley, 2014). They allow this by facilitating discussion, on the hypothetical situation, that can reveal underlying perceptions or decision-making processes (Poulou, 2001; Skilling & Stylianides, 2019).

"Vignettes cut through complex situations and allow for certain kinds of questions to be asked." (Skilling & Stylianides, 2019, p. 13). Researchers can "delve into an area that may not be foremost in people's thoughts, but nevertheless is worthy of consideration." (Schoenberg & Ravdal, 2000, p. 69). They can be ideal for facilitating discussion on a subject that may be highly vague and abstract or have subtleties/peculiarities, and thus would possibly be difficult to directly question individuals about – or even collect data on at all (Goss, 2013; Martin, 2004; Torres, 2009). Furthermore, the use of vignettes in this way can save time. Where a complex issue may have otherwise required extensive explanation or priming before it could be discussed, having the issue depicted in a vignette can cut directly to the crux of the issue (Torres, 2009). Asking about the issue at hand – selecting a main job – perhaps could, in theory, be done using a questionnaire or similar. However in practice, this would likely require substantial prior explanation to participants – and even then, they may still struggle to answer in what is essentially a "vacuum," without context or examples (Finch, 1987). This is perhaps best summarised by Soydan and Stal, as cited by Torres (2009, p. 94):

"...certain attitudes and behavioral patterns are less accessible and less assessable than others. The main concern of the researcher who is trying to measure interpersonal attitudes, judgments, beliefs and feelings is to avoid disturbing the attitudes, judgments, etc. in the process of describing them."

It has also been noted that vignettes often seem to be more engaging and interesting as a research tool — as opposed to more standard means of questioning (Stravakou & Lozgka, 2018). Participants have even been known to become invested in the storylines and hypothetical characters they are presented with (Barter & Renold, 2000). Higher levels of engagement are conducive to producing higher quality, reliable data and insights (Stravakou & Lozgka, 2018).

Vignettes provide an opportunity to explore issues and hypothetical events beyond only those which participants have directly experienced first-hand (Finch, 1987; Schoenberg & Ravdal, 2000). In this way, participants are able to draw on their own valued position as someone who holds (or has recently held) multiple jobs – given that their perspective is desired in order to address the main job issue – while offering data that goes beyond merely their own multiple job holding situation through their responses to the vignettes (Barter & Renold,

2000; Finch, 1987). This supports the study's objective – to understand the basis upon which multiple job holders would select a main job – in a particularly efficient way (Martin, 2004). The data gathered by posing multiple vignettes to each participant was far richer than the data that would have been gathered as a result of asking each participant only about their own situation, i.e. their own main job. In a sample size of 15, with each participant responding to four vignettes and their own situation, this generated 75 data points as opposed to only 15.

#### 4.2.4.1.2. Vignette disadvantages

Inevitably, no one research method is infallible – and each method will merely provide another angle from which to capture some evidence of social phenomena (Hughes & Huby, 2004). Vignettes offered an angle that here is suitable to develop an understanding, from one perspective, of how "main" jobs may be selected. However, they alone would not provide a complete illustration. Accordingly, short, semi-structured interview questions were also utilised to provide another angle – one directly relating to the individual's own multiple job holding situation. Using vignettes alongside questions in this manner is fairly popular, as this allows for information gathered from vignette responses to be confirmed, clarified or justified, as well as enabling for any issues of interest that are raised by the vignettes to be investigated further (Skilling & Stylianides, 2019; Torres, 2009).

At times, participants may be reluctant to respond to questions on the vignette, feeling as though they are not expert enough; that their perspective is not important or "correct" to respond in relation to the hypothetical character's predicament (Schoenberg & Ravdal, 2000). In order to prevent this or overcome it in the event that this issue did arise during interviews, as recommended by Schoenberg and Ravdal (2000) in addition to Stravakou and Lozgka (2018), participants were assured at the beginning that their own opinion/perspective on the questions was sought above all else, and that the process did not seek to "assess" their responses. They were reassured that there was no correct or incorrect answer. This was also repeated throughout the interview if participants appeared hesitate to answer due to uncertainty of their response.

In the words of Torres (2009, p. 108) when summarising potential pitfalls of vignettes; "just like any other method it is all a question of being reflexive enough so that the study design can tackle the challenges that vignette construction and deliverance can pose."

# 4.2.4.1.3. Using vignettes to manipulate factors

A key strength of vignettes is the ability for the researcher to carefully craft each one, deciding which factors they want to emphasise, in line with the objectives of the research (Weber, 1992). Factors can then be deliberately varied/adjusted across multiple vignettes, to assess how participant decision-making evolves or varies when presented with a different set of factors (Skilling & Stylianides, 2019). As noted by Aguinis and Bradley (2014, p. 361), this can be used to "show the effects of a manipulation within one individual and is useful in terms of uncovering judgement processes of a single individual." In the current study, for example, all vignettes contained a variety of elements that could be indicative of a "main" job – such as the job with the most hours worked. The vignettes had some common elements, but all were unique in that none contained completely identical set of elements. In practice, asking participants to select which job they perceive to be the "main job" in each vignette, and why, provided insight around the importance they gave to each element.

Given that this resulted in each vignette containing a fairly complex variety of elements, it was essential that the creation content of each vignette was systematically mapped – i.e. the elements present in each vignette should be clearly documented by the researcher (separate from material given to participants). This transparency is important, as it allows those external to the researcher (i.e. readers) to clearly understand the basis upon which each scenario was designed (Aguinis & Bradley, 2014). This outline is provided below in Table 4.

Table 4: Summary of vignette content

Main job indicator	Joe	Luisa	Wiremu	Suzie
Most income		<b>✓</b>	<b>√</b>	<b>√</b>
Most time taken	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Longest tenure	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Most enjoyment/satisfaction	1	1	<b>/</b>	<b>J</b>
Most security			<i>,</i>	<i></i>

Most entitlements	<b>√</b>			
Obligation to others	<b>√</b>		<b>√</b>	<b>√</b>
Long term goal	✓	<b>√</b>		
Most learning/upskilling		<b>√</b>		
Most energy draining			<b>√</b>	
Most rewarding			<b>√</b>	<b>√</b>

## 4.2.4.1.4. Using vignettes to inform questionnaire design

Vignettes have previously been utilised to explore issues pertaining to the content of questionnaires – particularly in relation to overcoming measurement error stemming from question wording and miscomprehension (Martin, 2004). In a context somewhat related to the present study, Martin et al. (1991) used a series of brief vignettes to assess how respondents to the Current Population Survey (CPS) interpreted the term "work." That is, which hypothetical scenarios they regarded to constitute as the subject being in work/employment. Discrepancy was found between the official survey definition of work (that was not provided to respondents) and the way in which most respondents interpreted a given situation as constituting someone being in work. This discrepancy was of concern given that respondents interpreting work in a way that contradicts the intended definition could potentially result in either the under or over-reporting of work prevalence. Therefore, it was deemed that the relevant survey question needed to be rephrased to more accurately capture what it was intending to capture. Similarly, it is possible that a question asking participants to self-select their "main" job could be significantly ambiguous and produce starkly varied results due to the basis upon which an individual selects their main job. This is something already suggested to be true based on the findings of Kottwitz et al. (2019).

The present study used vignettes in a somewhat similar way to the previously cited studies; taking a deep-dive into the issue of selecting a main job and, through participants' responses to the vignettes, determining which factor/s appeared most significant when making a judgement as to one's main job. The findings from this vignette study were then incorporated into a subsequent study (study two, see chapter 5). The subsequent study employed a quantitative cross-sectional questionnaire and entailed participants responding to questions

in relation to one of their jobs. Specifically, this first study's findings were to determine on which basis participants would be asked to select which job they would answer (study two's) questions in relation to.

# 4.2.4.1.5. Constructing vignettes

As with any other research tool, the creation of vignettes should be undertaken in a way that aligns with research objectives — including the research questions at hand, and intended population from which the sample will be derived (Skilling & Stylianides, 2019). The vignettes developed for and utilised in the present study can be found in full in Appendix B. The vignettes were developed with consideration of Skilling and Stylianides' (2019, p. 4) framework for vignette construction — shown in Table 5.

Table 5: Skilling and Stylianides' (2019) framework for vignette construction

Key elements	Characteristics	Descriptors	
Conception	Capturing content	Draw on conceptual or theoretical frameworks, existing literature, and practical experiences to reflect the essence of the research topic.	
	Realistic and hypothetical portrayals	Portray characters and events that are representative of and meaningful to those experienced by the participants, balancing hypothetical yet realistic situations.	
	Purpose/function	Construction guided by the research purpose, data sought, and respondents (e.g. promote/focus/stimulate discussion, solve problems, identify attitudes, seek beliefs, report practices, models of practice, norms, understandings).  Vignette functions as the sole method or part of a multiphase data collection.	
Design	Presentation	The nature of vignettes requires succinct (not necessarily complete or exact) portrayals of selected information. Brevity and incompleteness allow for participants to interpret/respond in unique and nuanced ways.  Written vignettes usually range between 50–200 words. Visual tools may	
	Length	Written vignettes usually range between 50–200 words. Visual tools may be single or multiple images (e.g. comics). Video vignettes are typically a few minutes long. The length should consider maintaining interest, time for absorbing information and responding to it.	
	Settings and terminology	Consider participants' degree of familiarity with the vignette situation (settings/ language specific to a particular cohort or profession) and ability to adequately respond to it. Also consider the appropriateness of using age-relevant and gender-neutral language.	
	Open or closed questioning	Consider the purpose of the vignette to decide the type and format of questions. Open questions allow for more detailed, realistic, and independent reactions to the situation posed in vignettes. Questions may be in a written or verbal form (e.g. if vignettes are part of an interview situation).	
	Participant perspectives	Consider from which perspective(s) the participants is (are) being asked to respond to the vignette (e.g. from a vignettes character's perspective, another role, or from their own perspective).	
	Piloting	Pilot the vignette prior to use to assess the extent of how representative it is of situations and participants.	
Administration	Instructions	Provide clear instructions for delivering, and how to respond to, the vignette.	
	Timing and responses	Consider the phase within the research study the vignette will be given (e.g. as the starting point or to follow other data collection methods) and provide adequate time for responses.	

Delivery mode and frequency	Consider how the vignette will be delivered (e.g. in person, on-line) and how this might influence completion and quality of responses. Oral delivery may be appropriate but consider possible bias if read by the
	researcher or another.  Multiple and frequent use may lead to a lack of responses and risk 'carry over' effects.

#### 4.2.4.1.5.1. Content

Based on guidance from extant vignette research, **content** for the vignettes was derived directly from the existing literature. This aligns with recommendations from past use of vignettes, to base vignette content on credible and relevant sources – such as existing theory – rather than incorporating content in an ad hoc way (Gould, 1996; Simon & Tierney, as cited by Skilling & Stylianides, 2019; Stravakou & Lozgka, 2018; Weber, 1992). Most of the elements included were derived directly from past published research from external sources (i.e. how others have denoted main jobs), but in addition to this, I also elected to include the concept of the impact that jobs had on the individuals. While this had not previously been treated as a main job indicator, it was thought that this would be a logical indicator to include – given the breadth of evidence of the impact that multiple job holding has on those who partake in it (as outlined in chapter 2).

Using an evidence-base for the content in this way also helped to ensure that vignette content was **realistic** — given that it was quite literally based on responses from past research participants across a range of multiple job holding research — rather than being derived merely from the researcher's imagination. Skilling and Stylianides (2019) advocate for the importance of realistic vignette content. By ensuring that participants are able to identify with at least some aspects of the scenario they are being presented with, they are more likely to feel able to respond to questions on the vignette.

It is also essential that a balance is sought between providing enough detail to participants to allow them to understand what is happening in the vignette, while still remaining sufficiently abstract/vague so that participants will make some assumptions that inform their responses. This is sometimes a point of criticism towards vignettes; that they cannot possibly contain every single detail of a hypothetical situation for participants to consider when responding. However, arguably, this is actually a strength of the technique – as participants will inevitably, possibly even subconsciously, "fill in" some gaps that are present, with their own assumptions

(Hughes & Huby, 2004). It is in these assumptions that valuable insights can be found – as this is where participants are likely to elucidate upon their views towards the subject that may have otherwise been implicit (Stravakou & Lozgka, 2018). As noted by Hughes and Huby (2004), "vignettes are used to simulate partly elements of the topics under study." In this way, the vignettes in the current study presented the situations of multiple job holders, with various elements of each job made apparent, but without overtly indicating which element may be indicative of a "main" job. Instead, it was intended that participants would process each vignette and make it apparent which element(s) they felt was significant in denoting each hypothetical worker's "main" job.

## 4.2.4.1.5.2. Purpose, presentation, length

The purpose of the vignettes at hand should also be carefully considered when they are being composed (Skilling & Stylianides, 2019). Rather than aiming to predict future behaviour of participants, as is common for (often quantitative) experimental vignette studies, the present study instead aimed to "achieve insight into the social components of the participant's interpretative framework and perceptual processes" (Jenkins et al., 2010, p. 178). Specifically, the vignettes were intended to prompt participants to make a decision as to whether any one of the jobs detailed in the hypothetical situation could be regarded as a "main" job. Then, they were intended to facilitate discussion around their rationale - which factors were significant in this decision-making process. Accordingly, this directly influenced the presentation of the vignettes. Given that their key purpose was to facilitate discussion – where it was intended that the desired insights would emerge – the vignettes were designed to be reasonably brief in length. This ensured that they were not laborious to read and time could instead be prioritised on the essential discussion. In order to prompt the desired discussion, the vignettes only needed to detail the multiple job holder's situation, including clearly providing evidence of each of the "elements" they meant to convey in a straightforward and static way. This type of vignette, briefly presenting the details of a situation and independent to any other vignettes also used, is also known as a "snapshot" vignette (Atzmüller & Steiner, 2010; Jenkins et al., 2010). This is as opposed to the commonly used developmental vignette, where a storyline is followed with multiple stages, which was not necessary (Finch, 1987). There are no definitive guidelines readily available for the length of vignettes. Rather, the most appropriate length will vary according to each unique research project and its requirements (Stravakou & Lozgka, 2018). Therefore, the current vignettes were not composed with a set numerical word limit in mind. However, all ranged from between around 150 to 250 words — which happens to align somewhat with Jeffries and Maeder (2011)'s recommended cap of 200 words.

# 4.2.4.1.5.3. Settings & terminology

As outlined by Skilling and Stylianides (2019), the **settings and terminology** of vignettes should also be tailored to match the intended participant audience. They should incorporate hypothetical settings and language that are likely to be familiar to participants, and also avoid the use of technical terminology as far as possible (Torres, 2009). In the current study's vignettes, avoiding the use of jargon/terminology was not difficult, given that the vignettes simply had to depict realistic employment settings – technical terms were not at all necessary. To provide settings for each vignette that were reflective of the New Zealand society in which they were based, care was taken to ensure that character names represented a mix of ethnicities. Other details, such as the pay rates and industries of the hypothetical jobs were also chosen to align with common practice in New Zealand – i.e. common industries of employment, and pay levels based on minimum wage (or higher, when intended). In this way, it was intended that participants would not be presented with vignettes that may seem extremely foreign or inconceivable to them.

Another determination that must be made is whether **open or closed questioning** (or even both) will be used in relation to the vignettes (Skilling & Stylianides, 2019). Closed-ended questioning would involve asking questions that can be answered simply with yes or no, or similarly, that will have some form of pre-defined answer. On the other hand, open-ended questioning encourages discussion to occur more freely, beyond pre-defined responses. Both approaches have advantages and disadvantages. Close-ended questions may be quicker for participants to answer and may be easier for researchers to code/analyse, but they also significantly limit participants freedom in responding (Weber, 1992). This is important, given that real-world decision making is rarely "black or white." Using close-ended questions may produce more shallow data, and can result in missing out on the "socially situated elements of participants' responses" (Hughes & Huby, 2004, p. 42). Richer data can be obtained through open-ended questions where participants can explain their thought processes (Hughes & Huby, 2004). Using a combination of closed and open-ended questioning can allow for the benefits of both approaches to be realised (Perkins et al., 2003). Using both approaches can

involve initially asking a closed question (i.e. yes or no), then followed by a more open-ended question exploring the participant's reasoning for their initial response. Using a mixed approach, of initial closed-ended questions being followed by open-ended questions, was deemed most appropriate for the present study. After reading each vignette, participants were asked to identify which of the jobs they viewed as the subject's main job. This was effectively a closed question, but the nature of the interview setting meant that any commentary could be captured – i.e. if the individual was to express that they could not select any "main" job. It is important that this possibility is accounted for; if participants were expected to select their response from a list, it is possible that the researcher may not have been able to predict all potential answers, and thus the participant's chosen response would not be available (Jenkins et al., 2010). After this, participants were asked to explain why they gave their answer for the previous question – to prompt discussion on the factors that influenced their decision.

Another crucial component of the post-vignette questions that must be clarified is the participant perspective; articulating from which perspective participants should answer questions about the vignette (Skilling & Stylianides, 2019). Various perspectives (from which the participant responds) can be used; this is something that needs to be carefully considered and decided upon, as it will impact the participant's experience in the study, as well as their response (Hughes & Huby, 2004). Most commonly, this will be either from the perspective of the hypothetical vignette protagonist, or from the participant's own perspective (ibid). Some studies even ask participants to respond from multiple perspectives (i.e. theirs personally, and the hypothetical vignette character's). In the present situation, it was deemed important that the research task should be as straightforward as possible for participants – thus they were simply asked to respond from their own perspective/opinion, as this was likely to be the least cognitively demanding option, while still aligning with the research objectives (to seek their own decision-making process regarding the main job issue).

As with any other data collection instrument, **piloting** the tool prior to empirical use can help to improve its efficacy by detecting any issues with comprehension, etcetera (Skilling & Stylianides, 2019; Stravakou & Lozgka, 2018). This was particularly important for the present study — given that participants were drawn from a range of backgrounds, including

educational levels. Piloting was conducted with two multiple job holders, as well as with colleagues — one of whom had prior experience in developing and using vignettes in employment research. This involved checking both the clarity of instructions, and the readability of the vignettes themselves. The piloting process confirmed that the interview schedule, including vignette content, functioned as it was intended to, and as a result no major changes were made. Minor changes were made to enhance the clarity of instructions given to participants at the start; pausing to check if participants had any questions, and explaining that I would be displaying the vignette on screen while reading it aloud.

The level of detail and clarity of any **instructions** given to participants before they read and respond to the vignettes will often vary, but these are an important consideration, given that they will determine how the participant interacts with the vignettes (Skilling & Stylianides, 2019). In the present study, the main job issue at hand was fairly unique and specialised, in the sense that it was not particularly an issue commonly thought about by multiple job holders unprompted. Nonetheless, it was something that participants were helping to explore through their responses; their expertise as key informants in the course of researching multiple job holding was being sought. Therefore, the main job "dilemma," as such, was clearly explained to participants in the instructions – followed by clear instructions explaining that they would be shown a number of made-up situations of multiple job holders, and would be asked to choose which job they thought was the main job in each situation. No detail was given around how they should select a main job, given that the intention of the vignettes was, in fact, to elicit how they would instinctively select a main job when prompted to do so.

The **timing and responses** of the vignettes – both in terms of when in the data collection activity they are presented, and the duration allowed for each response – must also be determined (Skilling & Stylianides, 2019). Given that participants did differ slightly in terms of their literacy levels, it was essential that they were not rushed, and were given sufficient time to comprehend and formulate a response to each vignette. Accordingly, no time limit was placed on participants at any stage in the interview. Timing was self-directed on the part of participants. To minimise issues associated with literacy levels, the vignettes were read aloud to participants while the text was also displayed in front of them – as discussed in more detail below in relation to delivery.

The point within the wider interview at which vignettes will be presented is also a key consideration that may impact their responses. The vignettes (segment 1) were all presented, together, at the start of the session. The semi-structured interview questions on the participant's own multiple job holding situation (segment 2) were after the vignettes – including a question asking them to identify their own main job. If these questions were asked prior to segment 1, they may have influenced participants' responses to the vignettes. For example, if a participant selected their own main job and gave the rationale that it was the job that they worked the most hours in, they may then be likely to apply this same rationale to all vignettes. This would interfere with the research objective, given that in segment 1, participants' unfettered judgements on the main job issue were sought. Thus, it was important that questions pertaining to the participant's own situation were placed after all vignettes.

The **delivery mode** through which the vignettes are presented to participants – i.e. whether the vignettes are presented through text, video, or other media – will impact their experience of the research (Skilling & Stylianides, 2019). Generally, the most common mode of delivery is known as "paper people" studies - which are generally written vignettes posed to participants in order to elicit their decisions/judgements as to how the subject(s) of the vignette should respond in the given hypothetical situation (Aguinis & Bradley, 2014). Kinicki et al., as cited by (Hughes & Huby, 2004), suggest that "paper people" vignettes pose lower cognitive demands upon participants than other, more complex formats/mediums. The use of this fairly simple medium was also appropriate given the interview medium – which primarily involved online video call interviews. All but one of the interviews took place using Zoom video call software. The one interview that took place in person occurred after COVIDrelated restrictions were lifted, and involved a participant who was located very close to my university campus. They expressed a desire to be interviewed in person, as they were planning to visit the campus independently of the interview. Each vignette was displayed on screen during the video call interviews, with participants being asked beforehand to join the interview on a computer if possible, as it would be easier to read from than a smartphone/smaller device. All participants were able to do so. The one participant who was interviewed in person had the vignettes printed and displayed to them in a very similar way.

During the interview, participants were given the option of me reading aloud the vignettes that were in front of them, while they viewed the text. Having the vignette read aloud can be beneficial as it can increase participants' ability to understand the content – however, care must also be taken to ensure that this does not create a bias (which, for example, could occur if particular inflection is given to any particular element of the vignette) (Skilling & Stylianides, 2019). All but two participants appeared to prefer this approach to reading individually. Two participants asked, after the first vignette, if they could read the remainder themselves, as they would prefer to do so. In these two cases, they were permitted to read individually, and were asked to take their time and to indicate when they had finished reading. While this arguably could create inequality in the procedure, it was clear these two participants had a strong preference to read individually, and so their preferences were given priority.

The **frequency** or number of vignettes to be utilised must be carefully considered, in relation to the research objectives (Skilling & Stylianides, 2019). Having too few can mean that the research questions are insufficiently able to be explored (Weber, 1992). By deciding on the number of vignettes to be given to participants, the researcher is effectively deciding between a within-person or between-person design – in that providing only one vignette to each participant would reflect a between-person design, comparing each participant's response to one vignette (Aguinis & Bradley, 2014). However, as the above authors note, doing so would sacrifice the richness of data collected. Just as psychometric scales generally contain more than only one item to more accurately measure a whole construct, a participant's response to one vignette may not be a true representation of their judgement/perception of the hypothetical situation being studied. Conversely, there is also a risk of overusing vignettes. Presenting participants with too many can cause participant fatigue and overload, resulting in lower quality responses (Hughes & Huby, 2004; Weber, 1992). Overusing vignettes may also cause "a 'carry over' effect where the vignette narratives may lose their distinctiveness and ultimately their effectiveness for the research." (Skilling & Stylianides, 2019, p. 9). The current study utilised four vignettes which were all given to each participant (i.e. a within person design) – to most effectively gain in-depth insights on participant's judgements of the main job issue. Four vignettes were deemed a suitable number, allowing for sufficient exploration of the full range of elements relevant to the main job issue. One may still argue that a carry-over effect is possible when using four vignettes. However, this was not as

concerning in the present case – given that for each vignette, participants were asked "why" they selected their answer. This enabled their reasoning to be uncovered – and thus should have indicated if a carry-over effect was present<sup>4</sup>.

## 4.2.4.2. Segment 2: semi-structured self-reflecting interview

To complement the use of vignettes, the second part of the data collection activity for this study utilised semi-structured interview questions. This interview segment commenced by asking participants how many jobs they held, and why they held multiple jobs. This provided a means of prompting conversation and refocusing their attention from the vignettes to their own situation. Participants were then asked to briefly outline their different jobs, and their reason for holding multiple jobs. They were also asked to select which job, out of their own situation, they deemed to be their main job – and why (the full interview schedule can be found in Appendix A). This allowed for reflection on participants' own multiple job holding situations, after they had reflected more broadly on the fictional multiple job holding situations presented in the vignettes. Although insights emerged from their reflections on the vignettes, discussion of their own situations provided further insight on the factors upon which they based the selection of their main job. Semi-structured interview questions were appropriate here, as they provided some guidance to ensure that participants were each asked the same questions, while still providing flexibility to allow participants to focus on what they perceived as being important in relation to the subject matter (Bryman & Bell, 2015).

#### 4.2.5. Ethical considerations

The present study was deemed to be of low ethical risk, particularly due to its use of vignettes. The overall content of the vignettes was not particularly sensitive or controversial, so it was not expected that they were likely to prompt feelings of distress or discomfort. Participants were informed that the content was not expected to be distressing at the start of each interview. They were also reminded of their rights as set out in the participant information sheet that was sent to them prior to their confirmation of agreement to participate in the

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<sup>&</sup>lt;sup>4</sup> As will be discussed further in the findings, it did not appear that a carry-over effect was present; participants seemed able to differentiate between vignettes and treat each one independently, with some noting that while they applied a certain criteria in the previous vignette, they did not feel the same criteria should be applied in their present vignette.

study. This included that they could pause or stop the interview at any point if they felt uncomfortable. Consent was also sought to record the interviews for the purpose of transcription, and participants were reminded that they could ask for the recording to be paused or stopped at any point. All participants gave consent for recording. Ethical risk was also reduced through the use of the vignettes, which meant that most of the interview content focussed on hypothetical situations, rather than the individuals' own situations. When individuals' own situations were discussed, it was voluntarily; all participants mentioned their own situations unprompted during discussion of the vignettes. Furthermore, before the final segment when their own situations were discussed, participants were asked if they were willing to discuss their own situations in more detail. Participant demeanour was carefully monitored throughout the interview; none of the participants showed any signs of distress or discomfort at any point.

Because the present study was planned as an auxiliary study to study two after initial full ethics approval for the other study had been sought and received, ethical approval was sought for this study as an amendment to the full ethics application for study two. Approval for the amendment to the original application granted by the Massey University Human Ethics – Northern Committee 19/08 was granted (please refer to Appendix A for the original approval).

#### 4.2.6. Data analysis

Data were analysed using Braun and Clarke's (2006, p. 87) six phase process of thematic analysis:

- 1. "Familiarizing yourself with your data: Transcribing data (if necessary), reading and rereading the data, noting down initial ideas.
- 2. Generating initial codes: Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
- 3. Searching for themes: Collating codes into potential themes, gathering all data relevant to each potential theme.
- 4. Reviewing themes: Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.

- 5. Defining and naming themes: Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
- 6. Producing the report: The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis." (p. 87)

Computer assisted qualitative data analysis software (CAQDAS) NVivo was used to undertake the thematic analysis process, as it offered the means to easily store qualitative data, and the flexibility to refine or create new themes as the thematic analysis process progressed (Bazeley & Jackson, 2013). Soon after each interview occurred, I transcribed the audio recording verbatim – and undertook an initial read of each transcript. General, initial ideas that emerged from each interview were documented, to allow for broad oversight of the findings that were key to the research question – about the criteria upon which main jobs were being selected. Once saturation was confirmed to have been achieved, the generation of initial codes was completed with a total of 30 codes having been identified. At this point, all codes were collated into overall themes – of which 14 were identified.

Data saturation was calculated using Guest et al. (2020)'s method, which established that saturation was reached (and in fact, slightly exceeded) at the point of 15 interviews. 77% of final themes (n=37) had been detected after the initial 6 interviews (base size), with 94% having emerged after the first "run." After reaching a total of 15 interviews, constituting a further 3 runs, only 3 additional themes emerged — with the last run producing 1 theme, representing a data saturation ratio of 3%. As outlined by Guest et al. (2020), they did not wish to prescribe an exact target ratio that all researchers must adhere to. Rather, they encourage flexibility and careful consideration of the unique research context at hand. However, one suggested level is ≤5%. With this in mind, and considering the challenging external environment within which the study was being conducted, a new information rate of 3% was regarded as satisfactory and thus, 15 interviews was deemed an acceptable point at which data collection could be concluded.

# 4.3. Findings

The objective of this study was to determine the most appropriate method for directing multiple job holders to select a main job, by investigating which factors are taken into consideration by multiple job holders when faced with such a task. By achieving this objective, it was intended that a method would be developed for directing participants to select their main job in the subsequent, main study.

In short, the overarching finding of the study can be summarised as indicating that, based on interviewee responses to the vignettes, there is no single, all-encompassing criteria that is consistently relied upon by multiple job holders to select a main job. On this basis, the most appropriate method of main job selection to be used in the subsequent study was concluded to be participant self-selection of their main job. Although one single method did not conclusively emerge as the superior criteria, this finding in itself – that self-selection was the most appropriate method – achieved the objective of this study and provided a basis upon which main job selection would take place in the subsequent study two.

Descriptive findings will first be presented (section 4.3.1), depicting each vignette and participant reaction to them. A notable diversity of criteria emerged throughout the thought processes of each interviewee. Through thematic analysis, 12 themes emerged in relation to the main purpose of the study – themes that pertained to interviewees' rationale for choosing a main job or main job indicators. These will be discussed immediately below (section 4.3.2). However, in addition to these themes that constitute the primary findings, themes worthy of discussion also emerged in relation to methodological considerations/matters of the study. Although these do not directly address the primary research question, attention will also be given to these findings (section 4.3.3) – given that they represent interesting and, in some cases, novel knowledge in relation to this unique use of vignette methodology.

## 4.3.1. Descriptive findings

Prior to commencing the reading of the vignettes, participants were informed that they would be read four fictional situations about multiple job holders, and would be asked to select which job they thought was the character's main job. Hence, they knew when each vignette was being read out that this was the purpose of their listening. Then at the conclusion of each

vignette, interviewees were asked which of the jobs depicted in each vignette they would select as being the respective character's "main job," and why they selected the specific job. Content of each vignette and overall reactions to each, with reference to the chosen main job indicator, will now be outlined. A summary of the chosen main job, and the main job indicator behind the choice, cited by all participants for each of the four vignettes can be found directly below in Table 6.

1         Feel most invested in mind in free time income mind in free time most most time most most time most time most atisfying most most time and income most most time most atisfying most most time and income most most time most most time most atisfying most most time and income most most time most atisfying most time and income most most time and income most most time and income most most time most atisfying most time and income most most time most atisfying most time and income most most time most atisfying most time and income most most most most most most most most	O	Joe	Luisa	Wiremu	Suzie
Most time         Own business, has control, will want to grow long term         Most time           Passion/wants to focus on Most time         Most time         Most time           Most income         Long term goal         Most time           Most income         Most income         Most income           Most time, stability (combo)         Lifelong dream/main goal         Combo of most time, money and tenure           Most time and income         Own business, will be more motivated to invest effort         Longest tenure and income           Most time         Her passion/long term goal         Most time and income           Most time         Most time and income         Her passion/long term goal         Most time and income           Most time         Most time and income         Most time and income         Longest tenure and most time and income           Most benefits/entitlements         Most time         Most time and income           Most benefits/entitlements         Most time         Most time and income           Most benefits/entitlements         Most time         Most time	1	Feel most invested in	Long term goal, occupies mind in free time	Most time, tenure and income	Most important to personal identity
Most reliable income         Most time         Most time           Most income         Long term goal         Most time           Permanence/stability         Permanence         Most time           Most income         Most time (and next, income)         Lifelong dream         Most time, money and tenure           Most time stability (combo)         Lifelong dream/main goal         Most time, most time         Lifelong dream/main goal           Most time         Own business, will be more motivated to invest effort         Longest tenure and income           Most time         Tenure, supports own brand, most time and income         Most stability and enjoyment most enjoyment           Most benefits/entitlements         Most time and income         Longest tenure and most enjoyment           Most benefits/entitlements         Most time and income	2	Most time	Own business, has control, will want to grow long term	Most time	Permanence
Passion/wants to focus on         Most time         Most time           Most income         Long term goal         Most time           Most income         Most income         Most income           Most time (and next, income)         Lifelong dream         Combo of most time, money and tenure           Most time, stability (combo)         Lifelong dream/main goal         More secure (and next, with and tenure           Most time         Own business, will be more motivated to invest effort         Longest tenure           Most time         Her passion/long term goal         Most stability and enjoyment most satisfying           Most time         Most stability and enjoyment enjoyment most enjoyment         Ind           Most benefits/entitlements         Most time         Most time and income           Most benefits/entitlements         Most time         Most time and income           Most benefits/entitlements         Most time         Most time and income	8	Most reliable income	Most stability	Most pay and stability	Permanence
Most income         Long term goal         Most time           Permanence/stability         Permanence         Most income         Most income           Most time (and next, income)         Lifelong dream         Most income         Combo of most time, money and tenure           Most time, stability (combo)         Lifelong dream/main goal         More secure (and next, income) and tenure           Most time         Own business, will be more motivated to invest effort         Longest tenure           Most time and income         Her passion/long term goal         Most time and income           Most time         Tenure, supports own brand, most stability and enjoyment most satisfying         Anost stability and enjoyment enjoyment           Most benefits/entitlements         Most time         Longest tenure and most enjoyment           Most benefits/entitlements         Most time         Most time and income           Most benefits/entitlements         Most time         Most time and income	4	Passion/wants to focus on	Most time	Most time	Permanence
Permanence/stability Most income Most income Most time (and next, income) Most time, stability (combo) Most time and income Most time and income Most time and income Most time	2	Most income	Long term goal	Most time	Stability
Most income       Most income       Most income       Lifelong dream       Most time, stability (combo)       Lifelong dream/main goal       Combo of most time, money and tenure         Most time, stability (combo)       Lifelong dream/main goal       More secure (and next with own people)         Most time       Own business, will be more motivated to invest effort       Longest tenure         Most time and income       Her passion/long term goal       Most time and income         Most time       Most satisfying       Anost stability and enjoyment most satisfying         Most income       Most enjoyment and learns a longest tenure and most lot         Most benefits/entitlements       Most time and income         Most time and income       Most time and income         Most time and income       Most time and income	9	Permanence/stability	Permanence	More secure (and next, fulfilling)	Permanence
Most time (and next, income)  Most time, stability (combo)  Most time, stability (combo)  Most time and income  Most time  Most time  Most income  Most benefits/entitlements  Most income  Most benefits/entitlements  Most income  Most incom	7	Most income	Most income	Most income	Most income
Most time, stability (combo)       Lifelong dream/main goal       More secure (and next with own people)         Most time       Own business, will be more motivated to invest effort       Longest tenure         Most time and income       Her passion/long term goal       Most time and income         Most time       Tenure, supports own brand, most satisfying       Most stability and enjoyment and learns a lot         Most benefits/entitlements       Most time and income         Passion/enjoyment       Most time and income         Most income       Most time and income         Most benefits/entitlements       Most time and income         Most income       Most time and income         Most income       Most fulfilling and satisfying	8	Most time (and next, income)	Lifelong dream	Combo of most time, money and tenure	Most income
Most timeOwn business, will be moreLongest tenureMost time and incomeHer passion/long term goalMost time and incomeMost timeTenure, supports own brand, most satisfyingMost stability and enjoyment and learns a longest tenure and most enjoymentMost benefits/entitlementsMost timeLongest tenure and most enjoymentPassion/enjoymentMost incomeMost time and incomePassion/enjoymentMost incomeMost fulfilling and satisfying	6	Most time, stability (combo)	Lifelong dream/main goal	More secure (and next with own people)	Permanence
Most time and income       Her passion/long term goal       Most time and income         Most time       Tenure, supports own brand, most satisfying       Most stability and enjoyment and learns a lot         Most benefits/entitlements       Most time       Most time and income         Passion/enjoyment       Most income       Most fulfilling and satisfying	10	Most time	Own business, will be more motivated to invest effort	Longest tenure	Stability and most income
Most time       Tenure, supports own brand, most satisfying       Most satisfying       Most time and most enjoyment         Most benefits/entitlements       Most time       Most time and income         Passion/enjoyment       Most income       Most fulfilling and satisfying	11	Most time and income	Her passion/long term goal	Most time and income	Permanence
Most income       Most enjoyment and learns a lot       Longest tenure and most enjoyment enjoyment         Most benefits/entitlements       Most time and income         Passion/enjoyment       Most income         Most fulfilling and satisfying	12	Most time	Tenure, supports own brand, most satisfying	Most stability and enjoyment (and next, obligation)	Permanence
Most benefits/entitlementsMost timeMost time and incomePassion/enjoymentMost incomeMost fulfilling and satisfying	13	Most income	Most enjoyment and learns a lot	Longest tenure and most enjoyment	Stability
Passion/enjoyment Most income Most fulfilling and satisfying	14	Most benefits/entitlements	Most time	Most time and income	Stability
	15	Passion/enjoyment	Most income	Most fulfilling and satisfying	Most enjoyment/meaningful

# 4.3.1.1. Vignette 1: Joe

This vignette was constructed to represent a reasonably straight-forward and traditional case of multiple job holding where the main character, Joe, held a "day job" (job 1<sup>5</sup>) in which he worked full-time, standard hours during at a call centre. This was a role that he didn't particularly enjoy but that provided the bulk of his income and was a permanent role with standard entitlements like annual and sick leave. Alongside this, Joe also undertook work for his sister's photography business on weekends (job 2). This was a job that he was passionate about due to an interest in photography, but that had fewer hours and less stability. Twelve out of fifteen interviewees selected Joe's call centre job, job 1, as his main one. The predominant main job indicator for this group was that it took up the most of his time, but other rationale were also selected by some. The three who chose his photography job did so because it was his passion (n=2) or because it was the one he appeared to feel most invested in (n=1). While there was some divergence in terms of chosen main job indicator in this vignette, as can be seen in Table 6, there was clearly a majority response.

#### 4.3.1.2. Vignette 2: Luisa

The subject of this vignette, Luisa, held 3 jobs – in what was intended to be a more complex and ambiguous situation than others (i.e. Joe). Luisa was depicted as a recent fashion design graduate, with a childhood dream to create her own clothing brand that was recently realised a month ago (job 1). Her second job, held the longest, involved managing the social media for a clothing brand, on a casual contract. Luisa's third job was her most stable, with a permanent contract, providing the most income, and was implied to take up most of her time – while also being the least challenging and thus, is implied to not be as enjoyable/interesting. There was more divergence among responses than the previous vignette. Out of the fifteen interviewees; seven chose Luisa's own brand, six chose her third job at the health food company and only two chose the second job – managing social media for another fashion brand. Precise reasons given as main job indicators also differed although most interviewees who chose job 1 did so because it was Luisa's lifelong dream or long term goal (n=5). This was followed by those who did so because it was her own business and thus she would have more

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<sup>&</sup>lt;sup>5</sup> NB: jobs were not referred to sequentially, i.e. as Job 1, Job 2, during interviews with participants – numbering is used here only for convenience.

control (n=1) or would be more motivated to invest effort into it (n=1). The six interviewees who selected job 3, at the health food company, did so because it gave the most stability or permanence (n=2), took up most of Luisa's time (n=2) or provided the majority of her income (n=2). Out of the two interviewees who selected job 2, working for another fashion brand, they cited that it gave her the most enjoyment and learning, or that it was where she had been the longest, alongside being the most satisfying and supporting her own business.

## **4.3.1.3. Vignette 3: Wiremu**

Vignette 3 depicted Wiremu who held two jobs. One highly paid job (1) as a full-time Chief Finance Officer (CFO) for a manufacturing company, and the other (job 2) managing the finances for his Iwi's trust. Job 1 as a CFO was highly paid, involving enjoyable easy work and was his longest-held job, but also took up most of his time, was tiring, and was also implied to be potentially insecure in the future. This insecurity was stated to be his rationale for taking on job 2 with his Iwi. While this job was stipulated to bring less income and enjoyment than job 1, it was perceived to be more secure, in addition to giving Wiremu a sense of obligation towards his Iwi. Eleven out of the fifteen interviewees selected Wiremu's job as a CFO as his main job, with most citing the job as taking up most of his time (n=3), a combination of most time and income (n=2), or both previous factors combined with longest tenure (n=2). One further interviewee selected tenure by itself, with the other giving tenure combined with enjoyment as their rationale. Out of the four interviewees who selected his lwi job, most (n=3) did so on the basis that this job was more secure, with the other giving the rationale that it was his most fulfilling/satisfying job. This vignette seemed to elicit the most complex responses. As illustrated in Table 6, many interviewees indicated that multiple factors were important as the main job indicator, being unable to select just one even when prompted.

#### **4.3.1.3. Vignette 4: Suzie**

This vignette was constructed in such a way that two out of the three jobs held by the character, Suzie, may appear to almost be equal — complemented by a third job that starkly contrasted the other two. Suzie's first job involved a casual contract, cleaning for 20 hours a insecurity of hours in this role, and in turn, insecurity of income. Suzie's second job also involved cleaning, for fewer contracted hours per week than the previous job, but on a permanent contract and at a higher hourly rate. It was stipulated that this job produced a higher income due to this higher pay rate, despite involving fewer hours of work. Separating

the job with the most hours from the job with the most pay was a conscious decision, made in order to elicit responses that would suggest which of these two traditional MJIs participants would favour. The third job was a casual role with two hours of paid work per week, where Suzie taught a Sunday School class at her church. It was made clear that this role was the most enjoyable to Suzie, and also one in which she was relied upon heavily – as no one else would undertake the role if she wasn't doing it. This vignette was the one in which the most agreement was seen – with thirteen out of fifteen interviewees selecting job 2 – the permanent, more highly-paid cleaning role. Ten of these individuals gave the stability/permanence as the main job indicator, while two expressed that it was the job with the most income. One interviewee responded with an equal combination of both factors. Of the two interviewees who selected job 3, teaching Sunday School as the main job, one gave their rationale as it being the job that Suzie found most enjoyable/meaningful, and the other did so because it was the job that was most important to Suzie's personal identity.

# 4.3.2. Themes pertaining to the research objective

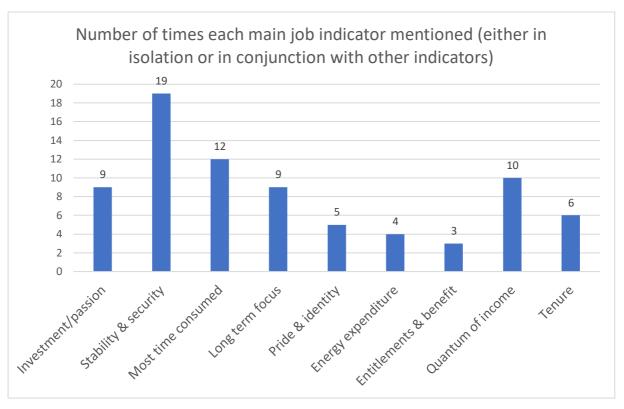


Figure 2: Prevalence of each main job indicator theme

Nine themes emerged directly around main job indicators – that is, themes encompassing or describing the main job indicators denoted by participants when making their selection of a

main job. The frequency with which each of indicators was cited is summarised above in Figure 2. While an overview of the main job indicators selected by participants across the vignettes has been discussed directly above, the nine themes that emerged around the indicators themselves, as well as three other themes directly related to the selection of indicators, will be now be summarised in Table 7 and then discussed in greater detail immediately after. The themes below are not presented in order of prevalence or importance.

Table 7: Summary of study one themes addressing the research objective

Theme	Summary	Example quote
Theme 1: Interaction	Interviewees could not select only	"I think it's an equal
between factors	one factor as a main job indicator,	combination of the fact that
	as they felt multiple factors were	he's been in it for five years,
	equally important and often were	it's got a good salary and
	discussed in conjunction with	takes up most of his time." -
	other factors.	P8
Theme 2: Stability	The certainty that a job would	"I think the permanent one is
and security	continue was important, and	more important than the
	would indicate – over other less	other factor because we all, I
	stable jobs – that such a job was	think we're all, you know,
	the main job.	looking for a stable job,
		because we need to maintain
		our livelihood." – P11
Theme 3: Most time	The job that took up the most of	"For me if I'm saying main job,
consumed	the individual's time would be	that's what I would do, I'd just
	deemed the main job.	see how much time it's taking,
		yeah, from my life." – P10
Theme 4: Long term	The job that the individual	"Yeah, like I think that the
focus	wanted and/or was likely to	main jobs definitely in a lot of
	continue with in the long term	ways the one where you kind
	over their other jobs would be	of like, see your career
	deemed the main job.	tracking in the future." – P1
Theme 5: Pride and	The job that the individual would	"It's clearly the one that has
identity	be most proud of and/or	the closest ties in terms of
	personally identify with the most	like, it's the most important
	would be their main job.	for her personal identity." –
		P1
Theme 6:	The main job indicator/criteria	"I think you have to sort of
Contingency of main	could change over time as the	look at what the individual's
job indicators	individual's situation changed; a	motivations are for having multiple jobs." – P8

	<del>-</del>	
	job initially viewed as a main job	
	may not always be.	
Theme 7: Energy	The job that took up most of	"That's where most of his
expenditure	one's energy and effort would be	effort is spent." – P4
	their main job.	
Theme 8:	The job that provided the most	"It'd be the benefits you get
Entitlements and	contractual entitlements and	that with part time, but it's
benefits	benefits to the individual would	obviously not as much. And if
	be indicative of a main job, when	you're a casual, you don't get
	their other jobs did not provide	it at all." – P14
	the same entitlements.	
Theme 9:	The main job is the one that the	"I can tell she's really
Investment and	individual feels most invested in	passionate about building her
passion	and/or passionate about, even if	own brand." – P11
	it doesn't provide sufficient	
	income or stability.	
Theme 10: Quantum	The main job is the one that	"That's purely because
of income	provides the bulk of the	obviously a six figure salary,
	individual's income.	it's full time." – P14
Theme 11: Tenure	The job that one has been in the	"I would probably say that
	longest is the main job.	one just because I've been
		doing the longest." – P12
Theme 12: Main job	Interviewees often	"I think you realize that my
indicator dependent	acknowledged, while selecting a	criteria has been changed all the time." – P11
on individual's	main job, that the most	uie uiiie. – FII
situation	appropriate main job indicator	
	would depend on the nature of	
	the individual multiple job	
	holder's situation	

# **4.3.2.1.** Theme 1: Interaction between factors

It is difficult to discuss the themes in isolation as they encompass the various factors that were present as main job indicators. This is because in many instances, interviewees mentioned a multitude of factors when asked upon which basis they made their main job selection in each vignette. Generally on each occasion, they were pressed for whether the various factors given were equally important, or whether one could be considered the most important. In most cases, participants had expressed which factor they prioritised or could do so when prompted, so one factor usually emerged as the prevailing indicator. However, even so, it cannot be overlooked that indicators were often considered in conjunction with one

another upon first impression. As expressed by Participant Eight, "I think it's an equal combination of the fact that he's been in it for five years, it's got a good salary and takes up most of his time."

Furthermore, participants generally had to be prompted or asked whether one factor could be chosen above all others. This was seen most prevalently in the cases of Luisa and Wiremu; perhaps indicating that these situations possessed more complexity. Therefore, the answer to research question one can be summarised by acknowledging that a diverse range of factors are considered, often in conjunction with one another.

### 4.3.2.2. Theme 2: Stability and security

The importance of a job being secure and providing stability and certainty of income was, somewhat surprisingly, the most prevalent theme to become evident in responses. Overall, it was selected as the main job indicator on its own 16 times, and a further three times in conjunction with other factors. This was summarised by Participant Eleven, who said, "I think the permanent one is more important than the other factor because we all, I think we're all, you know, looking for a stable job, because we need to maintain our livelihood."

It was present particularly (but not exclusively) in the case of Suzie (vignette 4). In Suzie's situation, the majority of respondents (n=11) gave either permanence or stability as their reason for selecting Suzie's second job (her only permanent contract) as her main job. Next, this was most evident (although much less unanimously) in the case of Wiremu. In his case three respondents selected his second, lwi job as his main one – citing that his more highly paid job was perceived by him to be insecure, hence his reasoning for taking on the additional lwi role on the first instance.

It was widely acknowledged that, particularly in the case of Suzie (who was depicted to have the most dire situation regarding income and being the sole provider), having secure employment that was able to provide certainty of future income was highly important. This was to the extent that jobs providing the most security (and therefore income certainty) should be prioritised over others (according to interviewees). Although the prospect wasn't

mentioned to interviewees, two (participants 10 and 5) expressed that if Suzie had to choose between her jobs, they felt that she would prioritise the job with a permanent contract. This was noted to be particularly due to her situation, given that she was the sole income earner for her family.

The concepts of job security/permanence and income reliability were closely intertwined, but not always treated as one and the same. That is – stability of income tends to be achieved through job security and it can be assumed that the former will often coincide with the latter – but at times, interviewees explicitly mentioned one without the other.

# 4.3.3.3. Theme 3: Most time consumed

After the concept of stability and security discussed immediately above, most time was the second most frequently cited main job indicator. This was mentioned on its own in nine instances, and a further three times in combination with other factors. This was discussed most often in relation to Joe and Wiremu's situations. Those who selected this factor explained that they made their selection on the basis that it represented the job that was taking up the largest proportion of the character's life at the time. Some went on to further explain that by taking up the largest amount of the individual's time, the chosen job was also likely consuming their energy/leaving them exhausted. In this way, it appeared that the factor of most time spent on a job also carried an implicit meaning for some participants — of the job having the biggest impact on the character. The factor of time often seemed to be considered alongside other factors, but most who cited it were ultimately able to select it as being more important than other factors. This judgement process was articulated by Participant Twelve in the following way: "The fact that he likes the photography one more than the call centre job is like, a factor, but 40 hours versus 12 hours - that's... that's a big difference to me."

# 4.3.3.4. Theme 4: Long term focus

The concept of a main job as being the job that one wishes to pursue and strive towards in the long term was evident in the responses of nine participants. This sentiment was particularly expressed in the situations of Joe and Luisa — where there was explicit mention of the characters wanting to work towards pursuing their passion in the long term. Those who provided this rationale expressed that this long term focus could supersede the number of

hours worked. Furthermore, they perceived that jobs that represented a long term goal were often taken on after other jobs, to enable an eventual transition to the multiple job holder's desired future career state. Participant One summarised this by saying "it's not necessarily the job you spend the most hours in that you see a future with."

Somewhat related to this concept of the long term goal was the idea that the main job was one that was supported by one's other jobs — an idea that emerged during discussion of Luisa's situation. Participants perceived that Luisa's other jobs — despite both possessing a range of factors that could suggest a main job, such as tenure, time and income — essentially enabled Luisa (financially and developmentally) to pursue and continue to build her own business. This idea was also echoed by one participant in discussing his own main job. He owned his own business, but also undertook consulting to maintain an income when the business was in a phase of downturn. Thus, even though his own business often did not provide the bulk of his income, it was still his main job — and his secondary job functioned purely to support the business.

"I'd say my business is the main job...that's like the end game... whereas like...contracting is just a means to get by. So I don't treat it as a main job... we're finally at the stage where we can start paying ourselves but needed to keep that [contracting job] for security." – Participant Four

#### 4.3.3.5. Theme 5: Pride and identity

When considering how they would self-identify their main job, two participants raised the issue of pride in one's work, or their work aligning with one's personal values. Participant Eight believed that Joe would be likely to introduce himself as a photographer as he would be proud of this work more so than his work in a call centre. When talking about her own main job, Participant One selected her own main job using a range of factors, but cited alignment with her personal values and goals for the country as one key factor. Her policy-related role in the public sector enabled her to undertake work that aligned with what she believed was the greater good of the country, and therefore it was a role she strongly identified with.

The concept of one's professional identity or calling emerged during discussions, particularly in relation to the situations of Joe and Suzie – where both characters held additional jobs that were fairly different from each other. Three participants expressed that they saw Joe as having a professional identity or calling as a photographer. They felt that he would perceive himself to be a photographer – although this was not the job that provided the bulk of his income and therefore covered his living costs. However, these three participants did not appear to regard Joe's professional identity (photographer) as being his main job, because it did not provide enough remuneration to live on – although it was suggested that Joe would have liked his photography job to be his main one. This dilemma and the thought process surrounding it was summarised well by Participant Five:

"I think about the word job as quite...as a description of something that is that can be quite detached from your professional identity, like a student job or a cafe job, or you know, like something that you do to make money, hmm. Besides, maybe you want to do something else instead. So I think because it's called a job and you're asking what's his main job, that's how I get to the conclusion that the money making part of his life is his job. Right? I think he has clearly a different professional identity. He sees himself as a photographer who makes money with his call centre job."

For these participants the factor of one's professional identity did not equate to a default status as the main job – due to the photography job not providing a sufficient income. However, it was suggested by some that this could change and it may become Joe's main job, if he started to make more money in the photography job. This concept of the main job changing is discussed in more detail as its own theme in section 4.3.2.12.

# 4.3.3.6. Theme 6: Contingency of main job indicators

From participants explaining their thought processes while selecting main jobs of the vignette characters, the theme of contingency emerged. This was evident in the sense that participants would, at times, provide one rationale behind their choice, but go on to explain that if certain factors in the characters' situations or properties of the jobs themselves changed, that their response would change also.

This theme arose primarily during discussions of Luisa's situation — as a new business owner, who held two other jobs. Three participants suggested that Luisa's own business (job 1) was not her main job currently, due to its recency, and the fact that she was still building it up. Participant Twelve suggested that it would become her main job "in the future when it takes off," while Participant Three believed that Luisa would prefer her own business to be her main job in the future, but that it wasn't yet, because her third job provided the stability she needed, enabling her to have her own business. Participant Three was able to empathise as a fellow small business owner, and he echoed that her own business would become her main job in the future, but not at present as he felt she would be spending more time in her other jobs. Somewhat similar sentiments were expressed by two participants in relation to Joe's situation. They both believed that Joe would prefer for his photography job to be his main one, but that this would not be the case until it was generating an income that he could live off. As explained by Participant Seven:

"If he could build the photo stuff... then that would sort of swap. It doesn't necessarily, like, at least in my mind... he wouldn't have to make more money doing the photography work than the other work before it became his main job, like just enough to live on. And then, that's where he directs his effort."

#### 4.3.3.7. Theme 7: Energy expenditure

Although to some extent it often correlates with and can be considered alongside the idea that a main job is one that takes up most of one's time, the matter of energy expenditure as a main job indicator also warrants attention. Discussed by four interviewees was the concept that the amount of cognitive effort that someone exerts in relation to a job may be another factor that can suggest a main job. This was not exclusive to effort and energy spent during work hours, either. Two interviewees noted that, although this was not articulated in the vignette, Luisa was likely to spend much of her "free" time thinking about her own business (job 1) – beyond the amount that she would spend on such a job if it wasn't part of her own business. As explained by Participant One, "even if you're not spending work hours on it, it sounds like it's the one which takes up a lot of her thought in her free time as well." One participant raised this criteria – albeit alongside a number of others that were deemed equal – in relation to selecting her own main job. It was emphasised here that energy investment

was separate to time investment – while the two may often correlate, this wasn't always the case, and the two were worthy of mentioning separately.

## 4.3.3.8. Theme 8: Entitlements & benefits

Although not as comprehensively discussed as other factors, when discussing Joe's situation three participants cited the benefits (meaning contractual entitlements like leave) provided by a job as another important reason – over and above the more basic factor of pay. This was mentioned particularly in the context of some jobs – particularly casual roles – not having the same level of provisions. Participant Nine explained this by saying "you may not like it, but it's got a good wage, it's steady and has all the annual leave and sick pay and everything."

# 4.3.3.9. Theme 9: Investment & passion

The idea that one's main job was the one that they felt most passionate about or invested in – or that was their own business – was touched upon by eleven of the participants; and there was often overlap between these three facets. The idea of passion towards a job was particularly present in relation to Joe's situation. Two participants even went so far as to acknowledge that most income or time would likely have been the more traditional indicator of a main job, but that they felt that Joe's passion towards his photography job placed this job of higher importance, as the main job. When asked, after this response, whether they felt that this took precedence over time or income, Participant Fifteen responded that "it definitely does because it's quality, not quantity, that really matters when we do things."

Similarly to being passionate about one's job, some participants interpreted the level of investment or commitment that they felt the characters had towards their jobs — the level of importance that they placed upon the roles. This interpretation was interesting as at times it went well beyond the detail provided in the vignette. Participant Thirteen selected Luisa's second job as her main one, explaining that "[the] third job, even though it's got the most hours and it pays the most, because it doesn't challenge her she might find it boring, and she'll probably quit it quite easily...[but] she's learning a lot in that [second] job. So she'll probably be quite engaged and interested in it, and for that reason she won't just leave it."

## 4.3.3.10. Theme 10: Quantum of income

Unsurprisingly, the common main job indicator of most income was also raised by participants on 10 occasions. When participants discussed this, it was often acknowledged that the job that provided a character's most income may not be the one that they favoured or enjoyed the most. However, the income it provided (being higher than their other jobs) was important for the individual due to their situation, and thus this was pragmatically prioritised in the case at hand over other potential main job indicators. This can be seen in Participant Thirteen's response to Joe's situation; "that's where his main income is coming from so I feel like that's his main job...it's more about the pay than the hours, which one is paying him more, because he has to... live on that money." This pragmatism was also seen frequently during discussion of Suzie's situation – where she was the main income provider for her family and was busy working three jobs alongside caring for her family members. Participant Eight elaborated upon their choice of Suzie's second job – involving fewer hours but at a higher hourly rate, resulting in higher income – by saying "with kids and a partner who's, you know, been disabled in a workplace accident, she needs to be efficient with her time, so the job that gives the most money for the least hours of work would seem to be the most important<sup>6</sup>."

An interesting perspective was provided by Participant One, who worked in a Government department in a fiscal policy job and had knowledge of the Inland Revenue Department<sup>7</sup> (IRD). Her thought process demonstrated a clear contrast between a widely used, conventional method of selecting a main job, alongside her own intuitive response.

"The criteria we'd (in her workplace) use for what someone's main job is, which is the job which is their primary source of income? Which is the same thing that IRD will use in determining which job is going to be your secondary tax, and which job is going to be your primary tax. But for me, I think your main job is the one where it's what you'd identify with as your source of employment. It sounds like if Susie was going to be introducing herself to someone she'd be like, you know, my name's, Suzy and you

<sup>&</sup>lt;sup>6</sup> It should be noted that the participant was asked about Suzie's main job – the interviewer did not use the phrase "important" – this was said unprompted by the participant, indicating that this was how they were interpreting the "main" job in this example.

<sup>&</sup>lt;sup>7</sup> This was not the organisation that the participant was employed in – it is not named to protect anonymity.

know, I am, like, a Sunday school teacher, as opposed to I am a cleaner first, even though she works 35 hours a week in two different cleaning jobs."

Participant One was sought for her status as a multiple job holder rather than her professional background or expertise and her background was unknown prior to the interview. However, this did provide a valuable insight into the thought process of someone who had actually encountered the more traditional criteria in her work, but whom still rejected this criteria when asked to make the main job selection herself.

#### **4.3.3.11.** Theme 11: Tenure

Tenure was mentioned by six participants in their responses, but this was almost exclusively in conjunction with other factors. There was only one instance in which it was provided as the only factor. Participant Ten expressed that in Wiremu's situation, his first job as a CFO was his main job. They explained that this was purely because it was the one he had held the longest, but that this job wouldn't continue to be his main job long term, and he would be likely to leave it for his second job with his lwi. "Six months down the track, I think the lwi job would be his main... he would feel more connected to it... if you've recently started something, I don't think you see it as a main." Beyond this, all other participants — even when pressed to determine if they prioritised one factor — expressed that tenure combined with other factors like the most income and most time spent working to denote a main job.

## 4.3.2.12. Theme 12: Main job indicator depending on the (character) worker's situation

As illustrated above in the above subsections under section 4.3.2., a highly diverse range of factors were mentioned by participants in the course of selecting a main job. This suggests that there is no suitable "one size fits all," criteria that can or should be applied to all situations where one is required to select a main job. However, beyond there being a diverse range of main job indicators used, there were frequently suggestions or acknowledgements from participants that the most suitable main job indicator would depend on the situation of the multiple job holding character at hand. This was particularly prevalent in discussions of Suzie's situation. Here, many participants expressed that given her status as the breadwinner alongside the burden of caring for her family, Suzie's main job should be the one that gave her the highest and most stable income. This thought process was clearly articulated by Participant Twelve:

"With Suzie... she has three kids to provide for, and a partner who cannot work so that, to me, already says right off the bat that one of the most important factors should be money. Whereas with Wiremu on the previous one, he had a six figure salary from the CFO job. And assuming that he's a half decent person with a few brain cells in his head, you would hope that he at least had some savings. So if he were to lose that CFO job, he would hopefully have like a cushion for a little bit, that money wouldn't be his main deciding factor."

## Participant One elaborated upon this contingency:

"I would say that the job which is your main job is the job that you feel more invested in and the way that people feel invested is going to differ – in that for some people, it's going to be the amount of money they make, other people it's going to be the amount of hours they do. And for some people, it's going to be the amount of, you know, passion that they have for it."

More specifically, a key element of the character's situation that presented as being most relevant to deciding their main job appears to have been their motivation or reason for holding multiple jobs in the first instance. Throughout the course of the interviews, participants frequently related what they saw as being the character's reason for holding multiple jobs, to their choice of main job. In this way, it became clear that factors that could serve as main job indicators (e.g. most income) were more important in particular cases than others. This is perhaps seen most clearly by contrasting the situations of Luisa and Suzie. Most participants appeared to interpret that Luisa was holding multiple jobs ultimately in order to support her lifelong dream of running her own clothing brand, while they recognised that Suzie was holding multiple jobs primarily for financial reasons, to provide for her family in a fairly dire situation. In Luisa's case, a majority of participants selected her own business as her main job, for the reason that it was her own business and lifelong dream – despite it not fulfilling traditional criteria like providing the most income or consuming most of her time. Conversely, in Suzie's case most participants selected the job that provided the most security and the most income as her main job, with many citing her financial need as their reasoning.

Participant Eight summarised this concept, through relating it to their own situation:

"I think you have to sort of look at what the individual's motivations are for having multiple jobs and I mean, some work we do out of necessity and you know, with my jobs, one of them, the income is incredibly variable from year to year. But I do it for other reasons. And the other one is more intellectually stimulating and better pay. So I do them both for different reasons, but they both fit together. So they fulfill different needs."

This reflection from Participant Eight also raises another issue – the idea that multiple job holders may not have just one overall reason for holding multiple jobs, but that each job may have its own unique motive.

## **4.3.3.** Themes pertaining to the methodology

Although not relating strictly to the overall research objective, interesting observations that relate directly to the use of vignettes as a methodology – that were classified into 2 themes – arose during analysis.

# 4.3.3.1. Theme 13: Relation to own situation

It was not uncommon for interviewees to — completely unprompted — respond to the characters' predicaments in a way that reflected their own situations. At times this happened explicitly, with seven participants specifically discussing how their own situation compared to a given vignette. Participant Nine clearly articulated this, saying that "you think of those people, but you think of yourself if you'd be in that situation, so it's almost what I would do rather than what they...would do... you know what I mean?" At times, participants appeared hesitant to verbalise a comparison that they were making with their own situation — such as Participant Six, who said "I don't know if I'm really supposed to, but if I kind of.. if I think about my life..." before explaining their rationale. Whenever this did happen, participants were reassured that they were welcome to reflect on their own situation, or any other situation that they found helpful in responding, and were encouraged not to censor their thoughts and responses.

Relation to an interviewee's own situation was also present less explicitly – where patterns could be observed between the rationale given for the vignettes and the individual's own main job, when reflecting upon responses after the interviews. In these cases, analysis revealed that the three interviewees who gave identical criteria across all vignettes also

provided precisely the same rationale when asked which of their jobs they would select as their main. Comparison was less straightforward for other participants, as most provided a varying range of criteria across the different vignettes – including citing more than one factor concurrently, at times. In addition to the three participants who gave the same criteria across all vignettes and their own situation, a further nine participants provided rationale for selecting their own main job that echoed the criteria they had used in one or more vignette responses earlier.

## 4.3.3.2. Theme 14: Engagement with vignettes

There were multiple interesting examples of participants engaging with the vignettes in more depth than anticipated. One of the key ways in which this occurred was participants placing themselves in the position of the characters, including possible future events that may happen to the characters, or actions they could take. The most fascinating example of this was in the case of Participant Two – someone who had held multiple jobs extensively throughout her life – who empathised with the characters to the extent that she would suggest ways in which they could resolve the dilemmas they faced. She exhibited this particularly in Suzie's case, saying:

"This is a tough one for her. She, she could get probably quite a lot of hours working at minimum wage [job one], and that will just be like the previous one [vignette], would just get exhausted from just working too much and having to run a household and three kids and an unwell partner. So... she needs to focus on that permanent job that pays more and try and seek more of that. Unless she can get that casual contract made permanent somehow or... might not always be possible, but bit of a precarious situation."

Also in Wiremu's case, Participant Two perceived that Wiremu faced a dilemma whereby he would like to be able to do more work for his Iwi:

"I feel that in his heart, he probably would be happier to do more work for this... for the iwi. Uhhh... I'm trying to think of how I could solve his problem for him [both laugh]. He could give up some of that salary and work half the days... probably would be able to get a person to job share."

Interestingly, Participant Fifteen – who, like Participant Two, was also someone who enjoyed holding multiple jobs and had done so throughout his life – tried to solve a perceived dilemma for Suzie in a similar fashion, suggesting that she attempt to grow the work in her third job:

"So if I were Susie, I would, yeah, I think that being a Sunday school teacher at the church would be the main job. If she can talk to the parents of more kids to bring their kids to the church on a Sunday and she can maybe earn, you know, make a living through that job. If parents are dependent on her, and obviously see value in her teaching, and she enjoys that teaching and feels more useful and meaningful in the job. That should be the main job, but obviously she needs to, you know, put food on the table and look after her kids and all of that. So a very kind of tricky situation."

Participants also often empathised with the predicaments of the characters, even expressing sympathy or concern. This was evident particularly in the cases of Wiremu and Suzie, where multiple participants expressed that they must be exhausted. Participants also expressed where they felt the characters may prefer for their main job to be different to the one that they had identified. An example of this can be seen in Joe's case where Participant Three — who took a fairly traditional approach across all main job selections — acknowledged that while he was adamant Joe's main job was his first job that provided the most stable income, Joe would likely prefer for photography to be his main job and would want to build this second job up so it could ultimately become his main job. Participant Eight also expressed the same sentiment: "I'd love to think that the photography was his main job because it aligns more with his sort of identity and what he wants to be and that sort of thing. But unfortunately, his main job to me is his call centre work."

#### 4.4. Discussion

As discussed earlier in section 4.1, when partaking in work-related research, multiple job holders are often required to select only one of their jobs in relation to which they should answer question. However, a notable issue with this is the arbitrary nature of the criteria that are traditionally used; upon which basis the individual is told to select their main job. This study aimed to overcome this issue by exploring the factors that multiple job holders consider when asked to make such a decision, with the overall objective of developing a meaningful, effective method for directing multiple job holders to select a main job. To this end, a number

of themes were identified representing a diverse range of factors/main job indicators cited by participants when selecting what they deemed to be the main job in each situation. This included some that do not appear to have been used as criteria to select a main job in previous research. Additionally, two themes were identified relating to the vignette methodology — that were not directly relevant to the overall research question, but may provide useful insight on the use of vignettes in research. The themes pertaining to the main research question will be discussed first in this section, followed by the themes identified that relate to the methodology.

# 4.4.1. Themes addressing the main research question

The most widely cited indicator was the stability and security of a job. The presence of this theme as a main job indicator – notably more so than any other one factor – was somewhat surprising when considered alongside the indicators that have traditionally been favoured in past research. This indicator does have some alignment with one of the criteria revealed by (Kottwitz et al., 2019), where one of their participants was said to have mentioned continuity of hours and entitlements as indicative of a main job. However, overall it has not been noticeably prevalent in other research. Thus, the emphasis it was given by participants in the present study is intriguing. This may speak to the nature of multiple job holding arrangements - in that they are often reported to include contingent jobs/contracts (Marucci-Wellman et al., 2014b). Perhaps this is why so many participants have indicated that security/stability of a job can set it apart from other jobs in the multiple job holding arrangement. It is possible that the importance placed on stability here may even be a symptom of the study's COVID-19 context. Indeed, it is a time where unemployment has risen, and thus participants may be even subconsciously (given that COVID was not mentioned in the vignette content) prioritising job security. However, there was not sufficient evidence in participants' responses to indicate this more conclusively – it is being presented merely as a possibility.

After the above indicator, the next most frequently cited indicator was the traditionally common concept of most hours worked. This suggests that this indicator does have *some* relevance and validity in being so commonly used — it clearly came to mind in numerous instances in the present study. Most income, another traditional indicator, was found to be the third most frequently cited indicator in the present study on eight occasions. Worth

noting, however, is that the responses including most income tended to express that this was highly dependent on the character's situation. Where they perceived the characters as being in greater financial need, they were more likely to select most income as the indicator. Tenure, which has also been a traditionally utilised main job indicator, was raised on six occasions – again, suggesting that it was deemed relevant in some instances, but certainly not a majority. It is clear that the three traditional indicators did feature fairly prominently. However, it is important to note that these were all subsequent to the most prominent indicator of stability. Furthermore, they were often mentioned alongside other indicators and participants' selections were often contingent upon the characters' situations. There were also numerous other different indicators raised. This suggests, ultimately, that none of these traditional indicators should be the only one to be used or relied upon when requiring multiple job holders to select a main job. Indeed, it would appear that no single indicator should be used and generalised across all situations.

Among the diverse range of indicators that were cited by participants, many of these were consistent with the findings of (Kottwitz et al., 2019). There were also, unsurprisingly, the more traditional indicators of longest tenure (Bamberry & Campbell, 2012), most hours worked (Renna & Oaxaca, 2006), and most income (University of Essex Institute for Social and Economic Research, 2018) as discussed above. However, there also appeared to be two novel indicators that, to the best of my knowledge, have not previously been treated as main job indicators in any past research. The first of these was most energy expenditure; the idea that the job that consumed most of one's energy and effort was their main job. The second of these was the long term goal; in that the job that one had as their long term goal/ambition, that they wanted to pursue or maintain well into the future, was their main job.

Although the indicator of most energy/effort expenditure may often coincide with most time spent in a job, this will not always be the case. Indeed, in the present study, some participants expressed that they felt Luisa would exert much energy, effort and thought on her own business, potentially even while working in her other jobs. Having come from those with firsthand experience of holding multiple jobs, this novel finding may suggest that this is a phenomenon present among multiple job holders. For whatever reason, individuals may be consciously investing more effort into one of their jobs. As suggested by Participant One, this

may even include energy and thought given to a job outside of its working hours — in Luisa's case. In this way, this indicator is meaningfully different from the traditional indicator of most working hours. In line with Jamal and Crawford (1981)'s theory that those holding multiple jobs are unique, high-energy individuals, some who engage in the practice may appraise their multiple jobs in terms of the overall levels of effort and energy that they dedicate to jobs, rather than simply the number of hours.

While it was novel as a main job indicator – in that the concept does not appear to have been previously discussed in this context – the idea of the job that one views as their long term goal/ambition could be said to represent the transitional motive for multiple job holding. As discussed in section 2.5.2.2., this has long been acknowledged as one of the key non-financial motives for holding multiple jobs. This is generally in order to either trial a potential new career, or gain the necessary experience before fully transitioning into a new role (Fitchett et al., 2016; Panos et al., 2011; Paxson & Sicherman, 1996). When considering its relevance as a motive, it seems logical that participants identified this as a main job indicator, specifically where they perceived that the characters were holding multiple jobs with the ultimate goal of transitioning completely to one of their jobs.

Beyond discussion of any one indicator that arose in the present study, perhaps the single most valuable advancement achieved is the finding that the main job indicator selected by participants was frequently shown to be contingent upon the relevant character's situation. In particular, it was frequently suggested that the character's reason for multiple job holding (the factors in their situation that caused them to engage in this) had some relation to the job that should be deemed their main one. This appears logical when one considers the diversity of motives that exist for holding multiple jobs as illustrated in section 2.4 of this thesis. Past research has started to acknowledge and empirically confirm that multiple job holders are a heterogeneous population and thus should not be treated as an amorphous population (Bouwhuis et al., 2018c). Therefore, it appears logical to suggest that the most appropriate criteria for an individual's main job to be selected should also be heterogeneous. This is arguably the most valuable finding, given the diversity of indicators raised by participants. This suggests that no one indicator can or should be relied upon across all situations. In itself, the inability to select a definitive main job indicator does not achieve the study's ultimate

objective – to develop a method of asking multiple job holders to select a main job. However, considering the way in which participants often selected a character's main job based upon their situation does aid in fulfilling this objective. While this finding does not produce one single criteria that should be used when asking individuals to select a main job out of their multiple jobs, it provides clear justification for the technique of requiring individuals to self-select their main job.

## **4.4.2.** Contributions to methodological understanding

From a methodological perspective, it was encouraging that multiple participants were able to both relate to the vignettes presented to their own situations and empathise with the characters' situations. This suggests that the scenarios and characters depicted were perceived as realistic and relatable for participants – achieving Skilling and Stylianides' (2019) recommendation. This concern for the characters is consistent with previous findings of Sayre (2006), when utilising vignettes that depicted characters in a similar situation to their participants. Furthermore, at times, empathy with the characters appeared to reach the extent that some participants even proposed solutions for issues that they perceived the characters to be facing (which was not an objective of the interview in any way). What was perhaps particularly interesting about the tendency of two participants to undertake fairly indepth problem solving attempts for the characters was that both participants' own situations had some similarities. Both participants were at similar stages of their careers, being approximately middle-aged, and both also had expressed that they had held multiple jobs extensively over the course of their careers. Furthermore, multiple job holding appeared to be a choice for these participants, and one that they seemed to enjoy and that enriched their lives – based on the details they shared. Their problem solving attempts could perhaps be interpreted as these individuals making recommendations that could allow the vignette characters to achieve similarly enriching multiple job situations.

# 4.5. Conclusion

This study was undertaken primarily to understand how those with firsthand experience of multiple job holding would select a main job when prompted to do so, to inform the method of main job selection to be used in a subsequent quantitative study. However, as is clear from the vast array of factors (themes) discussed in section 4.3.2. and the lack of an overwhelming majority for any one factor, this study strongly suggests that no one, predefined main job

indicator should be utilised. While the fact that this study was unable to conclusively identify one, predominant factor may seem like a shortcoming, arguably the opposite is, in fact, true. Instead, this is a promising, novel finding that gives further insight as to the true heterogeneity of multiple job holding and those who engage in the practice. No single (main job indicator) criteria should be applied across all situations, just as the overall premise of this thesis is that there is not one, all-encompassing type of multiple job holder.

Furthermore, there is clear support for the idea that the criteria used to select a main job (the main job indicator) is heavily contingent upon the situation of the individual in question — particularly, it seems, their motive for engaging in the practice. Thus, given the diverse range of motives that have previously been reported for holding multiple jobs (as discussed in section 2.4), it is logical to conclude that criteria used by individuals to select a main job, when asked to do so, will also vary. Therefore, rather than imposing an arbitrary criteria upon multiple job holders when asking them to select a main job to reflect on (in the context of data collection), ideally, the opportunity should be provided for these individuals to select a main job on their own terms, and these terms (criteria) also captured in the data collection. As aptly noted by Renna and Oaxaca (2006, p. 11), allowing individuals to self-select their main job does create ambiguity, as the researcher is not aware of the basis upon which they made their selection (their main job indicator). This necessitates the collection of the individual's main job indicator. Even though the criteria used among individuals will vary, this allows for transparency and clarity around precisely how this criteria does vary.

It is acknowledged that this method does create greater variability than a more prescriptive method, such as asking participants to treat the job in which they earn the most as their main job, and thus may be open to criticism around comparability. Furthermore, for data collected by Government departments — particularly for such purposes as basic descriptive employment and/or income statistics — an arbitrary criteria such as the job with the most hours worked may suffice. However, in situations where the objective of the data collection or other measurement is to understand the experiences of multiple job holders, or similar, it is argued that enforcing a more prescriptive method would be doing a disservice to the meaningfulness of the data captured. To conclude, in similar research contexts with an

objective to more meaningfully understand multiple job holders and their experiences in some way, the following method is recommended:

- 1. In data collection, provide the opportunity for the multiple job holder to self-select what they perceive to be their "main" job (advising the individual, if queried, that they should make their decision based upon what a "main" job means to them).
- 2. Following step 1 and ideally after other variables/matters of interest have been collected or measured ask for (and record) the individual's reason for selecting their chosen main job.

# Chapter 5: Study Two - Investigating the situational heterogeneity of multiple job holders

### 5.1. Introduction & study rationale

As outlined in chapter 2, multiple job holding is an important phenomenon that, owing to a general increase in non-standard work, is unlikely to diminish in its significance. Thus, its impacts warrant attention. However, the impacts reported to be experienced by multiple job holders vary substantially. Yet, there is little current understanding as to what may cause these experiences to differ. This lack of understanding may hamper those wanting to engage with this population – whether for research, practice or policy development (or in another capacity. To overcome this lack of understanding and consensus around the practice, a meaningful, nuanced conceptualisation of multiple job holders that can explain their differences is needed. The overall objective for this research was, therefore:

To explore the heterogeneity of multiple job holders in order to develop a meaningful, nuanced method for conceptualising these individuals, which can be utilised for future research, policy development and practice.

Key to this conceptualisation was an understanding of the differences in multiple job holders. The possibility that different types of multiple job holders may exist, and that these different types may have differing experiences, had to be explored. Therefore, the objective for this study (two) was:

To investigate why the experiences of multiple job holders differ, through the achievement of two sub-objectives:

- A) To determine whether different "types" of multiple job holder can be identified based upon their situational factors, including their experience of the psychosocial work environment
- B) To investigate whether the outcomes experienced differ between the different types of multiple job holder identified

To achieve these objectives, two distinct phases were required. As suggested in chapter 2, there is some evidence to suggest that factors inherent to the multiple job holder's situation

may impact their experience. Furthermore, the concept of the psychosocial work environment introduced in chapter 3 may be a useful vehicle through which the situations of multiple job holders can be understood more deeply. Thus, Phase A was intended to utilise factors relating to the multiple job holder's personal situation, in conjunction with psychosocial work environment factors, to determine whether different "types" of multiple job holder could be identified. This was intended to address sub-objective A. Subsequently, the hypothesis for Phase A was:

H1: That multiple, heterogeneous types (classes) exist within a wider sample of multiple job holders in New Zealand.

H1A: That types (classes) can be distinguished based on reported situational factors of multiple job holders – including psychosocial work environment factors.

Operating on the assumption that distinct types of multiple job holder would emerge from Phase A, based on their reported situational factors, Phase B was then intended to test the utility of these types. This was intended to provide insight into specifically how outcomes differed across the various types and addressing the overall research question (addressing sub-objective B). Subsequently, the hypotheses for Phase B were:

H2: that outcomes experienced will differ among the various types of multiple job holder that are identified.

H2A: that less favourable outcomes will be experienced by those in types where objectively negative indicator variables are present – such as lower levels of choice, high work demands and low resources.

Consistent with the pragmatic epistemology that underpins this research, this study was designed to utilise the methodology deemed most appropriate to solve the problem at hand (Wicks & Freeman, 1998). The present study outlined in the chapter ahead was intended to be an initial step towards solving the problem of understanding why some have highly positive experiences of multiple job holding, while others suffer negative impacts. This study was the first step towards understanding the different types of multiple job holders that may exist based on situational and psychosocial work environment factors, and how their experiences may differ. With little known about this topic, particularly around the psychosocial work

environments of multiple job holders, this was fairly exploratory and accordingly, it needed to be of large enough scope and scale to capture useful data from which inferences could be drawn on this largely unknown matter. For this purpose, the most appropriate design was a large-scale quantitative survey, in order to collect sufficient wide-ranging data from which inferences could be drawn and thus generalised in relation to the population of interest.

In order to more fully understand the phenomenon of multiple job holding, that is likely to only become more important and prevalent in society, a holistic picture of the experiences of multiple job holding individuals and the factors that shape their experiences needed to be developed. The most significant contribution in this regard to date has been the recent work of Bouwhuis et al. (2018c), who identified four distinct groupings among Dutch multiple job holders aged 45 and over. Such an investigation would be particularly useful in the New Zealand context, where multiple job holding rates appear comparable to those internationally, but the availability of research to deepen understanding of this issue is not comparable.

This study drew inspiration from the aforementioned work of Bouwhuis et al. (2018c), but offered unique, novel contributions primarily through:

- 1) The use of a broader range of ages in the sample
- 2) A novel, sophisticated and empirically-informed means of asking respondents to select the main job in relation to which they would answer survey questions (study 1)
- 3) Using a comprehensive conceptualisation of the psychosocial work environment as a lens through which to differentiate types of multiple job holders (as previous studies have only used a small number of psychosocial factors at most)
- 4) The setting of New Zealand as a unique context
- 5) The inclusion of a broad range of outcomes, related not only to health/wellbeing but also work itself

The following chapter outlines the precise way in which this was achieved, commencing with a discussion of the overall research design. The participants included in this study and the way in which they were sampled and recruited is then covered, followed by an outline of the materials employed. The procedure for data collection and statistical analysis of the data is

outlined, prior to the full findings. Following this, the results are interpreted and discussed, before the study is concluded.

# 5.2. Methodology

#### 5.2.1. Research design overview

As noted at the start of this chapter, the present study had two distinct phases through which the overarching research question was addressed. The sub-objectives for the study, in order to test the overall study objective stated in section 5.1, were:

- Phase A: To detect underlying types of multiple job holder, based on analysis of their situational factors and experiences of the psychosocial work environment
- Phase B: To determine whether outcomes experienced by the different types of multiple job holder differed; and if so, how they differed

Both phases were achieved through the collection of data using an online cross-sectional questionnaire design. The questionnaire contained items that captured:

- basic demographic information on the individual and each of their jobs
- situational factors of the individual
- the individual's selection of their perceived main job
- items from the COPSOQ III questionnaire to measure their experience of the psychosocial work environment as well as select outcomes experienced by the individual

# 5.2.2. Study setting: COVID-19 pandemic

Data collection took place in October 2020. For the duration of data collection, in New Zealand no lockdown measures were in place beyond border closures and workers were generally able to continue to carry out their work as normal in workplaces — with the exception, of course, of those who had lost employment. Despite no enforced requirements, anecdotally it appeared as though the practice of working from home remained widespread after becoming a requirement for many during previous lockdowns. However, official statistics on this were not available. As of the commencement of data collection in October, unemployment was at 5.3%, while underutilisation was at 13.2% (according to the most recent figures available in the September 2020 quarter) — compared to 4.2% and 10.4%,

respectively, as of the same time in 2019 (Statistics NZ, 2019c, 2020b). Official statistics were not available around the prevalence in or any change to reported rates of multiple job holding. No direct modifications were made to the study or planned data collection procedure as a result of COVID-19, beyond the study having been delayed a number of months by the onset of the pandemic earlier in the year, due to other preparatory activities being delayed. There were concerns that potential changes to the labour market as a result of the economic downturn may have caused a reduction in multiple job holding and thus decreased the pool of available participants. However, this was speculative, as local data on multiple job holding rates for the relevant time period was not available. These concerns appeared to be unfounded, and a sufficient sample was recruited through the use of a third-party panel provider (Qualtrics) with little disruption or delay.

#### 5.2.3. Procedure

Multiple job holders are known in the research for having less free time, on average, than their single job-holding counterparts (Marucci-Wellman et al., 2014a), and to be balancing multiple commitments (McClintock et al., 2007). This was therefore likely to make obtaining completed survey responses from this population more challenging and in fact, this had been proven in past attempts to collect survey data from the same population. To overcome this challenge, consideration was required around two key areas: the ease of use and content of the questionnaire (including length), and incentives offered for participation.

# 5.2.3.1. Questionnaire medium and ease of use

The medium through which the survey was distributed required careful consideration, given its ability to affect completion rates. The questionnaire was delivered through an online survey platform, Qualtrics. To make participation as convenient as possible for these potentially time-poor individuals, the questionnaire's appearance and usability when displayed on a smart phone or other mobile device was carefully examined. It is acknowledged that electronically delivered questionnaires are imperfect, particularly as those without access to either a computer, smartphone or other suitable mobile device are not be able to participate. However, New Zealand has a high rate of smartphone penetration – over 80%, ahead of many nations despite the population generally being less wealthy than countries with comparable smartphone penetration (The Nielsen Company, 2017). This gave more confidence that a reasonable proportion of the population would be able to access the

survey on a smartphone, if not a computer, and thus the data received would be reasonably reflective of the general population.

Beyond participant-related practicalities, online data collection also offered superior accuracy and speed in the coding of data (Couper, 2011), in turn expediting the rate with which data analysis could be undertaken and insights gleaned. The Qualtrics platform also allowed the researcher to carefully test how the survey interface would appear both on computers and a variety of mobile devices, to ensure ease of use for respondents. Once data collection had ceased, the survey could then be closed and all data exported directly to the appropriate software package to be promptly and efficiently processed and analysed.

The limitations of web-based surveys are widely acknowledged – namely, their lower response rates when compared to methods such as paper or telephone-based survey delivery (Sinclair et al., 2012). Additionally, potential participants are restricted to those with access to internet and a computer or mobile device (smartphone/tablet) on which they can access the survey (Tourangeau et al., 2013). However, for a number of pragmatic but key reasons, the online platform was the most suitable mode for this study. As discussed above in section 5.2.2, one of these key reasons was the potential for COVID to resurface in the New Zealand community during data collection. If this had eventuated, it would significantly hinder the ability to physically collect data using paper questionnaires. Furthermore, delivering paperbased questionnaires would have been significantly more difficult in light of the study population's business. Expecting respondents to return completed paper questionnaires via mail would pose an additional burden for the target population, who are already notably busy. Using paper questionnaires could have, therefore, biased the sample counterproductive to the researcher's efforts to access a diverse population of potential multiple job holders. Given these considerations and the planned use of incentives (to be discussed in section 5.2.3.3), an online survey link was easy to quickly and inexpensively disseminate among prospective participants and was clearly the most viable medium.

#### 5.2.3.2. Questionnaire length and useability

As already mentioned, the target respondent population is known for being busy (Marucci-Wellman et al., 2014a; Marucci-Wellman et al., 2016). Therefore, the length of the

questionnaire was carefully considered and minimised as much as possible while still ensuring it was able to collect data to meet the research objectives. The estimated length of the questionnaire was between 15-20 minutes. Furthermore, while it was unavoidable that the questionnaire was fairly comprehensive in order to capture all planned variables, this was tempered with the use of incentives to encourage completion.

The interface and features of the survey were also carefully considered, given its length and the complexity of some of the questions. As an example, the questions on the psychosocial work environment required participants to think of their (self-selected) main job when answering. To enhance convenience and minimise the potential for confusion or distraction when answering these questions, piped text was utilised within the Qualtrics platform. This ensured that at the top of each page of the questions, participants were reminded of the job that they selected as their main one (including its hours and industry, in case participants had the same title for more than one job). This also reminded them that they should answer the following questions with this job in mind. An example of this is shown in Figure 3.

Q47.

Now that I have asked about each of your jobs, I'd like you to now only think about the job that you selected as your main job:

Corrections Officer where you worked 40 hours last week in the Other services industry

These questions will ask about your work environment in this job - so while answering them, <u>only</u> think about <u>this job</u> - not your other jobs.

Figure 3: example of selected main job reminder

#### **5.2.3.3. Completion incentives**

Early pilot attempts for the study clearly demonstrated stark difficulties in accessing a sufficient number of qualified participants and furthermore, successfully obtaining completed surveys from participants (discussed further below in section 5.2.3.4). A common strategy to improve participation rates is to offer some form of post-paid financial incentive – that is, an incentive offered once survey completion has been confirmed. Support has been found for the efficacy of such a strategy. Brown et al. (2016) report that offering a post-survey financial incentive significantly increased the chance of participating in the survey in the first instance, and it also further led to a slight increase in overall survey completion. This is supported by Coopersmith et al. (2016), who found that incentives offered after survey completion were

the most effective in increasing completion rates — over other strategies such as pre-paid incentives or early response incentives.

After the challenges experienced during initial piloting, the decision was made to utilise a third-party provider, Qualtrics, to both recruit participants and administer post-paid incentives. In this way, the benefits of offering such incentives could be achieved, while minimising the risk of participant confidentiality breach (if the researcher was to administer incentives firsthand). At the desired respondent level of a 500 person sample, such incentives would also be extremely difficult and impractical, if not nearly impossible, to administer firsthand. Furthermore, the third-party provider was able to recruit participants more effectively via their established networks. Qualtrics was selected as an appropriate and credible third-party provider given their reputation among academics, being widely used and trusted by other researchers – such as Campion and Csillag in a similar study, published after the completion of this thesis (2021). Qualtrics has data quality checks integrated into their data collection process - as detailed further in section 5.2.4.3. – to prevent the inclusion of irrelevant/invalid participants, and to mitigate against factors such as participant fatigue or inattention.

#### 5.2.3.4. Survey piloting

The survey was subject to extensive piloting, on multiple occasions. An initial attempt at data collection was made prior to the COVID-19 pandemic. I utilised many diverse channels to recruit participants – including trade unions, tertiary student associations, personal networks, social media advertisements and Facebook groups of relevant professions (namely rideshare drivers). After these extensive efforts over 3 months, a sufficient number of responses could not be obtained. Only 118 complete responses were able to be obtained, and these were skewed heavily towards the tertiary student population, owing to the recruitment methods used. Thus, the decision was made to pause data collection and re-evaluate the study. Following this, the decision was made to utilise a third-party provider to assist with the collection of data and administration of incentives. Given the amount of time that had (inadvertently, due to the COVID-19 pandemic) elapsed between this initial data collection attempt and the second attempt, data from the first collection attempt was not used in the

present study. Furthermore, it was not ideal to join the two datasets together – given that the second was collected in the atypical context of COVID-19.

Prior to the recommencement of data collection, the survey was piloted once again to test its appropriateness for the present context and the means of collecting data through a third-party provider. Based on feedback from my supervisors and colleagues who acted as pilot participants, the changes made were primarily around wording to improve conciseness and clarity where issues were identified, in addition to visual elements of the survey to improve its presentation on smartphone screens.

# **5.2.3.5. Ethical considerations**

The survey contained items that directly measured workplace matters, including those that related to stress and incivility with others in the workplace, as well as sensitive outcome measures. In light of this, a full ethics application was deemed necessary and was submitted to the Massey University Human Ethics Committee (Northern). Although expected to be low, there was still a risk that participants may become distressed while reflecting on these matters in the survey. To mitigate this risk, participants were clearly presented with their rights in the information sheet, including that they could stop completing the survey at any time if they became distressed. Helpline details for various local, free mental health support services were also provided in the information sheet, as well as at the conclusion of the survey.

As both a development exercise and in the interests of being present to address any concerns of the committee as the application was discussed, I elected to attend the committee meeting at which my application was discussed. Discussion was primarily around seeking clarification on points. One matter of discussion was the collection of data on ethnicity, and whether this may present a risk – particularly if it was used in a context that may portray any particular ethnicity negatively. Reassurance was given that ethnicity data would only be used descriptively to describe the overall sample composition – although in the final iteration the decision was made to remove ethnicity altogether. Another point of clarification was to ensure that participants were aware of the potential for trade unions to be given anonymous, aggregated results summaries for the responses of their members, when the unions assisted

with survey promotion (although this did not eventuate, given that recruitment in the final survey was instead done via panel). Given that the survey related to employment matters, the suggestion was also made to include a link to the Government's employment advice website among the other helpline numbers provided to participants. After addressing these matters and other fairly minor points around wording, full ethics approval NOR 19/08 was issued by the committee (please see Appendix A).

#### **5.2.4.** Participants

#### **5.2.4.1. Selection criteria**

To be eligible to participate, individuals must have met the following selection criteria:

- currently identify as having more than one job, and;
- usually work in New Zealand, and;
- be 18 years of age or older.

Differing phrases have been used to describe multiple job holding across various studies. However, the most common contemporary means of phrasing questions intended to measure this appears to be to ask respondents whether they have "more than one job" (Bamberry & Campbell, 2012; Newell & Baines, 2006). Thus, participants were asked if they currently held more than one job at the time of the survey. If participants answered positively to this, they qualified as multiple job holders for the purpose of the study. Individual identification as a multiple job holder was the most important qualifier for this study, in the context of exploring the individual's experience — given that participants' experience would undoubtedly be shaped somewhat by their perceived situation (i.e. perception that they hold multiple jobs).

The final two qualifiers, of being 18 or over and usually working in New Zealand, were used for practical purposes. Firstly, the present study was intended to involve adults. This was in part due to the potentially sensitive nature of some questions, e.g. those around workplace ill-treatment, including sexual harassment. Asking those under 18 about such matters would pose significant ethical concerns. Furthermore, the study received ethical approval on the basis that participants would all be adults. Complexities would arise around informed consent if those under 18 were included. Lastly, the context for the study was New Zealand. Thus,

participants were required to usually work in New Zealand. The qualifier "usually" was used so as not to exclude those who may at times be required to travel for work, or who may undertake some work online for overseas entities, while still being primarily employed in New Zealand.

#### 5.2.4.2. Sample size considerations

The desired sample size for the present study was n=500. This figure was based on widely accepted and adopted norms for sample sizes in the field of Latent Class Analysis (LCA), while being generous in relation to some more conservative (i.e. lower) guideline presented (Finch & Bronk, 2011). Previous researchers undertaking LCA have asserted that the ideal sample size can differ, depending on other factors such as the number and quality of indicators to be used in the analysis, as well as the inclusion and effect size of any covariates (Wurpts & Geiser, 2014). The aforementioned researchers have suggested that using more indicators, especially those of "high quality" – i.e. "those with strong relationships to the latent class variable" (p. 1) – may sometimes compensate for a smaller sample size. However, the exploratory nature of this study made these considerations more difficult to incorporate, as it is harder to anticipate them. This was because prior to the study, the latent classes were yet to be identified – so conclusions could not be drawn around which indicators may have strong relationships to the classes. To this end, a conservatively large sample size target was chosen, rather than relying on the above factors that may justify a smaller sample size (such as a lower parameter of 300 that has been suggested by some, e.g. Nylund-Gibson and Choi (2018)). An additional advantage of this substantial sample size was an increased potential for more nuanced classes/groupings to be identified from the data – as there was a higher chance that rarer classes may be detectable at a larger sample size (Nylund-Gibson & Choi, 2018).

#### **5.2.4.3. Final sample**

Data were collected by the third-party panel survey provider. To ensure the data were robust, I remained closely involved with all data quality checks. The survey started with a screening page, which asked questions to confirm participants' status in relation to the selection criteria – and to automatically screen out anyone whose response indicated that they did not meet the screening criteria. All responses that had a duration of less than half of the median (800 seconds) were automatically screened out immediately upon submission – and thus not included in the subsequent data quality checks. Fieldwork was paused and data quality

checked at three points – after an initial "soft launch" when 15 responses had been collected, at 287 responses and again at 520 responses. Throughout the data cleaning process, a total of 80 responses were deemed invalid and removed for the following reasons:

- Duplicate responses
- Invalid verbatim comments (e.g. entering "cat" as a job title)
- "Straight line" responses the same response point selected for all items

After the final data quality check, 507 valid responses were retained, with no missing data<sup>8</sup>. Participant demographics are outlined below in Table 8. Ideally, comparisons of these sample demographics with the relevant proportions of each group within the broader New Zealand MJHer population would be made — in order to provide an indication of the representativeness of the present study's sample. However, due to the lack of in-depth exploration around multiple job holders in New Zealand to date by the government body Statistics NZ, most of the relevant demographic figures are not available for comparison. Only the gender proportion was available — indicating that as of June 2019 (the most recent data available), 45% of multiple job holders were male, and 55% were female (Statistics NZ, 2019a). Those identifying as gender variant/non-binary were not available in the national statistics. Considering this figure may aid in understanding the fairly low proportion of males in the present study's sample — although the present study, the proportion of males is even lower. Table 8 below is provided in order for the reader to reflect on the demographic properties of the present study, in relation to the study's applicability to whichever other population the reader may be interested in.

Table 8: Participant demographics

GenderPercentageFemale61%Male38%Gender variant/non-binary1%Level of education completedPrimary/intermediate school1%Secondary school22%

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<sup>&</sup>lt;sup>8</sup> The only missing data that was not cause for exclusion were responses to the scales that pertained to having colleagues and a supervisor/manager – e.g. support from colleagues or support from supervisor. Participants who responded negatively to questions on whether they had colleagues and supervisors were not shown these scales and thus did not respond to them. In the latent class analysis, their empty responses to these questions were treated as missing data.

Undergraduate qualification	50%
Postgraduate qualification	25%
Other	2%
Union membership status	
Union member	19%
Not union member	76%
Unsure	5%
Tertiary student status	
Student	16%
Not a student	74%
Number of jobs held	
Two jobs	90%
Three jobs	8%
Four jobs	1%
Five or more jobs	1%

# 5.2.5. Materials

The questionnaire contained demographic items, descriptive items around each of respondents' multiple jobs, items capturing data on their multiple job holding situation, a section for the purpose of selecting their main job, various items on the psychosocial work environment and lastly, a selection of relevant outcome measures. These will be discussed in more detail immediately below. An overview of all items can then be found in Figure 4. The full questionnaire is provided in Appendix D.

#### Demographic (not MJH situational info Multiple jobs (ask for included in Latent Class Student status Reason for MJH each) Analysis) Union membership List Job title MJH tenure Other; short answer Industry Age Gender Financial status (ability to Choice (1-10) Tenure in job **Education level** cover expenses) Prefer 1 job? Income Total income Breadwinner status Hours worked last week Contract type Answer these questions thinking of the job that Now, these questions will ask about you chose as your main job how you are feeling in general Choosing main job Outcomes: COPSPQ PSWE: COPSOO Work engagement Which job has the Quantitative demands - Role conflicts biggest impact on (main job) Work pace - Illegitimate tasks your life Job satisfaction (main Cognitive demands - Quality of leadership Why job) - Social support (supervisor) Emotional demands Social media List Demands for hiding - Social support (colleagues) Other; short harassment - Sense of community at answer Sexual harassment Influence at work work Threats of violence Possibilities for - Horizontal trust Physical violence development - Vertical trust Bullying Pink = Phase A Variation of work - Organisational justice Self-rated health Control over working time (latent class) Sleeping troubles Meaning of work variables Burnout Predictability Somatic stress Recognition Depressive symptoms Role clarity Blue = Phase B (outcome) variables

Figure 4: Questionnaire content outline

#### 5.2.5.1. Demographic variables

Basic demographic information was captured at the start of the questionnaire, around the participant's age, gender, education level and number of jobs held. This is consistent with the practice of Bouwhuis et al. (2018c), who collected such information for descriptive purposes. This enabled them to identify whether certain demographic segments were more predisposed to membership in particular groups of multiple job holder.

#### 5.2.5.2. Information on each job

To gain descriptive statistics on the employment situations of multiple job holders, basic information was asked about each of the individual's jobs. This allowed general observations to be made about the number of jobs held, industries in which these jobs exist, and hours worked in each job, for example. This allowed for variables to be computed (after data collection, prior to analysis) in relation to total weekly working hours, whether the individual was in casual employment in any or all of their jobs, as well as whether the individual was

self-employed in any or all of their jobs (i.e. whether they were a "hybrid" multiple job holder).

The task of measuring working hours is one that should be carefully considered when undertaken in relation to non-standard forms of work, such as multiple job holding. This is because these employment situations may be more likely to feature irregular hours; it may be difficult for a multiple job holding respondent to indicate (or perhaps even recall) a "usual" week (Bell & Elias, 2003). Furthermore, even if the individual is asked for an average of their usual working hours, weekly fluctuations may reduce the usefulness of these figures. Therefore, rather than the common practice to ask respondents for average or usual hours worked, they were asked for the number of hours they worked in each job last week – given that a week is a standard and appropriate timeframe used in working hour research (Tijdens & Dragstra, 2007). This was most appropriate because the present research intended to capture the individual's experience at the time of the questionnaire – thus, the actual hours worked from the most recent week were of most relevance.

#### 5.2.5.3. MJH situational information

The following information was collected to illustrate, holistically, the multiple job holder's situation. Union membership status was captured, as means of illustrating sources of professional support available to the worker. Whether or not the individual was the main provider of income (breadwinner) for their household, and whether – after covering expenses – they had too little, just enough or more money than required were collected – using the same phrasing as that of (Bouwhuis et al., 2018c). This provided clear indications of the level of fiscal responsibility and pressure each respondent faced. The elements of the worker's reason for having more than one job, the extent to which they were doing so by choice and whether they would prefer one job were also captured; these matters are more complex and thus will be discussed individually in the next subsection.

Total weekly before-tax income was also collected. However, it appeared that there had been widespread misinterpretation of this question – with around 10% of participants providing a large value that appeared to be more likely as an annual income figure (overall m=\$10,356). These participants had provided otherwise sensible (non-extreme) answers throughout the

rest of the survey, thus it was interpreted that these responses were likely due to either misinterpretation, or perhaps reluctance to share their income. Given this issue, and that participants' financial circumstances could also be gauged to some extent through questions on their breadwinner status and status after covering expenses while income values were not a crucial aspect of the study, the decision was made pragmatically to exclude this variable from analysis.

# 5.2.5.3.1. Motive for holding multiple jobs

As suggested above in chapter 2, it appears as though the individual's motive for holding multiple jobs is a key variable in the context of understanding their broader multiple job holding situation. Furthermore, as indicated in section 2.6, there is some evidence to suggest that those with differing motives may experience multiple job holding differently (e.g. negatively or positively). Therefore, the individual's motive for holding multiple jobs was captured in two ways.

Initially, three motives were presented participants to choose from, as derived from the relevant literature; to meet financial commitments, to develop skills or abilities and to provide variety in work/life. These options were a synthesis of those presented through a thorough review of the relevant literature. However, as noted previously in section 2.5.3., these were still unlikely to capture the unique motives of some. Thus, a free-response option was also provided, for those who felt that their selection fit under the "other" category. The 39 free-responses were then manually coded after the conclusion of data collection. Nine responses that were clearly financially related were recoded to the financial motive, while one response that clearly conveyed the desire for variety was recoded to that category. Five responses were coded to a new category, "enjoyment" — e.g. one response that said "because I love both." 11 responses were recoded to the new category of "altruistic reasons/helping others," such as "they need all the help they can get and I'd hate to leave them in the lurch." Thirteen miscellaneous responses that did not relate to any other categories and that did not relate to another response in order to justify a new category were left as "other."

Because the aforementioned range of motives was fairly broad and developed and used for the first time in this study, the decision was made to utilise an existing range of motives also, to capture more detail after participants had responded to the initial, broader list. The list of motives compiled and utilised by (Bouwhuis et al., 2018c) was used after the previous question, asking participants to now select more specifically how they would describe their reason for holding multiple jobs.

# 5.2.5.3.2. Individual's choice in their situation

As discussed in section 2.6.1, the matter of whether the individual is holding multiple jobs by choice, or not, has previously been treated fairly simplistically and in a binary manner. One method of measuring this has been to ask whether the individual would prefer to hold one job, rather than holding multiple jobs (Bouwhuis et al., 2018c). This is a useful, straightforward parameter and so this will also be adopted in the present study. However, this in itself is not sufficient. As noted in section 2.6.1, some multiple job holders have responded to questions around choice by indicating that their arrangement was both a choice, and a necessity (McClintock et al., 2007; McClintock et al., 2004). Therefore, such individuals may not feel able to answer with certainty one way or the other as to whether they would prefer to have one job. Therefore, a continuous measure for choice will also be utilised to capture greater variability. This will allow for the individual to select on a Likert scale of 1-10 how much choice they feel they have in the decision to hold multiple jobs – with 1 denoting no choice feeling they "had to", with 10 denoting complete choice, because they "wanted to." This appears to be a novel, more sensitive means of measuring choice in the context of multiple job holding, but is being used alongside a more established method (preference).

#### 5.2.5.4. Selection of main job

When capturing variables that directly relate to the workplaces/jobs of those holding more than one job, it may seem appealing to attempt to gather information on each of their jobs. However, this is highly impractical, not least because a data collection instrument that attempted to do so would likely be prohibitively long – particularly for this study's variables. Therefore in such situations, individuals are often asked to answer questions in relation to their "main job" (Bamberry & Campbell, 2012). However, making such a request is arguably a limitation of multiple job holding investigation to date – because of the manner in which it is asked and qualified.

As discussed earlier in section 2.3.4.3. and extensively in chapter three, most commonly in multiple job holding research the individual is asked to treat the job in which they worked the

most hours in the last week as their main job (Renna, 2006). At other times, instead this is treated as the job in which one most recently worked or the one they held first, or there is no prescription given at all as to which job should be considered the main one (Bamberry & Campbell, 2012). Treating the issue of one's main job in such a way is, as argued above in chapter four, highly arbitrary and therefore possibly doing a disservice to the meaningfulness of data collected.

Thus for the present study, in which a priority is meaningfully understanding the individual's experience of multiple job holding, it was important to attempt to overcome this issue. As already suggested and considered, asking the individual to answer questions on each of their jobs would make the present questionnaire exceedingly long, and therefore probably reduce the likelihood of completion. For example, as part of assessing their experience of the psychosocial work environment, the individual would be asked to what degree they had control over their work tasks in each job (i.e. autonomy). Given that the psychosocial work environment encompasses a number of factors, asking questions about each of these factors for each of an individual's jobs would create a questionnaire that would be impractically and prohibitively long. Therefore in order to be able to measure the broad range of psychosocial work environment, practicality necessitated that a "main" job out of the individual's numerous ones was selected.

To this end, a method of allowing the individual to self-select their main role was utilised. Based on the findings of study one, as outlined in chapter three, it was deemed most appropriate to ask the individual to self-select the job that they viewed as being their main job. As prompts, a list of possible criteria for choosing their main job that individuals *could* use was presented (based on the criteria that emerged in study one). It was emphasised that participants could use one of these reasons, or another — whichever they deemed most appropriate. Much later at the end of the questionnaire (to minimise contamination with nearby questions, such as the questions around motive for holding multiple jobs), participants were reminded of the job that they selected as their main one, and then asked to identify the indicator that they used for selecting their main job. Options presented were identical to those suggested earlier as indicators that participants could choose to use, in addition to an "other" free response text box. This was done to obtain a better understanding of the manner

in which individuals responded to the question and was deemed particularly important, given the novelty of this method. This data was then able to be used descriptively, to understand both the frequency with which each MJI was chosen and in more detail, to understand the prevalence of the various MJI within sub-populations.

To the best of the author's knowledge, this approach is novel in the domain of researching multiple job holding. Kottwitz et al. (2019) undertook a similar activity while interviewing multiple job holders, asking them which job they considered to be their main one and why. However, this does not appear to have been done at all in the context of a questionnaire – which offers stark contrast to the context in which Kottwittz et al. did similar, given this study's large-scale quantitative, self-report nature.

#### 5.2.5.5. Psychosocial work environment (PSWE) factors

Respondents were asked to answer questions about aspects of the psychosocial work environment specifically in relation to the job that they selected as their main job. Aspects of the psychosocial work environment were measured using the third edition of the Copenhagen Psychosocial Questionnaire (COPSOQ III). All items from the questionnaire were utilised, to ensure a comprehensive assessment of the psychosocial work environment. This was selected as the most appropriate instrument for measurement of the psychosocial work environment factors in the present study, due to its psychometric strength and comprehensive nature giving it the ability to capture rich data on the subject. The third version of COPSOQ is very new, emerging in the public domain only in the past three years. Given this recency, it may seem preferable to use the second version for multiple reasons – e.g. the availability of a wide array of validation studies and in-depth critique/comment. However, the key additions/changes made in the third version to align with contemporary employment issues, as outlined above in section 3.3.5., were particularly relevant for the present study. It is important that the continuously changing world of work is acknowledged appropriately in the selection of a research instrument on the worker and the workplace. This is even more so given that the domain of non-standard work – of which multiple job holding is one form – is one of the key changes/trends that is part of this shift. Therefore, the most recent revisions to COPSOQ lent themselves well to the investigation of multiple job holding.

As discussed more comprehensively in section 3.3.5., the dimensions measured within COPSOQ aligned well with the Job Demand Resource model – containing both clear demand and resource items. All items and their status as demands or resources are outlined in Table 9. To enable the latent class analysis to take place with these variables as indicators, an average was calculated for each dimension/factor. This was done because analysis using each individual item response would have produced a large, highly complex datafile that would have been highly demanding and likely unfeasible in terms of computational requirements. Care was taken to ensure that reverse-coded items were recoded before the average was calculated. This is commonly done when using COPSOQ. These averages were the indicators that were then used in the analysis.

Table 9: categorisation of COPSOQ dimensions

Demands:		
Quantitative demands	Work pace	Cognitive demands
Emotional demands	Demands for hiding emotions	Role conflicts
Illegitimate tasks	Insecurity over employment	Insecurity of working conditions
Work life conflict	Social media harassment	Sexual harassment
Threats of violence	Physical violence	Bullying
Resources:		
Influence at work	Role clarity	Possibilities for development
Variation of work	Control over working time	Meaning of work
Predictability	Recognition	Quality of leadership
Social support (supervisor)*	Social support (colleagues)*	Sense of community at work*
Commitment to the workplace	Horizontal trust*	Vertical trust*
Organisational justice		
Incivility		
Social media harassment	Sexual harassment	Threats of violence
Physical violence	Bullying	
*Items were only displayed t	o those who indicated that	they did have colleagues or a
supervisor/manager at work		

#### 5.2.5.6. Outcome measures

All outcome variables contained within the COPSOQ III questionnaire were included, as they represented a diverse range of physical and mental health outcomes, in addition to non-health work-related outcomes. They were included within COPSOQ for their proven relevance to psychosocial work factors, and have been previously studied in relation to the psychosocial work environment concept (Burr et al., 2018). Therefore, they were also appropriate for the present study. All outcome measures are listed below in Table 10. Averages were calculated

for the work-related and health outcome scales, with the exception of general health, for which the two items used different scoring – so the single item scores for each of these was used.

Table 10: Categorisation of health outcomes

Health		
General health (1, 2)	Sleeping troubles	Burnout
Stress	Somatic stress	Cognitive stress
Depressive symptoms		
Individual		
Work engagement	Job satisfaction	Self-efficacy

# 5.2.5.7. Psychometric properties of COPSOQ

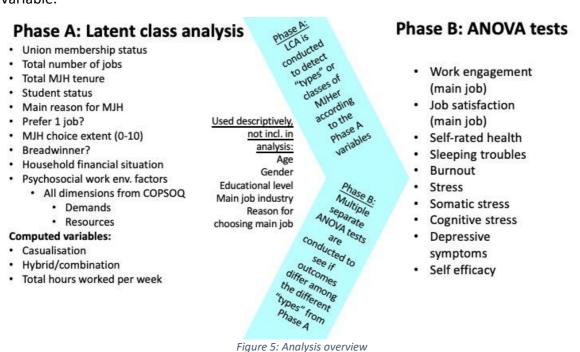
Reliability for all scales within the COPSOQ instrument was assessed by calculating Cronbach's alpha for each scale. Cronbach's alpha values were high for most scales, meeting the threshold of 0.7 – selected as it is a common threshold and also one used in COPSOQ validation studies (Burr et al., 2019; Pejtersen et al., 2010). The three scales that did not meet this were quantitative demands ( $\alpha$ =0.69), quality of work ( $\alpha$ =0.63) and variation of work ( $\alpha$ =0.53). However, for variation of work, the  $\alpha$  value was similar to the value found for variation ( $\alpha$ =0.50) in the validation of the COPSOQ II long version (Burr et al., 2019; Pejtersen et al., 2010). Comparisons with validation of the most recent version, COPSOQ III, could not be made, as the scale was not included in the study. Values for the scales quality of leadership, sense of community at work, support from colleagues and support from supervisor were all 1.0, suggesting that there may have been some redundancy in the scales. Excluding these and the below-threshold values,  $\alpha$  values ranged from 0.7 to 0.99.

#### 5.2.6. Data analysis

As outlined previously, there were two distinct phases to the present study. Accordingly, each phase entailed its own separate analysis in order to achieve the research objectives. The objectives for the first phase, A, were intended to be achieved through Latent Class Analysis (LCA). This involved undertaking analysis using the situational variables (as outlined in Figure 5 below) to detect underlying, or latent, classes – or types – of respondents. The conventions of the LCA methodology utilise the phrase "class" to describe the types/groupings of individuals who emerge from the analysis (Weller et al., 2020). Therefore for consistency with the methodology, in this chapter the phrase "class" shall be used henceforth when discussing

this type of analysis as the methodology. However, this phrase is intended to be synonymous with "types" – in the sense that this research sought to identify different types of multiple job holder.

Once phase A was complete, the next phase B involved undertaking analysis to determine whether the identified types differed in relation to the measured outcomes (as outlined in Figure 5 below). This was done through a series of ANOVA tests – one for each outcome variable.



# 5.2.6.1. Data preparation

Data cleaning was undertaken throughout the data collection process, including at its conclusion. Data cleaning measures and criteria were discussed in detail in section 5.2.4.3. Beyond this, in preparation for analysis, descriptive statistics were examined. As per the correlation table in Appendix D, correlations were observed in the expected directions. Normality testing was not undertaken for the indicator variables to be used in the Phase A latent class analysis, as latent class analysis is regarded not to possess an assumption of normal distribution (Magidson & Vermunt, 2002). However, outlier testing was conducted for the outcome variables to be used in the Phase B ANOVA tests – given that normal distribution is an assumption of ANOVA tests (Laerd Statistics, 2017). Outliers were visually identified using box and whisker plots (see Appendix E).

# 5.2.6.2. Phase A: Latent Class Analysis

Latent class analysis was undertaken in order to detect underlying types or classes of respondents that may be present. This statistical technique works by grouping individuals according to their questionnaire item responses – so that those with similar responses are clustered in the same group (Porcu & Giambona, 2017). Whereas other techniques such as regression analyses or structural equation modelling are "variable-centred" in that they are capable of describing the relationship between different variables, latent class analysis is "person-centred" and so instead is undertaken with the aim of describing relationships that exist among individuals (Jung & Wickrama, 2008). By classifying individuals based on their response patterns, the goal of latent class analysis is to produce groupings or classes so that individuals within any given group or class are more similar than individuals across different types or classes.

This phase of analysis utilised situational variables of the individual (as outlined in the materials section above) and all psychosocial work environment variables. Some of these variables required computing in SPSS, based on other directly measured variables, prior to the commencement of analysis. An overview of the variables used can be found in Figure 5 above. Combining both the dimensions of the individual's situational variables and those that captured their experience of the psychosocial work environment (in their chosen main job) was intended to, via the analysis, provide insights as to how experiences of the psychosocial work environment clustered with the individual's situation. For example, it was intended that analysis would be able to depict which individuals appeared to experience psychosocial work environments traditionally considered to be adverse – such as those containing high demands and low resources. However, the understanding to be gained was intended to be more nuanced than simply a two-dimensional demand-resource conceptualisation. By including each individual scale within COPSOQ in the analysis, it was intended that the findings could differentiate specifically between different types of demands – such as quantitative demands, work pace, cognitive demands, and emotional demands. Therefore, this would demonstrate whether certain types (or classes) of multiple job holder experienced certain demands more so than others.

A key part of latent class analysis involves deciding upon the number of classes to be retained – i.e. which model (where each model contains a different number of classes) to select as the "final" model (Nylund-Gibson & Choi, 2018). This decision is based on a number of criteria – both statistical and non-statistical.

The first of these criteria used in the present study was the Bayesian information criterion (BIC), which is widely acknowledged as being superior to other criterion, such as the Akaike Information Criterion (AIC) and the sample-size adjusted Bayesian information criterion (SABIC) (Bouwhuis et al., 2018c; Nylund et al., 2007; Weller et al., 2020). A smaller value for this criterion means a better model fit – and thus in this regard, a model is superior if it has a lower BIC value than the previous model. The next indicator used was the Bootstrap Likelihood Ratio Test (BLRT). This is widely used and over other similar tests (Bouwhuis et al., 2018c; Nylund et al., 2007). Where the BLRT p value for a model is significant, the said model is deemed an improvement on the previous one (i.e. with 1 fewer class).

Next, the entropy value was considered. Entropy relates to the model's ability to accurately separate classes. A higher value (close to 1.0) indicates a better ability of the model to separate classes, and thus is more desirable. While there is no firm threshold established, a value above 0.8 is deemed sufficient, while a value of 0.9 is ideal (Weller et al., 2020).

Average posterior probabilities are another criteria that must be considered. The posterior probability is the probability that an individual, based on their responses to the latent class indicators, will be classified into any given class. Where posterior probabilities are higher, this indicates a cleaner model fit; individuals are more clearly defined into a given class. A posterior probability of 1.0 would indicate a 100% chance of belonging to that class – thus, higher values are more desirable (Jung & Wickrama, 2008).

The last quantitative criteria to be considered was the number of participants assigned to each class, as this pertains to usefulness – ensuring a sufficient number of cases in each category to be feasible for subsequent analysis (Bouwhuis et al., 2018c). There are differing guidelines around minimum numbers in each class (Weller et al., 2020), however, a guideline

of 5% of the total study sample was chosen for the present study – as used by Bouwhuis et al. (2018c) with a similar sample size.

Interpretability is a non-quantitative but crucial element to also consider in model evaluation. This relates to whether the model actually "makes sense" theoretically – i.e. in relation to previous related research (Weller et al., 2020). This is generally assessed after the previously discussed statistical criteria. Once it has been established whether a model is acceptable as per the statistical criteria, it must be considered whether the model appears to be classifying individuals in a manner that is theoretically logical (Nylund-Gibson & Choi, 2018).

# 5.2.6.3. Phase B: Multiple ANOVA tests

In the second phase of analysis, multiple ANOVA tests were conducted to determine if significant differences in outcomes were present across the different types of respondents. These types (classes) were identified in the previous phase, Phase A, through the undertaking of latent class analysis. The ANOVA test enabled the identification of where significant differences were present in the mean outcome scores between the different types and, where the result indicated a significant difference was present, post-hoc tests were run to identify between precisely which types there were significant differences in outcome score. Standard ANOVA tests were conducted, with the exception of the outcomes for which Homogeneity of variance checks were violated (i.e. there was not homogeneity of variances) (general health 2, somatic stress, cognitive stress and depressive symptom scores). Where homogeneity of variances is not present, a Welch's ANOVA should instead be carried out and interpreted instead of the standard ANOVA (Laerd Statistics, 2017). Where the ANOVA tests indicated significant differences were present, Tukey post-hoc tests were run to determine between which types the differences were present (Games-Howell post-hoc tests were instead used in the case of the variables for which the Welch's ANOVA was instead used).

Separate tests were conducted for each of the following outcomes, to test for differences:

- 1. Work engagement (WS)
- 3. Job satisfaction (JS)
- 5. Sleeping troubles (SL)
- 7. Burnout (BO)
- 9. Stress (ST)
- 11. Somatic stress (SO)

- 2. Cognitive stress (CS)
- 4. Depressive symptoms (DS)
- 6. General health 1 (GH1)
- 8. General health 2 (GH2)
- 10. Self efficacy (SE)

# 5.3. Findings

This study was intended to address the overall research question of this thesis – "how does a multiple job holder's situation influence their experiences?" – through two phases. The first phase (A) was to determine whether underlying types of multiple job holder could be identified, based upon their situational factors – including their experiences of the psychosocial work environment. The latent class analysis undertaken for Phase A determined that four distinct types of multiple job holder could be seen in the study population. The second phase (B) was then intended to determine whether the outcomes experienced by these individuals differed across the different types of multiple job holders. The ANOVA tests conducted for each outcome variable indicated that there were, indeed, significant differences in the outcomes experienced across the various types. The detailed findings from each of the two phases will now be discussed in greater detail below, in addition to supplementary findings regarding the measurement of the main job indicator. Although the latter does not relate directly to the research questions of study two, it provides additional insight that serves as a valuable addition to the initial findings around the main job issue that arose from study one.

### 5.3.1. Phase A: Latent Class Analysis findings

The latent class analysis, undertaken using MPlus 8.4, was able to distinguish participants based on their responses to the situational questions, or indicators. Initially, all indicators were included in the analysis (as outlined in Figure 5 earlier). However, satisfactory models could not be obtained with the inclusion of any of the incivility measures, nor the single item illegitimate tasks measure. Initially, the incivility items were excluded from the analysis, however a satisfactory model could not be produced. When a solution was not reached after this, the model was run again with illegitimate tasks excluded – selected for exclusion due to its single-item nature. After this and as illustrated in Table 11, 5 models were successfully run in total before a superior model became clear based on a range of criteria (these criteria were discussed in section 5.2.6.2.). The contents of this table and their meaning are discussed immediately below the table.

Table 11: Model properties

Measures of	Number of classes (types)					
model fit	1	2	3	4	5	
AIC	55951.381	51771.169	50997.181	50480.673	50285.709	
BIC	56306.576	52342.018	51792.141	51499.744	51528.891	
SABIC	56039.95	51913.513	51195.407	50734.782	50595.701	
LL HO	-27891.69	-25750.585	-25310.591	-24999.337	-24848.854	
Entropy	n/a	0.933	0.905	0.909	0.921	
BLRT	n/a	0.0000	0.0000	0.0000	0.0000	
smallest mean PP	1.0000	0.973	0.933	0.925	0.923	
n in each class						
(PP)	507	216 (0.973)	149 (0.964)	115 (0.929)	35 (0.969)	
		291 (0.987)	164 (0.933)	138 (0.971)	132 (0.957)	
			194 (0.977)	120 (0.925)	130 (0.923)	
				134 (0.970)	124 (0.977)	
					86 (0.933)	

Based on the criteria utilised for model selection (outlined in section 5.2.6.1.), model 4 was chosen as the final model. Model 4 possessed a significant BLRT (p<0.00), in addition to being the last model to produce an improved (smaller) BIC figure. Although model 5 produced a significant p value (<0.00), the analysis produced a warning<sup>9</sup> that indicated that the p value may be untrustworthy — and therefore, the significant p value in model 5's BLRT was disregarded in favour of the unproblematic model 4. The entropy value was 0.905, thus meeting the threshold of 0.9 stipulated as ideal by Weller et al. (2020). With average posterior probabilities all above 0.9, the values for model 4 clearly exceeded the commonly used threshold of 0.8 (Bouwhuis et al., 2018c; Weller et al., 2020). With regard to the number of participants in each class, as illustrated in Table 11, all classes were demonstrably larger than the minimum of 5% of the study's sample (5% of 507 equating to 25 individuals). Therefore, there were no concerns around each individual class size, further supporting model 4's quality. In relation to interpretability, indicator responses of those within classes was logical, both with regard to expected patterns in psychosocial work factors from the relevant literature, and the extant knowledge on multiple job holders. These consistencies will be

<sup>&</sup>lt;sup>9</sup> "Of the 10 bootstrap draws, 6 draws had both a smaller LRT value than the observed LRT value and not a replicated best loglikelihood value for the 5-class model. This means that the p-value may not be trustworthy due to local maxima. Increase the number of random starts using the LRTSTARTS option."

discussed in more detail in section 5.4 – but for now the class compositions will be described below in Table 12.

The four classes identified in the analysis could all be said to logically sit on something of a spectrum, ranging from those consisting of more (typically considered to be) negative factors, through to more positive. These classes were (starting from those with more typically negative factors); the compelled type, the striver type, the peripheral type and lastly (with the most positive factors) the privileged type.

In comparison to those from other classes, class 1 consisted of participants who were more likely than the others to be students and were more likely to MJH as it was impossible to work more hours in their first job, or that they needed to work more hours to make ends meet. They were most likely to prefer one job (80%), most likely to report having just enough money after covering expenses and most likely to hold multiple jobs as an employee (combination). They reported the lowest average tenure of multiple job holding, as well as the lowest average reported choice score. With regard to demands, they reported the highest (most negative) scores for job insecurity as well as insecurity over working conditions. They scored the lowest on all resource indicators, including lowest equal (with the peripheral class) on variation of work. Within the class, their prevailing reason(1) was to meet financial commitments, predominantly selecting to earn extra money for the second reason variable. 73% were the breadwinners in their households – second to class 2. Insights can also be gleaned within the class as to their experience of the psychosocial work environment by more closely examining their scores on these dimensions. The demands for which they scored the highest were work pace (m=3.50) and hiding emotions (m=3.52), scoring the lowest on emotional demands (m=2.94). The resource for which they scored the highest was quality of work (m=3.33), and they scored lowest on vertical trust (m=2.12). This class clearly has a notable proportion of negative indicator responses. These individuals hold multiple jobs out of compulsion, not choice - predominantly out of financial necessity. Their work environments do not carry the highest demands out of all classes, but they do experience the

Table 12: Class properties

Description	INDICATORS					
Yes         20%         17%         29%         13%         23%           No         80%         83%         72%         87%         77%           Student         Ves         16%         22%         20%         18%         5%           No         84%         78%         81%         82%         95%           Reason (1)         To meet my financial commitments         60%         61%         53%         65%         62%           To develop my skills or abilities         12%         15%         20%         5%         6%           To give me variety in my work and/or life         23%         22%         20%         21%         27%           Altruistic reasons/helping others         3%         1%         4%         3%         1%           Enjoyment         2%         0%         1%         3%         1%           Chther         1%         1%         3%         1%         4%           Enjoyment         2%         0%         1%         3%         1%           Unpossible to work more hours in current job         7%         14%         7%         6%         0%           No earn some extra money         20%		ΠΑ	Compelled	Striver	Peripheral	Privileged
No         80%         83%         72%         87%         77%           Student         16%         22%         20%         18%         5%           No         84%         78%         81%         82%         95%           Reason (1)         70 meet my financial commitments         60%         61%         53%         65%         62%           To develop my skills or abilities         12%         15%         20%         5%         6%           To give me variety in my work and/or life         23%         22%         20%         21%         27%           Altruistic reasons/helping others         3%         1%         4%         3%         1%           Enjoyment         2%         0%         1%         3%         1%           Other         1%         1%         2%         4%         4%           Impossible to work more hours in current job         7%         14%         7%         6%         0%           Work more hours to make ends meet         4%         26%         19%         18%         17%           To earn some extra money         20%         40%         50%         38%         36%           To get experience in another job <th< td=""><td>Union member</td><td></td><td></td><td></td><td></td><td></td></th<>	Union member					
Student         16%         22%         20%         18%         5%           No         84%         78%         81%         82%         95%           Reason (1)         3         81%         82%         95%           To meet my financial commitments         60%         61%         53%         65%         62%           To develop my skills or abilities         12%         15%         20%         21%         27%           To give me variety in my work and/or life         23%         22%         20%         21%         27%           Altruistic reasons/helping others         3%         1%         4%         3%         1%           Enjoyment         2%         0%         1%         3%         1%           Other         1%         1%         2%         4%         4%           Work more hours to make ends meet         4%         26%         19%         18%         17%           To earn some extra money         20%         40%         50%         38%         36%           To earn some extra money         20%         40%         5%         5%         5%           To start a business         7%         1%         5%         5%	Yes	20%	17%	29%	13%	23%
Yes         16%         22%         20%         18%         5%           No         84%         78%         81%         82%         95%           Reason (1)         To         Commet my financial commitments         60%         61%         53%         65%         62%           To develop my skills or abilities         12%         15%         20%         5%         6%           To give me variety in my work and/or life         23%         22%         20%         21%         27%           Altruistic reasons/helping others         3%         1%         4%         3%         1%           Enjoyment         2%         0%         1%         3%         1%           Other         1%         1%         4%         3%         1%           Other         1%         1%         2%         4%         4%           Reason (2)         1         1%         1%         7%         6%         0%           Work more hours to make ends meet         4%         26%         19%         18%         17%           To earl some extra money         20%         40%         5%         5%         5%           To earl some extra money         4%	No	80%	83%	72%	87%	77%
No         84%         78%         81%         82%         95%           Reason (1)         To meet my financial commitments         60%         61%         53%         65%         62%           To develop my skills or abilities         12%         15%         20%         5%         6%           To give me variety in my work and/or life         23%         22%         20%         21%         27%           Altrustic reasons/helping others         3%         1%         4%         3%         1%           Enjoyment         2%         0%         1%         3%         1%           Chther         1%         1%         2%         4%         4%           Enjoyment         2%         0%         1%         3%         1%           Chther         1%         1%         2%         4%         4%           Chther         1%         1%         2%         4%         4%         2%         4%         4%         2%         9%         3%         36%         17%         1%         5%         5%         5%         5%         5%         5%         5%         5%         5%         5%         5%         5%         5%	Student					
Reason (1)	Yes	16%	22%	20%	18%	5%
To meet my financial commitments         60%         61%         53%         65%         62%           To develop my skills or abilities         12%         15%         20%         5%         6%           To give me variety in my work and/or life         23%         22%         20%         21%         27%           Altruistic reasons/helping others         3%         1%         4%         3%         1%           Enjoyment         2%         0%         1%         3%         1%           Other         1%         1%         2%         4%         4%           Reason (2)         1         1         2%         4%         4%           Work more hours to make ends meet         4%         26%         19%         18%         17%           To earn some extra money         20%         40%         50%         38%         36%           To earl a business         7%         1%         5%         5%         5%           To get experience in another job         4%         3%         2%         4%         4%           Because I enjoy the combination of jobs         4%         3%         3%         15%         21%           Other         1         11% <td>No</td> <td>84%</td> <td>78%</td> <td>81%</td> <td>82%</td> <td>95%</td>	No	84%	78%	81%	82%	95%
To develop my skills or abilities         12%         15%         20%         5%         6%           To give me variety in my work and/or life         23%         22%         20%         21%         27%           Altruistic reasons/helping others         3%         1%         4%         3%         1%           Enjoyment         2%         0%         1%         3%         1%           Other         1%         1%         2%         4%         4%           Other         1%         1%         2%         4%         4%           Reason (2)         1         1         2%         4%         4%           Work more hours to make ends meet         4%         26%         19%         18%         17%           To earn some extra money         20%         40%         50%         38%         36%           To retain income security         41%         7%         8%         9%         3%           To get experience in another job         4%         3%         2%         4%         4%           Because I enjoy the combination of jobs         4%         3%         3%         15%         21%           Other         1         2%         2%	Reason (1)					
To give me variety in my work and/or life         23%         22%         20%         21%         27%           Altruistic reasons/helping others         3%         1%         4%         3%         1%           Enjoyment         2%         0%         1%         3%         1%           Other         1%         1%         2%         4%         4%           Reason (2)         Impossible to work more hours in current job         7%         14%         7%         6%         0%           Work more hours to make ends meet         4%         26%         19%         18%         17%           To earn some extra money         20%         40%         50%         38%         36%           To retain income security         41%         7%         8%         9%         3%           To get experience in another job         4%         3%         2%         4%         4%           Because of the variation         3%         3%         4%         2%         7%           Because I enjoy the combination of jobs         4%         3%         3%         15%         21%           Other         18%         80%         70%         50%         37%           No	To meet my financial commitments	60%	61%	53%	65%	62%
Altruistic reasons/helping others       3%       1%       4%       3%       1%         Enjoyment       2%       0%       1%       3%       1%         Other       1%       1%       2%       4%       4%         Reason (2)       Impossible to work more hours in current job       7%       14%       7%       6%       0%         Work more hours to make ends meet       4%       26%       19%       18%       17%         To earn some extra money       20%       40%       50%       38%       36%         To retain income security       41%       7%       8%       9%       3%         To start a business       7%       1%       5%       5%       5%         To get experience in another job       4%       3%       2%       4%       4%         Because I enjoy the combination of jobs       4%       3%       3%       15%       21%         Other       11%       2%       2%       4%       6%         Prefer one job?       7       80%       70%       50%       37%         No       40%       20%       30%       50%       63%         No       33%       7%	To develop my skills or abilities	12%	15%	20%	5%	6%
Enjoyment         2%         0%         1%         3%         1%           Other         1%         1%         2%         4%         4%           Reason (2)         Impossible to work more hours in current job         7%         14%         7%         6%         0%           Work more hours to make ends meet         4%         26%         19%         18%         17%           To earn some extra money         20%         40%         50%         38%         36%           To retain income security         41%         7%         8%         9%         3%           To start a business         7%         1%         5%         5%         5%           To get experience in another job         4%         3%         2%         4%         4%           Because I enjoy the combination of jobs         4%         3%         3%         15%         21%           Other         11%         2%         2%         4%         6%           Prefer one job?         2         2         4%         6%           No         40%         20%         30%         50%         6%           Breadwinner?         2         4         4         6% </td <td>To give me variety in my work and/or life</td> <td>23%</td> <td>22%</td> <td>20%</td> <td>21%</td> <td>27%</td>	To give me variety in my work and/or life	23%	22%	20%	21%	27%
Other       1%       1%       2%       4%       4%         Reason (2)       Impossible to work more hours in current job       7%       14%       7%       6%       0%         Work more hours to make ends meet       4%       26%       19%       18%       17%         To earn some extra money       20%       40%       50%       38%       36%         To retain income security       41%       7%       8%       9%       3%         To start a business       7%       1%       5%       5%       5%         To get experience in another job       4%       3%       2%       4%       4%         Because of the variation       3%       3%       4%       2%       7%         Because I enjoy the combination of jobs       4%       3%       3%       15%       21%         Other       11%       2%       2%       4%       6%         Prefer one job?       2       4%       6%         Yes       60%       80%       70%       50%       37%         No       40%       20%       30%       50%       63%         Breadwinner?       4       7%       73%       78%	Altruistic reasons/helping others	3%	1%	4%	3%	1%
Reason (2)         7%         14%         7%         6%         0%           Work more hours to make ends meet         4%         26%         19%         18%         17%           To earn some extra money         20%         40%         50%         38%         36%           To retain income security         41%         7%         8%         9%         3%           To start a business         7%         1%         5%         5%         5%           To get experience in another job         4%         3%         2%         4%         4%           Because of the variation         3%         3%         4%         2%         7%           Because I enjoy the combination of jobs         4%         3%         3%         15%         21%           Other         11%         2%         2%         4%         6%           Prefer one job?         80%         70%         50%         37%           Yes         60%         80%         70%         50%         37%           No         40%         20%         30%         50%         63%           Breadwinner?         Yes         67%         73%         78%         51%         63% </td <td>Enjoyment</td> <td>2%</td> <td>0%</td> <td>1%</td> <td>3%</td> <td>1%</td>	Enjoyment	2%	0%	1%	3%	1%
Impossible to work more hours in current job   7%   14%   7%   6%   0%   Work more hours to make ends meet   4%   26%   19%   18%   17%   170 earn some extra money   20%   40%   50%   38%   36%   36%   70 retain income security   41%   7%   8%   9%   3%   70 start a business   7%   1%   5%   5%   5%   5%   70 get experience in another job   4%   3%   2%   4%   4%   4%   8ecause of the variation   3%   3%   4%   2%   7%   7%   8ecause I enjoy the combination of jobs   4%   3%   3%   15%   21%   21%   0ther   11%   2%   2%   4%   6%   6%   15%   15%   6%   15%   1	Other	1%	1%	2%	4%	4%
Work more hours to make ends meet       4%       26%       19%       18%       17%         To earn some extra money       20%       40%       50%       38%       36%         To retain income security       41%       7%       8%       9%       3%         To start a business       7%       1%       5%       5%       5%         To get experience in another job       4%       3%       2%       4%       4%         Because of the variation       3%       3%       4%       2%       7%         Because I enjoy the combination of jobs       4%       3%       3%       15%       21%         Other       11%       2%       2%       4%       6%         Prefer one job?       ****  Yes       60%       80%       70%       50%       37%         No       40%       20%       30%       50%       63%         Breadwinner?       ****       ****       78%       51%       63%         No       33%       27%       22%       49%       37%         Financial situation       ***       13%       13%       18%       17%       6%         Just enough money       51%       61%<	Reason (2)					
To earn some extra money       20%       40%       50%       38%       36%         To retain income security       41%       7%       8%       9%       3%         To start a business       7%       1%       5%       5%       5%         To get experience in another job       4%       3%       2%       4%       4%         Because of the variation       3%       3%       4%       2%       7%         Because I enjoy the combination of jobs       4%       3%       3%       15%       21%         Other       11%       2%       2%       4%       6%         Prefer one job?       11%       2%       2%       4%       6%         Yes       60%       80%       70%       50%       37%         No       40%       20%       30%       50%       63%         Breadwinner?       Yes       67%       73%       78%       51%       63%         No       33%       27%       22%       49%       37%         Financial situation       31%       13%       18%       17%       6%         Just enough money       51%       61%       51%       47%       45% <td>Impossible to work more hours in current job</td> <td>7%</td> <td>14%</td> <td>7%</td> <td>6%</td> <td>0%</td>	Impossible to work more hours in current job	7%	14%	7%	6%	0%
To retain income security  To start a business  7% 1% 5% 5% 5%  To get experience in another job 4% 3% 2% 4% 4%  Because of the variation 3% 3% 4% 2% 7%  Because I enjoy the combination of jobs 4% 3% 3% 15% 21%  Other 11% 2% 2% 4% 6%  Prefer one job?  Yes 60% 80% 70% 50% 37%  No 40% 20% 30% 50% 63%  Breadwinner?  Yes 67% 73% 78% 51% 63%  No 33% 27% 22% 49% 37%  Financial situation  Short of money 13% 13% 18% 17% 6%  Just enough money 51% 61% 51% 47% 45%  More than enough money 36% 26% 32% 35% 50%  Casual contract?  In none of their jobs 44% 41% 41% 37% 55% In one of their jobs  44% 43% 49% 46% 36%	Work more hours to make ends meet	4%	26%	19%	18%	17%
To start a business 7% 1% 5% 5% 5% 5% To get experience in another job 4% 3% 2% 4% 4% 4% Because of the variation 3% 3% 4% 2% 7% Because I enjoy the combination of jobs 4% 3% 3% 15% 21% Other 11% 2% 2% 4% 6% Prefer one job?  Yes 60% 80% 70% 50% 37% No 40% 20% 30% 50% 63% Breadwinner?  Yes 67% 73% 78% 51% 63% No 33% 27% 22% 49% 37% Financial situation  Short of money 13% 13% 18% 17% 6% Just enough money 51% 61% 51% 47% 45% More than enough money 36% 26% 32% 35% 50% Casual contract?  In none of their jobs 44% 41% 41% 37% 55% In one of their jobs 43% 43% 49% 46% 36%	To earn some extra money	20%	40%	50%	38%	36%
To get experience in another job Because of the variation Because of the variation Because I enjoy the combination of jobs Other  11% 2% 2% 4% 5% 15% 21% 6%  Prefer one job?  Yes 60% 80% 70% 50% 37% No 40% 20% 30% 50% 63%  Breadwinner?  Yes 67% 73% 78% 51% 63% No 33% 27% 22% 49% 37%  Financial situation Short of money 13% 13% 13% 18% 17% 6% Just enough money 51% 61% 51% 47% 45% More than enough money 36% 26% 32% 35% 50%  Casual contract? In none of their jobs In one of their jobs 44% 41% 41% 37% 55% In one of their jobs	To retain income security	41%	7%	8%	9%	3%
Because of the variation       3%       3%       4%       2%       7%         Because I enjoy the combination of jobs       4%       3%       3%       15%       21%         Other       11%       2%       2%       4%       6%         Prefer one job?       70%       50%       37%         No       40%       20%       30%       50%       63%         Breadwinner?       67%       73%       78%       51%       63%         No       33%       27%       22%       49%       37%         Financial situation       13%       13%       18%       17%       6%         Short of money       13%       13%       18%       17%       6%         Just enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?       In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	To start a business	7%	1%	5%	5%	5%
Because I enjoy the combination of jobs       4%       3%       3%       15%       21%         Other       11%       2%       2%       4%       6%         Prefer one job?         Yes       60%       80%       70%       50%       37%         No       40%       20%       30%       50%       63%         Breadwinner?         Yes       67%       73%       78%       51%       63%         No       33%       27%       22%       49%       37%         Financial situation         Short of money       13%       13%       18%       17%       6%         Just enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?         In none of their jobs       44%       41%       41%       47%       45%         In one of their jobs       44%       43%       49%       46%       36%	To get experience in another job	4%	3%	2%	4%	4%
Other       11%       2%       2%       4%       6%         Prefer one job?       60%       80%       70%       50%       37%         No       40%       20%       30%       50%       63%         Breadwinner?       73%       78%       51%       63%         No       33%       27%       22%       49%       37%         Financial situation       33%       13%       18%       17%       6%         Just enough money       13%       13%       18%       17%       6%         More than enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?       In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	Because of the variation	3%	3%	4%	2%	7%
Prefer one job?       60%       80%       70%       50%       37%         No       40%       20%       30%       50%       63%         Breadwinner?       67%       73%       78%       51%       63%         No       33%       27%       22%       49%       37%         Financial situation       33%       13%       18%       17%       6%         Just enough money       13%       13%       18%       17%       6%         More than enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?       In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	Because I enjoy the combination of jobs	4%	3%	3%	15%	21%
Yes       60%       80%       70%       50%       37%         No       40%       20%       30%       50%       63%         Breadwinner?       80%       70%       50%       63%         Yes       67%       73%       78%       51%       63%         No       33%       27%       22%       49%       37%         Financial situation       33%       13%       18%       17%       6%         Short of money       13%       13%       18%       17%       6%         Just enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?       1       44%       41%       41%       37%       55%         In one of their jobs       44%       41%       41%       46%       36%	Other	11%	2%	2%	4%	6%
No       40%       20%       30%       50%       63%         Breadwinner?       50%       63%       78%       51%       63%       63%       78%       51%       63%       78%       51%       63%       78%       51%       63%       78%       51%       63%       78%       51%       63%       78%       51%       63%       78%       51%       63%       78%       51%       63%       78%       51%       63%       78%       51%       63%       78%       51%       63%       78%       51%       64%       65%	Prefer one job?					
Breadwinner?       67%       73%       78%       51%       63%         No       33%       27%       22%       49%       37%         Financial situation       Short of money       13%       13%       18%       17%       6%         Just enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?       In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	Yes	60%	80%	70%	50%	37%
Yes       67%       73%       78%       51%       63%         No       33%       27%       22%       49%       37%         Financial situation       33%       13%       18%       17%       6%         Short of money       13%       13%       18%       17%       6%         Just enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?       In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	No	40%	20%	30%	50%	63%
No       33%       27%       22%       49%       37%         Financial situation       51%       13%       18%       17%       6%         Short of money       13%       13%       18%       17%       6%         Just enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?       10       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	Breadwinner?					
Financial situation         13%         13%         18%         17%         6%           Just enough money         51%         61%         51%         47%         45%           More than enough money         36%         26%         32%         35%         50%           Casual contract?         In none of their jobs         44%         41%         41%         37%         55%           In one of their jobs         43%         43%         49%         46%         36%	Yes	67%	73%	78%	51%	63%
Short of money       13%       13%       18%       17%       6%         Just enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?         In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	No	33%	27%	22%	49%	37%
Just enough money       51%       61%       51%       47%       45%         More than enough money       36%       26%       32%       35%       50%         Casual contract?         In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	Financial situation					
More than enough money       36%       26%       32%       35%       50%         Casual contract?       In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	Short of money	13%	13%	18%	17%	6%
More than enough money       36%       26%       32%       35%       50%         Casual contract?       In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	Just enough money		61%	51%	47%	45%
In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%	-	36%	26%	32%	35%	50%
In none of their jobs       44%       41%       41%       37%       55%         In one of their jobs       43%       43%       49%       46%       36%						
In one of their jobs 43% 43% 49% 46% 36%		44%	41%	41%	37%	55%
	-	43%	43%	49%	46%	36%
	In all of their jobs		16%	10%	18%	8%

Type of MJH arrangement					
Combination	65%	79%	70%	60%	49%
Hybrid	35%	21%	30%	40%	51%
INDICATORS	All	Comp	Striv	Peri	Privi
MEANS OF CONTINUOUS INDICATORS					
Number of jobs	2.110	2.106	2.092	2.067	2.168
Tenure	4.150	2.84	3.386	4.078	6.241
Choice (0-10)	6.448	5.36	6.33	6.69	7.468
Total hours across all jobs	41.962	44.726	51.353	31.001	39.698
PSWE - DEMANDS (high mean = negative)					
Quantitative demands	2.620	2.972	3.072	2.236	2.163
Work pace	3.293	3.502	3.83	2.924	2.895
Cognitive demands	3.446	3.372	3.945	2.984	3.45
Emotional demands	2.671	2.936	3.379	2.091	2.237
Demands for hiding emotion	3.289	3.515	3.684	2.905	3.014
Role conflict	2.758	3.265	3.488	2.17	2.062
Job insecurity	2.638	3.124	3.131	2.628	1.697
Insecurity over work conditions	2.394	2.998	2.782	2.31	1.489
Work-family conflict	2.653	3.168	3.381	2.158	1.872
PSWE - RESOURCES (high mean = positive)					
Influence	3.247	2.705	3.533	2.903	3.83
Possibilities for development	3.718	3.016	4.128	3.377	4.346
Variation of work	3.060	2.711	3.215	2.797	3.496
Control over time	3.254	2.818	3.25	3.295	3.672
Meaning of work	3.856	3.043	4.194	3.547	4.635
Predictability	3.539	2.669	3.739	3.416	4.352
Recognition	3.728	2.617	3.867	3.808	4.672
Role clarity	4.040	3.265	4.144	4.093	4.696
Quality of leadership	3.437	2.547	3.86	3.372	4.332
Supervisor support	3.576	2.772	3.883	3.643	4.338
Colleague support	3.533	3.041	3.778	3.354	4.028
Sense of community at work	3.993	3.254	4.165	4.092	4.637
Commitment to workplace	3.543	2.608	3.783	3.504	4.314
Quality of work	3.911	3.328	3.926	3.904	4.501
Horizontal (colleagues) trust	3.644	3.027	3.316	4.068	4.458
Vertical trust	3.595	2.113	2.666	3.045	2.545
Organisational justice	3.507	2.618	3.615	3.687	4.374

most severe insecurity both in relation to their job prospects and the potential for their working conditions to change against their will. Concerningly, they also experience the lowest resources out of all classes. Given their lack of choice and low resources scores, this class has been termed the *compelled* type (1).

Participants from class 2 were the more likely than those from other classes to belong to a union, to MJH in order to develop their skills or abilities or to help others (reason1) and more specifically, when responding to reason2, most likely to MJH to earn some extra money or start a business (the latter being first-equal with class 4). They were most likely to be the breadwinner in their household, to be short of money after covering expenses and to have one casual contract out of their multiple ones. They worked the longest average hours (m=51.35) and experienced the highest demands out of all others, with the exception of job insecurity (which they were first-equal for with class 1) and insecurity over working conditions (for which they placed second). Within class 2, their most prevalent reason(1) for MJH was to meet financial commitments – as with all classes – but they scored the lowest prevalence for this out of all others (53%). The demand for which they scored highest within their class were cognitive demands, with insecurity over working conditions being the lowest. The resource for which they scored highest was the meaning of their work (m=4.20) with vertical trust being the lowest (m=2.67). Individuals from this class appear to be stretched, in multiple ways. Perhaps most obvious are the long average working hours – but they can also be considered to be extended in relation to the high levels of demands experienced. They also experience financial challenges, being breadwinners and most likely to be short of money. However, this class does not have entirely negative connotations – scoring more favourably than class 1 with regard to resources, and also being more likely to be holding multiple jobs as a way of developing themselves. Their work is likely to be meaningful (m=4.20) and provide possibilities for development (m=4.13). These individuals could instead be viewed as toiling and striving for improvement in their situations – thus this type is termed the **striver** type (2).

Class 3 consisted of participants who were least likely to belong to a union (13%) and more likely than others to MJH for financial reasons (65%), or for other reasons (4%) or enjoyment (3%) – in relation to reason1. When responding to reason2, they were most likely to report MJH to retain income security (9%), to get experience in another job (4%) or to start a business (5%, first-equal). They were least likely out of all others to be the breadwinner in their household, and most likely to report that all of their contracts were casual (18%). They worked the lowest average hours (m=31) and held the lowest average number of jobs (m=2.07). In terms of reported job demands, class 3 scored the lowest out of all classes in relation to

cognitive demands, emotional demands and demands for hiding emotions. With regard to resources, they scored lower than all other classes on variation of work, but highest on vertical trust. This is worth noting, considering that for all other classes vertical trust was their lowest-scoring resource. Within the class, the demand for which they scored most highly (i.e. negatively) on was that of cognitive demands. Yet, their score here (m=2.98) was lower than all other classes. This illustrates the extent to which individuals in this class appear to experience a non-demanding work environment. Their lowest-scoring demand is that of emotional demands (m=2.09). The resources for which they scored most highly were role clarity and sense of community at work (both m=4.09), suggesting that those in this class are more likely to experience straightforward, clear job roles and welcoming workplaces. The resource for which they score the lowest is that of variation – the same for which they score lower than other classes. Overall, individuals in this class appear to have fairly positive experiences at work. They do not work long hours or experience high levels of demands in the workplace, and seem to have particularly strong trust (in comparison) with management. Their higher propensity for casual work and lower hours of work could represent, in a sense, a lesser reliance on work. Many in this class do not appear overly invested in or affected by their work. For this reason, this class is known as the *peripheral* type (3).

Participants in the remaining class 4 were least likely than those in other classes to be students and more likely than others to hold multiple jobs because they enjoyed the variety (27%) or for other reasons (4% - equal with peripheral) according to their reason1 response. In relation to reason2, they were more likely than others to report their reason as being for the variation (7%) or enjoyment (21%). This class was least likely to prefer holding one job instead (63% not preferring one), most likely to have more than enough money after covering expenses (50%) and most likely to hold no casual contracts (55%). They were also more likely than others to be hybrid multiple job holders, hold the highest average number of jobs (2.17), have the longest tenure (m=6.24 years) and report the highest level of choice in holding multiple jobs (m=7.47). With regard to demands, they experienced the lowest demands out of all classes, with the exception of cognitive demands, emotional demands and demands for hiding emotion. They also experienced the highest resources across all classes, except for vertical trust, for which they scored second lowest. This class clearly presents as reporting the most favourable situational factors — particularly when considering their choice in their

employment situation, and the psychosocial work factors they experience. For this reason, they are labelled the *privileged* type (4).

#### **5.3.1.1.** Descriptive findings across classes

# 5.3.1.1.1. Demographics

Crosstabulations and Chi-square tests were run to ascertain the split of the demographic variables age, gender and education level across the various classes. Gender and education level did not have statistically significant associations, but proportions of each demographic within each class are provided in Table 13 alongside age for descriptive purposes. Age was the only variable for which there was a statistically significant association with class membership;  $\chi^2$  (6, N = 507) = 8.013, p < .05, Cramer's V = 0.198 (see Table 15). Younger workers were more likely than other age groups to belong classes consisting of more negative situational factors. For example, as shown in Table 14, 32% of those aged 18-25 and 36% of those aged 26-34 belonged to the compelled class. Conversely, older workers were more likely to be classified as belonging to classes consisting of more positive situational factors – such as the privileged class, of which 37% of workers aged 55-64 and 63% of workers 65 and over belonged to.

Table 13: Class demographics<sup>10</sup>

	Compelled	Striver	Peripheral	Privileged
Age				
18-25	21%	19%	20%	13%
26-34	30%	28%	13%	19%
35-54	38%	44%	38%	31%
55-64	9%	7%	21%	19%
65+	1%	3%	8%	18%
Gender				
Male	41%	37%	33%	41%
Female	57%	63%	66%	59%
Non-binary	2%	0%	1%	0%
Education level				
Primary/intermediate	1%	1%	0%	1%
Secondary school	25%	19%	24%	20%
Undergraduate	43%	48%	57%	54%

<sup>&</sup>lt;sup>10</sup> Percentages shown above are the percentage within said class that fits the given demographic.

Postgraduate	29%	31%	17%	23%
Other	2%	2%	2%	2%
Main job indicator				
Most income	49%	58%	39%	33%
Most time consumed	15%	9%	7%	8%
Tenure	12%	12%	16%	6%
Long term goal	4%	4%	5%	11%
Most enjoyment	7%	8%	13%	30%
Most stability	7%	8%	14%	8%
Other	7%	1%	6%	5%

Table 14: Age spread across classes

			18-25	26-34	35-54	55-64	65+
	Compelled	n	29	41	53	13	2
		% of age	32%	36%	28%	18%	5%
	Striver	n	23	33	53	8	3
		% of age	25%	29%	28%	11%	8%
ā	Peripheral	n	23	15	44	24	9
МЈН type		% of age	25%	13%	23%	34%	24%
Α	Privileged	n	17	25	42	26	24
		% of age	19%	22%	22%	37%	63%
		n	92	114	192	71	38
Total		Overall %	18%	23%	38%	14%	8%

Table 15: Chi-Square test of association for age and MJH class

Chi-Square Tests (age, MJH class)							
	Value	df	Asymptotic Significance (2-sided)				
Pearson Chi-Square	59.351a	12	.000				
Likelihood Ratio	59.966	12	.000				
Linear-by-Linear Association	31.49	1	.000				
N of Valid Cases	507						
a. 0 cells (0.0%) have expected cour	nt less than 5.	The min	imum expected count is 8.62.				
Symmetric measures							
		Value	Approximate significance				
Nominal by nominal	Cramer's V	.198	0.000				
N of Valid Cases		507					

# 5.2.1.1.2. Main job indicator

There appeared to be significant associations in the MJI selected by those across the various latent classes of multiple job holder, as confirmed by a Chi-square test of association;  $\chi^2$  (18, N = 507) = 70.87, p < .05, Cramer's V = 0.216 (see Table 17). As outlined in Table 16, 'most income' was the most prevalent MJI across all types, it was particularly prevalent for Strivers at 58%, followed by the Compelled class at 49%. In the case of the Privileged class, most income (33%) was closely followed by most enjoyment (30%). Another interesting feature was the prevalence of most stability among the Peripheral type – who were more likely than the other types to select this as a MJI.

Table 16: MJI spread across classes

			Most income	Most time consumed	Tenure	Long term goal	Most enjoyment	Most stability	Other
	Compelled	n	67	21	17	6	9	9	9
		% of class	49%	15%	12%	4%	7%	7%	7%
		% of MJI	30%	42%	30%	19%	12%	20%	38%
	Striver	n	70	11	14	5	9	10	1
		% of class	58%	9%	12%	4%	8%	8%	1%
		% of MJI	31%	22%	25%	16%	12%	22%	4%
	Peripheral	n	45	8	18	6	15	16	7
		% of class	39%	7%	16%	5%	13%	14%	6%
		% of MJI	20%	16%	32%	19%	21%	36%	29%
e	Privileged	n	44	10	8	15	40	10	7
typ		% of class	33%	8%	6%	11%	30%	8%	5%
МЈН type		% of MJI	20%	20%	14%	47%	55%	22%	29%
	•	n	226	50	57	32	73	45	24
Total		Overall %	45%	10%	11%	6%	14%	9%	5%

Table 17: Chi-Square test of association for chosen MJI and MJH class

Chi-Square Tests (MJI, MJH class)			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	70.865	18	.000
Likelihood Ratio	68.804	18	.000

Linear-by-Linear Association	18.816	1	.000			
N of Valid Cases	507					
a. 0 cells (0.0%) have expected coun	a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.62.					
Symmetric measures						
		Value	Approximate significance			
Nominal by nominal	Cramer's V	.216	0.000			
N of Valid Cases						

# 5.3.1.1.3. Main job industry

A Chi-square test of association indicated that there were significant associations between the industry of participants' main jobs, and their class;  $\chi^2$  (51, N = 507) = 70.84, p < .05, Cramer's V = 0.229 (see Table 19). Illustrated below in Table 18, the most prevalent class associated with each industry is in bold. There is a clear clustering of industries such as accommodation/hospitality, retail trade and public administration and safety in the compelled class. The agriculture, forestry and fishing, health care and social assistance and information media and telecommunications industries are predominantly found in the striver class, while the transport, postal and warehousing industry are most heavily present in the peripheral class. The privileged class sees a high proportion of those in the construction, education and training, other services, professional, scientific and technical and wholesale trade industries.

Table 18: Main job industry spread across classes

Industry	Compelled	Striver	Peripheral	Privileged
Accommodation/hospitality	43%	17%	20%	20%
Administrative and support services	27%	18%	27%	27%
Agriculture, forestry and fishing	13%	35%	22%	30%
Arts and recreation services	6%	19%	38%	38%
Construction	8%	33%	17%	42%
Education and training	18%	21%	16%	46%
Electricity, gas, water and waste services	38%	25%	25%	13%
Financial and insurance services	13%	25%	25%	38%
Health care and social assistance	30%	33%	20%	18%
Information media and telecommunications	24%	38%	14%	24%
Manufacturing	38%	38%	17%	8%
Other services	25%	14%	26%	35%

Professional, scientific and technical services	28%	17%	24%	31%
Public administration and safety	44%	33%	22%	0%
Rental, hiring and real estate services	29%	29%	14%	29%
Retail trade	44%	18%	26%	12%
Transport, postal and warehousing	33%	19%	43%	5%
Wholesale trade	13%	13%	25%	50%

Table 19: Chi-Square test of association for main job industry and MJH class

Chi-Square Tests (MJI, MJH class)					
	Value	df	Asymptotic Significance (2-sided)		
Pearson Chi-Square	79.837a	51	0.006		
Likelihood Ratio	85.109	51	0.002		
Linear-by-Linear Association	5.539	1	0.019		
N of Valid Cases	507				
a. 30 cells (41.7%) have expected co	ount less than	5. The n	ninimum expected count is 1.59.		
Symmetric measures					
		Value	Approximate significance		
Nominal by nominal	Cramer's V	.229	0.006		
N of Valid Cases		507			

#### 5.3.1.2. Phase A conclusion

From examining the composition of each class, clear distinctions can be seen between their situations — both in terms of the indicator variables that have been clustered to form the classes, and the subsequent descriptive analysis with regard to demographics. However, for latent class analysis to be truly useful, the classes identified should also be meaningful in relation to differentiating outcomes or results of some kind. Furthermore, one of the main research objectives was to determine whether outcomes differed between different types of multiple job holders. Therefore, the next phase (B) involved testing for differences between outcomes experienced by the different classes of multiple job holder.

## 5.3.2. Phase B: testing outcomes across classes

As mentioned previously, an indication of a model's validity is whether outcomes differ in a logical, expected way, across the classes. Thus, phase B focussed on determining whether significant differences in outcomes existed across the classes. This was undertaken using multiple ANOVA tests – one for each of the outcome variables:

1. Work engagement (WE)

3. Sleeping troubles (SL)

2. Job satisfaction (JS)

4. Burnout (BO)

- 5. Stress (ST)
- 6. Somatic stress (SO)
- 7. Cognitive stress (CS)
- 8. Depressive symptoms (DS)

- 9. General health 1 (GH1)
- 10. General health 2 (GH2)
- 11. Self-efficacy (SE)

Homogeneity of variances were violated for the GH2, somatic stress, cognitive stress and depressive symptom variable scores – thus for these variables, the Welch ANOVA had to be used rather than the standard ANOVA test used for all other variables. Each initial ANOVA revealed that significant differences across all outcomes were present between the classes. Thus, post hoc tests were then run for each variable to determine where the differences were. Games-Howell post hoc tests were undertaken for the variables GH2, somatic stress, cognitive stress and depressive symptoms, for which homogeneity of variances were violated. For all other variables where homogeneity of variances was not violated, Tukey post hocs were run.

The ANOVA tests indicated that significant differences were present between the mean outcome scores of most types, across most outcomes – with some interesting exceptions (where significance was not present). This is summarised below in Table 20. Perhaps the starkest finding in this regard, as shown in Table 20, is that for many health outcomes (outcomes 3 to 7) differences were not significant between the compelled and striver types, and between the peripheral and privileged types. These findings, and the other areas where significant differences were not present, are discussed in more detail in sections 4.3.2.1 to 4.3.2.11.

The ANOVAs also revealed patterns that were as to be expected in relation to the mean outcome scores across the different types. The differences for each outcome variable are summarised immediately below in Table 21, and then discussed more fully in sections 4.3.2.1 to 4.3.2.11. Overall, as illustrated in Table 21, those in the privileged type tended to experience more favourable outcomes (although it is worth noting, as indicated above in Table 18, that across many health outcomes the differences between the privileged and peripheral types were non-significant). Additionally, the compelled type tended to experience the most adverse outcomes – although for most health outcomes, as noted in Table 18, the

differences between the compelled and striver type were not significant – indicating that both of these types were of concern with regard to health outcomes.

Table 20: Summary of significant differences in outcome mean across classes

Clas	sses	Work engagement	Job satisfaction	Sleeping troubles	Burnout	Stress	Somatic stress	Cognitive stress	Depressive symptoms	General health 1	General health 2	Self efficacy
Compelled	Strivers	Sig	Sig	No	No	No	No	No	Sig	Sig	Sig	Sig
	Peripheral	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig
	Privileged	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig
Strivers	Compelled	Sig	Sig	No	No	No	No	No	Sig	Sig	Sig	Sig
	Peripheral	Sig	Sig	Sig	Sig	Sig	Sig	Sig	No	Sig	No	No
	Privileged	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	No	Sig	Sig
Peripheral	Compelled	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig
	Strivers	Sig	Sig	Sig	Sig	Sig	Sig	Sig	No	Sig	No	No
	Privileged	Sig	Sig	No	No	No	No	No	Sig	Sig	Sig	Sig
Privileged	Compelled	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig
	Strivers	Sig	Sig	Sig	Sig	Sig	Sig	Sig	Sig	No	Sig	Sig
	Peripheral	Sig	Sig	No	No	No	No	No	Sig	Sig	Sig	Sig

Table 21: Summary of outcome differences across classes

Outcome	Compelled	Striver	Peripheral	Privileged	Overall
	mean	mean	mean	mean	mean
Work engagement*	2.8068	3.8528	3.4870	4.2313	3.5851
Job satisfaction*	2.8423	3.8504	3.6734	4.3209	3.6613
Sleeping troubles	2.9167	2.7938	2.3804	2.1884	2.5735
Burnout	3.4366	3.2250	2.6848	2.4403	2.9527
Stress	3.0024	2.8833	2.2928	2.0572	2.5634
Somatic stress	2.3043	2.3000	1.7739	1.6082	1.9990
Cognitive stress	2.4674	2.4542	1.9500	1.7183	2.1489
Depressive symptoms	2.8533	2.4458	2.1239	1.7519	2.3003
General health 1*	2.7556	3.5043	3.1391	3.7895	3.294
General health 2*	5.5870	6.7167	6.5478	7.6343	6.6134
Self efficacy*	2.5459	2.8958	2.8217	3.2027	2.8649
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<sup>\*</sup>Indicates where a higher score signals a more favourable outcome; otherwise, a high score signals a more adverse outcome.

# 5.3.2.1. Work engagement (WE)

There were outliers in the data, however these were retained after comparison between ANOVAs with original data and outliers removed indicated that the outliers did not materially change the findings for work engagement scores. The data was normally distributed for each group, as assessed by Normal Q-Q plots, and there was homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance (p =0.156). Mean scores for work engagement were statistically significantly different between classes, F(3, 503) = 110.837, p < .0005,  $\eta^2 = 0.398$ . The compelled class reported the lowest levels of work engagement (m=2.81, SD=0.72) followed by peripheral (m=3.49, SD=0.69), second highest for strivers (m=3.85, SD = 0.70), and highest for the privileged class (m=4.23, SD=0.56). Tukey post hoc analysis revealed that the mean differences were significant between all classes. Full ANOVA, descriptives and post hoc results can be found in Appendix F, Tables A1-3.

#### 5.3.2.2. Job satisfaction (JS)

Job satisfaction was one of only two variables for which results materially changed after removal of outliers<sup>11</sup>, and thus the results presented here are post-removal of the outliers. The data was normally distributed for each group as assessed by Normal Q-Q plots, and there was homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance (p =0.112). Job satisfaction scores were statistically significantly different between classes, F(3, 495) = 173.387, p < .0005,  $\eta^2 = 0.512$ . The compelled class reported the lowest levels of job satisfaction (m=2.84, SD=0.61) followed by peripheral (m=3.67, SD=0.47), second highest for strivers (m=3.85, SD = 0.56), and highest for the privileged class (m=4.32, SD=0.51). Tukey post hoc analysis revealed that the mean differences were significant between all classes, except between the striver and peripheral classes. Full ANOVA, descriptives and post hoc results can be found in Appendix F, Tables B1-3.

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 $<sup>^{11}</sup>$ . Prior to removal of outliers, ANOVA indicated that there were significant differences in job satisfaction score between all classes. However, after the removal of outliers, the previously significant (p=.024) difference between the peripheral and striver class became non-significant (p=.069). As the removal of outliers did materially change the finding in relation to this outcome, the decision was made to include the post-removal results here.

# 5.3.2.3. Sleeping troubles (SL)

There were outliers in the data, however these were retained after comparison between ANOVAs with original data and outliers removed indicated that the outliers did not materially change the findings for sleeping trouble scores. The data was normally distributed for each group, as assessed by Normal Q-Q plots, and there was homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance (p =0.656). Mean scores for sleeping troubles were statistically significantly different between classes, F(3, 503) = 14.960, p < .0005,  $\eta^2 = 0.082$ . The mean score was lowest (less severe) for the privileged class (m=2.18, SD=0.98) followed by peripheral (m=2.38, SD=1.02), second highest for strivers (m=2.79, SD = 1.09), and highest for the compelled class (m=2.92, SD=0.98). Tukey post hoc analysis revealed that the mean differences were not statistically significant between the compelled and striver classes, and between the peripheral and privileged classes. Full ANOVA, descriptives and post hoc results can be found in Appendix F, Tables C1-3.

## **5.3.2.4.** Burnout (BO)

There were outliers in the data, however these were retained after comparison between ANOVAs with original data and outliers removed indicated that the outliers did not materially change the findings for burnout. The data was normally distributed for each group, as assessed by Normal Q-Q plots, and there was homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance (p =0.128). Mean scores for burnout were statistically significantly different between classes, F(3, 503) = 27.627, p < .0005,  $\eta^2 = 0.141$ . Burnout mean was lowest (less severe) for the privileged class (m=2.44, SD=1.07) followed by peripheral (m=2.68, SD=0.99), second highest for strivers (m=3.22, SD = 1.07), followed by the compelled class (m=3.44, SD=0.91). Tukey post hoc analysis revealed that the mean differences were not statistically significant between the compelled and striver classes, and between the peripheral and privileged classes. Full ANOVA, descriptives and post hoc results can be found in Appendix F, Tables D1-3.

## 5.3.2.5. Stress (ST)

There were outliers in the data, however these were retained after comparison between ANOVAs with original data and outliers removed indicated that the outliers did not materially change the findings for stress. The data was normally distributed for each group, as assessed by Normal Q-Q plots, and there was homogeneity of variances, as assessed by Levene's Test

of Homogeneity of Variance (p =0.72). Mean scores for stress were statistically significantly different between classes, F(3, 503) = 27.648, p < .0005,  $\eta^2 = 0.142$ . The stress mean was lowest (less severe) for the privileged class (m=2.05, SD=0.94) followed by peripheral (m=2.29, SD=0.95), second highest for strivers (m=2.88, SD = 1.12), followed by the compelled class (m=3.00, SD=0.96). Tukey post hoc analysis revealed that the mean differences were not statistically significant between the compelled and striver classes, and between the peripheral and privileged classes. Full ANOVA, descriptives and post hoc results can be found in Appendix F, Tables E1-3.

## 5.3.2.6. Somatic stress (SO)

There were outliers in the data, however these were retained after comparison between ANOVAs with original data and outliers removed indicated that the outliers did not materially change the findings for somatic stress. The data was normally distributed for each group, as assessed by Normal Q-Q plots. Homogeneity of variances was violated, as assessed by Levene's Test of Homogeneity of Variance (p = <.05), and thus the Welch's figure is reported here. The mean score for somatic stress was statistically significantly different between classes, Welch's F(3, 275.484) = 23.703, p <.001,  $\eta^2$  = .122. The somatic stress mean was lowest (less severe) for the privileged class (m=1.61, SD=0.73) followed by peripheral (m=1.77, SD=0.71), second highest for strivers (m=2.300, SD = 0.98), followed closely by the compelled class (m=2.304, SD=0.91). Games-Howell post hoc analysis revealed that the mean differences were not statistically significant between the compelled and striver classes, and between the peripheral and privileged classes. Full Welch statistic, descriptives and post hoc results can be found in Appendix F, Tables F1-3.

#### 5.3.2.7. Cognitive stress (CS)

There were outliers in the data, however these were retained after comparison between ANOVAs with original data and outliers removed indicated that the outliers did not materially change the findings for cognitive stress. The data was normally distributed for each group, as assessed by Normal Q-Q plots. Homogeneity of variances was violated, as assessed by Levene's Test of Homogeneity of Variance (p = <.05), and thus the Welch's figure is reported here. Mean score for cognitive stress was statistically significantly different between classes, Welch's F(3, 273.237) = 22.240, p <.001,  $\eta^2$  = .108. The cognitive stress mean was lowest (less severe) for the privileged class (m=1.72, SD=0.77) followed by peripheral (m=1.95, SD=0.92),

second highest for strivers (m=2.45, SD = 1.05), followed closely by the compelled class (m=2.47, SD=1.01). Games-Howell post hoc analysis revealed that the mean differences were not statistically significant between the compelled and striver classes, and between the peripheral and privileged classes. Full Welch statistic, descriptives and post hoc results can be found in Appendix F, Tables G1-3.

#### 5.3.2.8. Depressive symptoms (DS)

There were outliers in the data, however these were retained after comparison between ANOVAs with original data and outliers removed indicated that the outliers did not materially change the findings for depressive symptoms. The data was normally distributed for each group, as assessed by Normal Q-Q plots. Homogeneity of variances was violated, as assessed by Levene's Test of Homogeneity of Variance (p = <.05), and thus the Welch's figure is reported here. Mean score for depressive symptoms was statistically significantly different between classes, Welch's F(3, 275.085) = 31.927, p <.001,  $\eta^2 = .154$ . The depressive symptoms mean was lowest (less severe) for the privileged class (m=1.75, SD=0.84) followed by peripheral (m=2.12, SD=0.92), second highest for strivers (m=2.45, SD = 1.09), and highest for the compelled class (m=2.85, SD=1.06). Games-Howell post hoc analysis revealed that the mean differences were significant between all classes, except between the striver and peripheral classes. Full Welch statistic, descriptives and post hoc results can be found in Appendix F, Tables H1-3.

#### **5.3.2.9. General health 1 (GH1)**

The GH1 measure was the second outcome variable (alongside job satisfaction) for which results materially changed after removal of outliers<sup>12</sup>, and thus the results presented here are post-removal of the outliers. The data was normally distributed for each group as assessed by Normal Q-Q plots, and there was homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance (p = .258). GH1 score was statistically significantly different between classes, F(3, 496) = 29.157, p < .0005,  $\eta^2 = 0.083$ . The compelled class reported the poorest

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<sup>&</sup>lt;sup>12</sup> Prior to removal of outliers, differences in score between the striver and peripheral classes were non-significant (p=.090), but reached significance after removal (p=.020). Also prior to removal, differences between the strivers and privileged classes were significant (p=.044), but became non-significant (p=.087) after removal. Thus, without outliers, there were significant differences between the GH1 score for all groups except the striver and privileged classes.

health score (m=2.76), while the privileged class reported the highest (m=3.79). GH1 score was lowest for the compelled class (m=2.76, SD=0.89) followed by peripheral (m=3.14, SD=0.91), second highest for strivers (m=3.50, SD = 1.01), and highest for the privileged class (m=3.79, SD=0.95). Tukey post hoc analysis revealed that the mean differences were significant between all classes, except between the striver and privileged classes. Full ANOVA, descriptives and post hoc results can be found in Appendix F, Tables I1-3.

## 5.3.2.10. General health 2 (GH2)

There were outliers in the data, however these were retained after comparison between ANOVAs with original data and outliers removed indicated that the outliers did not materially change the findings for GH2. The data was normally distributed for each group, as assessed by Normal Q-Q plots. Homogeneity of variances was violated, as assessed by Levene's Test of Homogeneity of Variance (p = <.05), and thus the Welch's figure is reported here. GH2 score was statistically significantly different between classes, Welch's F(3, 271.773) = 26.702, p <.001,  $\eta^2$  = .116. GH2 score was lowest for the compelled class (m=5.59, SD=2.06) followed by peripheral (m=6.55, SD=2.26), second highest for strivers (m=6.72, SD = 2.29), and highest for the privileged class (m=7.63, SD=1.71). Games-Howell post hoc analysis revealed that the mean differences were significant between all classes, except between the striver and peripheral classes. Full Welch statistic, descriptives and post hoc results can be found in Appendix F, Tables J1-3.

#### 5.3.2.11. Self-efficacy (SE)

There were outliers in the data, however these were retained after comparison between ANOVAs with original data and outliers removed indicated that the outliers did not materially change the findings for self-efficacy. The data was normally distributed for each group, as assessed by Normal Q-Q plots, and there was homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance (p =0.68). Mean scores for self-efficacy were statistically significantly different between classes, F(3, 503) = 25.706, p < .0005,  $\eta^2 = 0.133$ . The self-efficacy mean was lowest for the compelled class (m=2.55, SD=0.60) followed by peripheral (m=2.82, SD=0.63), second highest for strivers (m=2.89, SD = 0.68), and highest for the privileged class (m=3.20, SD=0.57). Tukey post hoc analysis revealed that the mean differences were statistically significant between all classes apart from the peripheral and

striver classes. Full ANOVA, descriptives and post hoc results can be found in Appendix F, Tables K1-3.

## 5.3.3. Supplementary findings around main job indicator

Although examining the novel method used for selecting a main job (as developed in study 1) was not a primary objective of this study, neglecting to explore the responses given to this question in the survey would be a missed opportunity. Overall, 'most income' was the predominant main job indicator (MJI) chosen by 45 % of participants. This was followed by most enjoyment (14%), longest tenure (11%), most time consumed (10%), most stability (9%), long-term preference (6%) and other (5%). Out of the 24 responses in the "other" category, examples included "all of the above" or similar sentiment that there were multiple reasons for selecting a main job, while one response captured a novel sentiment: "It is my core purpose for being; everything else fits around it." Further patterns of interest can be found when examining the prevalence of the various main job indicators across various subpopulations. A Chi-square test of association indicated that there were associations between age and chosen main job indicator:  $\chi^2$  (24, N = 507) = 85.01, p < .05, Cramer's V = 0.205 (see Table 22). As illustrated in Table 22, most income was still the prevalent MJI across all age groups – except those aged 65 and above, who were most likely to select most enjoyment (45%). Those aged between 26-34 and 35-54 were most likely to select most income (56% and 49%, respectively). Younger participants were more likely to select most time consumed; with a prevalence rate of 21% for those in the 18-25 age group, and 13% between 26 and 34. Tenure as a MJI appeared to also be associated with age – selected by 20% of those aged 55-64 and 18% of those 65 and over.

Table 22: MJI spread across age groups

			Most income	Most time consumed	Tenure	Long term goal	Most enjoyment	Most stability	Other
	18-25	n	33	19	10	6	11	9	4
		% of age group	36%	21%	11%	7%	12%	10%	4%
	26-34	n	56	15	6	11	10	10	6
		% of age group	49%	13%	5%	10%	9%	9%	5%
	35-54	n	107	11	20	10	19	15	10
tab		% of age group	56%	6%	10%	5%	10%	8%	5%
ossi	55-64	n	23	2	14	3	16	9	4
& MJI crosstab		% of age group	32%	3%	20%	4%	23%	13%	6%
⊗	65+	n	7	3	7	2	17	2	0
AGE		% of age group	18%	8%	18%	5%	45%	5%	0%
		n	226	50	57	32	73	45	24
Overall		Overall %	44.6%	9.9%	11.2%	6.3%	14.4%	8.9%	4.7%

Table 23: Chi-Square test of association for age and chosen MJI

Chi-Square Tests (MJI, age)					
	Value	df	Asymptotic Significance (2-sided)		
Pearson Chi-Square	85.088ª	24	0.000		
Likelihood Ratio	78.813	24	0.000		
Linear-by-Linear Association	4.546	1	0.033		
N of Valid Cases	507				
a. 8 cells (22.9%) have expected co	unt less than 5	. The mi	nimum expected count is 1.80.		
Symmetric measures					
		Value	Approximate significance		
Nominal by nominal	Cramer's V	.205	0.000		
N of Valid Cases		507			

There were also significant associations between MJI and reported reason for holding multiple jobs:  $\chi^2$  (30, N = 507) = 114.904, p < .05, Cramer's V = 0.213 (see Table 25). Those who had a financial motive for holding multiple jobs were most likely to select most income

as their main job indicator with over half of these participants doing so (53%), while those with other motives presented with greater diversity of chosen main job indicators. While for those with development as their motive still predominantly chose most income (27%), this was closely followed by most time (22%) as well as a greater spread across other indicators. A similar pattern was present for those with a variety motive, with 37% selecting most income, but closely followed by 31% who selected most enjoyment. Results for the remainder of the less prevalent motives are outlined, along with the above results, in Table 24.

Table 24: MJI spread across reason for holding multiple jobs

			Most income	Most time consumed	Tenure	Long term goal	Most enjoyment	Most stability	Other
	Financial	n	161	24	33	18	27	27	14
		% of reas	53%	8%	11%	6%	9%	9%	5%
	Develop	n	16	13	9	10	8	4	0
		% of reas	27%	22%	15%	17%	13%	7%	0%
	Variety	n	42	9	9	2	35	13	4
		% of reas	37%	8%	8%	2%	31%	11%	4%
	Helping	n	5	1	3	0	0	0	2
		% of reas	46%	9%	27%	0%	0%	0%	18%
	Enjoyment	n	0	0	0	2	1	0	2
		% of reas	0%	0%	0%	40%	20%	0%	40%
son	Other	n	2	3	3	0	2	1	2
Reason		% of reas	15%	23%	23%	0%	15%	8%	15%
	•	n	226	50	57	32	73	45	24
Total		Overall %	45%	10%	11%	6%	14%	9%	5%

Table 25: Chi-Square test of association for reason for holding multiple jobs and chosen MJI

Chi-Square Tests (MJI, age)					
	Value	df	Asymptotic Significance (2-sided)		
Pearson Chi-Square	114.904ª	30	0		
Likelihood Ratio	101.289	30	0		
Linear-by-Linear Association	18.168	1	0		
N of Valid Cases	507				
a. 22 cells (52.4%) have expected count less than 5. The minimum expected count is .24.					

Symmetric measures			
		Value	Approximate significance
Nominal by nominal	Cramer's V	.213	0.000
N of Valid Cases		507	

#### 5.4. Discussion

Prompted by notable divergence in outcomes among those holding multiple jobs, this study was intended to explore why some have positive experiences of multiple job holding, while others suffer. To this end, the study aimed to determine whether different types of multiple job holders could be detected, based on their situational factors and then if so, how outcomes and experiences may differ between the various types. Overall, the first phase of analysis (A) confirmed the presence of four distinct, statistically-supported and theoretically logical classes, or types, of multiple job holders in the sample – supporting hypothesis 1. Hypothesis 1A – that classes can be distinguished based on reported situational factors, including psychosocial factors – was also supported, given that clear distinctions between the classes could be seen with regard to their situational factors. The second phase of analysis (B) indicated that outcomes did differ across the various classes, supporting hypothesis 2. Hypothesis 2A - that less favourable outcomes will be experienced by those in categories where objectively negative indicator variables are present, in line with the Job Demand Resources theory (Bakker & Demerouti, 2017) – was also supported.

Four classes emerged from the analysis, representing something of a spectrum of vulnerability regarding their situations – or more specifically, the indicator variables that comprised these situations. The outcomes experienced by the classes were consistent with what one would expect, when their compositions are considered in light of the Job Demands-Resources Theory where high demands are said to result in health erosion, while low resources are said to result in demotivation (Bakker & Demerouti, 2017). Sleeping troubles, burnout, somatic stress, cognitive stress, stress, depressive symptoms and the general health variables evidently represent the health erosion pathway, which is said to result negatively when work demands are high. Work engagement, job satisfaction and self-efficacy can be regarded as outcomes akin to the motivational pathway that is said to result positively when resources are high.

Although each phase A and B (identifying the classes or types and then testing whether outcomes differed between them) represented separate hypotheses, they are both inextricable – given that the validity and usefulness of the classes depended on their ability to differentiate through differing outcomes. Therefore, the compositions and outcomes of each class, including their implications in relation to both current understanding of multiple job holders and psychosocial risk, will be now be discussed together in relation to each class below. After this, insights gained in relation to main job indicator – which are tangential to the hypotheses but worthy of discussion in their own right – will be discussed.

#### 5.4.1. Compelled class

The class deemed to be the most marginalised with regard to both situational variables (that comprised the grouping) and subsequent outcomes was the compelled class. This class consisted broadly of multiple job holders who were most likely to be engaging in the practice for financial reasons and not by choice, and who were most likely to have just enough money after covering expenses. This class also saw the lowest levels across all resources and highest levels of the demands job insecurity and insecurity over working conditions. While not scoring the highest overall demands on average, the compelled class was second highest (to the striver class). In practical terms, not only were these individuals financially pressured and in a forced, precarious situation, but they were also less likely to have access to resources in the workplace that could have the impact of reducing the strain caused by their relatively high demands (Bakker & Demerouti, 2017).

When outcomes were tested in phase B, the compelled class reported the poorest results for every outcome — related to both the health erosion and motivational pathways. This is consistent with the JDR theory; while the compelled class had the second highest demands rather than the highest, their demands were still relatively high — and adverse health outcomes are seen that could relate to these high demands. The compelled class also had the lowest resources, and experienced the lowest levels of work engagement, job satisfaction and self-efficacy — which could represent the motivational pathway.

The compelled class is comparable in numerous ways with the vulnerable class identified by (Bouwhuis et al., 2018c). Both were most likely to cite their reason for multiple job holding as needing to work more hours to make ends meet, or because they couldn't obtain more hours in their current job, in addition to being most likely to prefer one job instead. In addition to being most likely to have just enough money left after covering expenses, both classes also experienced low autonomy (measured through dimensions including influence and control over time in the present study). Subsequently, these classes reported the poorest health outcomes across all classes in their respective studies.

The compelled class also has parallels with an early proposition about multiple job holders and their nature – the deprivation/constraint hypothesis of multiple job holding (Jamal et al., 1998; Jamal & Crawford, 1981). This term described those who were engaged in multiple job holding out of financial necessity, as one job alone did not provide sufficient income. According to the authors, these individuals would be vulnerable and disadvantaged, experiencing negative outcomes as a result of their multiple job holding situation. However, his hypothesis was rejected in favour of the energic/opportunity hypothesis (discussed below in section 4.4.4.), as Jamal and colleagues did not find evidence that multiple job holders experienced more negative outcomes than single job-holders. Jamal et al.'s (1998) rejection of this hypothesis is problematic as discussed below in section 5.4.4. The emergence of the compelled class here offers support to previous claims that multiple job holders are a heterogeneous population (Bouwhuis et al., 2018c; Rouault, 2002), and multiple types are likely to exist; those defined under the "energic/opportunity" hypothesis are likely to exist alongside different individuals who fit the deprivation/constraint hypothesis.

Although this study was fairly exploratory in the sense that it was unknown quite how psychosocial factors may cluster across any detected groupings from Phase A, as discussed in section 5.1., it was expected that those holding multiple jobs out of necessity rather than choice would be – in line with previous research – more prone to adverse outcomes (Lindstrom, 2016). The findings for the compelled class were consistent with these expectations in that, alongside other disadvantageous elements such as low resources and high job insecurity, they were the class most likely to report low choice and prefer to have one job instead.

#### 5.4.2. Striver class

The striver class was characterised by members who worked the longest hours, often as the breadwinner for their households that were more likely than other classes to be short of money after expenses. They were also more likely than others to report development motives for holding multiple jobs – suggesting that they may be working particularly hard at this point in their lives in order to advance their state in some way. Despite the previously discussed compelled class presenting clearly concerning outcomes, the striver class also had concerning properties. These individuals reported the highest demands for all areas except job insecurity – for which they were highest equal with the compelled class – and insecurity over working conditions for which they were second. However, this class also experienced fairly high resources – to the extent that their overall mean for resources was still slightly higher than their overall mean for demands.

With regard to outcomes, the striver class reported some concerning results, but to a slightly lesser extent than the compelled class. While the compelled class scored most adversely on all outcomes relating to health erosion, the differences between the compelled and striver classes for sleeping troubles, burnout, somatic stress, cognitive stress and stress were not statistically significantly different (in fact, for somatic and cognitive stress, their value was equal to two decimal places). However, in relation to general health, this class scored more favourably – reporting the second highest (most positive) levels of health. This could be seen as somewhat contradictory to the key tenet of the JDR theory – that high demands do not coincide with the absolute poorest health outcomes – although the striver class still does show signs of health erosion. It is also possible that the high resources experienced by these individuals has, as reported in previous studies, acted as somewhat of a buffer and has resulted in slightly less severe health erosion for this class (Bakker et al., 2010; Xanthopoulou et al., 2007). Furthermore in relation to the JDR theory, there appears to be support for the motivational pathway - in that the striver class reported the second highest levels of resources overall, and experienced the second most favourable outcomes for work engagement, job satisfaction and self-efficacy. Thus, this class of multiple job holders is intriguing, and cannot be regarded as having a wholly positive or negative experience of the practice.

The striver class appears to be fairly unique in comparison to existing knowledge of multiple job holders. It does not have clear parallels with any of Bouwhuis et al.'s (2018c) classes, nor can it be considered to exclusively represent one motive or previously documented conceptualisation of multiple job holders. While those in the striver class are more likely than others to cite development as their motive for holding multiple jobs (20%), money is still their primary motive (53%). Beyond a slightly higher level of choice exhibited by the striver class, a key distinction between the striver and compelled classes is the higher levels of resources experienced by the former. This suggests that the nature of the jobs held by strivers are of higher quality than those of compelled multiple job holders (Piasna et al., 2020).

It appears that as a result of these higher resources, while strivers report some negative health outcomes, they report positive outcomes in terms of engagement and satisfaction. However, this class are still concerning – particularly in the longer term. In spite of faring positively on the motivational pathway, the health erosion experienced is worrying. This is the case perhaps even more so than it is for the compelled class – given that the striver class has a longer average tenure. Furthermore, highly engaged and satisfied workers may be more likely to remain in their work situations (Schaufeli & Bakker, 2004). Thus, it is a possibility that they may maintain this situation for a longer time period and experience worsening health as their situation persists.

## 5.4.3. Peripheral class

The peripheral class was named as such as it consisted of multiple job holders who did not appear to be as fully "immersed" in the practice of multiple job holders as those from other classes. They worked the lowest average number of hours and were more likely than others to cite enjoyment as their motive. They also held the lowest average number of jobs and were most likely to hold casual contracts across all jobs, but least likely to be the breadwinner for their household. They also had the lowest rate of union membership — which is likely associated with the nature of their employment, as casual/temporary workers are less likely to belong to a union (Quinlan et al., 2001a). However, they presented more favourably than the previous two classes with regard to choice — reporting the second highest average choice (m=6.69) and with exactly 50% preferring to hold multiple jobs (also placing them second highest in this regard). Additionally, they held the second highest tenure (m=4.08 year)

suggesting that while the practice of multiple job holding may not take up significant amounts of their time, it is a practice that they see as being fairly long term. They scored lowest in relation to cognitive demands, emotional demands and demands for hiding emotions, offering insight into the nature of the types of jobs they were likely to fill (considering that the privileged group scored lowest on all other demands). In relation to resources, the peripheral class also scored lowest equal alongside the compelled class in relation to variation of work, but higher than all others for vertical trust between staff and management. Their score for the latter was notably higher than that for all other classes – which is also interesting given that for all other classes, vertical trust was the resource for which all others scored lowest.

With regard to outcomes, the peripheral group overall could be said to be impacted in a fairly neutral manner. They scored second-lowest (to the privileged class) on all adverse health outcomes, and the differences between the peripheral and privileged classes were non-significant on all of these adverse items except depressive symptoms — suggesting that although the privileged class scored most favourably (lowest), the peripheral class can also be generally regarded as not severely experiencing negative symptoms. However, they also scored second lowest in relation to all beneficial work-related outcomes — work engagement, job satisfaction and self-efficacy — as well as general health (for which a higher score indicated better health). This differentiates the peripheral class from the striver class in particular in an interesting manner. Whereas the striver class seems to expend more effort and face higher demands in the course of multiple job holding and appear fairly engaged (albeit strained) as a result, the opposite is true for the peripheral class.

As with the previous classes, the results seen here align with expectations in relation to JDR theory (Bakker & Demerouti, 2017). The peripheral class experiences the second-lowest average resource levels and in turn, demonstrates the second lowest scores for engagement and related outcomes (along the motivational pathway). Furthermore, they experience the second-lowest levels of average demands, and the second lowest scores for outcomes along the health erosion pathway. Another interesting distinction with the peripheral class is the casualised nature of employment – they are least likely to have permanent arrangements across all of their jobs, which may traditionally be perceived as precarious employment.

However, their reported job insecurity was the second lowest across classes – suggesting that despite being in casual arrangements, they did not perceive them as being highly insecure (which is particularly of note given the climate within which data was collected – in a time of economic uncertainty brought on by COVID-19). This supports the call of Bouwhuis et al. (2018b) – that multiple job holding should not be assumed to be a form of precarious employment in itself.

There are some notable similarities with the "indifferent" class of multiple job holders found by Bouwhuis et al. (2018c). Both classes presented with the lowest average working hours and were more likely to have non-permanent contracts across their multiple jobs, in addition to being least likely to be the breadwinner in their household. They also both experienced fairly non-demanding jobs, with low quantitative demands. Lastly, both classes reported fairly positive health outcomes. Further comparison cannot be easily drawn, as the different foci for each study meant many indicator variables differed. Regardless, the similarities are still noteworthy – particularly given that the present study was undertaken on a full range of ages (as opposed to the previous study focussing on older workers) and in a completely different region and hemisphere. While multiple job holders are often seen dichotomously – as either having distinctly negative or positive experiences, both studies taken together support the presence of a broader spectrum of experiences.

## 5.4.4. Privileged class

The final class was labelled as the privileged class due to a clear clustering of favourable indicator variables, particularly around choice. This class had the highest average choice (m=7.47) and were most likely (63%) to prefer working in multiple jobs, in addition to being most likely to have more than enough money remaining after covering expenses (50%). They were also more likely than others to cite variety as their motive for holding multiple jobs, had the highest average number of jobs (m=2.167) and longest average tenure (6.24 years). As with all other classes, outcomes for the privileged class are once again consistent with the JDR theory (Bakker & Demerouti, 2017). Those in this class experienced on average the lowest overall demands, highest overall resources, lowest levels of health erosion pathway variables and highest motivational pathway variables.

This type of multiple job holder appears to closely align with what previous literature has described as the "energic/opportunity" motive – where the individual is unique and seeks out multiple jobs as they enjoy the challenge and variety (Baba & Jamal, 1992; Jamal, 1986; Jamal et al., 1998; Jamal & Crawford, 1981). However, the aforementioned authors had claimed support for this theory on the basis that multiple job holders they studied did not generally experience more negative outcomes than single-jobholders. Thus, an assumption was made that multiple job holders fit this theory on the basis of outcomes, as these studies did not explicitly capture reported motives from the multiple job holders. The present study advances these claims by supporting the idea that such a conceptualisation of multiple job holder fits one type (rather than describing all those who engage in the practice). Furthermore, it does so by explicitly capturing situational factors (including motive), rather than inferring that the individuals must be holding multiple jobs voluntarily based on a lack of negative reported outcomes. In short, the "energic/opportunity" type of multiple job holder does exist – as one among other diverse types of multiple job holder.

There are also parallels with both the satisfied combination and satisfied hybrid classes of multiple job holder as identified by Bouwhuis et al. (2018c). These classes consisted of multiple job holders who were also more likely to hold multiple jobs out of enjoyment, to prefer having more than one job, and to be financially stable – having money left after covering expenses. Similarly, the satisfied combination class had the most positive health outcomes, as did the privileged class in this study. One key point of divergence with the classes determined by Bouwhuis et al. (2018c) is that the latter's analysis produced classes that divided between satisfied combination and hybrid multiple job holders – but this is not surprising, given that the two studies had key elements of difference (as discussed at the end of section 5.1). However, broadly, there are consistencies in the understandings developed around multiple job holders.

#### 5.4.5. Main job indicator

Most income was selected by 45% of participants as their main job indicator – making it the most prevalent choice. However, this is interesting in the sense that, while the most widely-used MJI in past research was also the most frequently selected here, it still only represented the choices of just under half of participants. The other two MJIs most commonly used in

previous measurement of multiple job holding, longest tenure (11%) and most time consumed (10%), were third and fourth most prevalent, respectively. Perhaps surprisingly, most enjoyment was the second most prevalent (14%). Beyond the work of Kottwitz et al. (2019) where enjoyment presented as one of a diverse range of MJIs, this concept does not previously appear to have been considered as a main job indicator — and yet is the second most prevalent here. This finding in itself arguably supports the use of this method; while not previously used as a MJI in the context of a survey (to the best of my knowledge and extensive searching), the MJI of enjoyment clearly resonated with a non-negligible proportion of participants. There were also patterns in the text responses of those who selected "other" — including the sentiment of multiple factors combining, which was also clearly evident in study one.

Furthermore, intriguing patterns were visible in relation to age. Older participants were more likely than other age groups to cite most enjoyment and tenure, with younger participants more likely to select the more traditional MJIs of most income and most time. This may reflect a change in priorities and values of older workers, and/or differing perceptions around the practice of multiple job holding and even employment in itself. Finally, and perhaps most significantly, there were clear, significant associations between chosen main job indicator and reported reason for holding multiple jobs. This provides strong support for a key finding of study one; that the criteria for selecting a main job is often linked to the individual in question's situation – particularly their motive(s) for holding multiple jobs in the first instance. It is not surprising that those who are financially motivated to hold multiple jobs would primarily regard their job with the most income as their main job, nor that those who hold variety motive would choose most enjoyment as a MJI more so than those with other motives. However, this appears to be the first empirical evidence of this pattern – and the first instance where these two elements have been synthesised.

#### 5.5. Conclusion

The objective of this study was to investigate why the experiences of multiple job holders differ, to inform a conceptualisation of those who hold multiple jobs. This overall study two objective was fulfilled through the achievement of two sub-objectives:

- A) To determine whether different "types" of multiple job holder can be identified based upon their situational factors, including their experience of the psychosocial work environment
- B) To investigate whether the outcomes experienced differ between the different types of multiple job holder identified

In an attempt to better understand why some multiple job holders appear to suffer as a result of the practice and have negative experiences, while others holding multiple jobs are able to thrive, this study has produced evidence in support of the existence of different, heterogeneous "types" of multiple job holder. Specifically, these different types have been conceptualised using their situational factors, such as their motives and the psychosocial work environment factors experienced in their main job. In this way, the sub-objective A has been achieved. Additionally, and perhaps more importantly, the study has also produced evidence to suggest that outcomes differ across the different types of multiple job holder – fulfilling sub-objective B. This advances our understanding towards answering the overarching question around why some have more negative experiences than others. To this end, the study found that the types consisting of more negative factors were more prone to negative outcomes. In parallel, this study has also been the first to utilise a novel method for conceptualising one's "main" job – through participants' self-selection of a main job using whichever criteria they felt most appropriate. An earlier, novel finding from study one – that one's reason for holding multiple jobs can influence how they select which of their jobs to be their main one - has also been reinforced. To summarise, this study has advanced understanding around the rich heterogeneity of those holding multiple jobs in two key ways. By doing so, it has clearly provided the basis for a nuanced conceptualisation of multiple job holders - comprising four distinct types of multiple job holder, with clear links to the outcomes experienced by this population. This conceptualisation is visually depicted below in Figure 6. As illustrated below, the four types can be clearly marked on horizontal and vertical axes indicating their position in relation to both the health and work-related outcomes. The two types depicted in the dashed-line circles are shown in such a way to indicate their complexity. Whereas the privileged and compelled types are very clearly positioned at positive and negative ends of the overall spectrum of experiences, the striver and peripheral types are less straightforward. These two types in particular are perhaps the most intriguing and arguably, even the most important. Their existence provides support for the idea that multiple job holders are, indeed, a highly heterogeneous population and furthermore, that this heterogeneity extends far beyond a binary of positive or negative multiple job holding situations.

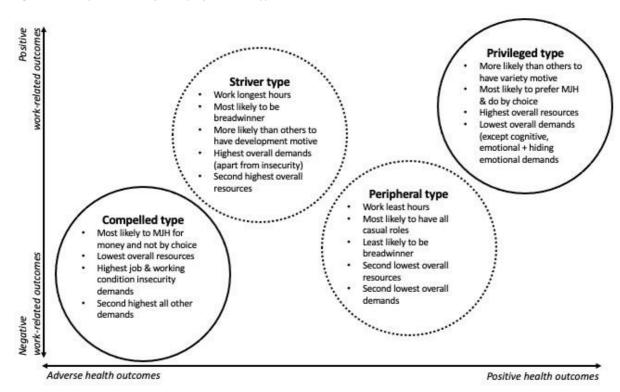


Figure 6: Conceptualisation of multiple job holder types

NB: the properties of each type depicted in the circles above are not complete summaries of all properties but rather, summaries of the properties where there are the clearest contrasts.

# **Chapter 6: Overall discussion and conclusion**

# **6.1 Summary of findings**

The two studies covered in this thesis can both be described broadly as advancing understanding around the true heterogeneity of those who hold multiple jobs. By doing so, the overall objective for this research has been achieved:

To explore the heterogeneity of multiple job holders in order to develop a meaningful, nuanced method for conceptualising these individuals, which can be utilised for future research, policy development and practice

As part of achieving the overall research objective, the objective for study one was to determine the most appropriate method for directing multiple job holders to select a main job, by investigating which factors are taken into consideration by multiple job holders when faced with such a task. Study one achieved this through unpacking the mechanism through which multiple job holders select a main job, when prompted to do so. The result here was an acknowledgement that, while the three key traditional and arguably arbitrary criteria of choosing a main job did feature fairly prevalently in responses, they were not the most prevalent, and appeared alongside a vast range of other factors. Furthermore, beyond the diversity of factors that emerged from the data, overall, it was evident that the criteria used for selecting an individual's main job was frequently influenced by the nature of the individual's situation. For example, participants were more likely to select financially-related main job indicators in the case of an individual who was in fairly dire financial need.

Once the objective for study one had been achieved, this allowed study two to proceed – with confidence that an appropriate method for main job selection had been identified. This was conducive to study two being able to proceed towards achieving its objective, which was to investigate why the experiences of multiple job holders differ. This objective required the achievement of two sub-objectives, which also necessitated two distinct phases of study two. These sub-objectives were:

 A) To determine whether different "types" of multiple job holder can be identified based upon their situational factors, including their experience of the psychosocial work environment  B) To investigate whether the outcomes experienced differ between the different types of multiple job holder identified

Study two further advanced knowledge around the heterogeneity of multiple job holders by identifying four distinct types of multiple job holder from the New Zealand sample – achieving sub-objective A. As predicted, multiple job holders were classified according to their situational factors – with clear distinctions emerging whereby individuals with more positive situational factors were grouped separately from those with more negative situational factors. Specifically, the most favourable type – labelled as the privileged class – were most likely to hold multiple jobs by choice as a long term lifestyle, experiencing high resources in the workplace and fairly low demands. The next type, the peripheral class, did not appear to be have multiple job holding strongly embedded as part of their lives – they were most likely to hold casual roles, work the least hours and experience low demands in their work. Next, the striver class worked the longest hours, were most likely to be the breadwinner for their families, were more likely than the previous two classes to prefer one job, most likely out of all others to hold multiple jobs for development reasons and experienced the highest demands in their work but also experienced fairly high levels of resources. Lastly, the compelled class were most likely to prefer one job, had the lowest average tenure suggesting that holding multiple jobs was a short-term measure, experienced the highest levels of job insecurity and the overall second highest demands otherwise, and the lowest levels of resources in their work.

Towards achievement of sub-objective B and as predicted, health and work-related outcomes differed significantly between the classes. The privileged class experienced the most positive outcomes overall — both health and work-related. Both the compelled and striver classes experienced similarly poor health outcomes, while the compelled class also experienced negative work-related outcomes, while the striver class scored fairly favourably on these outcomes. These outcome patterns were consistent with expectations according to the job-demand-resource model of job strain — whereby high demands were likely to cause health erosion (negative health outcomes), while high resources were likely to cause motivation or positive work-related outcomes.

#### **6.2 General discussion**

## 6.2.1. Acknowledging the heterogeneity of multiple job holders

As outlined above, this thesis has advanced the knowledge around the heterogeneity of multiple job holders in two key ways – through exploring the concept of main job indicators (study one), and identifying different types of multiple job holders (study two). However, it is certainly not the first to suggest that those who hold multiple jobs comprise a highly diverse population and thus that these individuals – and the broader phenomenon that is multiple job holding – should be treated accordingly. Indeed, the diversity of multiple job holders has been discussed as far back as the early work of Shishko & Rostker (1976) strictly in relation to motives. Rouault (2002) then hypothesised around the existence of different "types" of multiple job holder, which has since received important empirical support in the extensive work of Bouwhuis et al. (2018a; 2018c).

Earlier work was often prone to the generalisation that multiple job holding was either a beneficial or detrimental experience for those involved — either cause for concern, or an intriguing and misunderstood phenomenon (Jamal & Crawford, 1981; Raffel & Groff, 1990). Over time, greater acknowledgement was given that for some, the practice seemed to carry significant benefits, while for others, it was troublesome. At a base level, this dichotomy is useful to contrast the starkest realities of this practice and convey the important assertion that multiple job holders are not a homogeneous population. However, as both this study and previous studies have suggested (Bouwhuis et al., 2018c), the conceptualisation of multiple job holders is more granular than this dichotomy — which enables an even greater understanding to be developed of these unique individuals. By examining why the experiences of multiple job holders in New Zealand differ, this research has developed a nuanced means of conceptualising multiple job holders — based upon their situations and the impact of these situations on outcomes. This more detailed conceptualisation can facilitate greater understanding of these individuals, beyond the more simplistic, dichotomous ways in which multiple job holders have previously been categorised and regarded.

The present research found that four types of multiple job holders could be observed from the sample, representing something of a spectrum of situations ranging from negative to positive - but with variation that indicated greater complexity than entirely negative or entirely positive situations of multiple job holding. While the privileged and compelled classes were, by nature, markedly positive and negative respectively, the striver and peripheral classes were less straightforward. Those in the striver class appeared strained in many ways likely to be working long hours as the breadwinner for their family and experiencing high demands and some negative health outcomes – but also possessed favourable characteristics, namely high resources and in turn, positive work-related outcomes. Those in the striver class cannot, therefore, be characterised wholly as thriving or suffering in their multiple job holding situation – there are clear elements of both. Similarly, those in the peripheral class do not appear to be deeply embedded in their situations – in the sense that they are not impacted either intensely positively or negatively. Their work is less likely to be demanding, but also less likely to provide high resources. This neutrality or mid-range of multiple job holding experiences appears to be a fairly novel concept in the literature. Although Bouwhuis et al. (2018c) reported the existence of an "indifferent" class in their study with some similarities (such as low working hours, low demands and being least likely to be the breadwinner), this appears to be the extent of similar findings. Taken together, these two studies advance knowledge around types of multiple job holding experience, beyond simply negative or positive.

# 6.2.2. Importance of considering the contingency of one's situation

An overarching theme that emerged from both studies in the present research – in differing ways, given their different objectives, but still clearly nonetheless – was the contingency of the multiple job holder's situation. That is, all ultimate outcomes (the selected main job for study one, and health and work-related outcomes for study two) appeared to be dependent on factors within the individual's situation. Conventionally, sweeping assumptions have often been made – albeit without negative intentions, given that these were generally made in situations where knowledge was still developing – about multiple job holders. Assumptions have been made about what truly constitutes one's main job – through the use of arbitrary criteria upon which multiple job holders have been asked to select their main job (Bamberry & Campbell, 2012; Renna, 2006; University of Essex Institute for Social and Economic Research, 2018). Assumptions have also been made, based on reported motives, about whether individuals are holding multiple jobs by choice or out of compulsion (Jamal et al.,

1998; Jamal & Crawford, 1981). Assumptions have even been made about motives for holding multiple jobs in themselves (Baba & Jamal, 1992; Jamal, 1986; Jamal et al., 1998; Jamal & Crawford, 1981).

The present research has challenged these assumptions and has suggested that by operating based on these assumptions, important contextual variations have been overlooked. Study one sought to look beyond the assumption that the job in which one has worked the most hours, earned the most money or has been employed in the longest should be treated as one's main job. By doing so, study one found that individuals used a range of factors upon which to base their decision about a main job – and that these factors often depended on the situation of the multiple job holder in question. Subsequently, study two refrained from making assumptions around individuals' motives for holding multiple jobs, whether or not they were doing so by choice and whether the phenomenon of multiple job holding was beneficial or detrimental. Instead, study two captured situational factors, including motive and choice, and classified individuals into types based on these and other situational factors. Then, the study provided support for the hypotheses that outcomes would vary based on one's situation – with those in more negative situations experiencing more negative outcomes, and vice versa.

## 6.2.3. General discussion summary

The finding directly above, around contingency, builds on the previous finding around the heterogeneity of multiple job holders. Those who undertake this form of work are diverse. Thus, their diversity can be better understood by considering their situations – including the drivers that encouraged them into multiple job holding, and factors within their work situation once they are holding multiple jobs. The phrase multiple job holding encompasses a broad spectrum of employment arrangements. This includes the generally more favourable situations of portfolio workers with higher bargaining power, or professionals undertaking "side hustles" as creative or entrepreneurial outlets alongside another career. However, this phrase also describes less favourable situations, such as those who are forced into holding multiple jobs to make ends meet.

With the growing popularity of the "side hustle" concept, there is a tangible risk that the entire practice of multiple job holding is being romanticised. During the height of the COVID-19 pandemic in 2020 when individuals around the world were suddenly required to stay at home which often created more free time, there were mantra being widely shared on social media such as "if you don't come out of this quarantine with a new skill, your side-hustle started, or more knowledge gained... then you never lacked time, you lacked discipline." (Mukhtar, 2020, p. 514). This reflects the ways in which the "side hustle" is viewed by some as a requirement for success – the neoliberal compulsion to ensure that the time one spends outside of their primary employment is commodified – that any available increment of one's free time is converted to productivity and economic output.

The practice of multiple job holding has clearly been proven, both in this research and in that of many others previously, to have the potential to benefit individuals, organisations and also less directly, societies. Thus, this practice should certainly not be discouraged, particularly for those doing so by choice and experiencing enrichment and numerous other benefits as a result. However, positive forms of multiple job holding (including the voguish "side hustle" with many attractive connotations) should not be conflated with the practice of multiple job holding when it is undertaken – often by those more vulnerable – out of constraint, due to financial need that arises from insufficient levels of pay and/or excessive costs of living, or to improve one's prospects when faced with precarious work. Those examining the practice of multiple job holding and its implications should do so using the conceptualisation developed through this research. Doing so will provide a more nuanced perspective of this population, and thus will aid in avoiding assumptions or generalisations that may not reflect the true reality of this practice.

### 6.3. Contributions of the research

With regard to theory, this research makes four original contributions. The clearest and arguably the most considerable of these is the novel, more nuanced method developed to conceptualise multiple job holders — which was the overall objective of this research. The remaining three original contributions, as well as the three ways in which this research extends existing knowledge, are outlined in Table 26 below. Implications for practice are then discussed (section 6.4.2) followed by policy implications (6.4.3).

Table 26: Theoretical contributions of the research

Original contributions	First attempt to develop a conceptualisation of multiple job holders based on a broad range of ages, and using a comprehensive measure of the psychosocial work environment – extending on the work of Bouwhuis et al. (2018c) who undertook this with a focus on older multiple job holders and using a range of situational factors – including
	broadly two types of demands and autonomy – rather than the full range of psychosocial factors used in this research.
	First comprehensive synthesis of multiple job holding and psychosocial risk
	Developed and used a novel method of prompting participants to select a main job for the purposes of answering a survey.
	First substantial quantitative investigation in New Zealand around the experiences and wellbeing of multiple job holders.
Extends previous research	Provides further evidence that those who hold multiple jobs are a heterogeneous population – suggested by Rouault (2002) and recently empirically supported by Bouwhuis et al. (2018c)
	Tests the Job Demand Resource model (Bakker & Demerouti, 2017; Demerouti et al., 2001) on multiple job holders and finds support for the health erosion and motivational pathways.
	Unintended research context of COVID-19 demonstrates strategies for conducting research in a volatile/crisis context

#### 6.3.1. Theoretical contributions

The most material contribution of this research is the fulfilment of the overarching research objective – the development of a nuanced, meaningful method through which multiple job holders can be conceptualised. This conceptualisation also goes beyond a novel theoretical contribution – as it can be used by practitioners and policymakers when interacting with or otherwise considering multiple job holders. This is discussed below in sections 6.4.2. and 6.4.3 respectively. While this research is not the first to investigate the potential for different "types" of multiple job holder to exist (Bouwhuis et al., 2018c), it does have a number of key strengths and ways in which it has built upon the initial work of the aforementioned Bouwhuis et al. Given the multiple similarities that may appear between the present study and the work of Bouwhuis et al. (2018c), particularly on the surface, the key differences between the two pieces of research are emphasised below in Table 27.

As indicated below in Table 27, the present study is (to the best of my knowledge) the first to develop a conceptualisation of MJHers that identifies different types of MJHers based on a <u>broad</u> range of ages. Additionally, it is the first to incorporate a full range of psychosocial

factors into such a conceptualisation (the use of psychosocial factors also represents an original contribution in itself and is discussed further in the next paragraph).

Another key feature of the present research was the synthesis of the fields of multiple job holding and the psychosocial work environment (and in turn, psychosocial risk), given that these two areas had only been discussed together in a fairly cursory manner previously. Others have, in the past, correctly identified that the practice of multiple job holding would

Table 27: Summary of differences between Bouwhuis et al. (2018c) study and the present research

	Bouwhuis et al. (2018c)	Present study
Population	Older multiple job holders	General population of
	(aged 45 and older)	multiple job holders
Study context	The Netherlands	New Zealand
Variables used for	A range of situational	A range of situational
categorisation	variables spanning the	variables including some
	multiple job holder's	similar to Bouwhuis et al.
	situation, and a small	relating to the MJHer's
	selection of <b>3</b> psychosocial	situation e.g. motive, choice,
	factors: physical demands,	financial situation, in
	quantitative demands,	addition to a full range of 22
	autonomy	psychosocial factors
Outcome variables	<b>2</b> - 1 physical health and 1	<b>7</b> - broader range of <b>5</b>
	mental health measure	individual wellbeing
		variables and 2 work-related
		variables:
Other key points of	Asked participants to answer	Developed and then utilised
difference	(fewer) questions in relation	novel method of directing
	to both of (or two of) their	participants to select one,
	jobs	main job, in relation to which
		they would answer a large
		set of questions
	Used secondary data from	Used primary data from a
	existing dataset (STREAM,	survey designed specifically
	cohort study among workers	for present study
	45 and older)	

have clear implications in relation to the psychosocial work environment (Keuskamp et al., 2013; LaMontagne et al., 2012; Pouliakas, 2017). Some have also gone as far as to capture particular elements of multiple job holders' experiences of psychosocial factors – such as Bouwhuis et al. (2017a; 2018c) who measured quantitative demands, physical demands and autonomy – as highlighted in Table 27. Similarly, Piasna et al. (2020) undertook to measure

job quality of multiple job holders through factors such as job security and prospects and work pressure, which — although the authors do not discuss the psychosocial work environment explicitly — are essentially psychosocial factors (Leka et al., 2003). However, the present study went significantly beyond these. It was the first to utilise a full, comprehensive range of psychosocial factors, and to then identify the presence of psychosocial risk — i.e. where psychosocial factors have been experienced adversely and resulted in harm (negative health and work-related outcomes). Specifically, the research was able to identify that two specific types of multiple job holders were more prone to psychosocial risk.

Another notable and original contribution was the development and use of a novel method for directing multiple job holders to select a main job in relation to which they would answer questions in a survey. Early on in this research, an issue was identified with the arbitrariness with which past research has directed survey participants to select their main job. This has been commonly done using the criteria of the job in which one has worked the most hours recently, or earned the most, or that they have been employed in for the longest time period. However, this was deemed an issue particularly given that this research sought to understand the experiences of multiple job holders, and how these individuals may differ in relation to their experiences and subsequent outcomes. In a study seeking to understand the diversity of those holding multiple jobs, it would have arguably been inappropriate to utilise one of the arbitrary criteria, and meaningful data could have been missed as a result. While another group of researchers also undertook to let participants self-select their main job as part of a wider qualitative study (Kottwitz et al., 2019), this research was the first to systematically investigate the process of multiple job holders self-selecting a main job and to capture rich insights around this process. This research does appear to be the first to conclude – based on the aforementioned investigation – that the chosen main job is often selected contingent upon the situation of the multiple job holder in question. The final method for the subsequent survey (study two) was based on the finding around contingency, and the breadth of differing criteria that emerged from study one. The method entailed asking participants to self-select what they felt was their main job. They were then provided a list of suggested criteria (all criteria that were raised in study one) upon which they may want to make their selection but were also reminded they may also choose based on any other criteria. At the end of the survey, they were then asked for the criteria they used so that this could be captured for

descriptive analysis. This method, and particularly its use in a quantitative survey, appears to be completely novel.

This research is also the first substantial study to take place in New Zealand in recent years, and appears to be the first to quantitatively investigate the wellbeing and experiences of multiple job holders on a large scale. A sizeable piece of Government-funded work was undertaken between approximately 2004-2007, that primarily utilised official statistics (Baines & Newell, 2003; Baines et al., 2002; Newell & Baines, 2006), in addition to qualitative investigation (McClintock et al., 2004). Since this concluded, and excluding the present research, there does not appear to have been any significant investigation, beyond descriptive findings incorporated into official labour market statistics.

The findings of this research around the heterogeneity of multiple job holders provide evidence that strongly supports the claims that multiple job holders are a diverse population, made by Rouault (2002) and then empirically supported by the similar work of Bouwhuis et al. (2018c). Earlier work that helped to inform the present research posited that the reason for the puzzling differences in outcomes experienced by multiple job holders could be that there was diversity in those who partook in this practice; perhaps that there were different types of multiple job holders or, at least, that this was a diverse population that warranted further investigation (Bamberry & Campbell, 2012). Published in 2018 subsequent to the initial planning of this research, the findings of Bouwhuis et al. (2018c) were the first to provide empirical, large-scale evidence this was the case – that different types of multiple job holders did indeed appear to exist. This research then undertook to extend upon this by utilising a full range of ages - rather than focusing on older multiple job holders as the previous study had done. As mentioned above in Table 27, this was also an extension on the aforementioned work as it utilised a full range of psychosocial factors – as it was theorised that their experiences of the psychosocial work environment would form part of the differences between different "types" of multiple job holder. A broader range of outcome variables was also measured, beyond the two utilised by Bouwhuis et al. (2018c).

Measuring a broad range of psychosocial factors from an established instrument (COPSOQ) then enabled this research to test the job-demand-resource (JDR) theory of strain, as

demands, resources and outcomes were all measured. The outcomes experienced across the different types of multiple job holder provided clear support for the JDR theory. Those experiencing high demands experienced poorer health outcomes (health erosion pathway) and those who experienced high resources experienced positive work-related outcomes (motivational pathway) (Demerouti et al., 2001). Furthermore, the outcomes of what was possibly the most intriguing type (strivers) supported the buffering effect that high resources can have in a high demand situation – resulting in the negative health outcomes experienced by the strivers being slightly less than the compelled class, who experienced low resources as well as high demands. In addition to providing further support for the JDR theory in this way, this appears to have been the first study to consider the JDR theory and its mechanisms in relation to multiple job holders.

Lastly, although this research certainly was not the first to be undertaken in a crisis context, nor was it by any means the only piece of research undertaken during the COVID-19 pandemic, there are insights to be gleaned particularly around the methodological adaptions made to fit the context. In addition to all data collection being subjected overall to a delay, study one was arguably the most significantly affected proportion of this research. A key issue during study one was the highly atypical nature of employment at the time, where many had either temporarily ceased work during the lockdowns that preceded and then occurred again (towards the end) during the data collection period. For others still working, many were working from home – so still an unusual work situation. Vignettes were utilised as a means to create distance between the unprecedented context and the data collection activities. They appeared to be highly effective in positioning participants' thoughts and responses in a less unusual context, in order to obtain responses that would be conducive to the research question, rather than responses that could have been heavily influenced by the COVID-19 context. Although undoubtedly the research was not undertaken in a vacuum and some contextual influences were likely inevitable, vignettes appeared to function well to reduce the extent to which the crisis context interfered with the data.

# **6.3.2.** Implications for practice

The findings of this research carry implications for practice in the sense that they inform recommendations for organisations to consider – both in relation to the role that

organisations may play in the decision of their employees to seek additional employment, and in the case of their employees who currently already hold additional jobs outside of the organisation.

## 6.3.2.1. The organisation's role in the worker's decision to MJH

Ultimately, many of the individual situational factors will be outside the control of organisations. An organisation is almost certainly not going to be able to change whether or not one of their employees who works in other jobs is the breadwinner for their family, nor will they be able to influence factors that pertain to jobs that their employees may hold in other organisations. However, there may well be instances in which an organisation may be able to eliminate the factors driving an employee's desire to seek secondary employment. This research did not set out to focus on the role of (employer) organisations in the multiple job holding relationship and therefore, this is not a possibility that has been explored indepth. Rather, here, the possibility for this to occur is simply being suggested.

Intervention from an employing organisation may be desirable and particularly applicable where the individuals in question could be classified as belonging to one of the more vulnerable "types" in this conceptualisation – such as the compelled class. Increasing remuneration or being able to provide additional hours of work may satisfy those who would otherwise be driven into holding multiple jobs out of financial necessity, while providing more stable forms of employment or otherwise enhancing job security may do the same for those seeking additional employment as a form of employment insurance. In this way, organisations may be able to play a part in reducing the incidence of their employees being forced to seek additional jobs out of financial necessity. This may, in turn, eliminate the potential for these individuals to experience adverse outcomes from their vulnerable situations. Conversely where employees may not be concerned with money but are seeking additional jobs to provide enrichment, variety or skill development, it may also be possible for employers to fulfil these needs within their existing employment. This could be achieved through measures such as job rotation or redesign, providing greater opportunities for training and development, or prioritising internal secondments over external appointments.

Importantly, organisations should be discouraged from attempting to eliminate all outside employment of their workers. This is especially crucial, given that the conceptualisation developed from this research emphasises that there are positive situations of multiple job holding, in addition to more negative ones. Attempting to prevent those who are in dire need of additional income would be unconscionable, as this would effectively be depriving individuals of the right to earn a liveable income – given that multiple job holding can provide a means to avoid or escape poverty (Scott et al., 2020). Rather, where multiple job holding is present, practitioners should be primarily concerned with identifying those who are in negative situations and seeking methods through which their situations can be alleviated (*not* simply eliminated). Those with positive experiences of the practice should not be subject to unnecessary interference from practitioners and their organisations. Indeed, these individuals may bring the benefits experienced from their positive situation of MJH into their other workplace(s) – thus actually benefitting the organisation.

Just as an employer lacks the right to dictate the hobbies, sports or religion that their employees may engage in outside of the workplace, additional jobs should be treated similarly, in so far as the employee is fulfilling their obligations around relevant matters such as their job performance and health and safety in the workplace (e.g. not working while fatigued). Above all else, those with employees who do hold multiple jobs should refrain from making generalised assumptions about the practice, its impacts on their employees and their ability to carry out their roles. Where an organisation may have reason to be concerned about their employees undertaking additional jobs, these situations should be assessed on a bespoke basis – given that the findings of this research have clearly suggested that not all who hold multiple jobs are comparable.

## 6.3.2.2. Organisational influence on the psychosocial work environment

Beyond the suggestions above, the area that will likely have the most potential for organisations to impact will likely be that of the psychosocial work environment — or more specifically, the individual factors that comprise this. Through comparing the compelled and striver classes found in study two, one can see the impact that these factors can have on individuals. While those in the striver class tended to experience higher work demands than those in the compelled class, the latter appeared to have slightly worse health outcomes. As

discussed in section 5.4.2., this may be attributable to the high level of resources that the striver class experienced – given that resources are said to have the potential to act as a buffer, alleviating the impacts of high demand environments. However, both the compelled and striver classes still reported concerning health outcomes – even if these were slightly lessened for the striver class.

In line with the health erosion pathway of the JDR model, organisational efforts to reduce demands experienced in the workplace are recommended. In study two, the highest demands experienced by the compelled class were demands for hiding emotion, and work pace; while for the striver class, they were cognitive demands and work pace. Some demands may be inherent to the type of work and thus difficult or impossible to reduce (Fillion et al., 2009). For example, a palliative care nurse may experience demands around hiding emotions inherent in the sensitive nature of their work – where the employer will not be able to change the fact that the work involves caring for individuals with terminal illness. Similarly, an air traffic controller may experience unavoidable cognitive demands in their work, given the intensive and concentrated nature of their work. However, through increasing staffing levels, an employer in both examples may be able to decrease the pace that the employees are required to work at – thus reducing work pace demands. As another example, an employer may be able to reduce the demands associated with job insecurity by avoiding as much as possible the use of precarious, insecure forms of employment. In addition to addressing high demands in the workplace where possible, seeking to increase the availability of resources in the workplace is another recommended measure – and one that may, at times, be more feasible than decreasing demands.

An important caveat to these suggestions is the fact that the present research was undertaken at an individual level, rather than an organisational level. The results at hand were able to indicate which demands and resources were experienced adversely by individuals across the identified types of multiple job holder. Nevertheless, it is suggested that organisations should undertake to measure psychosocial factors in their workplace to understand where their strengths and weaknesses lie and to then address the factors of concern. By effectively doing so, this can produce benefits for employees beyond only those holding multiple jobs. While the importance of considering and responding to adverse

psychosocial factors in the workplace certainly is not exclusive to multiple job holders alone, the findings from study two have suggested that these factors do combine with other situational factors (e.g. motive for holding multiple jobs) to shape the experiences of those holding multiple jobs and therefore are worthy of attention.

#### 6.3.2.3. Implications for the union movement

Beyond organisations employing those with multiple jobs, this research also carries some implications for unions and the broader union movement. Perhaps the most notable consideration is the plight of those more vulnerable identified in this research – in that quality of employment and the impacts that carries for social justice is a key concern of the union movement (Council of Trade Unions, 2013). This is particularly so given that individuals in the striver class – as well as being prone to high workplace demands and adverse health outcomes - were most likely out of all classes to belong to a union. Current union density in New Zealand is at 19% (A. Black, personal communication, December 10, 2020), while 29% of those in the striver class indicated that they were union members. The union movement faces challenges around the long term decline in membership, in addition to the potential difficulties associated with organising labour amidst the changing work landscape and increase in unconventional forms of work and employment relationship (e.g. gig/app-based work, triangular employment) (Murphy & Turner, 2014; Tassinari & Maccarrone, 2017). Potential complexities around the employment relationships and employee obligations of those holding multiple jobs should also be considered alongside these challenges. While these represent challenges, there may too be opportunities to more effectively serve workers who work across different organisations, in different contractual arrangements and even under the remit of different unions. The present research did not have a significant focus on the union movement and therefore more specific recommendations or implications are not appropriate. However, given the implications that multiple job holding can have for worker welfare as highlighted in study two, and that worker welfare is a key interest of the union movement, it may be conducive for the movement to investigate the extent of multiple job holding among its membership to inform possible future actions.

### **6.3.3.** Policy implications

As outlined above, this research has been able to produce a conceptualisation of multiple job holders that illustrates which types of individuals engaging in multiple job holding appear to have more positive experiences, in addition to those who should be the subject of concern due to negative experiences and outcomes. Considering this, there are clear policy implications that may offer the opportunity to alleviate the situations of New Zealanders holding multiple jobs to their own detriment.

The compelled and striver types of multiple job holder, as identified in study two, appeared to frequently be holding multiple jobs not out of choice, but out of necessity. In particular, the compelled class demonstrated the strongest financial need. Additionally, these types of workers appeared most prone to psychosocial risk in their main workplace – that is, harm that resulted from adverse experiences of psychosocial factors. Given that Government regulator Worksafe has expressed a commitment to developing its capabilities to address psychosocial risk for New Zealand workers (WorkSafe New Zealand, 2016), and that the Labour Government has made a commitment to prioritising the wellbeing of the population (Ainge Roy, 2019; Treasury, 2020b), these types of workers should be of greatest concern to local policymakers. It is highly possible that, were these individuals more easily able to cover their expenses with the income from one job, they would not be compelled to work in multiple jobs, seemingly at the expense of their wellbeing. Precise details of income, expenditure or family/household circumstances were not captured in the present research to enable analysis and comparisons around these factors. However, it is conceivable that initiatives to lift income for the lowest earners and to address rising living costs – particularly housing – could contribute to alleviating the situations of those forced into holding multiple jobs. This is particularly so given OECD (2019) findings that New Zealand has greater inequality than the OECD average, and has weaknesses broadly in the areas of average earnings and household income, housing affordability and long working hours. Those on the lowest incomes are more likely to spend a disproportionate amount of their income on housing (Black, 2020a). The country also has a widely acknowledged productivity problem – with output per hour worked steadily sitting at around 40% less than the OECD average since 1996 (Nolan et al., 2019). Considering these issues, initiatives like those suggested above are likely desirable not just for those forced into multiple job holding but also the wider workforce.

While the more vulnerable types of multiple job holder identified in this research should be of most urgent concern to policymakers, there are also opportunities and learnings to be

gleaned from considering those with positive experiences of the practice — namely the privileged class. As previously mentioned, the incumbent Government has expressed a commitment to prioritising the wellbeing of the population. The individuals within this type are clearly more likely than others to report positive wellbeing, particularly more so than the other types. Without being able to isolate any one factor within the situations of those in the privileged type (given that this was not the objective of the research at all) to base recommendations on, holistically it can be seen that these individuals tended to be holding multiple jobs by choice, not be strained financially, have more secure employment arrangements, be more likely to be self-employed alongside another job (or jobs), experience reasonably low demands and markedly high resources. Policymakers may wish to consider this as a potential indication of the types of work situations that contribute to wellbeing, rather than reducing it (as other situations tended to do).

#### 6.4. Limitations and future research

#### 6.4.1. Limitations

One potential key limitation is the unavoidable timing of the research – given that data collection occurred at the height of the COVID-19 pandemic. Results should, therefore, be considered with this in mind. However, it is worth noting that New Zealand's public health response to the pandemic has been highly commended. Despite the two lockdown periods causing disruption to all aspects of life, including employment, the country has objectively fared well in comparison to other countries – both in terms of public health outcomes and economic outcomes. While there has been an increase in unemployment, to date this has been to a lesser extent than predicted<sup>13</sup> by the Treasury early on in the pandemic (Treasury, 2020a). Additionally, the country's GDP recovered in the third quarter of the year, meaning that the economy had officially left recession (Withers, 2020). While no country, New Zealand included, can be said to be completely recovered at the time of writing (January 2021), the

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<sup>&</sup>lt;sup>13</sup> The Treasury forecast cited made predictions based on five possible scenarios. As noted on page 8 of the report, the lowest unemployment rate forecast (i.e. the "best case scenario") was 13.5%. This is notably higher than the highest rate available for the year at the time of writing – which was an unemployment rate of 5.3% in the September 2020 quarter Statistics NZ. (2020b). *Unemployment rate hits 5.3 percent due to COVID-19*. Retrieved December 30 from https://www.stats.govt.nz/news/unemployment-rate-hits-5-3-percent-due-to-covid-19.

clear indicators that New Zealand has fared better than most other countries arguably means that the findings of this research will not have been influenced to the same extent that they may have otherwise been, had this research been based in another country.

It has been suggested that a potential limitation, particularly in relation to study one, is a lack of attention given to participant ethnicity/culture and how this dimension may have impacted the way in which participants responded to study one's vignettes. It has also been suggested that ethnic minorities are overrepresented in multiple job holding - thus the matter of ethnicity/culture is important to explicitly address in the research. While both of these points and their validity are acknowledged, it should be noted that this research did not intend to explore cultural/ethnic aspects of multiple job holding. This is not due to their perceived unimportance, but rather the opposite. Matters such as the role that culture plays in the interpretation of vignettes, or the prevalence and experiences of different cultures and ethnicities across multiple job holders in New Zealand are interesting, complex areas that warrant investigation in their own right. Given that the present research already had considerably complex and hefty objectives to achieve (cf. section 3.4.3.), an attempt to also explore these issues relating to culture and ethnicity would not have been able to do justice to these important issues. Therefore, it should be considered as a potential limitation that the interpretation of the vignettes in this research may have been influenced by the culture and/or ethnicity of participants. However, conclusions cannot be drawn around this as, after discussions with the Massey University Human Ethics Committee, the decision was made not to collect data on ethnicity and culture (cf. section 5.2.3.5.).

The clearest limitation to study two is the use of cross-sectional survey data collected on one occasion, which is acknowledged as non-ideal and can lead to common method bias (Podsakoff et al., 2003). While it may have been desirable to address this by collecting the data at two points in time rather than one, numerous factors in the study context made this infeasible. Firstly, as previously mentioned and indeed observed during piloting, the study population of multiple job holders is quite niche and difficult to access, in addition to those who hold multiple jobs being busier on average than those who don't (Marucci-Wellman et al., 2014a). Secondly, the general disruption and uncertainty of the time period caused by the COVID-19 pandemic increased the risk of collecting data on two separate occasions. Had the

virus surged again in the local community and led to further lockdown measures and other disruptions, this could have dramatically increased attrition between surveys or caused unworkable delays in data collection. Indeed within two weeks of ceasing data collection for study two, a case was identified within the local community. While a full lockdown was avoided, this still resulted in a 24-hour shutdown of the local central business district (Gray, 2020).

Lastly, it is important to acknowledge that the situational data collected for study two was collected in relation to only one of participants' multiple jobs. While considerable effort was made to undertake this in a robust, evidence-based way (with a main job selection method informed by study one), it must be acknowledged that regardless, the data did only relate to one job. In theory, it would have ideal to capture data on each of participants' jobs — but practically this was not possible, particularly given the comprehensive survey instrument used to fulfil the research objectives.

#### 6.4.2. Future research

While it has been mentioned in multiple instances that this study has been the first to comprehensively explore the psychosocial work environments and subsequent psychosocial risk that these individuals have experienced, this has been done so entirely in the context of examining differences between the different identified types of multiple job holder. Therefore, there was never the intention to attempt to compare how multiple job holders may experience these concepts in contrast to single job holders. However, this appears to be an area that is certainly worthy of exploration. Undertaking similar research inclusive of single job holders may be able to identify whether the experiences of psychosocial factors may differ between these two populations, in addition to whether the outcomes subsequently experienced may differ (e.g. whether high demands and low resources impact single and multiple job holders differently).

Given the differences identified in experiences of multiple job holding across the different types from this research and the marked vulnerability especially of the compelled type, further investigation into this type's reason(s) for multiple job holding could enable greater insights and more targeted support for these individuals. A key policy implication mentioned

in section 6.4.2.3. was that policymakers should be concerned about this type of multiple job holder, who appear to predominantly be forced into the practice out of necessity. It was suggested that higher wages and/or lower living costs may help to alleviate the state of these individuals. However, with limited information about these individuals' financial situations, this is somewhat speculative. Further investigation – potentially qualitatively – around the reasons why these more marginalised individuals find themselves holding multiple jobs may serve to better inform policy and interventions around this matter.

#### 6.5. Overall conclusions

The practice of multiple job holding is one that has featured steadily as part of the labour market over time, and shows no signs of decreasing. In fact, the increase in non-standard work arrangements generally suggests that this practice may even become more prevalent as individuals look to combine multiple non-standard forms of work into their overall career – either by choice to enrich their lives, or out of desperation to sustain themselves. The outcomes for those who partake in this practice are mixed, with some truly appearing to suffer as a result, while others thrive. This dichotomy of experiences has bemused those researching the practice, particularly in earlier decades when there appeared to be a desire to resolve, once and for all, whether this practice was one that should give cause for concern, or should be lauded as a promising method of personal and career development and self-advancement. More recently, researchers have started to suggest that the differences in experiences resulting from holding multiple jobs are indicative of differences in those who partake in the practice. This research has occurred in a time when empirical evidence for this heterogeneity is starting to emerge, and this research has been the first to test for this heterogeneity on a general population of multiple job holders.

In an ideal world, all multiple job holding arrangements would be a choice. Liveable incomes and decent, secure work should be the norm, so that no individual is compelled to engage in detrimental employment situations — such as those experienced in particular by the compelled type from study two - out of desperation. For as long as there exists individuals forced into these work situations, these individuals should be of most concern and front of mind to those with an interest in the practice of multiple job holding. While many workers clearly benefit from this practice, those more vulnerable who experience the opposite must

not be forgotten in discussions that laud this practice as an exciting, empowering and entrepreneurial phenomenon in a changing world of work.

The conceptualisation of multiple job holders that has emerged from this research provides a clear direction for those with a vested interest of some kind in multiple job holding. The diversity of these individuals illustrated by the conceptualisation should be kept front of mind when interacting with or making decisions about multiple job holders. To assume that all multiple job holders are in precarious, vulnerable situations is argued to be equally as dangerous as assuming that all are in privileged work situations that allow them to thrive. If sweeping decisions are made and actions taken based on such an assumption, regardless of which side of the dichotomy they favoured, some in this population could likely suffer as a result. It is apparent that the practice of multiple job holding, which has remained fairly stable over time, is unlikely to diminish in importance in the conceivable future. Therefore, care should be taken to acknowledge the heterogeneity of those who engage in this practice. By doing so, the numerous benefits experienced by those in positive MJH situations can continue to be realised, while intervention measures can be targeted towards where they are needed most — alleviating the plight of the most vulnerable workers.

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# **Appendices**

## Appendix A – Ethics approval



Date: 03 April 2019

Dear Miss Zoe Port

Re: Ethics Notification - NOR 19/08 - Investigating the psychosocial work environments and experiences of multiple job-holders

Thank you for the above application that was considered by the Massey University Human Ethics Committee: <a href="https://example.com/human-ethics-northern-committee"><u>Human Ethics Northern Committee</u></a> at their meeting held on <a href="https://example.com/wednesday.3-April.2019">Wednesday.3-April.2019</a>.

Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Professor Craig Johnson

Chair, Human Ethics Chairs' Committee and Director (Research Ethics)

Research Ethics Office, Research and Enterprise

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Appendix B – Study one vignettes & interview schedule

**Study introduction:** 

Thank you so much for agreeing to take part in this interview – your perspective is going to

be really helpful for me.

Before we get started, I just want to remind you that you can stop the interview at any point

and withdraw, if you decide that you do not want to take part. The things we will discuss

aren't sensitive matters and it's not expected that they will make you feel uncomfortable or

distressed. But if you do feel distressed after this, I encourage you to make use of the support

service contact details provided in the information sheet. This was sent to you by email and

is part of the Outlook invite, and I will also re-send it again after this interview. You can also

ask me for them at any point.

Everything that you say in this interview is confidential – no one else aside from me will know

your identity. With your permission I'd like to record the audio of this interview, to allow me

to transcribe it later. The video of us won't be kept. I am the only one who will access the

recording. The transcribed interview content may be discussed with my PhD supervisors, but

your identity will not be linked in any way – they will not know who you are. Lastly, in the

event that I do use any direct quotes of something you say in my PhD thesis or publications,

once again your identity will not be linked to your response at all, and nothing that could

potentially identify you will be shared. You have the right to request that the recording and/or

transcript of your interview is sent to you, if you wish. You can also request to pause or stop

the recording at any point throughout the interview.

So, would you like to proceed? By saying yes, you are consenting to participating in this

research.

Secondly, do you consent to having this interview recorded, with the conditions that I gave

above?

[If yes]: Great! I'm now recording.

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In my research, I'm trying to understand the experiences of people who have more than one job. I want to do this using a survey, that asks some questions about work. But I can't ask all of the questions for every single job that someone has, because it would take too much of their time. So because of this, I need people to choose one, "main" job to answer the questions about. And so for this, I need to understand how people choose their one main job to answer questions about.

This is what I'd like your help with. I'm going to show you some different made-up scenarios of people who have multiple jobs. Then for each of them, I'll ask you to choose which of their jobs you think is their "main" job.

There is no right or wrong answer at all here – it's not a test at all. Please don't feel as though you need to be an expert or anything here – you are the expert here simply because you've worked in more than one job before, and so it's your honest perspective that I want.

I'd like you to just respond honestly, with what you think – what your very first impression is. I'm really interested in what you think – no matter what you say – this will help me to understand this issue about choosing a main job better. And everything you say will be useful – please don't worry about holding back from saying something, and don't worry about saying what you think I might want to hear.

Do you have any questions for me at this point?

OK – we'll get started. I will display each scenario on the screen, while reading it out loud to you. You can ask me to repeat any part of the scenario at any stage. If you have trouble seeing it, please let me know.

#### Part 1: Vignettes

Joe has 2 jobs. From 8.30am to 5pm, Monday to Friday, he works in a call centre for 40 hours a week. He has had this job for nearly 10 years now, and it's a permanent job with annual leave, and sick pay, etc.

Last year, he started helping out his sister in her photography business. On his weekends, he is a wedding photographer, which usually takes around 12 hours a week in total. It's not as stable as his first job, as he's a contractor and so doesn't have things like sick leave, but he has a passion for photography and really feels it's important to be helping his sister.

He doesn't really care much about the work at his call centre job – but it pays much more than photography. One day, he hopes his sister's business will become busy enough to hire him full-time, because he finds photography much more rewarding – helping to make a couple's wedding day special feels much more important than answering customer queries over the phone.

Okay so just a reminder – I'm really interested in your first impression here – what is the first thing that comes to mind when I ask you:

- 1.1 Which job do you think is Joe's main job?
- 1.2 Why?

Since graduating last year with a Bachelor in Fashion Design, Luisa has had 3 jobs. Last month Luisa started her own business, working on a clothing brand that she created – which has been a dream of hers since she was a little girl. She is very proud of her brand as it's been a lifelong goal for her, and because of this she feels a lot of pressure to make it successful.

For the past 2 years, she has been the social media manager for a women's' clothing brand for around 15 hours a week on a casual contract. This job is the most satisfying, because she is learning a lot about the fashion industry from the head designer.

This year, she also started as a social media manager for a health food company, which takes around 25 hours and pays the most out of all her jobs. This job doesn't challenge Luisa so she finds it kind of boring, but at least it's easy work and it's a permanent contract to provide her with more stability than her other jobs have.

#### 2.1 Which job do you think is Luisa's main job?

## 2.2 Why?

Wiremu is the Chief Finance Officer (CFO) for a manufacturing company. He really enjoys his job, as he has a natural talent for numbers and so the work is easy and even fun. It also pays very well — a six figure salary — but it takes up most of his time and requires him to travel around the country most weeks, meaning he is often exhausted. Although he has had this job for 5 years, he was worried about his job security after the company was sold to a large overseas company, so he started looking for another job to take on as well in case he lost this job.

He has recently decided that it's time to give back to his Iwi, and so he also has taken on a job managing the finances and assets for his Iwi's trust. He does not earn as much as his CFO, but this job feels more secure and provides more stability – he doesn't worry about losing this job. It's not as enjoyable as his easy CFO job, but he knows it makes his whanau really proud, and he knows he is already making a really positive difference to his Iwi's financial position. He also feels obligated to his Iwi – he doesn't feel like he could stop doing this job anytime soon, because his Iwi is relying on him.

- 3.1 Which job do you think is Wiremu's main job?
- 3.2 Why?

Suzie has three kids, and her partner has not been able to work since a workplace accident a few years ago. The family's finances are really tight, and the job that Suzie has had for most of her life – where she cleans at the hospital for around 20 hours a week earning minimum wage – isn't enough to pay the bills anymore. She is only on a casual contract for this job, so the hours aren't guaranteed, and she's always nervous that she won't get enough hours every week.

Suzie also recently got a part-time permanent job (so her hours are guaranteed), cleaning the local high school in the evenings. She works 15 hours a week in this job, but her hourly rate is higher than her hospital job – so she earns more here than she does cleaning at the hospital.

As well as this, Suzie also has a casual job as a Sunday School teacher for her church — where she looks after the kids who come to church, while teaching them bible study. This job is only 2 hours per week so she doesn't earn much from it, but she enjoys it the more than any of her other jobs. She feels like she is really making a difference, sharing her knowledge with the kids — it gives her a sense of achievement. She also knows that the families with children at church all rely on her. If she wasn't there to teach Sunday School, no one else would do it and the families with children would struggle to come to church.

- 4.1 Which job do you think is Susie's main job?
- 4.2 Why?

## Part two: Interview guideline

NB: if participants do not currently hold multiple jobs, these questions were rephrased, asking participants to reflect on the answers at the point where they last held multiple jobs.

- 1. Do you currently still have multiple jobs?
  - a. If not, when did you last hold multiple jobs?
- 2. How many jobs do you have? OR did you have [at point where they last had multiple jobs]?
- 3. Why do you have multiple jobs OR Thinking back to [point where they last had multiple jobs] why did you have multiple jobs?
- 4. Just briefly, could you please tell me a little about each of your jobs what do you do for each of them/what industries are they in?
- 5. That's all that I have to ask. Is there anything else you'd like to add, or anything you'd like to ask me?

Great! Once again, thank you so much for your time – you're helping me to get a little bit closer to finishing my PhD, so I really appreciate it.

So the next step will be getting your voucher sent to you. I'm hoping to get these sent to you this week. Are you happy for this to be sent to the email address that we used to set this up?

## Appendix C – Study two survey

Start of Block: Section 1: demographics
This first section will ask some basic information about you.
How many jobs do you currently have?
$\bigcirc$ 1
○ 2
Оз
O 4
○ 5 or more
How old are you?
O 18-25
O 26-34
O 35-54
O 55-64
O 65+
What is your gender?
○ Male
○ Female
○ Gender variant/non-binary

What is the highest level of education that you have <b>completed</b> ?
O Primary/intermediate school
O Secondary school
O Undergraduate university/polytechnic (e.g. certificate, diploma, Bachelor's degree)
O Postgraduate university/polytechnic (e.g. Postgrad certificate/diploma, Honours or Master's degree, PhD)
Other
Are you a member of a union?
○ Yes
○ No
O Don't know
Are you a student at a university/polytech/tertiary institute?
○ Yes
○ No
How long have you worked in multiple jobs?
How long have you worked in multiple jobs?
How long have you worked in multiple jobs?  More than a year - please enter a whole number (round down to the nearest full year)

Thinking about your household's ability to cover expenses, is your usually household short of money, can it just get by or does it have more money than needed?
We are usually short of money to cover our expenses
We usually can just get by, just covering our expenses
O We usually have more money than we need to cover our expenses
Do you provide the main (largest) source of income for your household?
○ Yes
○ No
End of Block: Section 1: demographics
Start of Block: Section 2: various jobs
This section will ask about each of the jobs that you have. You will be asked these same questions for each of your jobs (according to the number of jobs you said that you have). You can answer these in any order - it doesn't matter which job you think about first, or last.
Remember: all information that you give us confidential. Your data, such as your income, will NOT be shared with any other parties – e.g. the Government, IRD, any of your employers etc.
[If "5 or more" jobs indicated]: As you indicated that you have 5 or more jobs, please answer these questions about the first 5 jobs that you think of.
End of Block: Section 2: various jobs
Start of Block: Job 1
Please answer these questions about your <b>first</b> job.
It doesn't matter which job is your first, second etc - you can put them in any order. Just think about the first job that comes to your mind.
What is your job title for this job?

What industry do you work in for this job?
Agriculture, forestry and fishing
O Mining
O Manufacturing
Electricity, gas, water and waste services
O Construction
O Wholesale trade
O Retail trade
Accommodation/hospitality
Transport, postal and warehousing
O Information media and telecommunications
Financial and insurance services
Rental, hiring and real estate services
O Professional, scientific and technical services
Administrative and support services
O Public administration and safety
Education and training
Health care and social assistance
Arts and recreation services
Other services

[This block repeated according to the number of jobs participant has indicated that they have]
Start of Block: Job 2
End of Block: Job 1
Other
○ Self-employed
O Independent contractor
○ Casual
○ Fixed-term
O Permanent (full OR part time)
What type of contract are you employed on for this job?
How many <b>hours</b> did you work in this job <b>last week</b> ? Please enter this in numbers only - no letters. If you cannot remember the exact number, please give your best estimate.
O 10+ years
○ 5-10 years
○ 3-5 years
○ 1-2 years
O 6-12 months
O-6 months
How long have you been employed in this job?

Start of Block: Section 3: MJH type

Now, please think overall about your decision to work in more than one job - why do you do it?
What was the most important reason that caused you to have more than one job?
O To meet my financial commitments
O To develop my skills or abilities
O To give me variety in my work and/or life
Other - please explain:
Now more specifically, which of these describes your most important reason for having more than one job?
O Impossible to work more hours in current job
O Work more hours to make ends meet
O To earn some extra money
O To retain income security
O To start a business
O To get experience in another job
O Because of the variation
O Because I enjoy the combination of jobs
Other - please explain:

Would you prefer to have one job instead?											
○ Yes											
○ No											
Do you feel that you have a choice to have	more t	han	one	job i̇̃	)						
Please drag the slider below to choose your my choice).	answ	er - 1	from	0 (n	o ch	oice	) to 1	10 (c	omp	lete	ly
,	١	lo ch	oice	- I ha	d to	C	ompl	etely wan	my nted		ce - I
	0	1	2	3	4	5	6	7	8	9	10
1		1				-				1	
Page Break											
End of Block: Section 3: MJH type											
Start of Block: Section 4: choosing main job											

# Thinking about all of your jobs, which of these jobs would you consider to be your main job?

It is up to you how you choose your main job. It <u>may</u> be due to one of these reasons, or another reason:

- It provides the most income
- It takes up most of my time
- I have worked in this job for the longest
- It is what I want to do as a job in the long term
- It brings me the most enjoyment
- It provides the most stability out of all of my jobs
- Or any other reason that you feel is more important.

\$\(\)\\$\(\)\\$\\\\\\\\\\\\\\\\\\\\\\\\\\
\$\(\)\\$\(\)\\$\\\\\\\\\\\\\\\\\\\\\\\\\\

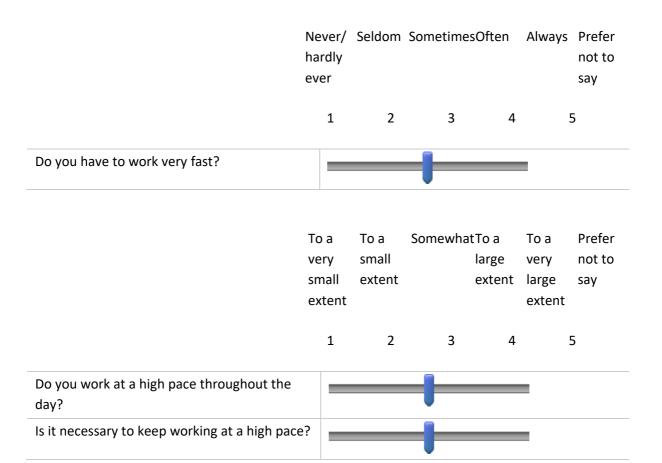
\$\(\)\\$\(\)\\$\\\\\\\\\\\\\\\\\\\\\\\\\\
\$\(\)\\$\(\)\\$\(\)\\$\\\\\\\\\\\\\\\\\\\\
$\bigcirc$ \${job5title} where you worked \${numberofhours} hours last week in the \${selected} industry
I am carefully paying attention while answering this survey.
○ Yes
○ No
Page Break
End of Block: Section 4: choosing main job
Start of Block: Psychosocial work environment

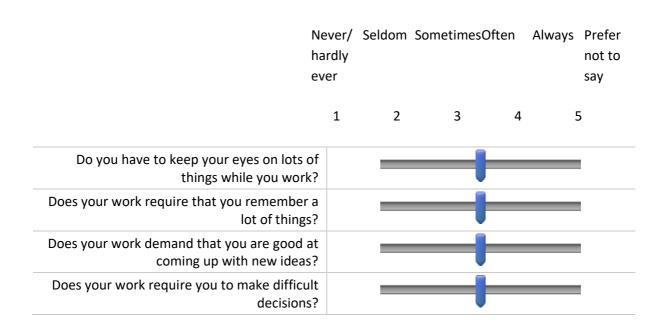
Now that I have asked about each of your jobs, I'd like you to now only think about the job that you selected as your main job:

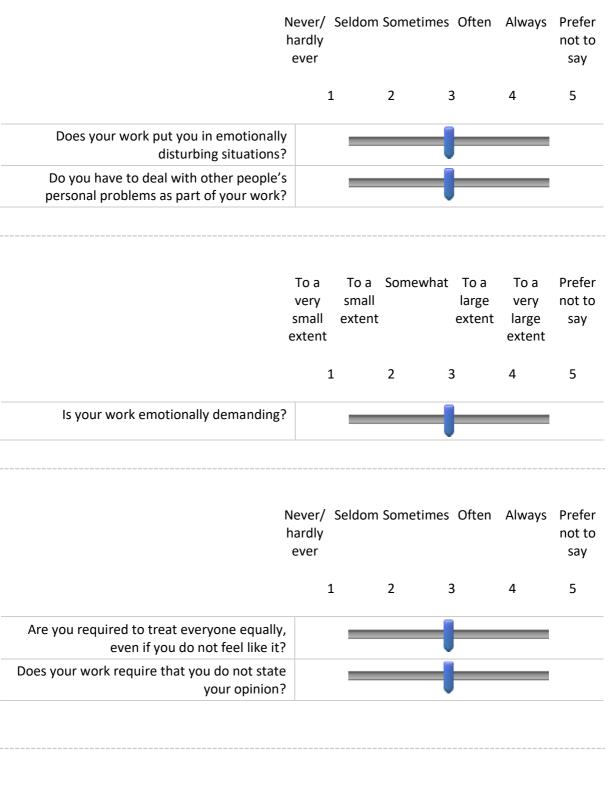
## *\${Q45/ChoiceGroup/SelectedChoices}*

These questions will ask about your work environment in this job - so while answering them, <u>only</u> think about <u>this job</u> - not your other jobs.

	Never/ hardly ever	Seldom	Sometime	sOften	Always	Prefer not to say
	1	2	3	4	į	5
Is your workload unevenly distributed so it piles up?			-		•	
How often do you not have time to complet all your work tasks?	е				-	
Do you get behind with your work?			1		-	
Do you have enough time for your work tasks?						







To a	To a	Somewhat	To a	To a	Prefer
very	small		large	very	not to
small	extent		extent	large	say
extent				extent	
1		2	3	4	5



Page Break -

For these questions, keep thinking about the job that you selected as your main job:  $\$\{Q45/ChoiceGroup/SelectedChoices\}$ 

	Never/ hardly ever	Seldom	Sometim	esOften	Always	Prefer not to say
	1	2	3	4	į	5
Do you have a large degree of influence on the decisions concerning your work?			-		-	
Do you have a say in choosing who you work with?	<		-		-	
Can you influence the amount of work assigned to you?			-		-	
Do you have any influence on what you do a work?	ıt		-		-	
Can you influence how quickly you work?			-		-	
Do you have any influence on HOW you do your work?						

Тоа	To a	Somewha	tTo a	To a	Prefer
very	small		large	very	not to
small	extent		extent	large	say
extent				extent	
1	2	3	4		5

Do you have the possibility of learning new things through your work?	
Can you use your skills or expertise in your work?	
Does your work give you the opportunity to develop your skills?	

Never/ Seldom Sometimes Often Always Prefer not to say

1 2 3 4 5

Is your work varied?

Do you have to do the same thing over and over again?

Never/	Seldom	Sometimes	Often	Always	Prefer
hardly					not to
ever					say
:	1	2	3	4	5

Can you decide when to take a break?	
Can you take holidays more or less when you wish?	
Can you leave your work to have a chat with a colleague?	
If you have some private business is it possible for you to leave your piece of work for half an hour without special permission?	
Do you have to do overtime?	

For these questions, keep thinking about the job that you selected as your main job:  $\{Q45/ChoiceGroup/SelectedChoices\}$ 

\_\_\_\_\_\_

	To a very small extent	To a small extent	Somewhat	To a large extent	To a very large extent	Prefer not to say
	1		2	3	4	5
Is your work meaningful?						

Is your work meaningful?
Do you feel that the work you do is important?

To a	Тоа	Somewhat	To a	Тоа	Prefer
very	small		large	very	not to
small	extent		extent	large	say
extent				extent	
1		2	3	4	5

	=		-  -		
To a very small extent	To a small extent	Somewhat	To a large extent	To a very large extent	Prefer not to say
1		2	3	4	5
To a very small extent	To a small extent	Somewhat	To a large extent	To a very large extent	Prefer not to say
1		2	3	4	5
	_				
		-			
	To a very small extent	To a To a very small extent small extent	To a To a Somewhat very small extent extent	To a To a Somewhat To a large small extent extent	To a To a Somewhat To a To a very small extent large extent large extent extent large extent extent large extent large very small extent extent large extent extent large extent

	To a very small extent	To a small extent	Somewhat	To a large extent	To a very large extent	Prefer not to say
	:	1	2	3	4	5
Are contradictory demands placed on you at work?						
Do you sometimes have to do things which ought to have been done in a different way?						
	To a	To a small	Somewhat	To a	To a very	Prefer not to
	small extent	extent		extent	large extent	say
	:	1	2	3	4	5
Do you sometimes have to do things which seem to be unnecessary?						
I have told the truth on this survey						
○ Yes						
○ No						
Page Break						

For these questions, keep thinking about the job that you selected as your main job: \${Q45/ChoiceGroup/SelectedChoices}							
In this job, do you have a manager/superviso	r/supe	rior?					
○ Yes							
○ No							
In this job, do you have colleagues/coworkers	s/work	mates ?	)				
○ Yes							
○ No							
For these questions, keep thinking about the s \${Q45/ChoiceGroup/SelectedChoices}	iob tha	t you s	elected as	your ma	in job:		
Please think about your immediate manager/would you say that your immediate superior	-		perior in to	-	To what o	<i>extent</i> Prefer	
	very small extent	small extent		large extent	very large extent	not to say	
	1		2	3	4	5	
makes sure that the members of staff has good development opportunities?							
gives high priority to job satisfaction?							
is good at work planning?							
is good at solving conflicts?							

To what extent would you say that your immediate superior... Never/ Seldom Sometimes Often Always Prefer hardly not to ever say 1 2 3 5 4 How often is your immediate superior willing to listen to your problems at work, if needed? How often do you get help and support from your immediate superior, if needed? How often does your immediate superior talk with you about how well you carry out your work? For this question, please think about your colleagues in this job. Never/ Seldom Sometimes Often Always Prefer hardly not to ever say 1 2 3 4 5 How often do you get help and support from your colleagues, if needed? How often are your colleagues willing to listen to your problems at work, if needed? How often do your colleagues talk with you about how well you carry out your work? For this question, please think about your colleagues in this job. Never/ Seldom Sometimes Often Always Prefer hardly not to ever say 1 2 3 5 Is there a good atmosphere between you and

your colleagues?

of work?

colleagues at work?

Is there good co-operation between the

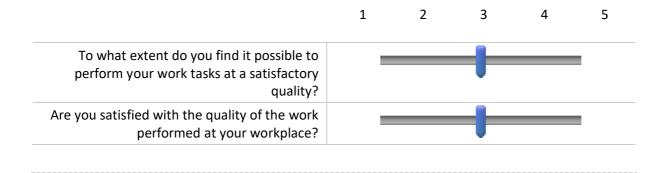
Do you feel part of a community at your place

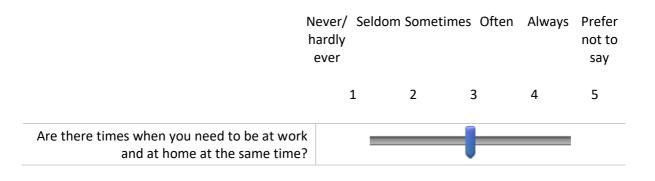
For these questions, keep thinking about the job that you selected as your main job: \${Q45/ChoiceGroup/SelectedChoices} To a To a Somewhat To a To a Prefer small very large very not to small extent extent large say extent extent 1 2 3 4 5 Do you enjoy telling others about your place Do you feel that your place of work is of great importance to you? Would you recommend other people to apply for a position at your workplace? Never/ Seldom Sometimes Often Always Prefer hardly not to ever say 1 3 5 2 How often do you consider looking for work elsewhere? To a Somewhat To a To a To a Prefer small very large very not to small extent extent large say extent extent 1 2 3 4 5 Are you proud of being part of this organisation?

	To a very small extent	To a small exten	l	t To a large extent	To a very large extent	Prefer not to say
		1	2	3	4	5
Are you worried about becoming unemployed?		-				
Are you worried about new technology making you redundant?		_				
Are you worried about it being difficult for you to find another job if you became unemployed?	2					

	To a very small extent	To a small extent	Somewhat	To a large extent	To a very large extent	Prefer not to say
	1		2	3	4	5
Are you worried about being transferred to another job against your will?						
Are you worried about your working tasks being changed against your will?						
Are you worried about the timetable being changed (shift, weekdays, time to enter and leave) against your will?						
Are you worried about a decrease in your salary (reduction, variable pay being introduced)?						
Are there good prospects in your job?						

To a	To a	Somewhat	To a	To a	Prefer
very	small		large	very	not to
small	extent		extent	large	say
extent				extent	





The next four questions concern the ways in which your work affects your private life:

To a To a Somewhat To a To a

	very small extent	small extent	oome ma	large extent	very large extent	not to say
	1		2	3	4	5
Do you feel that your work drains so much of your energy that it has a negative effect on your private life?		-				
Do you feel that your work takes so much of your time that it has a negative effect on your private life?						
The demands of my work interfere with my private and family life						
Due to work-related duties, I have to make changes to my plans for private and family						

For these questions, keep thinking about the job that you selected as your main job: \${Q45/ChoiceGroup/SelectedChoices}

The next questions are not about your own job but about the whole company you work at.

To a	To a	Somewhat	To a	To a	Not
very	small		large	very	applicable
small	extent		extent	large	- I am the
extent				extent	only
					employee

1 2 3 4 5

Do the employees withhold information from each other?	
Do the employees withhold information from the management?	
Do the employees in general trust each other?	

The next questions are not about your own job but about the whole company you work at.

To a	To a	Somewhat	To a	To a	Not
very	small		large	very	applicable
small	extent		extent	large	- I am the
extent				extent	only
					employee

1 2 3 4 5

Does the management trust the employees to do their work well?	
Can the employees trust the information that comes from the management?	
Does the management withhold important information from the employees?	
Are the employees able to express their views and feelings?	

The next questions are not about your own job but about the whole company you work at.

To a	To a	Somewhat	To a	To a	Not
very	small		large	very	applicable
small	extent		extent	large	- I am the
extent				extent	only
					employee

1 2 3 4 5

Are conflicts resolved in a fair way?
are employees appreciated when they have done a good job?
Are all suggestions from employees treated seriously by the management?
Is the work distributed fairly?

Page Break

For these questions, keep thinking about the job that you selected as your main job: \${Q45/ChoiceGroup/SelectedChoices} The following 3 statements are about how you feel at work. If you have had this feeling, indicate how often you felt it.

,	now often you felt it. ever Seldom Sometimes Often A			Always	Prefer not to say
	1	2	3	4	5
At my work, I feel bursting with energy.	-		-		
I am enthusiastic about my job.	-		1		
I am immersed in my work.	-		1		

Regarding your work at this job in general, how pleased are you with:

Very	Unsatisfi	ed Neithe	er/ Satisfied	l Very	Prefer
unsatisfied	ł	nor		Satisfied	not to
					say
	1	2	3	4	5

your work prospects?						
the physical working conditions?						
the way your abilities are used?				Ì		
your job as a whole, everything taken into consideration?				Ĭ		
your salary?						
Page Break						
For these questions, keep thinking about the \${Q45/ChoiceGroup/SelectedChoices}	job tha	t you se	lected a	as your m	ain job:	
The following questions relate to conflicts at	work.					
<b>3 4</b>	No	Yes, a few	Yes, monthl	Yes, y weekly	Yes, daily	Prefer not to
		times			,	say
	1	2	2	3	4	5
Have you been exposed to WORK-RELATED harassment on social media (e.g. Facebook), by e-mail or text messages during the last 12 months?						
From whom did you experience work-related more than one)	social r	media h	arassmo	ent? (You	may se	lect
Clients/customers/patients						
Clients/customers/patients Subordinates						
Subordinates						

	No	Yes, a few times	Yes, monthly	Yes, y weekly	Yes, daily	Prefer not to say
	1	:	2	3	4	5
Have you been exposed to undesired sexual attention at your workplace during the last 12 months?						
From whom did you experience sexual harassr	ment?	(You m	ay select	t more th	an one)	
Clients/customers/patients						
Subordinates						
Manager/superior						
Colleagues						
	No	Yes, a few times		Yes, y weekly	Yes, daily	Prefer not to say
	1	:	2	3	4	5
Have you been exposed to threats of violence at your workplace during the last 12 months?						
Have you been exposed to physical violence at your workplace during the last 12 months?						

From	whom did you experience threats of viol	ence?	(You ma	ay select	more th	an one)	
	Clients/customers/patients						
	Subordinates						
	Manager/superior						
	Colleagues						
From	whom did you experience physical viole	nce? (Y	'ou may	select n	nore than	one)	
	Clients/customers/patients						
	Subordinates						
	Manager/superior						
	Colleagues						
		No	Yes, a few times	Yes, monthly	Yes, weekly	Yes, daily	Prefer not to say
		1	2	2	3	4	5
Н	ave you been exposed to bullying at your workplace during the last 12 months?						

rom whom did you experience bullying? (You may select more than one)									
Clients/customers/patients									
Subordinates									
Manager/superior									
Colleagues									
End of Block: Psychosocial work environment									
Start of Block: Outcomes									
Thank you for your answers.									
You are nearly finished – now I just need to a	sk you a	about	how	you ł	nave b	een f	eelinį	g lat	ely.
The following questions are about your own distinguish between symptoms that are cause other causes.									
I understand that these feelings <b>may not be related to your work</b> - that's OK. The task is to describe how you have been feeling in general.					to				
This question is about how you have been du	ring the Poor	e last <b>4</b> Fair		eks: ood	Very good	Exc	ellent	: Pre not	t to
	1		2		3	4		5	
In general would you say your health is:									
	0 1	. 2	3	4	5 6	7	8	9	10
If you evaluate the best conceivable state of health at 10 points and the worst at 0 points:  How many points do you then give your present state of health?		_							

These questions are about how you have been during the last **4 weeks**:

Not at	A small	Part of	A large	All the	Prefer
all	part of	the time	part of	time	not to
	the time		the time		say

1 2 3 4 5

How often have you slept badly and restlessly?	
How often have you found it hard to go to sleep?	
How often have you woken up too early and not been able to get back to sleep?	
How often have you woken up several times and found it difficult to get back to sleep?	

These questions are about how you have been during the last 5 weeks.

Not at	A small	Part of	A large	All the	Prefer
all	part of	the time	part of	time	not to
	the time		the time		say
1	2		3	4	5

How often have you felt worn out?	
How often have you been physically exhausted?	
How often have you been emotionally exhausted?	
How often have you felt tired?	

These questions are about how you have been during the last **5 weeks**.

Not at	A small	Part of	A large	All the	Prefer
all	part of	the time	part of	time	not to
	the time		the time		say
1	2		3	4	5

How often have you had problems relaxing?
How often have you been irritable?
How often have you been tense?

These questions are about how you have been during the last 5 weeks.

,	Not at all	A small Part of A lapart of the time pa		•	All the time	Prefer not to say
	1	2		3	4	5
How often have you had stomach ache?						
How often have you had a headache?						
How often have you had palpitations?						
How often have you had tension in various muscles?						

These questions are about how you have been during the last **5 weeks**.

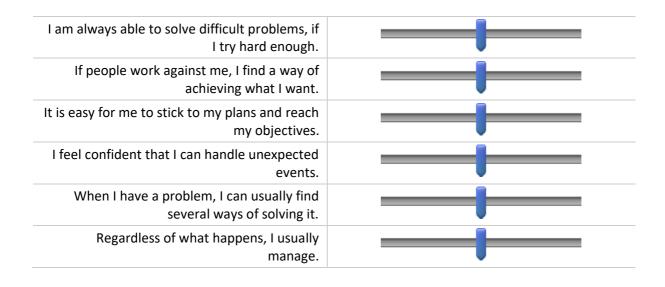
Not at	A small	Part of	A large	All the	Prefer
all	part of	the time	part of	time	not to
	the time		the time		say
1	2	;	3	4	5

How often have you had problems concentrating?
How often have you found it difficult to think clearly?
How often have you had difficulty in taking decisions?
How often have you had difficulty with remembering?

		5 weel			
Not at all	part of	the time	part of	All the time	Prefer not to say
1	2		3	4	5
	all	all part of the time	all part of the time the time	all part of the time part of the time the time	all part of the time part of time the time the time

How well do these descriptions fit on you as a person?

Does not fi		Fits a little bit	Fits quite well	Fits perfectly
	1	2	3	4



Earlier in this survey, you chose \${Q45/ChoiceGroup/SelectedChoices} as your main job.

What was your reason for choosing this as your main job?

It provides the most income
It takes up most of my time
I have worked in this job for the longest
It is what I want to do as a job in the long term
It brings me the most enjoyment
It provides the most stability out of all of my jobs
Other - please explain:

**End of Block: Outcomes** 

O Yes

O No

Page Break

## **Appendix D – Descriptive statistics and correlations**

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Quantitative demands	2.62	0.83	1	.409**	.313	.438	.270	-0.048	-0.001	0.012	219 <sup>**</sup>	-0.061	285	286**
2. Work pace	3.29	0.95	.409**	1	.437**	.426**	.392**	-0.071	0.068	132 <sup>**</sup>	311 <sup>**</sup>	-0.053	132**	192**
3. Cognitive demands	3.45	0.82	.313	.437**	1	.436	.339**	.227**	.370**	.188**	-0.047	.283	-0.030	-0.023
4. Emotional demands	2.67	1.08	.438**	.426**	.436**	1	.495	0.003	.123**	0.037	217 <sup>**</sup>	.127**	116 <sup>**</sup>	203**
5. Demands for hiding emotion	3.29	0.93	.270**	.392**	.339**	.495**	1	130 <sup>**</sup>	0.020	095 <sup>*</sup>	296**	-0.036	167**	176 <sup>**</sup>
6. Influence	3.25	0.92	-0.048	-0.071	.227**	0.003	130 <sup>**</sup>	1	.450**	.349**	.507**	.370**	.442**	.425**
7. Possibilities for development	3.72	0.94	-0.001	0.068	.370**	.123**	0.020	.450**	1	.459**	.202**	.572**	.416**	.447**
8. Variation of work	3.06	0.89	0.012	132**	.188**	0.037	095	.349**	.459**	1	.266	.386**	.252**	.228**
9. Control over time	3.25	0.86	219**	311**	-0.047	217**	296**	.507**	.202**	.266**	1	.195**	.291**	.347**
10. Meaning of work	3.86	1.02	-0.061	-0.053	.283**	.127**	-0.036	.370**	.572**	.386**	.195	1	.468**	.451**
11. Predictability	3.54	0.96	285**	132**	-0.030	116	167**	.442**	.416**	.252**	.291**	.468**	1	.632**
12. Recognition	3.73	1.02	286**	192**	-0.023	203**	176**	.425**	.447**	.228**	.347**	.451**	.632**	1
13. Role clarity	4.04	0.81	288**	-0.085	0.019	176**	-0.083	.293**	.305**	.109*	.212**	.455**	.570**	.564**
14. Role conflict	2.76	1.05	.404**	.405**	.363**	.425**	.314**	-0.045	0.007	-0.058	191**	-0.079	250**	329**
15. Quality of leadership	3.44	0.91	176**	-0.062	0.022	-0.034	130 <sup>*</sup>	.318**	.502**	.178**	.137**	.412**	.582**	.660**
16. Supervisor support	3.58	0.93	176**	-0.089	-0.017	-0.073	167**	.273**	.402**	.114	.147**	.298**	.493**	.584**
17. Colleague support	3.53	0.86	-0.058	0.018	0.000	-0.038	-0.082	.160**	.283**	.105	.156	.199**	.299**	.363**
18. Sense of community	3.99	0.82	229**	-0.063	0.001	109 <sup>*</sup>	100 <sup>*</sup>	.209**	.390**	.217**	.180**	.351**	.450	.548**
19. Commitment to workplace	3.54	0.90	248**	146**	.099*	098*	147**	.357**	.505**	.288**	.221**	.583**	.566**	.642**
20. Job insecurity	2.64	1.13	.237**	.225**	0.057	.172**	.179**	177 <sup>**</sup>	160 <sup>**</sup>	186**	245**	229 <sup>**</sup>	227**	293**
21. Insecurity over working conditions	2.39	0.91	.333**	.278**	.099	.312**	.263**	211 <sup>**</sup>	217 <sup>**</sup>	220**	314**	333**	330**	423**
22. Quality of work	3.91	0.77	312**	135**	-0.043	195**	132**	.283**	.327**	.201**	.213**	.388**	.400**	.454**
23. Work life conflict	2.65	1.03	.533**	.444**	.291**	.430**	.358**	-0.056	-0.066	094 <sup>*</sup>	319 <sup>**</sup>	230**	285**	341**
24. Horizontal trust	3.64	0.91	283**	238**	156**	257**	262**	.164**	.213**	.159**	.256**	.255**	.347**	.430**
25. Vertical trust	3.59	0.82	333**	176**	-0.068	220**	250**	.312**	.314**	.121*	.294**	.307**	.532**	.646**
26. Organisational justice	3.51	0.93	309**	159**	-0.039	208**	255**	.346**	.407**	.177**	.268**	.396**	.566**	.735**
27. Work engagement	3.60	0.85	177**	094 <sup>*</sup>	.139**	-0.057	135 <sup>**</sup>	.445**	.440**	.288**	.262**	.591**	.493**	.568**
28. Job satisfaction	3.66	0.78	277**	187**	0.027	143**	228**	.452**	.505**	.278**	.356**	.559 <sup>**</sup>	.595**	.673**
29. Sleeping troubles	2.57	1.06	.208**	.196**	.161**	.210**	.179**	-0.069	109 <sup>*</sup>	-0.061	088*	203**	199 <sup>**</sup>	168**
30. Burnout	2.95	1.08	.283**	.309**	.175**	.281**	.295**	202**	136**	161**	225**	268**	298**	297**
31. Stress	2.56	1.07	.283**	.271**	.180**	.295**	.297**	127**	096 <sup>*</sup>	126**	186 <sup>**</sup>	244**	289 <sup>**</sup>	246**
32. Somatic stress	1.96	0.86	.276**	.218**	0.086	.276**	.197**	-0.059	-0.083	-0.069	142**	210 <sup>**</sup>	255**	208**
33. Cognitive stress	2.12	0.98	.322**	.284**	.151**	.276**	.308**	112 <sup>*</sup>	115 <sup>*</sup>	120**	176**	236**	281**	224**
34. Depressive symptoms	2.27	1.05	.237**	.217**	0.050	.228**	.256**	205**	232**	216**	190**	348**	336**	291**
35. General health 1	3.29	1.03	-0.087	-0.015	0.084	-0.042	-0.082	.278**	.264**	.195**	.159**	.325**	.371**	.341**
36. General health 2	6.61	2.21		112 <sup>*</sup>		146**	175	.213	.216	.164	.180**	.221"	.329**	.295
37. Self efficacy	2.88	0.65	171	-0.013	.144	-0.064	092	.277	.283	.187	.164	.339	.305	.261

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).
\*. Correlation is significant at the 0.05 level (2-tailed).

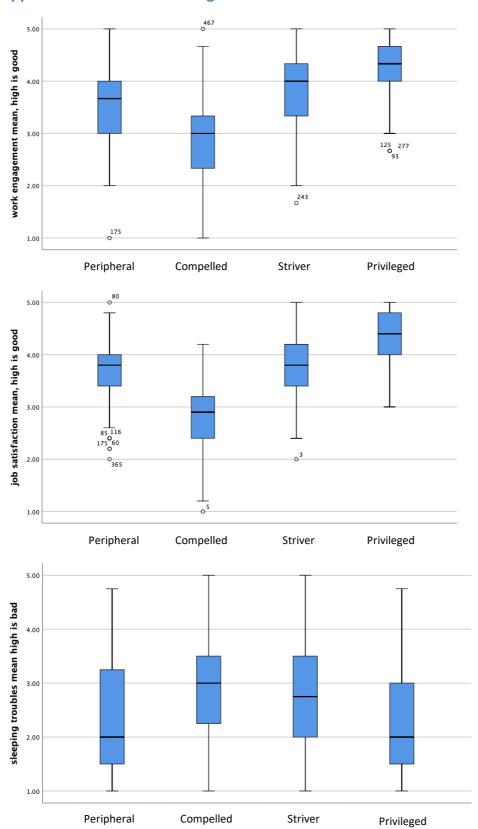
	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Quantitative demands	288**	.404**	176 <sup>**</sup>	176**	-0.058		248**	.237**	.333**	312 <sup>**</sup>	.533**	283**	333**	309**
2. Work pace	-0.085	.405**	-0.062	-0.089	0.018	-0.063	146**	.225**	.278**	135**	.444**	238**	176**	159**
3. Cognitive demands	0.019	.363**	0.022	-0.017	0.000	0.001	.099*	0.057	.099*	-0.043	.291**	156**	-0.068	-0.039
4. Emotional demands	176**	.425	-0.034	-0.073	-0.038	109 <sup>*</sup>	098*	.172**	.312**	195	.430**	257**	220**	208**
5. Demands for hiding	-0.083	.314**	130 <sup>*</sup>	167**	-0.082	100 <sup>*</sup>	147**	.179**	.263**	132**	.358**	262**	250**	255**
emotion 6. Influence	222**	-0.045	0.40**	070**	400**	000**	057**	4**	011**	222**	-0.056	404**	240**	0.40**
	.293		.318**	.273**	.160	.209**	.357	177	211**	.283		.164	.312**	.346**
7. Possibilities for development	.305	0.007	.502	.402	.283	.390	.505	160	217**	.327	-0.066	.213	.314	.407**
8. Variation of work	.109 <sup>*</sup>	-0.058	.178**	.114*	.105	.217**	.288**	186**	220**	.201**	094 <sup>*</sup>	.159**	.121 <sup>*</sup>	.177**
9. Control over time	.212**	191 <sup>**</sup>	.137**	.147**	.156**	.180**	.221**	245**	314**	.213**	319**	.256**	.294**	.268**
10. Meaning of work	.455**	-0.079	.412**	.298**	.199**	.351**	.583**	229**	333**	.388**	230**	.255**	.307**	.396**
11. Predictability	.570**	250 <sup>**</sup>	.582**	.493**	.299**	.450**	.566**	227**	330**	.400**	285**	.347**	.532**	.566**
12. Recognition	.564**	329**	.660**	.584**	.363**	.548**	.642**	293**	423**	.454**	341**	.430**	.646**	.735**
13. Role clarity	1	325**	.475**	.426**	.293**	.517**	.515**	276**	407**	.541**	320**	.372**	.490**	.474**
14. Role conflict	325**	1	122 <sup>*</sup>	207**	-0.030	229 <sup>**</sup>	227**	.364**	.432**	323**	.558**	515**	386**	282**
15. Quality of leadership	.475**	122 <sup>*</sup>	1	.710**	.534**	.598**	.642**	143 <sup>**</sup>	269**	.361**	170 <sup>**</sup>	.337**	.543**	.674**
16. Supervisor support	.426**	207**	.710**	1	.551**	.531**	.537**	142 <sup>**</sup>	254**	.287**	186 <sup>**</sup>	.356**	.469**	.569**
17. Colleague support	.293**	-0.030	.534**	.551**	1	.623**	.345**	107 <sup>*</sup>	167**	.210**	-0.092	.259**	.249**	.358**
18. Sense of community	.517**	229**	.598**	.531**	.623**	1	.553**	191**	359**	.399**	241**	.452**	.472**	.518**
19. Commitment to workplace	.515**	227**	.642**	.537**	.345**	.553**	1	283**	445**	.430**	318**	.391**	.573**	.608**
20. Job insecurity	276**	.364**	143**	142**	107 <sup>*</sup>	191**	283**	1	.684**	216 <sup>**</sup>	.399**	364**	306**	193**
21. Insecurity over working conditions	407**	.432**	269**	254**	167**	359**	445**	.684**	1	350**	.492**	495**	449**	324**
22. Quality of work	.541**	323 <sup>**</sup>	.361**	.287**	.210**	.399**	.430**	216**	350**	1	307**	.329**	.407**	.374**
23. Work life conflict	320**	.558**	170 <sup>**</sup>	186 <sup>**</sup>	-0.092	241**	318 <sup>**</sup>	.399**	.492**	307**	1	490 <sup>**</sup>	415	317**
24. Horizontal trust	.372**	515 <sup>**</sup>	.337**	.356**	.259	.452**	.391**	364**	495**	.329**	490**	1	.618**	.494**
25. Vertical trust	.490**	386**	.543**	.469**	.249**	.472**	.573**	306**	449 <sup>**</sup>	.407**	415**	.618**	1	.740**
26. Organisational justice	.474**	282 <sup>**</sup>	.674**	.569**	.358**	.518 <sup>**</sup>	.608**	193 <sup>**</sup>	324**	.374**	317**	.494**	.740**	1
27. Work engagement	.475	179 <sup>**</sup>	.541	.428**	.354	.483**	.689**	203**	362**	.481	277**	.322**	.468	.565**
28. Job satisfaction	.491**	235 <sup>**</sup>	.573**	.499**	.375	.511 <sup>**</sup>	.683**	297**	463**	.496	372**	.411**	.554	.671**
29. Sleeping troubles	186**	.229**	127*	109 <sup>*</sup>	132**	179 <sup>**</sup>	161**	.198**	.221**	112 <sup>*</sup>	.347**	233**	151**	148**
30. Burnout	227**	.259**	173 <sup>**</sup>	182**	143**	213 <sup>**</sup>	248**	.242**	.231**	156	.507**	262**	172**	234**
31. Stress	263**	.307**	177 <sup>**</sup>	154**	143**	203**	196**	.328**	.289**	187**	.479**	312**	203**	223**
32. Somatic stress	280**	.306**	154**	184**	138**	226**	201**	.311**	.318**	110 <sup>*</sup>	.440**	325**	226**	210**
33. Cognitive stress	285**	.302**	139 <sup>**</sup>	140**	-0.088	170 <sup>**</sup>	189**	.350**	.331**	163 <sup>**</sup>	.458**	327**	198**	201**
34. Depressive symptoms	333**	.279**	245**	220**	188**	259 <sup>**</sup>	318**	.404**	.409**	207**	.418**	332**	257**	272**
35. General health 1	.257**	-0.060	.311**	.263**	.274**	.307**	.334**	209**	188**	.135**	142"	.111 <sup>*</sup>	.219**	.306**
36. General health 2	.211"	128**	.241**	.222**	.229**	.307**	.284**	175 <sup>**</sup>	211**	.163**	211"	.175**	.238**	.271**
37. Self efficacy	.402	201	.166	.162	.154	.287	.323	232	285	.318	174	.156	.214	.233

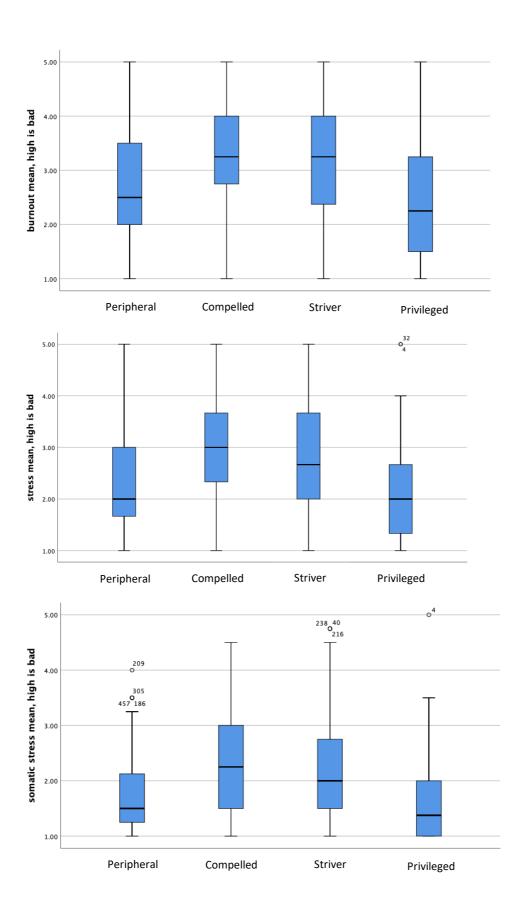
<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).
\*. Correlation is significant at the 0.05 level (2-tailed).

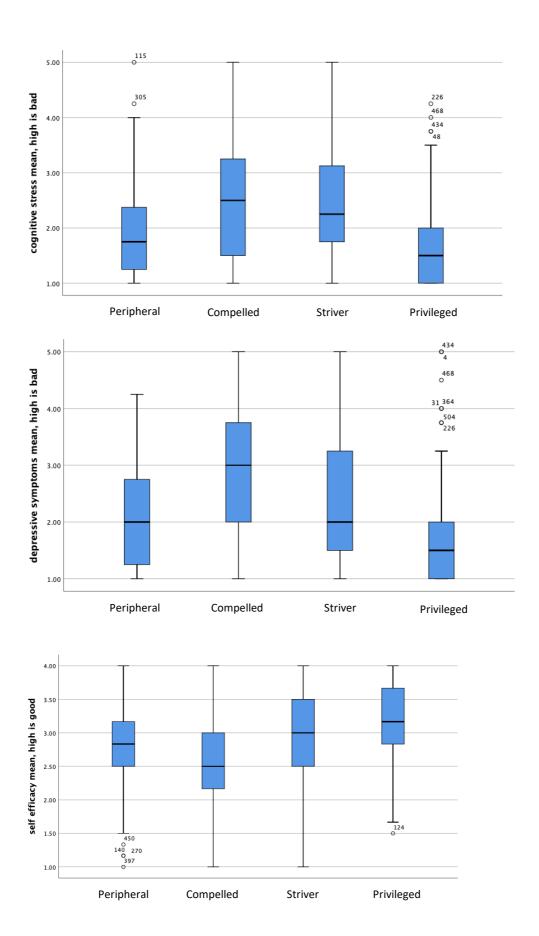
	27	28	29	30	31	32	33	34	35	36	37
1. Quantitative demands	177**	277**	.208**	.283**	.283**	.276**	.322**	.237**	-0.087	142 <sup>**</sup>	171 <sup>**</sup>
2. Work pace	094 <sup>*</sup>	187 <sup>**</sup>	.196**	.309**	.271**	.218**	.284**	.217**	-0.015	112 <sup>*</sup>	-0.013
3. Cognitive demands	.139**	0.027	.161**	.175**	.180**	0.086	.151**	0.050	0.084	0.008	.144**
4. Emotional demands	-0.057	143 <sup>**</sup>	.210 <sup>**</sup>	.281**	.295**	.276**	.276**	.228**	-0.042	146 <sup>**</sup>	-0.064
5. Demands for hiding emotion	135 <sup>**</sup>	228 <sup>**</sup>	.179 <sup>**</sup>	.295**	.297**	.197**	.308**	.256 <sup>**</sup>	-0.082	175 <sup>**</sup>	092 <sup>*</sup>
6. Influence	.445**	.452**	-0.069	202 <sup>**</sup>	127 <sup>**</sup>	-0.059	112 <sup>*</sup>	205**	.278**	.213 <sup>**</sup>	.277**
7. Possibilities for development	.440**	.505**	109 <sup>*</sup>		096 <sup>*</sup>	-0.083	115 <sup>*</sup>	232 <sup>**</sup>	.264**	.216 <sup>**</sup>	.283**
8. Variation of work	.288**	.278**	-0.061	161 <sup>**</sup>	126 <sup>**</sup>	-0.069	120 <sup>**</sup>	216 <sup>**</sup>	.195**	.164**	.187**
9. Control over time	.262**	.356**	088*	225 <sup>**</sup>	186 <sup>**</sup>	142 <sup>**</sup>	176 <sup>**</sup>	190 <sup>**</sup>	.159**	.180**	.164**
10. Meaning of work	.591**	.559 <sup>**</sup>	203 <sup>**</sup>	268 <sup>**</sup>	244**	210 <sup>**</sup>	236 <sup>**</sup>	348**	.325**	.221 <sup>**</sup>	.339**
11. Predictability	.493**	.595**	199 <sup>**</sup>	298**	289 <sup>**</sup>	255 <sup>**</sup>	281 <sup>**</sup>	336 <sup>**</sup>	.371**	.329**	.305**
12. Recognition	.568**	.673**	168 <sup>**</sup>	297**	246 <sup>**</sup>	208 <sup>**</sup>	224**	291 <sup>**</sup>	.341**	.295**	.261**
13. Role clarity	.475**	.491 <sup>**</sup>	186 <sup>**</sup>	227**	263 <sup>**</sup>	280 <sup>**</sup>	285 <sup>**</sup>	333 <sup>**</sup>	.257**	.211**	.402**
14. Role conflict	179 <sup>**</sup>	235 <sup>**</sup>	.229**	.259**	.307**	.306**	.302**	.279**	-0.060	128 <sup>**</sup>	201**
15. Quality of leadership	.541**	.573**	127 <sup>*</sup>	173 <sup>**</sup>	177 <sup>**</sup>	154 <sup>**</sup>	139 <sup>**</sup>	245 <sup>**</sup>	.311 <sup>**</sup>	.241**	.166**
16. Supervisor support	.428**	.499**	109 <sup>*</sup>	182 <sup>**</sup>	154 <sup>**</sup>	184 <sup>**</sup>	140 <sup>**</sup>	220 <sup>**</sup>	.263**	.222**	.162**
17. Colleague support	.354**	.375**	132 <sup>**</sup>	143 <sup>**</sup>	143 <sup>**</sup>	138 <sup>**</sup>	-0.088	188 <sup>**</sup>	.274**	.229**	.154**
18. Sense of community	.483**	.511 <sup>**</sup>	179 <sup>**</sup>	213 <sup>**</sup>	203 <sup>**</sup>	226 <sup>**</sup>	170 <sup>**</sup>	259 <sup>**</sup>	.307**	.307**	.287**
19. Commitment to workplace	.689**	.683**	161 <sup>**</sup>	248 <sup>**</sup>	196 <sup>**</sup>	201 <sup>**</sup>	189 <sup>**</sup>	318 <sup>**</sup>	.334**	.284**	.323**
20. Job insecurity	203**	297**	.198**	.242**	.328**	.311**	.350**	.404**	209 <sup>**</sup>	175 <sup>**</sup>	232 <sup>**</sup>
21. Insecurity over working conditions	362 <sup>**</sup>	463 <sup>**</sup>	.221**	.231**	.289**	.318 <sup>**</sup>	.331**	.409**	188 <sup>**</sup>	211 <sup>**</sup>	285 <sup>**</sup>
22. Quality of work	.481**	.496**	112 <sup>*</sup>	156 <sup>**</sup>	187 <sup>**</sup>	110 <sup>*</sup>	163 <sup>**</sup>	207**	.135**	.163**	.318**
23. Work life conflict	277**	372 <sup>**</sup>	.347**	.507**	.479 <sup>**</sup>	.440**	.458**	.418 <sup>**</sup>	142 <sup>**</sup>	211 <sup>**</sup>	174 <sup>**</sup>
24. Horizontal trust	.322**	.411**	233 <sup>**</sup>	262 <sup>**</sup>	312 <sup>**</sup>	325 <sup>**</sup>	327**	332 <sup>**</sup>	.111*	.175**	.156**
25. Vertical trust	.468**	.554**	151 <sup>**</sup>	172 <sup>**</sup>	203 <sup>**</sup>	226 <sup>**</sup>	198 <sup>**</sup>	257**	.219 <sup>**</sup>	.238**	.214**
26. Organisational justice	.565**	.671**	148 <sup>**</sup>	234**	223 <sup>**</sup>	210 <sup>**</sup>	201 <sup>**</sup>	272 <sup>**</sup>	.306**	.271**	.233**
27. Work engagement	1	.670 <sup>**</sup>	197**	278 <sup>**</sup>	234**	205**	214 <sup>**</sup>	327**	.394**	.309**	.348**
28. Job satisfaction	.670 <sup>**</sup>	1	239 <sup>**</sup>	343**	336 <sup>**</sup>	260 <sup>**</sup>	296 <sup>**</sup>	371 <sup>**</sup>	.411**	.367**	.341**
29. Sleeping troubles	197**	239 <sup>**</sup>	1	.648**	.666**	.577**	.560**	.580**	353 <sup>**</sup>	396 <sup>**</sup>	-0.085
30. Burnout	278 <sup>**</sup>	343 <sup>**</sup>	.648**	1	.792 <sup>**</sup>	.613 <sup>**</sup>	.650 <sup>**</sup>	.691**	419 <sup>**</sup>	438 <sup>**</sup>	164 <sup>**</sup>
31. Stress	234**	336 <sup>**</sup>	.666**	.792 <sup>**</sup>	1	.711 <sup>**</sup>	.760 <sup>**</sup>	.755 <sup>**</sup>	391**	419 <sup>**</sup>	190 <sup>**</sup>
32. Somatic stress	205 <sup>**</sup>	260 <sup>**</sup>	.577**	.613 <sup>**</sup>	.711 <sup>**</sup>	1	.724**	.672 <sup>**</sup>	321**	382 <sup>**</sup>	200 <sup>**</sup>
33. Cognitive stress	214**	296 <sup>**</sup>	.560**	.650**	.760 <sup>**</sup>	.724**	1	.762 <sup>**</sup>	341**	387**	248**
34. Depressive symptoms	327**	371 <sup>**</sup>	.580**	.691**	.755 <sup>**</sup>	.672**	.762 <sup>**</sup>	1	412 <sup>**</sup>	427**	300**
35. General health 1	.394**	.411**	353**	419 <sup>**</sup>	391 <sup>**</sup>	321**	341**	412 <sup>**</sup>	1	.756 <sup>**</sup>	.246**
36. General health 2	.309**	.367**	396 <sup>**</sup>	438**	419 <sup>**</sup>	382 <sup>**</sup>	387**	427 <sup>**</sup>	.756**	1	.240**
37. Self efficacy	.348**	.341**	-0.085	164 <sup>**</sup>	190 <sup>**</sup>	200 <sup>**</sup>	248 <sup>**</sup>	300 <sup>**</sup>	.246**	.240**	1

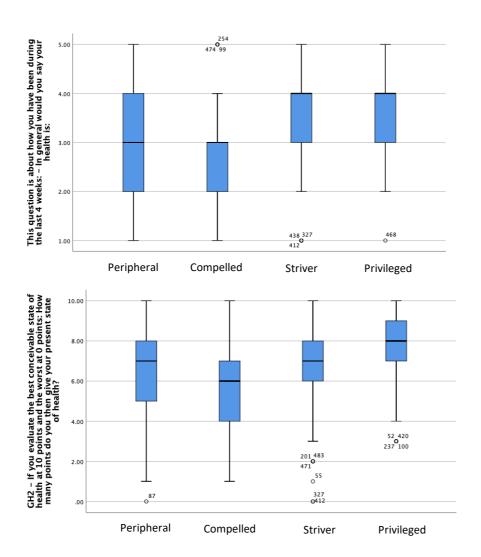
Correlation is significant at the 0.01 level (2-tailed).
\*. Correlation is significant at the 0.05 level (2-tailed).

## Appendix E – Outlier checking for ANOVA tests









## **Appendix F – ANOVA tables**

Table A 1: Work engagement ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between	149.270	3	49.757	110.837	.000
Groups					
Within	225.805	503	.449		
Groups					
Total	375.075	506			

Table A 2: Work engagement descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max	Between- Component Variance
Compelled	138	2.8068	.72362	.06160	2.6850	2.9286	1.00	5.00	
Strivers	120	3.8528	.70187	.06407	3.7259	3.9796	1.67	5.00	
Peripheral	115	3.4870	.69007	.06435	3.3595	3.6144	1.00	5.00	
Privileged	134	4.2313	.55632	.04806	4.1363	4.3264	2.67	5.00	
Total	507	3.5851	.86096	.03824	3.5100	3.6603	1.00	5.00	
Model – fixed			.67001	.02976	3.5267	3.6436			
effects									
Model – random				.31444	2.5845	4.5858			.38975
effects									

Table A 3: Work engagement Tukey post-hoc

		Mean				
(1)	(J)	Difference			95% CI	
eight4class	eight4class	(1-1)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	-1.04601	.08363	.000	-1.2616	8304
	Peripheral	68019	.08460	.000	8983	4621
	Privileged	-1.42458	.08126	.000	-1.6340	-1.2151
Strivers	Compelled	1.04601	.08363	.000	.8304	1.2616
	Peripheral	.36582	.08743	.000	.1404	.5912
	Privileged	37857	.08421	.000	5956	1615
Peripheral	Compelled	.68019	.08460	.000	.4621	.8983
	Strivers	36582	.08743	.000	5912	1404
	Privileged	74439	.08517	.000	9639	5249
Privileged	Compelled	1.42458	.08126	.000	1.2151	1.6340
	Strivers	.37857	.08421	.000	.1615	.5956
	Peripheral	.74439	.08517	.000	.5249	.9639

Table B 1: Job satisfaction ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between	154.457	3	51.486	173.387	.000
Groups					
Within	146.986	495	.297		
Groups					
Total	301.444	498			

Table B 2: Job satisfaction descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max	Between- Component Variance
Compelled	137	2.8423	.61330	.05240	2.7387	2.9460	1.20	4.20	
Strivers	119	3.8504	.56281	.05159	3.7483	3.9526	2.40	5.00	
Peripheral	109	3.6734	.47349	.04535	3.5835	3.7633	2.40	4.80	
Privileged	134	4.3209	.50740	.04383	4.2342	4.4076	3.00	5.00	
Total	499	3.6613	.77802	.03483	3.5929	3.7298	1.20	5.00	
Model – fixed			.54492	.02439	3.6134	3.7093			
effects									
Model – random				.32298	2.6335	4.6892			.41147
effects									

Table B 3: Job satisfaction Tukey post-hoc

		Mean				
(1)	(J)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	-1.04601	.08363	.000	-1.2616	8304
	Peripheral	68019	.08460	.000	8983	4621
	Privileged	-1.42458	.08126	.000	-1.6340	-1.2151
Strivers	Compelled	1.04601	.08363	.000	.8304	1.2616
	Peripheral	.36582	.08743	.000	.1404	.5912
	Privileged	37857	.08421	.000	5956	1615
Peripheral	Compelled	.68019	.08460	.000	.4621	.8983
	Strivers	36582	.08743	.000	5912	1404
	Privileged	74439	.08517	.000	9639	5249
Privileged	Compelled	1.42458	.08126	.000	1.2151	1.6340
	Strivers	.37857	.08421	.000	.1615	.5956
	Peripheral	.74439	.08517	.000	.5249	.9639

Table C 1: Sleeping troubles ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between	46.228	3	15.409	14.960	.000
Groups					
Within	518.098	503	1.030		
Groups					
Total	564.326	506			

Table C 2: Sleeping troubles descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max	Between- Component Variance
Compelled	138	2.9167	.97988	.08341	2.7517	3.0816	1.00	5.00	
Strivers	120	2.7938	1.08739	.09926	2.5972	2.9903	1.00	5.00	
Peripheral	115	2.3804	1.02242	.09534	2.1916	2.5693	1.00	4.75	
Privileged	134	2.1884	.97595	.08431	2.0217	2.3552	1.00	4.75	
Total	507	2.5735	1.05606	.04690	2.4813	2.6656	1.00	5.00	
Model – fixed			1.01490	.04507	2.4849	2.6620			
effects									
Model – random				.17495	2.0167	3.1302			.11366
effects									

Table C 3: Sleeping troubles Tukey post-hoc

		Mean				
(1)	(J)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	.12292	.12668	.766	2036	.4494
	Peripheral	.53623*	.12814	.000	.2059	.8665
	Privileged	.72823*	.12309	.000	.4110	1.0455
Strivers	Compelled	12292	.12668	.766	4494	.2036
	Peripheral	.41332*	.13244	.010	.0719	.7547
	Privileged	.60532*	.12755	.000	.2765	.9341
Peripheral	Compelled	53623*	.12814	.000	8665	2059
	Strivers	41332*	.13244	.010	7547	0719
	Privileged	.19200	.12901	.445	1405	.5245
Privileged	Compelled	72823*	.12309	.000	-1.0455	4110
	Strivers	60532*	.12755	.000	9341	2765
	Peripheral	19200	.12901	.445	5245	.1405

Table D 1: Burnout ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between	84.648	3	28.216	27.627	.000
Groups					
Within	513.716	503	1.021		
Groups					
Total	598.364	506			

Table D 2: Burnout descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max	Between- Component Variance
Compelled	138	3.4366	.91423	.07782	3.2827	3.5905	1.00	5.00	
Strivers	120	3.2250	1.0741 4	.09806	3.0308	3.4192	1.00	5.00	
Peripheral	115	2.6848	.98513	.09186	2.5028	2.8668	1.00	5.00	
Privileged	134	2.4403	1.0664 8	.09213	2.2581	2.6225	1.00	5.00	
Total	507	2.9527	1.0874 5	.04830	2.8578	3.0475	1.00	5.00	
Model – fixed			1.0106	.04488	2.8645	3.0408			
effects			0						
Model – random effects				.23676	2.1992	3.7062			.21496

Table D 3: Burnout Tukey post-hoc

		Mean				
(1)	(J)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	.21159	.12614	.337	1136	.5367
	Peripheral	.75181*	.12760	.000	.4229	1.0807
	Privileged	.99630*	.12257	.000	.6804	1.3122
Strivers	Compelled	21159	.12614	.337	5367	.1136
	Peripheral	.54022*	.13188	.000	.2003	.8802
	Privileged	.78470*	.12701	.000	.4573	1.1121
Peripheral	Compelled	75181*	.12760	.000	-1.0807	4229
	Strivers	54022*	.13188	.000	8802	2003
	Privileged	.24448	.12846	.228	0866	.5756
Privileged	Compelled	99630*	.12257	.000	-1.3122	6804
	Strivers	78470*	.12701	.000	-1.1121	4573
	Peripheral	24448	.12846	.228	5756	.0866

Table E 1: Stress ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between	81.638	3	27.213	27.648	.000
Groups					
Within	495.071	503	.984		
Groups					
Total	576.709	506			

Table E 2: Stress descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max	Between- Component Variance
Compelled	138	3.0024	.96281	.08196	2.8403	3.1645	1.00	5.00	
Strivers	120	2.8833	1.1157 6	.10185	2.6817	3.0850	1.00	5.00	
Peripheral	115	2.2928	.94503	.08812	2.1182	2.4673	1.00	5.00	
Privileged	134	2.0572	.94239	.08141	1.8962	2.2182	1.00	5.00	
Total	507	2.5634	1.0675 9	.04741	2.4703	2.6566	1.00	5.00	
Model – fixed effects			.99209	.04406	2.4769	2.6500			
Model – random effects				.23252	1.8235	3.3034			.20732

Table E 3: Stress Tukey post-hoc

		Mean				
(1)	(J)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	.11908	.12383	.771	2001	.4383
	Peripheral	.70966*	.12526	.000	.3868	1.0325
	Privileged	.94520*	.12032	.000	.6351	1.2553
Strivers	Compelled	11908	.12383	.771	4383	.2001
	Peripheral	.59058*	.12946	.000	.2569	.9243
	Privileged	.82612*	.12469	.000	.5047	1.1475
Peripheral	Compelled	70966*	.12526	.000	-1.0325	3868
	Strivers	59058*	.12946	.000	9243	2569
	Privileged	.23554	.12611	.243	0895	.5606
Privileged	Compelled	94520*	.12032	.000	-1.2553	6351
	Strivers	82612*	.12469	.000	-1.1475	5047
	Peripheral	23554	.12611	.243	5606	.0895

Table F 1: Somatic stress Welch statistic

	Statistica	df1	df2	Sig.				
Welch	23.703	3	275.484	.000				
a. Asymptotically F d	a. Asymptotically F distributed.							

Table F 2: Somatic stress descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max	Between- Component Variance
Compelled	138	2.3043	.91207	.07764	2.1508	2.4579	1.00	4.50	
Strivers	120	2.3000	.98444	.08987	2.1221	2.4779	1.00	4.75	
Peripheral	115	1.7739	.71095	.06630	1.6426	1.9052	1.00	4.00	
Privileged	134	1.6082	.73349	.06336	1.4829	1.7335	1.00	5.00	
Total	507	1.9990	.89851	.03990	1.9206	2.0774	1.00	5.00	
Model – fixed			.84419	.03749	1.9254	2.0727			
effects									
Model – random effects				.18202	1.4198	2.5783			.12618

Table F 3: Somatic stress Games-Howell post-hoc

		Mean				
(1)	(J)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	.00435	.11876	1.000	3029	.3116
	Peripheral	.53043*	.10209	.000	.2664	.7945
	Privileged	.69614*	.10022	.000	.4370	.9553
Strivers	Compelled	00435	.11876	1.000	3116	.3029
	Peripheral	.52609*	.11167	.000	.2370	.8152
	Privileged	.69179*	.10996	.000	.4071	.9765
Peripheral	Compelled	53043*	.10209	.000	7945	2664
	Strivers	52609*	.11167	.000	8152	2370
	Privileged	.16570	.09171	.273	0715	.4029
Privileged	Compelled	69614*	.10022	.000	9553	4370
	Strivers	69179*	.10996	.000	9765	4071
	Peripheral	16570	.09171	.273	4029	.0715

Table G 1: Cognitive stress Welch statistic

	Statistica	df1	df2	Sig.			
Welch	22.240	3	273.237	.000			
a. Asymptotically F distributed.							

Table G 2: Cognitive stress descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max	Between- Component Variance
Compelled	138	2.4674	1.0144 2	.08635	2.2966	2.6381	1.00	5.00	
Strivers	120	2.4542	1.0541 9	.09623	2.2636	2.6447	1.00	5.00	
Peripheral	115	1.9500	.92017	.08581	1.7800	2.1200	1.00	5.00	
Privileged	134	1.7183	.76974	.06650	1.5868	1.8498	1.00	4.25	
Total	507	2.1489	.99716	.04429	2.0619	2.2359	1.00	5.00	
Model – fixed			.94433	.04194	2.0665	2.2313			
effects									
Model – random effects				.19011	1.5439	2.7539			.13675

Table G 3: Cognitive stress Games-Howell post-hoc

		Mean				
(1)	(J)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	.01322	.12930	1.000	3212	.3477
	Peripheral	.51739*	.12174	.000	.2025	.8323
	Privileged	.74911*	.10899	.000	.4673	1.0310
Strivers	Compelled	01322	.12930	1.000	3477	.3212
	Peripheral	.50417*	.12893	.001	.1705	.8378
	Privileged	.73588*	.11697	.000	.4330	1.0387
Peripheral	Compelled	51739*	.12174	.000	8323	2025
	Strivers	50417*	.12893	.001	8378	1705
	Privileged	.23172	.10856	.145	0493	.5127
Privileged	Compelled	74911*	.10899	.000	-1.0310	4673
	Strivers	73588*	.11697	.000	-1.0387	4330
	Peripheral	23172	.10856	.145	5127	.0493

Table H 1: Depressive symptoms Welch statistic

	Statistica	df1	df2	Sig.			
Welch	31.927	3	275.085	.000			
a. Asymptotically F distributed.							

Table H 2: Depressive symptoms descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max	Between- Component Variance
Compelled	138	2.8533	1.0635 5	.09054	2.6742	3.0323	1.00	5.00	
Strivers	120	2.4458	1.0852 3	.09907	2.2497	2.6420	1.00	5.00	
Peripheral	115	2.1239	.92027	.08582	1.9539	2.2939	1.00	4.25	
Privileged	134	1.7519	.84765	.07323	1.6070	1.8967	1.00	5.00	
Total	507	2.3003	1.0667 8	.04738	2.2072	2.3934	1.00	5.00	
Model – fixed effects			.98419	.04371	2.2144	2.3862			
Model – random effects				.24226	1.5293	3.0713			.22584

Table H 3: Depressive symptoms Games-Howell post-hoc

		Mean				
(I)	(J)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	.40743*	.13420	.014	.0603	.7545
	Peripheral	.72935*	.12474	.000	.4067	1.0520
	Privileged	1.10140*	.11644	.000	.8003	1.4025
Strivers	Compelled	40743*	.13420	.014	7545	0603
	Peripheral	.32192	.13107	.070	0173	.6611
	Privileged	.69397*	.12319	.000	.3751	1.0128
Peripheral	Compelled	72935*	.12474	.000	-1.0520	4067
	Strivers	32192	.13107	.070	6611	.0173
	Privileged	.37205*	.11281	.006	.0801	.6640
Privileged	Compelled	-1.10140*	.11644	.000	-1.4025	8003
	Strivers	69397*	.12319	.000	-1.0128	3751
	Peripheral	37205*	.11281	.006	6640	0801

Table I 1: General health 1 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between	79.722	3	26.574	29.157	.000
Groups					
Within	452.060	496	.911		
Groups					
Total	531.782	499			

Table I 2: General health 1 descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max	Between- Component Variance
Compelled	135	2.7556	0.88492	0.07616	2.6049	2.9062	1.00	5.00	
Strivers	117	3.5043	1.0139	0.09374	3.3186	3.6899	1.00	5.00	
Peripheral	115	3.1391	0.98129	0.09151	2.9579	3.3204	1.00	5.00	
Privileged	133	3.7895	0.94591	0.08202	3.6272	3.9517	2.00	5.00	
Total	500	3.294	1.03233	0.04617	3.2033	3.3847	1.00	5.00	
Model – fixed									
effects			0.95468	0.04269	3.2101	3.3779			
Model – random									0.20566
effects				0.23132	2.5578	4.0302			

Table I 3: General health 1 Tukey post-hoc

		Mean				
(I)	(J)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	74872*	.12059	.000	-1.0596	4379
	Peripheral	38357*	.12115	.009	6959	0713
	Privileged	-1.03392*	.11664	.000	-1.3346	7333
Strivers	Compelled	.74872*	.12059	.000	.4379	1.0596
	Peripheral	.36514*	.12536	.020	.0420	.6883
	Privileged	28520	.12101	.087	5971	.0267
Peripheral	Compelled	.38357*	.12115	.009	.0713	.6959
	Strivers	36514*	.12536	.020	6883	0420
	Privileged	65034*	.12156	.000	9637	3370
Privileged	Compelled	1.03392*	.11664	.000	.7333	1.3346
	Strivers	.28520	.12101	.087	0267	.5971
	Peripheral	.65034*	.12156	.000	.3370	.9637

Table J 1: General health 2 Welch statistic

	Statistica	df1	df2	Sig.				
Welch	26.702	3	271.773	.000				
a. Asymptotically F distributed.								

Table J 2: General health 2 descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max
Compelled	138	5.5870	2.06015	.17537	5.2402	5.9337	1.00	10.00
Strivers	120	6.7167	2.28691	.20877	6.3033	7.1300	.00	10.00
Peripheral	115	6.5478	2.26431	.21115	6.1295	6.9661	.00	10.00
Privileged	134	7.6343	1.71478	.14813	7.3413	7.9273	3.00	10.00
Total	507	6.6134	2.20771	.09805	6.4208	6.8060	.00	10.00
Model – fixed	138	5.5870	2.06015	.17537	5.2402	5.9337	1.00	10.00
effects								
Model – random effects	120	6.7167	2.28691	.20877	6.3033	7.1300	.00	10.00

Table J 3: General health 2 Games-Howell post-hoc

		Mean				
(1)	(J)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	-1.12971*	.27265	.000	-1.8351	4244
	Peripheral	96087*	.27448	.003	-1.6711	2506
	Privileged	-2.04737*	.22956	.000	-2.6409	-1.4538
Strivers	Compelled	1.12971*	.27265	.000	.4244	1.8351
	Peripheral	.16884	.29693	.941	5995	.9372
	Privileged	91766*	.25598	.002	-1.5804	2550
Peripheral	Compelled	.96087*	.27448	.003	.2506	1.6711
	Strivers	16884	.29693	.941	9372	.5995
	Privileged	-1.08650*	.25793	.000	-1.7545	4185
Privileged	Compelled	2.04737*	.22956	.000	1.4538	2.6409
	Strivers	.91766*	.25598	.002	.2550	1.5804
	Peripheral	1.08650*	.25793	.000	.4185	1.7545

Table K 1: Self efficacy ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between	29.666	3	9.889	25.706	.000
Groups					
Within	193.495	503	.385		
Groups					
Total	223.162	506			

Table K 2: Self efficacy descriptives

	N	Mean	SD	SE	95% CI mean lower bound	95% CI mean upper bound	Min	Max
Compelled	138	2.5459	.60371	.05139	2.4443	2.6475	1.00	4.00
Strivers	120	2.8958	.67711	.06181	2.7734	3.0182	1.00	4.00
Peripheral	115	2.8217	.63050	.05879	2.7053	2.9382	1.00	4.00
Privileged	134	3.2027	.57312	.04951	3.1048	3.3007	1.50	4.00
Total	507	2.8649	.66410	.02949	2.8069	2.9228	1.00	4.00
Model – fixed	138	2.5459	.60371	.05139	2.4443	2.6475	1.00	4.00
effects								
Model – random	120	2.8958	.67711	.06181	2.7734	3.0182	1.00	4.00
effects								

Table K 3: Self efficacy Tukey post-hoc

		Mean				
<b>(I)</b>	(1)	Difference			95% CI	
eight4class	eight4class	(I-J)	Std. Error	Sig.	lower bound	95% CI upper bound
Compelled	Strivers	34994*	.07742	.000	5495	1504
	Peripheral	27585*	.07831	.003	4777	0740
	Privileged	65684*	.07522	.000	8507	4629
Strivers	Compelled	.34994*	.07742	.000	.1504	.5495
	Peripheral	.07409	.08094	.797	1345	.2827
	Privileged	30690*	.07795	.001	5078	1060
Peripheral	Compelled	.27585*	.07831	.003	.0740	.4777
	Strivers	07409	.08094	.797	2827	.1345
	Privileged	38100*	.07884	.000	5842	1778
Privileged	Compelled	.65684*	.07522	.000	.4629	.8507
	Strivers	.30690*	.07795	.001	.1060	.5078
	Peripheral	.38100*	.07884	.000	.1778	.5842