

Self-employment, health, illness, and social security among solo self-employed workers

by

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A thesis

presented to the University of Waterloo

in fulfillment of the

thesis requirement for the degree of

Doctor of Philosophy

in

Public Health Sciences

Waterloo, Ontario, Canada, 2022

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This thesis consists of material all of which I authored or co-authored: see Statement of Contributions included in the thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Statement of Contributions

This thesis consists of three manuscripts that have been published, submitted, or are under review. Exceptions to sole authorship:

Chapter 3: Khan, T. H., MacEachen, E., Hopwood, P., & Goyal, J. (2021). Self-employment, work and health: A critical narrative review. *Work*, 1-13.

Chapter 4: Khan, T. H., MacEachen, E., & Dunstan, D. (2022). What Social Supports Are Available to Self-Employed People When Ill or Injured? A Comparative Policy Analysis of Canada and Australia. *International Journal of Environmental Research and Public Health*, 19(9), 5310.

Chapter 5: Khan, T.H., MacEachen, E., Premji, S., Neiterman, E. Self-employment, illness, and the social security system: a qualitative study of the experiences of solo self-employed workers in Ontario, Canada. *BMC Public Health* (under review).

As lead author of these three chapters, I was responsible for conceptualizing the study design, data collection, data analysis, and drafting and submitting manuscripts.

My co-authors provided guidance during each step of the research and provided feedback on draft manuscripts.

Under the supervision of the committee members, I also prepared the remaining chapters in this thesis, which were not written for publication.

Abstract

Today's labour market has changed over time, shifting from full-time, secured, and standard employment relationships to entrepreneurial and precarious working arrangements. Thus, self-employment (SE) has been growing rapidly in recent decades due to globalization, automation, dramatic technological advances, the information revolution, and the recent rise of the 'gig economy'. More than 60% of workers worldwide are in non-standard employment relationships; hence their employment positions are precarious. This precarity profoundly impacts workers' health and well-being, undermining the comprehensiveness of social security systems, employment standards, and occupational health and safety policies. The general goal of this research was to focus on the circumstances of solo self-employed (SE'd) workers, investigating how they navigate, experience, and manage their injuries/illness in the context of their work.

To explore this, this dissertation combines three findings' manuscripts: (i) the first manuscript, based on a scoping review, critically reviewed the peer-reviewed literature focusing on advanced economies to understand how SE'd workers navigate, experience, or manage their injuries and illness when unable to work. The scoping review was a critical interpretive synthesis, following Dixon-Woods et al. (2006). (ii) The second manuscript considered how self-employed people access social support systems when they are not working due to injury and sickness in the two comparable countries of Canada and Australia. This comparative policy analysis adopted 'interpretive policy analysis' (Yanow, 2000), which involved analyzing public policies as a form of text or representation of social actions. (iii) Finally, the third manuscript examined how SE'd workers in Ontario, Canada were protected with available social security systems, following illness, injury, and income reduction or loss. Drawing on-depth interviews with 24 solo SE'd people; thematic analysis was conducted based on participant narratives.

Findings revealed that one of the challenges of providing support to SE'd people is derived from unclear definitions of who is SE'd. Thus, based on peer-reviewed literature, this dissertation demystified the conceptualization of SE and explored why people choose SE, including the push and pull factors. The comparative policy analysis revealed that support for SE'd workers following their injury or sickness was barely present in the relevant policies in Australia (NSW) and Canada (Ontario). In both cases, the SE'd workers tended to be homogenized in policy documents and literature as financially prosperous, younger, and highly educated. In this context, this study argues that a significant number of SE'd workers living in both jurisdictions need income support during their absence from work due to injury and sickness. This dissertation also explored the experiences of SE'd workers in Ontario in terms of social security systems that SE'd workers encountered when ill or injured. The study identified several constraints to social security access in this context: premium affordability, information/knowledge gap, lack of SE social support programs, the red tape of bureaucracy, confidence about savings, and lack of trust in the government-regulated system.

Acknowledgements

This Ph.D. was my dream in life; people would say I am too ambitious. However, it is now “reality”. This journey could not have been possible without numerous individuals' love, inspiration, support, and guidance. While this journey has been full of many fantastic experiences, I firmly believe I would not be where I am now if it weren't for some wonderful people who deserve my sincerest gratitude.

First and foremost, I cannot thank enough my amazing supervisor, Dr. Ellen MacEachen. I'm always amazed at how you manage multiple responsibilities with pivotal contributions - as an administrator to SPHS, an engaged and approachable mentor to your students, and getting updated and effectively involved with international work and health scholar communities. Dr. MacEachen- you were consistently there to provide guidance, support, and reassurance from the beginning of this thesis until the end, irrespective of weekdays or weekends. You generously supported me for the last couple of years, cultivating my intellectualism and looking after my personal affairs, including my wife, baby daughter, and elderly and critically sick mother. Your calm demeanor and continuous reminders of progress kept me on track and inspired me to complete this task. You have taught me so many things and helped me grow as a researcher in work and health. I am sincerely grateful to have had the opportunity to learn from you and look forward to keeping our Guru-disciple (mentor-mentee) relationship forever.

It is also my great opportunity to express my sincere gratitude to my committee members - Drs. Stephanie Premji and Elena Neiterman have generously supported an international student, like me, by understanding my issues and challenges. Thank you for devoting time from your hectic schedules to provide detailed comments and guidance to accomplish this project. I

appreciate your thoughtful comments on my work from the proposal until the dissertation defense. Collaborating with you throughout the past few years has been a pleasure.

To Dr. Arif Jetha, thank you for agreeing to be external on my committee. Your suggestions and questions helped me revisit issues around my research focus, and I will carry those learnings into future research projects.

To Dr. Edwin Ng, thank you for your insight and suggestions to the committee. It is always refreshing to consider research from a new perspective, and your questions and comments gave me that opportunity. Thank you all - my friends and colleagues in the “Work and Health Research Lab” and within SPHS – who have supported me throughout this journey; Your consistent encouragement and reassurance have meant more than you can imagine, and I would not be here without you. Thank you, Joyceline, for the great mental and spiritual support during my dull and distress; I would say - the almighty responded to all of your prayers for me. Thank you, Julia and Pam; we used to sing and dance to the song "wonky donkey" together; those moments were great sources of refreshment, rejoicing, and energy, something more than a song; I will never forget those memories. Meghan was the source of lots of fun; she had a lovely reaction to my snoring and laughed at me with mounting surprise at how I could snore in a sedentary sleep. However, she never becomes bothered by such a funny disturbance in our lab. I also express my sincere gratitude to Dr. Sonja Senthnanar, one of our former lab mates, who was "instrumental" throughout my Ph.D. journey and beyond. I am grateful for the love and support you've shown me during this long process. I am happy to say I have made some lifelong friends from our journey together.

To my dearest family – my single mother and fatherly elder brother. Today I have a comfortable life and opportunities which could not have been possible without your sacrifices and supports. I would also like to extend my indebtedness to my extended family members - my sisters, sister-in-law, brothers-in-law, cousins, uncles, and parents-in-law, whose blessing and prayers were always with me. Today, they are prouder than I am, I believe.

To my wife, Nahida, you took the burden of a graduate researcher on your shoulder just after we married, helping a researcher grow up and making my dream come true; you always showed your patience -more than I did. You are my best friend and partner. I love you very much, more than I can express. Thank you for being by my side throughout this entire process. I know this journey has also been tough on you for some days, and I want you to know how much I appreciate your patience, support, and love. I am fortunate to have you as my partner in life, and I cannot wait to see what comes next! Like the Ph.D. project accomplished, our princess, Tazkeya, is the best gift for us from the Almighty during my Ph.D. journey; I missed you a lot, my baby mom! My apology: I had nothing to do with her being thousands of miles away.

Finally, I would like to thank the participants of my research, who shared their stories during the unprecedented time of Covid-19. I appreciate their cooperation and time.

Dedication

To my grandfather, late Ayub Ali Khan, who inspired me to pursue a sky-sized dream in my boyhood.

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List of Abbreviations

SE	Self-employment
SE'd	Self-employed
EI	Employment Insurance
EISB	Employment Insurance Special Benefits
CERB	Canadian Emergency Response Benefit
OHIP	Ontario Health Insurance Plan
ICT	Information and communication Technology
WSIB	Workplace Safety and Insurance Board
CRA	Canada Revenue Agency
ODSP	Ontario Disability Support Program
ULG	Universal Labour Guarantee
CESB	Canadian Emergency Student Benefit
IT	Information Technology
ILO	International Labour Organization
WHO	World Health Organization
UGI	Universal Guaranteed Income
UBI	Universal Basic Income
SDG	Sustainable Development Goals
UN	United Nations
OECD	Organization for Economic Cooperation and Development
CTP	Compulsory Third Party
SIRA	State Insurance Regulatory Authority
NDIS	National Disability Insurance Scheme
CEIS	Canada Employment Insurance Commission

Chapter 1

Introduction

Internationally, self-employment (SE) has become a non-standard, unstable, and contingent work arrangement (Khan, MacEachen, Hopwood, & Goyal, 2021; Ontario, 2012; Wall, 2015).

Precarious work, including SE, has been proliferating in recent decades due to globalization, dramatic technological advances, the information revolution, and the decline of manufacturing industries (Ontario, 2012; Quinlan, 2015; Taylor, Marsh, Nicol, & Broadbent, 2017). Non-standard employment is estimated to represent more than 60% of the world's workers (ILO, 2015; Khan, MacEachen, & Dunstan, 2021). This trend is hastened by the emergence of the "gig economy", which undermines traditional employment relationships with secure jobs, predictability, advancement and stable wages (Apouey, 2019; Facey & Eakin, 2010; Lewchuk, De Wolff, King, & Polanyi, 2003; OECD, 2019). Of importance, self-employed (SE'd) workers now comprise 15% of employment in Europe (Sharp, Torp, Van Hoof, & de Boer, 2017) and 10% of the Australian workforce (Clare & Craston, 2016). In Canada, 2.9 million people (15%) were SE'd in 2018, which is double of the number in 1976 (Yssad, 2019), although this increasing trend has remained stable in Canada for the last decade (Yssad, 2019).

SE'd workers are 'chameleons' in pattern; different agencies related to employment, tax and revenue management, workers' compensation management, social security service providers, judiciaries, politicians, public policymakers, researchers, and academics tend to define SE from a variety of perspectives. The elevated divergence of views is derived from different political (e.g., political public policy), ethical (e.g., social justice), and philosophical (e.g., neoliberal agenda) grounds. According to Cohen, Hardy, and Valdez (2019), SE is not a fixed category/pattern and is contingent on changing structural relationships, which are subject to the mode of production and

economy (e.g., manufacturing, service, and digital economy, or labour market, and economic status of society) (Cohen et al., 2019). This ambiguity or complexity of classification/misclassification is reinforced by newly emerging labour market traits and sectors, such as the ICT-based labour market, globalized labour market, and neoliberal labour market. Traditionally, ‘own account’ workers, such as agriculture, forestry, fishing, retail trade, and crafts are common SE’d workers worldwide.

Similarly, SE’d workers from the sectors such as building and construction, road and transport, media (e.g., journalist and photographer), actors, musicians, and performers in the entertainment industry are also common sectors of SE. However, the non-traditional sectors for SE’d workers, such as graphic design, music composition, information technology (IT) specialist, and software developer, are recent developments due to globalization and technological advancement. These ever-changing work arrangements make it difficult to identify who is SE’d. In terms of the question of the distinction between general “business operators” and “independent contractors”, according to the Australian Bureau of Statistics (Clare & Craston, 2016), the ‘independent contractors’ are owner operators who personally provide a service for clients under a commercial contract (e.g., a courier owner-driver contracted to perform a specific delivery run). The ‘other business operators’ are different from ‘independent contractors’ in terms of two factors: they provide the service directly to the public rather than under a client contract (e.g., a taxi operator); and/or they manage others to perform the service rather than provide the service personally (e.g., an owner-operator of a trucking fleet that spends more of their time managing other drivers than driving trucks). Statistics Canada (2015) has more clear-cut distinctions in this context: owners of incorporated and unincorporated businesses, farms, and professional practices are deemed as SE’d (Yssad, 2019). The latter groups are also SE’d, though

they do not own a business, such as babysitters. Incorporated groups may be of two types: those with paid helping hands and those who do not have such helpers. Statistics Canada (2015) also includes in SE'd groups those who help other family members' businesses, farms, or professional practices without receiving salary/wages. To sum up, across all the national contexts and differences, the SE, through a broader lens, is seen as individuals who work for themselves instead of working for others like paid workers. Many may work alone, but others may own small businesses with or without employees. In this sense, there is an inevitable overlap between employers, self-employees, and employees. In short, SE is a diverse work arrangement, encompassing occupations ranging from highly paid professionals or billionaire entrepreneurs to low-skilled workers operating a business on their own. In Canada, the Law Commission of Ontario (2012) listed several precarious workers, such as women and single parents, racialized persons, newcomers to Canada, and established immigrants, temporary migrant workers, aboriginal persons, people with disabilities, youth, and undocumented workers, who may (generally many do) tend to choose SE to meet their needs that derive from traditional social roles (e.g., women as a caregiver and to earn money to support their families), immigrants choose due to lack of suitable paid jobs (LCO, 2012; Wall, 2015; Ontario, 2012).

Mounting international evidence stresses that precarious employment conditions have profound adverse effects on workers' safety, health, and wellbeing (Quinlan, 2004; Rietveld, Van Kippersluis, & Thurik, 2015; Yoon & Bernell, 2013). Several research studies have identified 'precarity' as a potential threat to public and population health (Weil, 2019, Standing, 2011; Benach, et al., 2002; Benach, et al., 2016). In the case of precarious workers (including SE'd), employment/income precarity induces numerous insecurities and uncertainties in workers' lives relating to job sustainability, family lives, and social lives (Benavides, Silva-

Peñaherrera, & Vives, 2022; Standing, 2014, 2018; Toshchenko, 2018; Weil, 2019). Mounting evidence revealed that these pressures associated with insecure work and income are associated with poorer mental and physical health outcomes (Lewchuk, Clarke, & De Wolff, 2008; Rietveld et al., 2015; Toshchenko, 2018; Benach, et.al., 2002; Benach, et al., 2016). Notwithstanding, SE'd workers are predominantly excluded from workers' compensation coverage worldwide (Quinlan, 2015), which exacerbates their precariousness, contributing to negative health and wellness outcomes (Weil, 2019, Standing, 2011).

However, there is little research on SE'd workers regarding their access to social support systems when they are not working due to injury or illness (or reduction/loss income). As such, complex interactions and responses are not captured in policies aimed at developing inclusive workers' compensation policies, improving social safety nets programs and reforming the legal / statutory frameworks. Against this backdrop, building upon three studies, this dissertation aimed to focus on the circumstances of SE'd workers by investigating how they navigate, experience, and manage their injuries/illness in the context of their work. First, through a scoping review, the study focused on SE'd workers internationally, by critically reviewing peer-reviewed literature from the advanced economies to understand how SE'd workers navigate, experience, or manage their injuries and illness when unable to work. Then, through comparative policy analysis, this study reflected on how SE'd workers access social security systems when they are not working due to injury and sickness in the two comparable countries of Canada and Australia. The third study built upon these two internationally focused studies, to examine how SE'd workers in Ontario, Canada, experienced social security systems following their illness, injury, and income reduction/loss.

1.1 Outline of literature review

I begin with the conceptualization of SE to portray the diversities of SE'd work. Following this, I orient readers to the health impacts of SE'd work. The following section focuses on policy and practice related to the social security systems available for the SE'd workers. Finally, this review concludes with a summary of the literature and identified gaps that informed this dissertation's research questions and objectives.

1.2 Self-employment: conceptualization and diversity

Diverse definitions of SE exist in the existing literature, shaped by political, cultural, and economic contexts and also different organizational and governance systems. Accordingly, this variety of nomenclature of SE appears in scientific and policy documents. Several articles described challenges regarding classifying or defining SE status (Gevaert, De Moortel, Wilkens, & Vanroelen, 2018; Grégoris, Deschamps, Salles, & Sanchez, 2017; Quinlan, 2004; Rizzo, 2002; Sharp et al., 2017). Gevaert (2018) proposed two approaches - objective and subjective – to identifying SE. The objective approach defines SE from the legal, social, and contractual framework of a given country, including salient traits, such as the absence of regular wage relationship, independence in terms of a certain degree of economic and organizational autonomy, working with or without employees, and magnitude of economic activity. Rizzo (Rizzo, 2002) adopted a similar objective, or structural, approach to defining SE. However, two articles (Quinlan, 2004; Sharp et al., 2017) discussed how difficult it is to administratively identify SE'd people, with Quinlan's article from Australia (Quinlan, 2004) elucidating how it has become common for employers to misclassify employees in order to avoid welfare and compensation coverage payments.

The second approach discussed by Gevaert (Gevaert et al., 2018) is subjective and focuses on the individualistic traits of SE'd individuals. This is attached to the discourse of the “entrepreneurial self,” implying that SE'd are people encompassing attributes associated with entrepreneurialism, including creativity, willingness to take risks, innovativeness, high intrinsic motivation, skillfulness, and the ability to recognize opportunities. Gevaert et al. (Gevaert et al., 2018) also discussed concerns with defining SE using lenses of the “entrepreneurial self” because of the risk of classifying people in neoliberal terms; a standard for which they ask, “to what extent even ‘real self-employed’ actually meet up to” (Gevaert et al., 2018). The essence of Gevaert et al.'s (Gevaert et al., 2018) analysis is that there are pull factors that render people more willing to enter SE. Discourse underlying the “entrepreneurial self” approach relates to SE more broadly and advances the question of whether this explanation can be generalized to identify SE'd workers. Authors of several articles note that pull factors are often dismissed because some people opt for SE as an alternative to unemployment or as a good fit with a congenital disability. Thus, they may be forced to engage in SE against the backdrop of gaining an identity in a society or integrating into mainstream society (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Larson & Hill, 2005; McNaughton, Symons, Light, & Parsons, 2006; Ostrow, Smith, Penney, & Shumway, 2018; Rizzo, 2002).

Now, this section paints a picture of the dimensions and diversities of SE, by debunking the relevant dominant narrative sticking to them in terms of who is SE'd, and why they choose SE. In research literature, SE'd workers have been depicted as a special group of homogenous people (Taylor et al., 2017), who possess good health, enjoy the freedom of being their own boss and flexible working hours (Hilbrecht, 2016), and do not rely on the states (e.g., social security protection), and enjoy greater job satisfaction, quality of life, and opportunity to gain work-life

balance than employees (Hilbrecht, 2016; Ostrow et al., 2018; Sharp et al., 2017; Wall, 2015). They have a reputation for taking on a high level of personal risk to grow their businesses and also of creating employment opportunities for others (Facey & Eakin, 2010; Rietveld et al., 2015; Sharp et al., 2017; Taylor et al., 2017). However, these depictions do not reflect the current reality of the SE, where a significant number of SE'd workers in a given society are compelled to undertake this type of work due to unemployment, scarcity of alternatives, and many more everyday financial hardships (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Fossen & König, 2017; Hartman, Oude Vrielink, Huirne, & Metz, 2003; McNaughton et al., 2006; Rietveld et al., 2015; Sharp et al., 2017; Vermeylen, Wilkens, Biletta, & Fromm, 2017). The diversity of income levels of SE'd workers is described by the Law Commission of Ontario (2012) who note that: “the experiences and vulnerabilities of this group range from billionaire entrepreneurs to taxi drivers working 90 hours a week simply to pay their bills and includes many people who are gaining income from SE activity alongside their main job” (LCO, 2012: 75). Therefore, SE does not always mean self-sufficiency. Instead, some SE'd workers may be precarious and at risk of poverty and social exclusion (Williams & Marlow, 2006). In all, as proposed by Rietveld et al, SE appears to be a “double-edged sword” (Rietveld et al., 2015).

1.3 Self-employment: health, illness, and wellness

Mounting international evidence stresses that the changing nature of work (including rising SE with different dimensions and contours) is having profound adverse effects on workers' safety, health, and wellbeing (Apouey, 2019; Khan & MacEachen, 2022b; Khan, MacEachen, & Dunstan, 2022; Khan et al., 2021; Khan, MacEachen, & Dunstan, 2021; Rietveld et al., 2015; Weil, 2019; Yoon & Bernell, 2013). Although SE is not a new genre of work, it is becoming internationally prominent in the growing precarious labour market due to the advancement of

communication and information technology (Quinlan, 2015; Taylor et al., 2017). It has been shown that this employment precarity induces numerous insecurities and uncertainties in workers' lives in terms of income, job sustainability, family lives, and social lives (Benavides, Silva-Peñaherrera, & Vives, 2022; Standing, 2014, 2018; Toshchenko, 2018; Weil, 2019). Mounting evidence revealed that these pressures associated with insecure work and income have profound repercussions on their health, illness, and wellbeing, and are associated with poorer mental and physical health outcomes (Lewchuk, Clarke, & De Wolff, 2008; Rietveld et al., 2015; Toshchenko, 2018). In addition to SE'd workers experiencing health effects of precarious work, several articles drew attention to physical and mental health hazards among SE'd workers in some SE'd sectors. For example, in the food and farming sectors, SE'd workers are at higher risk for certain diseases, such as musculoskeletal disorders, joint pain, sleep disorders, and digestive complaints, compared to salaried workers (Dahl, Nielsen, & Mojtabei, 2010; Rietveld et al., 2015). Research has frequently reported SE'd to be healthier than salaried workers (Bradley & Roberts, 2004; Rietveld et al., 2015; Stephan & Roesler, 2010; Tetrick, Slack, Da Silva, & Sinclair, 2000), although, as was mentioned above, low-income SE/SE can have a considerable adverse impact on workers' health and personal lives (e.g., family relations) (Dahl et al., 2010; Parslow et al., 2004; Yoon & Bernell, 2013). These health differences between regular employees and SE'd workers have been explained by the 'selection effect' (Rietveld et al., 2015) which suggests that these studies might be biased by the 'healthy worker effect' in which healthy workers might be studied or healthier individuals might self-select into self-employment (Rietveld et al., 2015).

In addition to income-based poverty, SE'd workers face particular challenges when they are unable to work due to illness or injury/disabilities, whether on a short- or long-term basis

(Weil, 2019). SE'd workers are largely excluded from automatic workers' compensation coverage across jurisdictions (Bennaars, 2019; Quinlan & Mayhew, 1999; Sharp et al., 2017; Weil, 2019). SE'd workers are often not eligible for sick pay, paid annual leave, or an old-age pension. Without these safety nets, lower-income SE'd workers may be unable to ensure their housing costs, medical expenses, food, and future security (e.g., retirement pension) in the event of an injury or illness. Compared to employees in standard employment who have access social security, SE'd workers may encounter particular stressors due to work or when out of work. However, how SE'd workers manage their health and illness when they experience sickness is not addressed in current statutory policies and protocols, including employment standards, workers' compensation policies, and social safety net programs in Ontario. In this context, these absences can perpetuate their distress and advance a central question to agencies, employers, policymakers, government stakeholders, and workers: how do the established norms and existing legislative protocols fit with the changing labour market (MacEachen, 2018), with special reference to SE?

1.4 Social security in managing health, illness, and wellness: policy and practice

The socio-economic transformations of global economies over recent decades have impacted multiple aspects of human lives, including the relations and patterns of the labour market and occupations. This transition from the Fordist mode of production to post-Fordist production systems was a momentous change in social history (Harvey, 1990) that escalated the processes of destandardization of work. Essentially, three key dimensions of standard working relations have weakened: full-time contracts (with SE, gig work), spatial arrangements (with homeworking), and temporal patterns (with temporary/part-time work (Edgell & Granter, 2019). In other words, the digital era induced working relations that are helping business organizations to shift to new

types of organization, including the so-called “gig economy”, which makes less necessary and subordinates’ workers (Todoli-Signes, 2017). These gig workers are directly connected to customers as service providers. The digital platform-based companies conduct their entire business through these workers, who are classified as self-employed (as the companies claim they have no control over them). Against this backdrop, employment laws/standards and other social security protocols formed several decades ago are facing significant challenges in dealing with a different workplace reality (Todoli-Signes, 2017). However, the interpretations of laws should be consistent with the existing social context of each period, which can effectively protect a worker who works for a living, regardless of type of work (Todoli-Signes, 2017).

Globally, legislation and policies related to supporting people when they have income or health challenges, such as workers’ compensation, employment insurance, and state pension plans, exclude SE’d workers. Indeed, Quinlan (2015) noted that SE’d workers are fully excluded from most countries’ workers’ compensation coverage policies. In some countries (e.g., Estonia, Latvia, Portugal, and Slovakia Republic), 40-50% of precarious workers are less likely than salaried workers to receive any form of income support when they are out of work due to injury, sickness, or any form of impairment (OECD, 2019). The ILO’s (2020) study of G20 countries found a social protection coverage gap for SE’d workers in many G20 countries (ILO, 2020). In this context, Spasova, Bouget, Ghailani, and Vanhercke (2019) illustrated an interesting correlation between SE’d people’s access to statutory social protection systems and types of welfare regimes in 35 European countries. They reveal that, in countries with social democratic regimes (e.g., Finland, Denmark, Iceland, Norway, Sweden) where social protections depend on ‘general taxation,’ the SE’d workers have access to all statutory schemes and are treated as salaried workers. They are also treated similarly in Liberal regime countries (e.g., Ireland and

UK) regarding social protection for self-employed workers. However, the countries whose schemes rely on ‘heavy taxations’ make distinctions between salaried and self-employed workers in terms of access to social protections. In these countries, while salaried workers can access both means-tested and insurance-based benefits, SE’d workers can access means-tested benefits, which are often low-level. Interestingly, some countries, such as the Corporatist (Austria, Belgium, and Germany) and Southern European regime (Italy, Spain), shows a variance of statutory access to social protections, including insurance schemes; these differences not only exist between SE’d and salaried, but it also exists within different SE’d patterns.

Some welfare states play a pivotal role in terms of protecting SE’d workers. For example, Finland provides a broad support system to workers regardless of employment status, in which SE’d workers are covered with earnings-related pension schemes (old-age pension, disability pension, survivors’ pension) and have access to a universal basic social security system (parental and sickness benefits, housing, and unemployment benefits) (Salonen, Koskinen, & Nummi, 2020). In the UK, although a “policy vacuum” was observed in social security policy for SE’d people in the 1980s, as of the 1990s SE’d people were included in state insurance systems and mainstream income-related benefits (Corden, 1999). Despite this, UK SE’d workers are still excluded from many benefits systems, such as income supports, housing benefits, council tax benefits, family credit, and disability working allowances (Corden, 1999). A further challenge in both the UK and Finland is that SE’d people pay too little in tax and pension contributions, leading to inadequate protection against personal risks (Salonen et al., 2020). Overall, although the welfare countries show comparatively comprehensive social protection for self-employed people in terms of access to (basic) pension and (basic) health insurance, they still have social protection coverage gaps for SE’d in countries (Conen & Schulze Buschoff, 2019; Spasova,

Bouget, Ghailani, & Vanhercke, 2017). As well, the ILO recommends measures to protect the SE'd , including preventing the false classification of workers as SE'd and reducing the 'grey zone' of vague employment status (ILO, 2020).

1.5 Summary and gaps

It is a common global challenge that SE'd workers are left out of social security regimes (Bennaars, 2019; Boeri, Giupponi, Krueger, & Machin, 2020; Fudge, 2003; Quinlan & Mayhew, 1999; Weil, 2019). Studies highlighted that SE'd workers are often not eligible for sick pay, paid annual leave, or an old-age pension (Boeri et al., 2020). Surprisingly, however, very few attempts have been made to systematically investigate how occupational injury and disease affects income and employment experiences of SE'd. Economically advanced countries, including Canada, that favor digital labour markets may promote the growth of a demographic of SE'd workers exposed to particular occupational diseases, sickness, and injury. Therefore, these jurisdictions may be considering the expansion of support for sick and injured SE'd people and related changes concerning labour laws, workers' compensation policies, and social welfare policies. Despite the growth of SE in advanced economies, little is known about how social security systems support SE'd workers when they are away from work due to sickness and injury.

Although a growing body of research examines SE'd workers' health and well-being, social mobility, and racial and gender discrimination (Lewchuk, 2017; Lewchuk et al., 2008; Wall, 2015), as well as their status as precarious workers, entrepreneurs, and small business owners, very few studies examine SE'd workers' social security and support systems that they have access to or can opt into (Taylor et al., 2017; Vermeylen et al., 2017). Though formal or statutory support systems concerning SE'd workers have received scholarly attention, their

overarching foci are based on policy-level analysis, occupational health and safety of precarious workers, entrepreneurs, and small business owners, and the census data. Very little research has shed light on the formal social support systems using a holistic perspective; that is, how SE'd experienced and navigated these support systems, following their illness or injury. Moreover, few studies have used qualitative methods to investigate the experiences of SE'd workers, and specifically, we have very thin knowledge about solo - self-employed workers in this context.

Against this backdrop, this present research attempts to fill the gaps and provide a comprehensive account of SE'd workers' experiences with the social security system in Ontario, Canada and beyond. A better understanding of the intersection of the working status of a growing population, health and illness, and accessing social security systems would be valuable for directing future research, policy, and practice to achieve a stable labour market for Canada and beyond.

1.6 Study aims and objectives

To address the gaps in the literature, this dissertation aims to focus on the circumstances of SE'd workers by investigating how they navigate, experience, and manage their injuries/illness in the context of their work. This dissertation focuses on the following research objectives:

- I. To understand how SE'd workers navigate, experience, or manage their injuries and illness when unable to work for health or impairment reasons in advanced economies through a critical review of the existing peer-reviewed literature.
- II. To reflect on how SE'd people access social support systems when they are not working due to injury and sickness by comparing two comparable countries of Canada and Australia.

- III. To examine the experience of SE'd workers in Ontario regarding how they are protected with available social security systems following illness, injury, and income reduction/loss.

1.7 Dissertation organization

This dissertation consists of six chapters, including this introduction. Chapter 2 describes the research design and methods employed in the studies. Chapters 3, 4, and 5 are composed of manuscripts published in and submitted to peer-reviewed journals that collectively achieved the research objectives.

In relation to the first research aim, chapter 3 (published 2021 in *Work*) presents the findings of a scoping review designed to identify the knowledge gaps regarding how SE'd workers manage their health, illness, or injury when unable to work or earn in advanced economies. As occupational health and safety issue of SE'd workers is understudied, this paper adds value in systematically and critically documenting health and safety issues pertinent to SE'd workers and how, within advanced economies, this growing population of the labour market is protected with existing social security systems. Chapter 4 (published 2022 in *International Journal of Environmental Research and Public Health*) presents the findings of a comparative policy analysis designed to identify the knowledge gaps regarding what social security or protections are available for SE'd workers when ill or injured in two comparable jurisdictions of Ontario (Canada) and NSW (Australia). This paper adds value to knowledge regarding social security systems for SE'd workers of two welfare states, who can exchange knowledge to improve their system because they have similar contexts (e.g., socio-political and cultural) and experiences. For example, social welfare policies differ by state/province, and each addresses occupational illness and injury via workers' compensation systems. They also have a similar penetration of the new "gig economy,"

and a similar proportion of SE'd workers, accounting for around 8-10% of the employed people in 2016 (ILO, 2020). Because of these similarities, a comparative analysis is useful for understanding actions that can support greater sustainability of labour markets and economies of their respective SE'd populations.

Chapter 5 (under review, *BMC Public Health*) addressed the experiences of solo SE'd workers in Ontario, Canada, by collecting workers' narratives regarding how the state-sponsored social security systems protected them following illness, injury, and income reduction/loss. Based on the government census and policy reports, there was a limited understanding of the practices and experiences of SE'd workers with formal social security systems in Canada. This study adds value to knowledge gaps by providing comprehensive and robust perspectives of SE'd people using qualitative empirical data. Chapter 6 summarizes key findings from the three findings chapters, followed by identifying and providing recommendations, policy implications, strengths and weaknesses, and directions for future research.

Chapter 2

Methodology

This chapter describes the methodological frameworks employed to conduct the studies mentioned above. This dissertation is the outcome of ‘multimethod qualitative research’ (Creswell, 2015), which combines two document studies (e.g., scoping review and comparative policy analysis) and an empirical qualitative study (e.g., thematic narrative analysis). This chapter begins with descriptions of methods used in the scoping review. Then this chapter describes the method used in the comparative policy analysis. Finally, this chapter focuses on the detailed design of the narrative thematic analysis study by detailing the sample, recruitment, data collection and analysis, and ethical considerations. In all, this chapter provides a full description of the method used in chapters 3, 4, and 5.

2.1 Scoping Review: a critical narrative synthesis

For Chapter 3, I conducted a scoping review to map out and identify the extent, range, and nature of research activity based on my research question with a view to identifying research gaps in the existing literature. This research was initiated with the broader aim of opening the gate of ‘my field’ of research in an area of ‘precarious labour market’ or ‘future work’. I chose to conduct scoping review instead of a systematic review because scoping reviews focus on broader topics where many different study designs might be applicable. In contrast, systematic reviews shed light on a well-defined question relating to the research design that can be identified in advance (Arksey & O'Malley, 2005). In addition, the design of my scoping review was inspired and reflected by the critical interpretive synthesis, following Dixon-Woods et al. (2006). Unlike a conventional systematic review, a critical interpretive review involves an inductive interpretive synthesis that moves beyond aggregative summaries and enables reviews to build theory rooted

in the empirical evidence under study (Dixon-Woods et al., 2006). This approach allowed me to appraise and critique a complex body of literature, irrespective of method, found by a systematic search. This method is particularly appropriate when there is a large body of diverse evidence on a subject (Dixon-Woods et al., 2006; Hudon, Lippel, & MacEachen, 2019).

I developed the research question with the help of my supervisor, and the search was performed in January and February 2019. The choice of keywords and the search strategy were made in collaboration with a University of Waterloo librarian. To be included in this study, articles needed to focus on: a) self-employment (either solo or with employees); b) sickness, injury or disability; and c) policy, insurance or other support systems relating to the inability to work or diminished capacity to work. As well, the articles had to focus on advanced economies as we sought comparable social security systems across the studies.

The aim was to identify gaps of social security systems for SE'd workers in advanced welfare economies. The articles had to be published in a peer-reviewed journal in English as I had no language proficiency other than English and Bangla. Further, articles had to be published in 2001 or later. I chose the year of 2001 as starting point to be 10 years period for including articles because the great global economic recession in 2007-2008 had profound impacts on the labour market, entrepreneurship, welfare systems, and social security systems of advanced economies. All of the important decisions, including inclusion/exclusion criteria, databases, and search terms were taken by consulting with my supervisor. Five databases were searched: Scopus, PsycINFO, CINAHL, PubMed, and ABI/INFO. Scopus is a popular multidisciplinary database covering humanities, social sciences, health, business, and sciences. As my research question was related to labour market, small business, entrepreneurship, employment, ABI/INFO was chosen because this database mainly covers the research publication of the business,

economics, and management sciences. In addition, the PsycINFO, CINAHL, and PubMed were searched, as they cover multidisciplinary research, including social sciences, behavioral sciences, public and population health sciences. The database search yielded 1623 articles. After removing duplicates (642), 981 articles were screened by examining titles and abstracts. Inter-rater reliability among the three reviewers (the lead author and two colleagues) was established through a series of trials until 95% agreement was reached. A total of 766 articles were excluded after reading titles and abstracts and a further 197 articles after reading the full texts. Our final sample included 18 relevant articles.

Data extraction and data synthesis from the final sample of articles were performed by following Dixon-Woods and colleagues' processes of data extraction, and data synthesis (Dixon-Woods et al., 2006; Hudon et al., 2019). As we included only peer-reviewed articles, we did not need to further assess the quality of articles; so, all were included in the review and analysis to facilitate understanding of the topic under study. Thus, our systematic data extraction focused on demographic information, research questions, study aims, year of publication, place of publication, methods, main results, important findings, sector of SE, work-related and non-work-related injury/disability, and types of SE (full time or part-time). This approach involved analytical exchanges between the team members and resulted in a comprehensive overview of the final articles.

In terms of data synthesis, a process of constant comparison and negative case analysis guided the synthesis, which involved assembling issues and grouping topics under common concepts, and a reciprocal and iterative process to detect similar and analogous findings. These processes are detailed in the chapter 3. Thus, data were synthesized by recurring concepts, which ultimately contributed to themes. Three phases of synthesis led to the final themes. First, an

open-coding system was used to analyze the articles. This helped us to reflect on the overall patterns of our data, including identifying the repeated and common themes. In the second phase, open codes were re-reviewed and focused codes were generated. A focused code is a pattern or category that groups together two or more open codes. Our focused codes then led to six major themes, together with sub-themes, focused on issues around SE, relative benefits and barriers, dynamics of illness, injury, and disability, formal and informal health management support systems, sick leave and health insurance, and occupational health services and rehabilitation. In these processes, I met and consulted with my supervisor on a regular basis to discuss ongoing analyses of findings and to challenge preliminary interpretations, which facilitated thorough interpretations of the findings. Finally, I met virtually with the committee members to update them on findings of the scoping review and manuscript.

To sum up, the process of this review involved several stages, including identifying the research question, identifying relevant studies, study selection, charting the data, collating, summarizing, and reporting the data.

2.2 Interpretive policy analysis

The manuscript presented in chapter 4 examined how SE'd people access social support systems when they are not working due to injury and sickness in the two comparable countries of Canada and Australia. An 'interpretive policy analyses was adopted (Yanow, 2000) as a methodological framework, which is a widely used approach for policy analysis or policy research (Duncan et al., 2015; Prasad, 2002; Yanow, 2007) and involves analyzing public policies, as a form of text or representation of social actions. This approach focuses on contexts and meaning-making processes that are situation-specific instead of focusing on general laws or universal principles (Yanow,

2007). This approach then helps us to interpret and establish relationships between different issues, develop arguments, and eventually draw a cogent conclusion.

This project was funded by the ‘Mitacs Globalink Research Award-Abroad’, that required a supervisor in my proposed study from their member countries. Accordingly, my supervisor connected me with Dr. Debra Dunstan, a professor from the University of New England, Australia, who is an expert in work disability policy, and occupational health and safety. This project was a long journey, that started in summer 2019 and ended in Winter 2022. I encountered a substantial number of challenges in terms of understanding the social security systems, employment standards, workers’ compensations systems, welfare systems, disability policy, and many more political and cultural context for two countries.

We took the cases of Canada and Australia, as both countries have key similarities in terms of comparable economies and liberal welfare states (Bambra, 2007). As well, both have social welfare policies that differ by state/province and each address occupational illness and injury via workers’ compensation systems. They also have a similar penetration of the new “gig economy”, and the similar proportion of SE’d workers, accounting around 8-10% in the employed people in 2016 (ILO, 2020). Because of these similarities, comparative analysis is useful for understanding actions that can support greater sustainability of labour markets and economies of their respective SE’d populations.

I collected and analysed a range of texts related to work disability policy and practice in Canada and Australia. I focused on ‘work disability policy’, which is diverse policies connected to workers’ compensation, sickness and disability policy, and the legal and regulatory protocols and frameworks of social security (MacEachen, 2018). Methodologically, this study is connected to the study presented in the chapter 3 (scoping review) in terms of document search and

selection mode because I utilized the final sample (n=18) from the scoping review in this policy analysis, along with a wide range of grey literature, found up to publication of the manuscript in 2022. In addition to this search results, I searched the SCOPUS databases separately (August 2019), focusing on only Australia and Canada, having used these key terms: Self employ, independent operator, 'gig' Work, 'gig' employ, entrepreneur, employment without employ, independent contract, dependent contract, own account self-employ, solo self employ, solo self-employ, stable own account self-employ, own boss employ, own boss work, unincorporated self-employ, dependent self-employ, economically dependent self-employ, return to work, RTW, work reintegration, work disability policy, workers rehabilitate, occupational safety regulations, social safety net programs, Australia, Ontario, Canada. Here, of 93 documents identified, three articles were relevant to our study.

Apart from using the established databases, the search for documents/grey literature was performed in several phases. In this context, I used Google because it is a popular tool for seeking specific information and relevant outcomes for a typical query (Behling & Harvey, 2015). However, I was aware that Google sometimes provides unreliable and unnecessary information/documents. Thus, I searched 'Google scholar' and 'google.com' separately using refined and specific key terms related to Canada, Ontario, Australia, and NSW, including SE in Canada/Australia, SE in Ontario/NSW, workers' compensation in Canada/Australia, employment insurance in Canada/Ontario, personal accident insurance in NSW, in order to get more specific peer-reviewed articles and grey literature related to Canada and Australia. As a result, official data, legal, and policy texts from both countries were used (i.e., material generated by governments and agencies).

In addition, I visited libraries of the two universities-the University of Waterloo in Canada and the University of New England in Australia. Visiting library, I accessed old press releases, parliamentary documents, some documents on treaties, and documents related to how social security systems, employment standards, welfare system evolved in these jurisdictions. This understanding was important to me because these documents comprise historical and political evidence, and these observations gave me comprehensive insight on a process as Canada and Australia developed as welfare states. In a similar vein, observations and commentaries (e.g., updated statistics) from global agencies such as the World Health Organization, the World Bank, and the International Labour Organisation were utilized. In this context, I underlined on the overall relevance of the articles and documents to be included in the review and analysis to facilitating understanding of the topic under study.

Once relevant documents were assembled, I performed data extraction and data synthesis (in order to obtain major themes) from both sources of articles and documents in a similar method of scoping review (chapter 3), mentioned in the previous section. Systematic data extraction focused on demographic information, authors, major focus, year of publication, place of publication, methods, important findings, and sector of SE. This approach resulted in a comprehensive overview of the final articles and facilitated analytical exchanges between the team members.

2.3 Narrative analysis

This study explored the experiences (Creswell & Creswell, 2017) of SE'd workers in terms of how they are protected by available social security systems following illness, injury, and income reduction/loss. As this study analyzed their narratives and experiences regarding navigating the tension between running their work and managing their health and illness, this study employed a

qualitative approach rather than aiming to show inferences from numerical data, causal relationships, and predictions. This approach examines the processes wherein the world is understood or created by people's lives, behavior, and meaningful interactions (Strauss & Corbin, 1990). Thus, qualitative research arrives at findings from real-world settings that unfold naturally (Patton, 2001). Based on the interpretative paradigm, I tried to understand the subjective and socio-culturally constructed meaning of the participants' experience regarding their activities to manage their health and illness. Inspired by the interpretative perspective, my qualitative research approach involved studying meaning-making processes of social reality, aiming to recognize how people understand, experience, interpret, and create the social world (Gibson & Brown, 2009). In other words, this approach is pragmatic, interpretative, and grounded in the living experiences of people, which helps to understand how social experiences are created and given meaning (Marshall & Gretchen, 2006; Yilmaz, 2013).

As mentioned above, the study collected narratives of SE'd workers because a chronological life story is important in this study because people are not self-employed by birth; some people are forced to enter due to unemployment, while for others, it is by choice. So why they chose SE was important to derive the answer to my research question, which are transitions of the told stories (Frost et al., 2010). In addition, as it is a chronological story, it would potentially help to understand the nuanced dynamics of the interconnected (and intersectional) unexplored working and personal lives of SE'd workers. As storytelling is a natural way of recounting experiences and recollections, creating a reasonable order out of experiences might help to solicit the untold stories about the circumstances of how and why they entered into SE'd, how they are supported when they are unable to work, how they manage their work when they are unable to work due to sickness and injury, how they reflect on the roles of existing statutory

(government - sponsored supports) social security systems. Thus, the narratives the SE'd workers provide may facilitate a practical solution to the fundamental problems they face in their everyday lives (Moen, 2006). As technical aspects of the methodology employed in this study are presented in chapter 5, the following sections shed light on the reflective aspects and rationale on some major decisions related to methodology of this study.

2.3.1 Participants, Sampling, and Recruitment

The participants in this study included solo SE'd workers (Table 1), who were purposively sampled. The demography of the participants was as follows: 54 % male (46% female), average age 36 years (highest: 62, lowest: 21), the highest and lowest family income /year: 200K and <25K, experiences of illness/injury: mental and physical health issue: 63% and 17% respectively (both: 21%).

A purposive sampling technique was selected because it enabled me to get participants who would provide sufficient data to meet my research objectives. Purposive sampling is an approach frequently used in qualitative research. It allows us to identify information-rich cases that provide in-depth insight into the central issues of the research and questions under study (Patton, 2001). In this study, we purposively sampled for:

- Individuals who were working as SE'd as the main source of income.
- Individuals who were more than 18 years old.
- Living and working legally in Ontario.
- and who, while SE'd, experienced physical or mental illnesses or injury (work-related or not), and any duration.
- relatively equal numbers of men and women in the sample.

As this study aimed to identify potential policy implications regarding SE, in particular for the Canadian labour market, these solo SE'd workers provided insightful and operational ideas from their own living experiences. My ultimate aim was to understand solo SE'd workers' experiences rather than to test a hypothesis; hence, my sample was heterogeneous rather than representative. A heterogeneous sample was needed because my population of SE'd workers are diverse groups in terms of sector of work, part/fulltime SE, gender, age, gig SE/traditional SE, types of illness/injury, immigration/citizenship status and many more (Table 1). I employed purposive sampling techniques to recruit participants with different socio-economic and demographic background (e.g., income, gender, age, and type of SE'd work). I stopped interviewing when I felt I had learned adequate information to answer my research questions in terms of heterogeneous participants; therefore, an adequate sample size was my target (Charmaz, 2006). Determining the sample size in this study was mainly guided by two principles: appropriateness and adequacy. This study fulfilled the 'appropriateness' by recruiting those participants who best represented the research topics and must be experts in the phenomena of interest. Adequacy was confirmed in terms of gaining sufficient answers to the research questions and when the depth and breadth of the information were achieved (Malterud, Siersma, & Guassora, 2016; Morse, 2015; O'reilly & Parker, 2013; Sandelowski, 1995). Thus, 24 participants were interviewed in this study, which is in line with suggestions by seasoned qualitative researchers (Charmaz, 2006; Creswell & Poth, 2016; Green & Thorogood, 2018).

Table 1 Participant characteristics								
Pseudonym	Gender	Age	Education	Type of SE'd work	Type of illness/injury (any duration)	City	Country of origin	Family Income (CAD)/ Yr.
1.Habibur	M	22	College diploma	Uber Driver	Depression Leg fracture	Toronto	Bangladesh	50K
2.Tasmina	F	32	College diploma	Home childcare	Flue, fever	Thorold	Bangladesh	50K
3.Emma	F	36	Undergraduate degree	Catering	Pneumonia	Brampton	Canada	25-50K
4.Mamun	M	45	Graduate degree	IT consultant	Spinal Injury	Toronto	Bangladesh	45K
5.Zayan	M	22	College diploma	Food delivery: Door dash Skip dish	Breaking ankle	Toronto	Canada	100K
6.Ruby	F	42-47	Graduate degree	Rotary Public commissioner	Depression Stress, Obesity	Richmond Hill	Canada	25-50K
7.Patrick	M	62	Undergraduate degree	Actor, catering	Knee injury	Ottawa	Canada	50-100K
8.Sarah	F	54	Graduate degree	Property manager	Stomach pain	Toronto	Canada	50-100K
9.Sumon	M	22	College diploma	Food Delivery	Breaking right hand	Toronto	Bangladesh	25-50K
10.Mary	F	46	High school	Fashion design	Sjogren syndrome	Toronto	Canada	Under 25K
11.Faria	F	21	Undergraduate degree	Beautician	ADHD	Waterloo	Srilanka	25-50K
12.Remi	F	45	College diploma	Financial Advisor	Asthma Covid-19	Waterloo	Canada	50-100K
13.Sarika	F	50	High school	Cleaner	Sleep disorder	Waterloo	Canada	25-50K
14.Scott	M	50	College diploma	Construction	Arthritis	Waterloo	Canada	50-100K
15.Ander	M	25	Postgraduate diploma	Online business/ E-commerce	Anxiety, stress, depression	Kitchener	India	25-50K
16. Bob	M	33	College diploma	Singer, DJ	Anxiety, stress Back pain	Kitchener	Canada	25-50K
17.Jane	F	33	Undergraduate degree	Actor, Writer	Nervous system disorder	Ottawa	Canada	130K
18.Jimmy	M	35	Graduate degree	Data analyst	Regular migran	Ottawa	Canada	200K
19 Paul	M	32	College diploma	Electrician	Backbone Injury	Brackford	Canada	50K
20. Ayla	F	35	College diploma	Grocery business	Cardiology ADHD	Ottawa	Canada	50-100K
21.Miller	M	24	Undergraduate degree	Music trainer, musician	Leg injury	waterloo	Russia	50K
22.Mila	F	35	Graduate degree	Tailoring	Backpain Fatigue	Waterloo	Nigeria	50-100K

23.Arnob	M	30	Graduate degree	Debate /public speaking trainer	Anxiety, stress, burn injury, depression,	Toronto	Bangladesh	25-50K
24.Pablo	F	26	College diploma	Financial advisor	Stress	Waterloo	Ghana	25-50K

2.3.2 Data Collection

Solo SE'd workers' narratives, semi-structured in-depth interviews were collected using online digital platforms (e.g., Zoom audio/video conference, WhatsApp, Facebook Messenger) from January to July 2021 to understand how they were protected by social security systems, following illness, sickness, income reduction/loss. As this study involves soliciting solo SE'd workers' personal and living experiences (e.g., some of them are culturally sensitive, such as income, sickness, personal family lives, and many more), the in-depth interview as a technique of data collection was selected to give participants a space to share their life stories. This technique helped me to conduct intensive individual interviews with a minimum number of participants to explore their particular ideas, co-creating meaning by reconstructing perceptions, stories, and experiences about what they encountered regarding health, sickness, access to health care, access to income replacement benefits, and return to work after sickness and injury with a focus on social security.

Due to the Covid-19 pandemic, I had to move my fieldwork online because social distancing policies were going on in Ontario, Canada, and this method was widely used to collect qualitative data during the pandemic (Khan & MacEachen, 2022a). In terms of mode of conferencing, it was mixed; around 50% were videoconferencing (remaining 50 % were with audio call only). Participants were given the freedom to choose the approach with which they were comfortable. These techniques helped us to recruit Ontario-wide participants. The interviews

lasted from 50 to 80 minutes. Participants were given an honorarium of \$40 in appreciation of their time. One of the prominent challenges of online interviews was “no show - up” during the scheduled interview time (Khan, 2022), which I encountered with a substantial number of participants during data collection. For example, a participant, who was a SE’d painter, changed her time five times in a day, while I was waiting overnight (due to Canada-Bangladesh time differences). She eventually cancelled the interview just five minutes before the scheduled time because she had an offer of a painting job. Therefore, in addition to online nature of interview, it is possible that the nature of work of this target population caused many absences. During the interviews, I kept a notebook in order to take necessary and meaningful notes. For example, I took notes using my own reflections and insights about an interesting context and silent feelings for a particular statement, that I used during my data analysis.

A semi-structured interview guide was developed, which was informed by literature and discussion with the research team/committee. Generally, questions broadly look at key topics central to the research focus, while probes explore these topics in detail to understand the participant’s perspectives. For instance, in the interview guideline, a question might be broadly asked, “Tell me about your experience; what do you usually do when you cannot work due to sickness” while probes may be asked from the response to elicit more detail, such as “How was it challenging?” The interviews were commenced with a preamble to the research topic and central focus, reaffirming consent, and then moved on to an icebreaker question related to the participant’s everyday lives, which set the scene for the interview, allowing participants to ‘open up from the get-go and giving the interview the opportunity to adapt my approach to suit the participant (Namageyo-Funa et al., 2014; Ritchie, Lewis, Nicholls, & Ormston, 2013). In terms of government-provided support systems/programs, participants were asked about how they managed

their work, health, and family affairs, following illness, injury, and income loss/reduction. In this context, to ensure an informed discussion, the interviewer informed the participants (in the case they missed/forgot to bring any programs) orally of Ontario social security programs available to SE'd and asked for their experiences (those they dealt with) and views (those they did not know about or did not deal with) of these programs.

2.3.3 Data management

All interview recordings were transcribed verbatim to separate Word documents, which were encrypted and protected with a password to ensure confidentiality on the University of Waterloo server. Then, I reread the transcripts while listening to audio recordings to recreate the interview while also providing the opportunity to add on non-verbal interview data (e.g., pauses, laughing, changes in pitch) and verify that the transcripts are as accurate as possible. The dataset was analyzed using NVivo qualitative software.

2.3.4 Data analysis: narrative thematic analytical approach (NTAA)

Following Reissman's (2008) Narrative Thematic Analytical Approach (NTAA), I sought to understand in detail the experiences and practices of SE'd workers as told stories (narratives) pertinent to accessing social security systems following illness and injury (Held et al., 2019; Ronkainen, Watkins, & Ryba, 2016). In this context, unlike another type of narrative analysis, TNAA is suitable because it focuses on "what content a narrative communicates [what is told or spoken], rather than precisely how a narrative is structured to make points" (Reissman, 2008, p.81). Of importance, data analysis followed a mixing of deductive and inductive coding. A codebook of 10 codes was created in this context. These codes were predetermined codes from the previous literature, and research objectives/questions reflected issues recognized or assumed during interviews by me. Using Nvivo, the data sets were re-arranged in terms of the codebook. These

codes helped us reflect on the overall patterns of the data, including identifying common themes that yield many descriptive themes. I then (re)viewed these descriptive themes again and developed more analytical themes by grouping them together, moving back and forth between descriptive and analytical themes, using a word document. This facilitated a higher level of abstraction and theorizing the interpretation of the research findings and the function they serve. Thus, I found some analytical and abstract themes through several reviews and re-reviews of the long list of (descriptive) themes through which the major /key themes emerged. Thus, my analysis led to the development of 4 four key major themes and several sub-themes (Table 2) based on the codes mentioned above, which are highlighted in this dissertation in chapter 5.

Table 2 Themes in the data

		Social Security System	
	Key major themes		Sub-themes
1	Policy-practice (mis)matching	1	Knowledge gaps
		2	Partially aware
		3	Misinformation
		4	Discretion
		5	Defective Medicare-OHIP
		6	Heavy reliance on OHIP
		7	Partial / limited / just basic coverage
		8	Out of pocket
		9	Unaffordable premiums -EISB
		10	Loan or benefit programs?
		11	Opt into/out: mixed views
		12	The red tape of bureaucracy
		13	Losing trust in government systems
		14	Unrealistic and overwhelming criteria-OW
		15	Emergency income support: a vague idea
		16	Private insurance – who prefer
		17	Affordability: neither govt nor private
		18	Group rather than an individual plan
		19	Eligibility criteria out of reach
		20	reduced income-WSIB
		21	Unfair benefit calculation method
2	Navigating Covid Emergency Response Benefit	22	Most successful
		23	Timely and effective
		24	Recognizing SE'd worker

- | | | | |
|---|---|----|---|
| | | 25 | Mismanagement: vague inclusion criteria |
| | | 26 | Unsustainable way out |
| | | 27 | Moral hazards |
| 3 | Equity/fair treatment: a call for restorative justice | 28 | Victim of social injustice |
| | | 29 | Right to fair treatment by benefit |
| | | 30 | Right to housing/food |
| | | 31 | Paid sick leave is justice for SE'd |
| | | 32 | Discarded overgeneralization |
| 4 | Compromise for a decent life: a potential threat to health and wellness | 33 | Underrepresented vulnerability |
| | | 34 | Forced choice – medicine or grocery |
| | | 35 | Beyond capacity- private insurance |
| | | 36 | Food insecurity |
| | | 37 | Cutting funds on health benefits |
| | | 38 | Reliance on credit card loan |
| | | 39 | Live with debilitating pain |

2.3.5 Ethical considerations

This study received ethics approval from the University of Waterloo Research Ethics Board (ORE # 42202 on January 7, 2021). A number of factors were required to successfully implement this research, including informed consent, confidentiality and anonymity, and safeguards against potential risks from participating.

In the beginning, informed consent was obtained from the participants – solo SE'd workers that met eligibility and agreed to participate. Moreover, I verbally explained the ins and outs of informed consent to each participant before beginning the discussion, making sure that they understood their rights, including their right to participate and to withdraw during an interview at any time without any penalty. In a nutshell, the participants were briefed about the research topic and informed that they would not be compelled to continue the interview or answer any questions they might feel uncomfortable with.

In terms of privacy, anonymity, and confidentiality, I assured them that any identifiers, including name would not be used directly. If a participant used any direct names, their

pseudonyms were used during transcriptions. I also used pseudonyms for each participant. I tried to make sure to protect their anonymity so that they could feel comfortable and safe. Participants were also informed about the research's confidentiality and that the findings would be used for academic purposes only. All audio recordings and transcripts were anonymized with assigned pseudonyms and stored on a secure drive at the University of Waterloo, accessible only by my supervisor, Dr. Ellen MacEachen. As per REB guidelines, these electronic files can be retained for up to seven years, after which they will be destroyed. All ethical concerns were reiterated in the information and consent form and discussed with participants prior to the interview. Once the interview was completed, participants were given a feedback letter (Appendix) to thank them for participating. It includes my contact details should they have further questions and/or concerns or would like to contact me for a copy of the research findings once completed.

To sum up, this chapter provides an account on the methods employed to conduct three studies - scoping review, policy analysis, and narrative analysis, detailing the rationales and reflections for the undertakings taken in order to conduct these studies.

Chapter 3

Self-employment, work and health: a critical narrative review

Status: Published

Khan, T. H., MacEachen, E., Hopwood, P., & Goyal, J. (2021). Self-employment, work and health: A critical narrative review. *Work (Reading, Mass.)*, 70(3), 945–957.
<https://doi.org/10.3233/WOR-213614>.

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Overview

Background: Self-employment (SE) is a growing precarious and non-standard work arrangement internationally. Economically advanced countries that favor digital labour markets may be promoting the growth of a demographic of self-employed (SE'd) workers who are exposed to particular occupational diseases, sickness, and injury. However, little is known about how SE'd workers are supported when they are unable to work due to illness, injury, and disability.

Objective: Our objective was to critically review peer-reviewed literature focusing on advanced economies to understand how SE'd workers navigate, experience, or manage their injuries and illness when unable to work.

Methods: Using a critical interpretive lens, a systematic search was conducted of five databases. The search yielded 18 relevant articles, which were critically examined and synthesized.

Results: Five major themes emerged from the review: (i) conceptualizing SE; (ii) double-edged sword; (iii) dynamics of illness, injury, and disability; (iv) formal and informal health management support systems; and (v) occupational health services and rehabilitation.

Conclusion: We find a lack of research distinguishing the work and health needs of different kinds of SE'd workers, taking into consideration class, gender, sector, and gig workers. Many articles noted poor social security system supports. Drawing on a social justice lens, we argue that SE'd workers make significant contributions to economies and are deserving of support from social security systems when ill or injured.

Keywords: precarious employment, work disability, social supports, self-employment, occupational health

3.1 Introduction

Globally, self-employment (SE) has emerged as a key non-standard, precarious, and contingent work relationship (Ontario, 2012; Wall, 2015). In the current digital age, SE appears in configurations and contours that differ from the labour market of 50 years ago and is part of a ‘paradigm shift’ from manufacturing/managerial capitalism to entrepreneurial capitalism (Bögenhold, 2019; Weil, 2019). In Canada, for example, 2.9 million people were self-employed (SE’d) in 2018 and this is more than double those SE’d in 1976 (Yssad, 2019). Overall, SE’d workers account for 15% of employment in Canada (Yssad, 2019). Similarly, 10% of the Australian workforce is SE’d (Clare & Craston, 2016), and SE’d workers now comprise 15% of the workforce in Europe (Sharp, Torp, Van Hoof, & de Boer, 2017). This SE trend is accelerating due to the rising ‘gig’ economy and the undermining of the former employment structures that provided secure, lifetime jobs with predictable advancement and stable pay (Apouey, 2019; Facey & Eakin, 2010; OECD, 2019).

In research literature, SE’d workers have been depicted as a special group of homogenous people (Nordenmark, Vinberg, & Strandh, 2012; Taylor, Marsh, Nicol, & Broadbent, 2017) who possess good health, enjoy the freedom of being their own boss and having flexible working hours, do not rely on the state [e.g., social security protection], and enjoy greater job satisfaction, quality of life, and opportunity to gain work-life balance than employees (Kautonen, Kibler, & Minniti, 2017; Sharp et al., 2017). They have a reputation for taking on a high level of personal risk to grow their businesses and also of creating employment opportunities for others (Facey & Eakin, 2010; Nordenmark, Hagqvist, & Vinberg, 2019; Rietveld, Van Kippersluis, & Thurik, 2015; Sharp et al., 2017; Taylor et al., 2017). However, these depictions do not reflect the recent

reality of SE (Bujacz, Eib, & Toivanen, 2019; Sharp et al., 2017). A murky, or dark side of the labour market, exists where a significant number of SE'd workers, both in high and low-income economies, are compelled to undertake this type of work due to unemployment, scarcity of alternatives, and other financial hardships (Ontario, 2012; Sharp et al., 2017; Taylor et al., 2017; Vermeulen, Wilkens, Biletta, & Fromm, 2017). The diversity of SE'd workers is described by the Law Commission of Ontario (2012) who note that: “the experiences and vulnerabilities of this group range from billionaire entrepreneurs to taxi drivers working 90 hours a week simply to pay their bills and includes many people who are gaining income from SE activity alongside their main job” (Ontario, 2012, p. 75). Therefore, SE does not always mean self-sufficiency. Rather, some SE'd workers can be considered precariously employed as they earn low incomes and are at risk of poverty and social exclusion (Ontario, 2012).

Mounting international evidence stresses that the changing nature of work is having profound adverse effects on workers' safety, health, and wellbeing (Apouey, 2019; Fudge, 2003; Quinlan, 1999; Rietveld et al., 2015; Weil, 2019; Yoon & Bernell, 2013). For example, SE'd workers are at higher risk for certain diseases such as musculoskeletal disorders, joint pain, sleep disorders, and digestive complaints, compared to salaried workers (Dahl, Nielsen, & Mojtabei, 2010; Rietveld et al., 2015; Stephan & Roesler, 2010). These risks stems from their job nature, for example, SE'd people encounter a higher level of job demands and workloads , self-exploitation and absence of social protections, such as lack of health insurance, elevated anxiety about financial matters (Rietveld et al., 2015).

As well, SE'd workers are largely excluded from workers' compensation coverage across jurisdictions (Bennaars, 2019; Boeri, Giupponi, Krueger, & Machin, 2020; Fudge, 2003; Quinlan & Mayhew, 1999; Weil, 2019). SE'd workers are often not eligible for sick pay, paid annual

leave, or an old-age pension (Boeri et al., 2020). Without these safety nets, lower-income SE'd workers may be unable to ensure their housing costs, medical expenses, food, and future security (e.g., retirement pension). They may encounter particular stressors due to work, or when out of work, as compared with employees in standard employment. In addition to income-based poverty, SE'd workers face particular challenges when they are unable to work due to illness or injury/disabilities, whether on a short- or long-term basis (Weil, 2019). Surprisingly, very few attempts have been made to systematically investigate how these new forms of employment, including other forms of precarious employment, impact occupational injury and diseases. Economically advanced countries that favor digital labour markets may be promoting the growth of a demographic of SE'd workers who are exposed to particular occupational diseases, sickness, and injury. Therefore, these jurisdictions may be considering the expansion of supports for sick and injured SE'd people and related changes in relation to labour laws, workers' compensation policies, and social welfare policies. Despite the growth of SE in advanced economies, little is known how, and to what extent, social security systems support SE'd workers when they are away from work due to sickness and injury. Our overarching objective in this critical review was to understand how SE'd workers navigate, experience, or manage their injuries and illness when unable to work for health or impairment reasons.

3.2 Materials and methods

We conducted a critical interpretive review of peer-reviewed scientific literature (Dixon-Woods et al., 2006). Unlike a conventional systematic review, a critical interpretive review involves inductive interpretive synthesis that moves beyond aggregative summaries and enables reviews to build theory rooted in the empirical evidence under study (Dixon-Woods et al., 2006). This approach allowed us to appraise and critique a complex body of literature, irrespective of

method, found by a systematic search. This method is particularly appropriate when there is a large body of diverse evidence on a subject (Dixon-Woods et al., 2006; Hudon, Lippel, & MacEachen, 2019).

Searching the literature

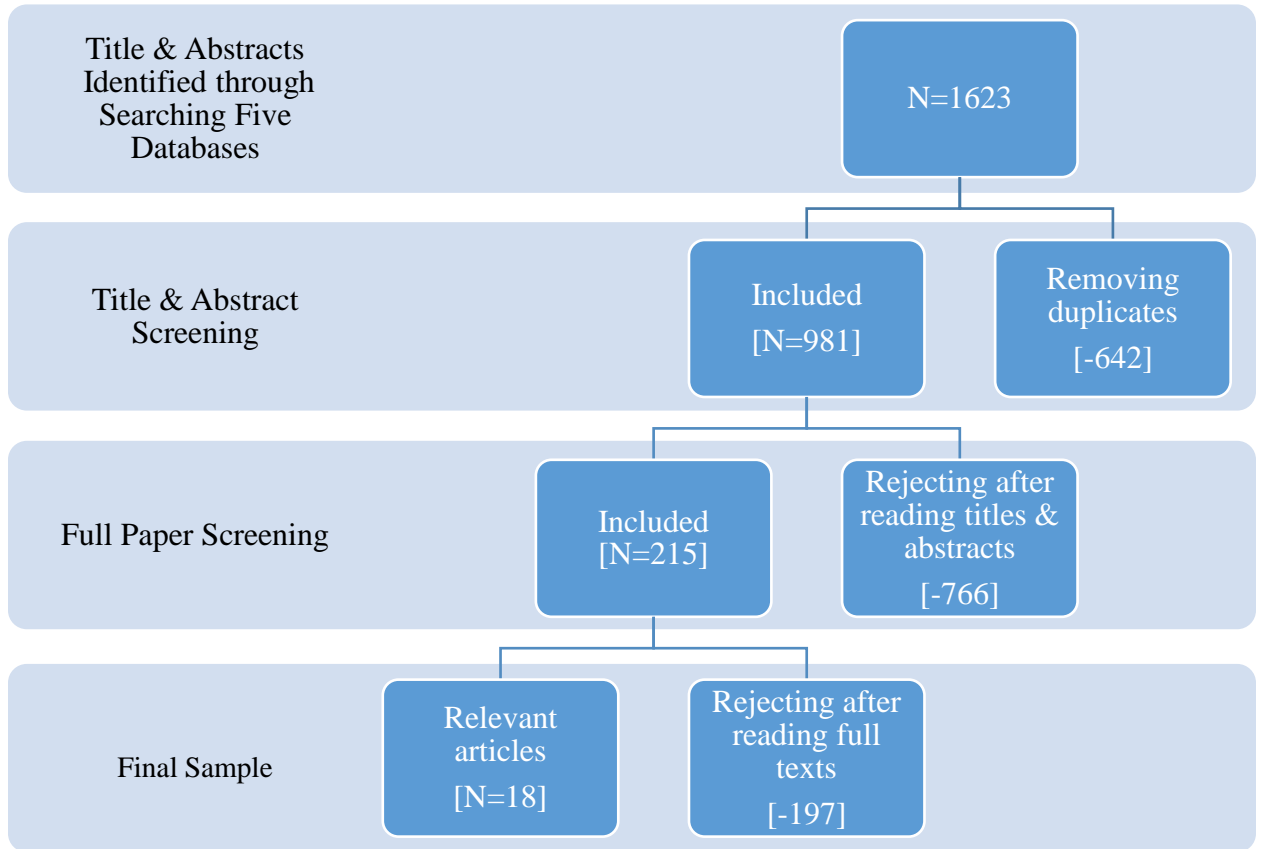
Five databases were searched: Scopus, PsycINFO, CINAHL, PubMed, and ABI/INFO. The search was performed in January and February 2019. The choice of keywords and the search strategy were made in collaboration with a University of Waterloo librarian. Table I details the database search terms. To be included in this study, articles needed to focus on: 1) self-employment (either solo or with employees); 2) sickness, injury or disability; and 3) policy, insurance or other support systems relating to the inability to work or diminished capacity to work. As well, the articles had to focus on economically advanced economies as we sought comparable social security systems across the studies. Finally, articles had to be published in English in a peer-reviewed journal in 2001 or later.

TABLE I: SEARCH TERMS

Category	Keywords used in the search
Self-employment	“Self employ*” OR “Self-employ*” OR “Independent Operator ” OR “Gig Work*” OR “Gig Employ*” OR Entrepreneur OR “Employment Without Employ*” OR “Independent Contract*” OR “Dependent Contract*” OR “Disguised Work*” OR “Bogus Work*” OR “False Work*” OR “Own Account Self-employ*” OR “Solo Self employ*” OR “Solo Self-employ*” OR “Stable Own Account Self-employ*” OR “Own Boss Employ*” OR “Own Boss Work*” OR “Unincorporated Self employ*” OR “Dependent Self Employ*” OR “Economically Dependent Self-employ*”
Health Status	Health OR Injury OR Disability OR Impairment OR Stress OR “Well-being*” OR Wellness OR “Long and Irregular Working*” OR “Flexible Working Schedule*” OR “Work-life Balance” OR “Access to Care” OR “Access to Health Care” OR “Body Mass Index” OR “Physical Health” OR “Mental Health” OR Diabetes OR “High Blood Pressure” OR “High Cholesterol” OR Arthritis
Support systems	“Return to Work” OR RTW OR “Work Reintegration” OR “Sick Leave*” OR Pension* OR Insurance OR “Vocational Rehabilitation” OR “Disability Insurance” OR “Sickness Absence” OR “Retirement Disability Pension” OR “Public Health Insurance”

The database search yielded 1623 articles (See Figure 1). After removing duplicates (642), 981 articles were screened by examining titles and abstracts. Inter-rater reliability among the three reviewers (the lead author and two colleagues) was established through a series of trials until 95% agreement was reached. A total of 766 articles were excluded after reading titles and abstracts and a further 197 articles after reading the full texts. Thus, our final sample included 18 relevant articles.

Figure 1: Flowchart of the literature search



Critical interpretive synthesis processes

The final sample of 18 articles was examined following Dixon-Woods and colleagues' processes of quality assessment, data extraction, and data synthesis (Dixon-Woods et al., 2006; Hudon et al., 2019). They underline the importance of assessing the quality of the articles to be included in the review and analysis in terms of examining their overall relevance to facilitating understanding of the topic under study. Our critical approach added an additional step of evaluating the theoretical and substantial foci of articles for gaps and limitations in perspective.

Systematic data extraction focused on demographic information, research questions, study aims, year of publication, place of publication, methods, main results, important findings, sector of SE, work-induced injury/disability or congenital, and types of SE (full time or part-time). This approach resulted in a comprehensive overview of the final articles and facilitated analytical exchanges between the authors. A summary description of the studies is in Table II: Foci of Articles.

TABLE II: DESCRIPTION OF ARTICLES				
Articles	Foci of Articles			
	Country	Method	Study focus	Sector of work
McNaughton et al. (2006)	USA	Quantitative	Investigating the experiences of individuals with cerebral palsy who used augmentative and alternative communication and were SE'd	Artist, software consultant, freelance
Arnold & Ipsen (2005)	USA	Policy analysis	Comparing and contrasting SE policy and procedures across the vocational rehabilitation agencies	Unspecified
Larson & Hill (2005)	USA	Quantitative	Comparing adult residents in 3 types of non-metropolitan areas with metropolitan workers to evaluate which characteristics contribute to lack of employment-related insurance.	Unspecified
Hartman et al.(2003)	Netherlands	Quantitative	Providing baseline data on the diagnoses, occurrence and duration of sick leave of SE'd farmers.	Farming
Rizzo (2002)	USA	Policy analysis	Discussing the possibilities for self- directed employment.	Unspecified
Fossen & König (2017)	Germany	Quantitative	Decisions to switch from paid employment to SE in relation to cost of health insurance	Unspecified
Hilbrecht (2016)	Canada	Qualitative	Obtaining SE'd participants' perceptions and experiences of informal of supports [informal].	Fine arts, freelancing
Barber III & Moffett (2015)	USA	Quantitative	Examination of whether state health insurance subsidies increased SE and the likelihood that SE'd individual would purchase health insurance	Unspecified
Grégoris et al. (2017)	France	Quantitative	Assessing the morbidity of SE'd workers in the food service industry.	Food service industry
Sharp et al. (2017)	European region	Commentary	The impact of cancer among SE'd people.	Unspecified

Wijnvoord et al. (2016)	Netherlands	Quantitative	Evaluating the influence of the number of prior episodes of sickness absence on the risk of subsequent periods of sickness absence in higher educated SE'd.	Unspecified
Ashley & Graf (2018)	USA	Quantitative	Exploring the process and experience of SE among people with disabilities.	Unspecified
Ostrow et al. (2018)	USA	Quantitative	Identifying characteristics of individuals' work and disability histories and business characteristics to inform policy and practice in support of disability-owned small businesses.	Unspecified
Quinlan (2004)	Australia	Qualitative	Exploring how SE'd workers are supported, what are the challenges posed to workers by the changing nature of work arrangements.	Unspecified
Rietveld et al. (2015)	USA	Quantitative	Examining the association between SE and health.	Unspecified
Gevaert et al., (2018)	European regions	Quantitative	Investigating variation in mental health between types of SE'd.	Farming
Beattie et al. (2018)	Australia	Qualitative	Investigating return to work experiences of farmers following a serious work-related injury	Farming
Yoon & Bernell (2013)	USA	Quantitative	Investigating health difference between the SE and wage-earning populations	Unspecified

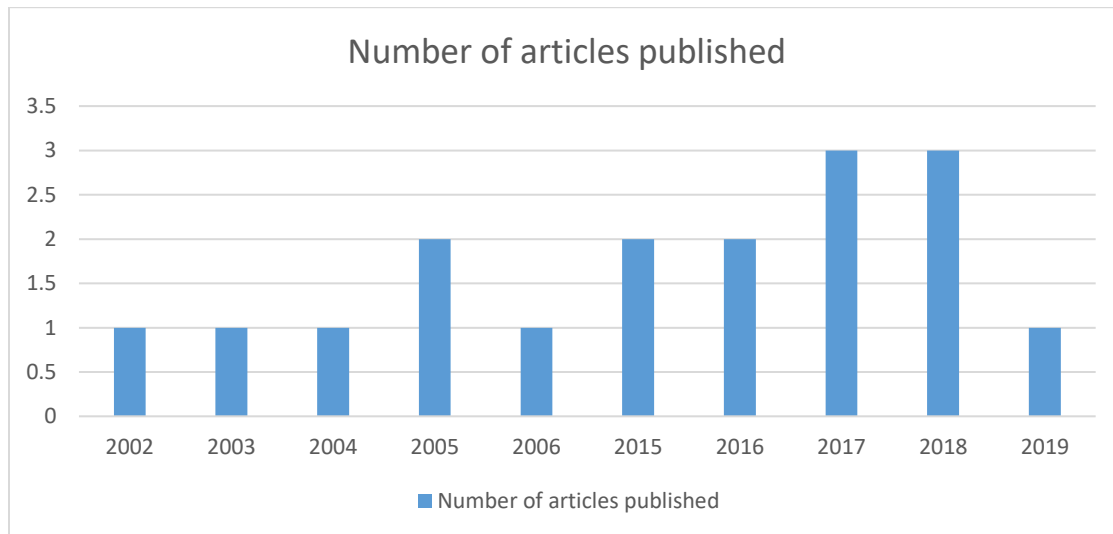
Data were synthesized by recurring concepts, which ultimately contributed to themes. A process of constant comparison and negative case analysis guided the synthesis, which involved assembling issues and grouping topics under common concepts, and a reciprocal and iterative process to detect similar and analogous findings. For example, authors might use dissimilar words, but might be addressing a similar general concept (e.g., SE, independent contractor, contingent worker). The negative case analysis focused on studies that appeared to contradict each other. For instance, several studies reported that SE'd workers are generally healthier than wage workers (Fossen & König, 2017; Ostrow, Smith, Penney, & Shumway, 2018; Rietveld et

al., 2015) because of flexibility, autonomy, and control over work. However, many articles stress that SE may bring physical and mental health hazards because of workload, self-exploitation, heavy physical jobs, and volatile income (Beattie et al., 2018; Gevaert, De Moortel, Wilkens, & Vanroelen, 2018; Grégoris, Deschamps, Salles, & Sanchez, 2017; Hartman, Oude Vrielink, Huirne, & Metz, 2003; Rietveld et al., 2015; Sharp et al., 2017; Yoon & Bernell, 2013) and isolation (Cassidy, 2017; McNaughton, Symons, Light, & Parsons, 2006). In these cases, we attempted to reconcile these contradictions by noting contexts and methods. In this example, the negative case analysis directed attention to the nexus between SE and health in terms of relative benefits and demerits, which provided insight into how SE can have negative repercussions on health. Three phases of synthesis led to the final themes. First, an open-coding system was used to analyze the articles. This helped us to reflect on the overall patterns of our data, including identifying the repeated and common themes. In the second phase, open codes were re-reviewed and focused codes were generated. A focused code is a pattern or category that groups together two or more open codes (Esterberg, 2002). Our focused codes then led to six major themes, together with sub-themes, focused on issues around SE, relative benefits and barriers, dynamics of illness, injury, and disability, formal and informal health management support systems, sick leave and health insurance, and occupational health services and rehabilitation. The lead author met and consulted with reviewers on a regular basis to discuss ongoing analyses of findings and to challenge preliminary interpretations, which facilitated thorough interpretations of the findings.

3.3 Description of studies

Of the final sample of 18, more than half of the articles (n=11) were published between 2015 and 2019, as presented in Figure 2.

FIGURE:2 Distribution of articles by year



Half of the articles focused on the United States of America, while the remaining articles focused fairly evenly on the Netherlands, Australia, Canada, Germany, and France. Two articles focused jointly on European countries, as shown in Table III.

TABLE III: Article published by country / geographical region

Country / Region	Number
USA	9
Netherlands	2
Australia	2
European countries jointly	2
Canada	1
Germany	1
France	1
	N=18

Thus, the issues of health (e.g., sickness and physical impairments) and health management among SE'd working populations appear to be under-researched in advanced

economies. More than half (10/18) of the articles were based on quantitative analysis, and only four articles focused on qualitative data, while the rest of the articles were mixed method, commentary, discussion paper, and a policy paper, as shown in Table IV, which shows the substantive foci of the sample articles.

TABLE IV: Study methods

Type of study	Number
Quantitative	10
Qualitative	4
Mixed method	1
Commentary	1
Discussion paper	1
Policy analysis	1
	N=18

3.4 Synthesis of findings

Five themes and twenty-one subthemes emerged through an iterative process of data extraction and synthetization from 18 articles. The themes were (i) conceptualizing SE; (ii) double-edged sword; (iii) dynamics of illness, injury, and disability; (iv) formal and informal health management support systems; and (v) and occupational health services and rehabilitation. These are summarized in Table V.

TABLE V: Summary of the themes and sub-themes

Main Themes	Sub-themes
I. Conceptualizing SE (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Gevaert et al., 2018; Grégoris et al., 2017; Larson & Hill, 2005; McNaughton et al., 2006; Ostrow et al., 2018; Quinlan, 2004; Rizzo, 2002; Sharp et al., 2017).	<ul style="list-style-type: none">● Objective and subjective perspective● Misclassification● Entrepreneurial self
II. Double-edged sword (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Gevaert et al., 2018; Gilman, 2014; Grégoris et al., 2017; Hilbrecht, 2016; McNaughton et al., 2006; Ostrow et al., 2018; Seekins & Arnold, 1999; Sharp et al., 2017) .	<ul style="list-style-type: none">● Flexibility● Reducing discrimination● Job control● Sense of identity● Self-exploitation● Selection effect● Cost of health insurance
III. Dynamics of illness, injury, & disability (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Beattie et al., 2018; Fossen & König, 2017; Gevaert et al., 2018; Grégoris et al., 2017; Hartman et al., 2003; Hilbrecht, 2016; Larson & Hill, 2005; Ostrow et al., 2018; Sharp et al., 2017; Wijnvoord et al., 2016).	<ul style="list-style-type: none">● Salaried vs SE workers: who are healthier?● SE farmworkers, aging, & health risks● SE'd food service workers & health risks● Physical & mental health risks
IV. Health management support system (Arnold & Ipsen, 2005; Barber III & Moffett, 2015; Beattie et al., 2018; Gevaert et al., 2018; Grégoris et al., 2017; Hartman et al., 2003; Larson & Hill, 2005; McNaughton et al., 2006; Ostrow et al., 2018; Quinlan, 2004).	<ul style="list-style-type: none">● Formal systems● Informal systems● Dependency on private insurance
V. Occupational health services & rehabilitation (Arnold & Ipsen, 2005; Beattie et al., 2018; Bleecker, 1991; Hilbrecht, 2016; McNaughton et al., 2006; Ostrow et al., 2018).	<ul style="list-style-type: none">● Limited compared to salaried● Lack of vocational rehab● Contested role of VRC● Microcredit as a means for rehab

I. Conceptualizing self-employment

This section describes issues related to conceptualizing SE according to objective or structural conditions or according to purported subjective traits of SE'd people. Several articles described challenges regarding classifying or defining SE status (Quinlan, 2004; Sharp et al., 2017), including three articles (Gevaert et al., 2018; Grégoris et al., 2017; Rizzo, 2002) that attempted to debunk this issue. Gevaert et al (Gevaert et al., 2018) related two approaches - objective and subjective – to identifying SE. The objective approach defines SE from the legal, social, and contractual framework of a given country, including salient traits, such as the absence of regular wage relationship, independence in terms of a certain degree of economic and organizational autonomy, working with or without employees, and magnitude of economic activity. Rizzo (Rizzo, 2002) adopted a similar objective, or structural, approach to defining SE. However, two articles (Quinlan, 2004; Sharp et al., 2017) discussed how difficult it is to administratively identify SE'd people, with Quinlan's article from Australia(Quinlan, 2004) elucidating how it has become common for employers to misclassify employees in order to avoid welfare and compensation coverage payments.

The second approach discussed by Gevaert (Gevaert et al., 2018) is subjective and focuses on individualistic traits of SE'd individuals. This is attached to the discourse of the “entrepreneurial self”, implying that SE'd are those people encompassing attributes associated with entrepreneurialism, including creativity, willingness to take risks, innovativeness, high intrinsic motivation, skillfulness, and the ability to recognize opportunities. Gevaert et al. (Gevaert et al., 2018) also discussed concerns about defining SE using lenses of the “entrepreneurial self” because of the risk of classifying people in neoliberal terms; a standard for which they ask, “to what extent even ‘real self-employed’ actually meet up to” (Gevaert et al.,

2018). The essence of Gevaert et al.'s (Gevaert et al., 2018) analysis is that there are pull factors that render people more willing to enter SE. Discourse underlying the "entrepreneurial self" approach relates to SE more broadly and advances the question of whether this explanation can be generalized to identify SE'd workers. Authors of several articles note that pull factors are often dismissed because some people opt for SE as an alternative to unemployment or as a good fit with a congenital disability. Thus, they may be forced to engage in SE against the backdrop of developing an identity in a society or integrating into mainstream society (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Larson & Hill, 2005; McNaughton et al., 2006; Ostrow et al., 2018; Rizzo, 2002).

TABLE VI: Substantive foci of papers

Articles	Main foci of Papers		
	Self-employment	Health Status	Support Systems
McNaughton et al. (2006)	x	-	x
Arnold & Ipsen (2005)	x	-	x
Larson & Hill (2005)	-	-	x
Hartman et al. (2003)	-	x	-
Rizzo (2002)	-	-	x
Fossen & König(2017)	-	x	x
Hilbrecht (2016)	-	-	x
Barber III & Moffett, (2015)	x	-	x
Grégoris et al. (2017)	-	x	-
Sharp et al. (2017)	x	x	x
Wijnvoord et al. (2016)	-	x	-
Ashley & Graf (2018)	x	x	x
Ostrow et al. (2018)	x	-	-
Quinlan (2004)	-	-	x
Rietveld et al.,(2015)	x	x	-
Gevaert et al. (2018)	x	x	-
Beattie et al. (2018)	x	x	x
Yoon & Bernell (2013)	x	x	x

II. Double-edged sword

In discussions of why individuals enter into SE, a controversial issue emerged in some articles (Arnold & Ipsen, 2005; Gevaert et al., 2018; Grégoris et al., 2017; Hilbrecht, 2016; Rietveld et al., 2015; Sharp et al., 2017) with respect to the relative benefits and barriers of entry to this form of work. On the one hand, people chose SE because of the benefits. Articles on the views of SE'd workers (Hilbrecht, 2016; McNaughton et al., 2006; Ostrow et al., 2018; Sharp et al., 2017) described varied reasons for choosing SE: it provides flexibility [e.g., work-life balance, caring for children and household chores that often fall on the shoulders of women (Hilbrecht, 2016; Ostrow et al., 2018), reduces discrimination [e.g., income inequality], increases independence or control over job (e.g., decision making) (McNaughton et al., 2006), and provides an identity of

being own boss (Ostrow et al., 2018); provides a sense of identity (e.g., people with disability) in a broader context (McNaughton et al., 2006); and, it offers freedom and autonomy in terms of type of job, pace and schedule (Sharp et al., 2017). People with congenital (present from birth) disabilities welcomed SE as it helped them to integrate into mainstream society with a social identity (Gilman, 2014; McNaughton et al., 2006; Seekins & Arnold, 1999), which is why the number of persons with disabilities is higher in SE compared to the general population (Ashley & Graf, 2018). However, a number of articles (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Fossen & König, 2017; Hartman et al., 2003; Hilbrecht, 2016; McNaughton et al., 2006; Rietveld et al., 2015; Sharp et al., 2017) underlined barriers to SE, such as job demands, self-exploitation, selection effect, cost of health insurance, and sick leave related complexity. In all, as proposed by one article, SE appears to be a “a double edged sword” (Rietveld et al., 2015). On one hand, SE appears to be valued for the freedom and flexibility from certain aspects of traditional employment. For example, the ability to set one's own hours and workload and the autonomy and identify affiliated with being one's own boss, are potential pulls. Conversely, elements of insecurity are created by entering SE, such as potentially variable work and lack of insurances. This opposite side of the sword may cause circumstances that impact health and potentially negate any real or perceived health benefits derived from SE.

III. Dynamics of illness, injury, and disability

The articles included debates around whether SE'd workers are healthier than wage earners (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Grégoris et al., 2017; Hilbrecht, 2016; Rietveld et al., 2015; Sharp et al., 2017). One article discussed the view that SE'd workers are healthy because of the flexibility in work, (Ostrow et al., 2018) including their ability to take care of their health by buying private insurance (Fossen & König, 2017). However, other articles

(Beattie et al., 2018; Gevaert et al., 2018; Grégoris et al., 2017; Hartman et al., 2003; Rietveld et al., 2015; Sharp et al., 2017; Yoon & Bernell, 2013), drew attention to physical and mental health hazards due to workload (e.g., farmers), drudgery (e.g., long working hours), heavy physical jobs, isolation due to working alone, reputational threat, customer and contractor betrayal, volatile income, financial worries, and less access to, or no occupational health services.

Interestingly, a few articles (Beattie et al., 2018; Hartman et al., 2003; Larson & Hill, 2005; Wijnvoord, Brouwer, Buitenhuis, van der Klink, & de Boer, 2016) underlined the nexus of SE'd farm work and aging, which is intertwined with the health and wellness of SE'd farmers. Authors expressed their concern about how 'aging' undermine farmers' health, as it is connected to a variety of diseases, such as musculoskeletal disorders. In Australia (Beattie et al., 2018), Beattie et al. raised a concern that farmers are forced to work before complete recovery from hospital and rehabilitation because of their workload and lack of help (Beattie et al., 2018). One article provided statistics demonstrating how Australian farmers are more vulnerable than salaried workers, where farm injuries account for 17% of all worker fatalities (Sharp et al., 2017). Another study of SE'd people in the Netherlands underlined musculoskeletal disorders as a common cause of sickness absence in the farming sector (Wijnvoord et al., 2016). A study (Grégoris et al., 2017) conducted in France found that SE'd workers in the foodservice industry were at higher risk of physical and mental health hazards than regular employees. The prevalence of a diseases such as sleep disorders, joint pain, musculoskeletal disorders, cardiovascular disease, digestive complaints, audiogram, and urinary abnormality was significantly associated with SE (Grégoris et al., 2017). A study (Sharp et al., 2017) of European

data on SE and salaried workers' cancer survival, provides further context in that, irrespective of cancer diagnosis, mortality rate was higher among solo SE'd people than salaried workers.

Mental health and illness of SE'd people were addressed in two articles, with SE'd people described as more vulnerable to mental disorders and illness than medium and large entrepreneurs and salaried workers (Gevaert et al., 2018). Gevaert et al. (2018) identified some work traits of SE'd people, including being creative, risk taking, innovative, motivated, skilful, and able to recognize opportunities. They stressed that the absence of these characteristics are responsible for poor mental health (Gevaert et al., 2018). An article by Sharp et al. compared SE'd cancer survivors with salaried cancer survivors and found that salaried workers received social, emotional, and instrumental supports from managers and co-workers, which positively impacted post-cancer recovery and health management, including mental health. However, these services and supports are often unavailable for SE'd workers because they work alone (Sharp et al., 2017).

IV. Health management support systems

Several articles shed light on formal and informal support systems available for SE'd people across economically developed countries (Arnold & Ipsen, 2005; Barber III & Moffett, 2015; Beattie et al., 2018; Fossen & König, 2017; Grégoris et al., 2017; Hartman et al., 2003; Hilbrecht, 2016; Larson & Hill, 2005; McNaughton et al., 2006; Ostrow et al., 2018; Rizzo, 2002; Wijnvoord et al., 2016; Yoon & Bernell, 2013), focusing on overarching themes of sick leave, health insurance, rehabilitation/vocational rehabilitation, family supports, and other social networks. The articles delineated various state-level support systems for SE'd such as government policies and services [e.g. health insurance, sick leave, income replacement or compensation in the USA, the Netherlands, Australia, and Canada]; (Arnold & Ipsen, 2005;

Barber III & Moffett, 2015; Fossen & König, 2017; Hartman et al., 2003; Hilbrecht, 2016; Larson & Hill, 2005; Quinlan, 2004) as well as support from non- government organizations and non-partisan groups [e.g., the Canadian Taskforce for Women’s Business Growth]; (Hilbrecht, 2016) private agencies [e.g., health insurance providers in USA, Canada, Australia]; (Arnold & Ipsen, 2005; Barber III & Moffett, 2015; Hartman et al., 2003; Hilbrecht, 2016) and local organizations (e.g., local chamber of commerce in Canada) (Hilbrecht, 2016).

In relation to informal support systems for SE’d individuals, Hilbrecht describes varieties in Canada,(Hilbrecht, 2016) including instrumental support connected to practical assistance in terms of concrete skills or resources [e.g., receiving babysitting from a neighbor due to sudden need to meet a client]; emotional supports, such as empathy or reassurance, especially during unstable or unexpected economic conditions; informational supports [e.g., offering valuable suggestions]; and social networks [e.g., disabled workers association, business groups] (Hilbrecht, 2016). Articles from the US also delineated how SE’d people with disability benefit through supports from similar informal groups and social networks (Ashley & Graf, 2018; McNaughton et al., 2006; Ostrow et al., 2018; Rizzo, 2002).

Articles addressing formal support systems for SE’d individuals focused on Canada, Australia, and the USA and noted that support for SE’d individuals relative to salaried workers was poor, as few countries have social security systems designed to support SE’d workers (Arnold & Ipsen, 2005; Barber III & Moffett, 2015; Fossen & König, 2017; Sharp et al., 2017). For example, Fossen and Konig (Fossen & König, 2017) mentioned that health insurance systems have been designed primarily to protect paid employees in the USA. Although social security supports SE’d people exist in some jurisdictions, such as Canada, recent research shows that the SE’d people are not aware of these supports and they are under-used. For example,

recently introduced Canadian federal government special benefits for SE'd workers, including maternity leave, parental leave, compassionate care leaves, sickness benefits, and benefits for SE'd parents of critically ill children, (Hilbrecht, 2016) were not known to SE'd workers (Hilbrecht, 2016). Similarly, Barber III and Moffet (Barber III & Moffett, 2015) note that SE is affected by "job lock" systems, in which incentives or subsidies for health insurance do not guarantee that more wage earners will enter into SE because of barriers posed by other drivers, such as payroll taxes, capital investment, and capital gain (Barber III & Moffett, 2015).

Several articles focusing on USA, Germany, Australia, and the Netherlands, stress that SE'd people are less privileged than salaried workers, in terms of paid sick leave, sickness benefits, disability benefits, health insurance, and occupational health services (Barber III & Moffett, 2015; Fossen & König, 2017; Larson & Hill, 2005; McNaughton et al., 2006; Ostrow et al., 2018; Quinlan, 2004; Sharp et al., 2017). Two articles, from Australia and the Netherlands, where income supports are available to SE'd workers when injured or ill, demonstrated a causal relation between age and sick leave claims, demonstrating that aging is a crucial factor because sick leave claim rates increase with age, and older claimants seek more sick leave, predominately due to musculoskeletal disorders (Beattie et al., 2018; Hartman et al., 2003). Therefore, age is an important factor because SE'd are older than wage earners, found in at least in one American study (Yoon & Bernell, 2013). A Dutch article found that in the Netherlands among SE'd workers, experiencing a first episode of work injury strongly predicted subsequent sick leave. Musculoskeletal disorders and mental illness cause most of the long-term sickness absence for SE'd in Denmark, and it differs in terms of the sector of SE. Therefore, some sectors of SE, such as farming and the food service industry, are more prone to expose risks in terms of health and illness for workers (Hartman et al., 2003; Wijnvoord et al., 2016).

Many articles presented a lack of health insurance as a strong deterrent to SE'd people taking sick leave (Beattie et al., 2018; Fossen & König, 2017; Hartman et al., 2003; Hilbrecht, 2016; Larson & Hill, 2005; Rietveld et al., 2015; Yoon & Bernell, 2013). One article from Germany stressed that people avoid SE because of the higher cost of health insurance (Fossen & König, 2017). In the US, a study found that more people were interested in SE when a state provided subsidies for health insurance (Barber III & Moffett, 2015). In terms of geographical setting, in the US, a study found that the number of SE'd people who do not have health insurance is higher in rural areas than the urban areas (Larson & Hill, 2005). In practice, in most of the cases, SE'd workers have to depend on private insurance for health care and other compensations (e.g., income replacement). As these supports are costly and many cannot afford it, most SE'd people, especially those who are low earners, are not interested in adopting these supports (Fossen & König, 2017; Quinlan, 2004).

V. Occupational health services and rehabilitation

Several articles in this review argue that injured or disabled SE'd workers (e.g., in Germany, Australia, USA) have meager access to occupational health services and limited, or a complete lack of, vocational rehabilitation (Ashley & Graf, 2018; Beattie et al., 2018; Hilbrecht, 2016; McNaughton et al., 2006; Rietveld et al., 2015; Rizzo, 2002). The authors stress that SE'd workers require basic supports for rehabilitation and reintegration in labour markets following illness or injury, including education, degrees, training, and occupational health services (Ashley & Graf, 2018; Beattie et al., 2018; Hilbrecht, 2016; McNaughton et al., 2006; Rietveld et al., 2015; Rizzo, 2002). Several articles (e.g., in the USA and Europe) in our review stressed the significance of vocational rehabilitation counselors (VRC) for SE'd workers (Ashley & Graf, 2018; Rizzo, 2002) (McNaughton et al., 2006; Ostrow et al., 2018). However, their value was

contested. Some authors argued that VRCs had a positive role in supporting SE, others found either ‘no’ or ‘negative’ impact of VRC for SE’d injured or disabled workers (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Bleecker, 1991). Another tool for supporting SE’d workers is micro-credit. Arnold and Ipsen (Arnold & Ipsen, 2005) showed how microcredit can be a successful means for rehabilitation for SE, who have disability, in American society. Through this interest free (or limited interest) loans, people with disabilities can create viable business in order to earn their livelihood.

3.5 Discussion

The 18 articles included in this review covered diverse aspects of how self-employed are supported when they are unable to work due to illness, injury, and disability. In our view, one of the challenges of providing supports to SE’d people is derived from unclear definitions of who is SE’d. Three articles in our review attempted to demystify the conceptualization of SE (Gevaert et al., 2018; Grégoris et al., 2017; Rizzo, 2002). Key to this perspective is Gevaert et al.’s analysis that pull factors, such as flexibility, draw people to enter into SE (Gevaert et al., 2018). We question if this explanation is broadly applicable to SE’d workers. It has become common to promote pull factors by highlighting that people opt for SE, both as an alternative to unemployment and a good fit for persons with a disability. This latter view downplays the context of underlying social and economic conditions, (Gevaert et al., 2018; Sharp et al., 2017) and is inconsistent with an OECD cross-national study asserting that there is a causal relationship between unemployment and SE (Bögenhold, 2019).

In the age of post-industrial labour markets, entrepreneurial capitalism (Bögenhold, 2019), and fissured workplaces (Weil, 2019), SE as a category of work continuously “receives fresh blood and loses old blood through underground mobility” (Bögenhold, 2019), that is to

say, SE is incessantly being reshaped in form and fashion, and it has become common for some wage-earning workers to also work as a SE in some sectors part-time. For example, conventional ideas of SE do not capture the working life of Uber drivers and Airbnb hosts, most of whom have another main job (MacEachen, 2019). Conventional discourses defining SE have not acknowledged the heterogeneity of the new modes of SE work, despite several hybrid forms of SE (Bögenhold, 2019; Bujacz et al., 2019). Weil (Weil, 2019) raised a very timely and crucial question, with respect to “fissured workplaces” about the restructuring of work arrangements in American society. This is nowhere clearer than between regular employees and those in alternative work arrangements, such as limited-term contracts, work with staffing agencies, and SE (Weil, 2019). New forms of work, including freelancing, micro-farming, Uber driving, and Airbnb hosting, challenge the traditional understanding and conceptualization of SE. Despite this complexity, employment statistics, such as American household (e.g. Current Population Survey, Contingent Worker Supplement) and employer-based surveys (e.g. current employment statistics or Quarterly Census of Employment and Wages) do not sufficiently capture all relevant features of SE. As a result, existing estimations and definitions related to SE, for instance, in the USA, are insufficient and contradictory (Weil, 2019).

In this review, surprisingly, we found very few articles that exactly focused on our research question. Of the three components of our research question – SE status, issues around health and sickness, and state support systems, few explored all three components in depth. For example, Beattie et al. mainly discussed the experiences of Australian SE’d farmers after a serious farm injury (Beattie et al., 2018), but barely addressed the experiences of how the injured farmers were supported during their sickness or when they were away from work. Similarly, Ashley et al. focused on people with congenital disabilities who are SE’d, and on available

support systems to manage and grow their business, but not on work-induced injury or disabilities (Ashley & Graf, 2018). Yoon and Bernell placed more importance on the health issues [prevalence of health conditions] than health management issues (what happens when injured or ill) (Yoon & Bernell, 2013) and the Sharp's article is a commentary, with an overall focus on the three components (Sharp et al., 2017). As such, there is a clear-cut knowledge gap in understanding the experiences of SE'd workers in relation to their health, illness, and work injury, and how they manage their illness and livelihood when they are unable to work.

It is unclear how the gig economy impacts occupational health and health-related services and social securities of SE'd workers. In our view, SE is inevitable in the age of flexible capital accumulation but needs proper supports to grow and be sustained (Boeri et al., 2020). However, globally several intermediate classes, such as temporary staffing agencies, are exempted from accountabilities in terms of providing legal and social security protections (Dacanay & Walters, 2011). These gaps raise ethical and philosophical questions about working relations, in relation to neoliberal and capital market demands that provide value to consumers and investors, but fail workers. What is particularly interesting is that SE'd workers in complex supply chains are sometimes not aware of who funds their positions. Some employers intentionally set up workers as SE to evade or reduce tax liabilities or employers' responsibilities – are called false (bogus) SE (Behling & Harvey, 2015; Thörnquist, 2015). Essentially, this neoliberal approach makes workers responsible for their own social protection.

Our review reveals that there is an ongoing debate around whether SE'd workers are healthier than wage earners. There is a hegemonic and popular discourse about positive experiences of SE'd people, with several articles promoting the view that SE'd workers are healthy because of the flexibility in SE'd work, (Fossen & König, 2017; Hilbrecht, 2016; Ostrow

et al., 2018; Rietveld et al., 2015; Sharp et al., 2017) and can, therefore, take care of their health (e.g., buying private health insurance and medical care) with their savings, enjoy better quality of life and health status, greater job satisfaction, and many more advantages compared to salaried workers (Fossen & König, 2017). In our view, however, these assertions are outdated. In practice, with diverse type of SE, including digital platform gigs, it is likely that many SE'd workers are earning low wages (Mishel, 2018). With few exceptions, (Bajwa, Gastaldo, Di Ruggiero, & Knorr, 2018; Bartel et al., 2019; Tran & Sokas, 2017) we know very little from the existing literature on how contemporary SE'd people experience their work and health. As such, it is necessary to explore empirically how sector specific SE'd people survive with low incomes, especially when injured or ill. Currently, statistical analyses do not accurately reflect the situation of SE'd people in economically advanced countries in the case of SE and may not be applicable for other countries. It is noteworthy that most of the articles in our sample are based on quantitative analysis, national surveys and concentrated in the USA (Fossen & König, 2017; Yoon & Bernell, 2013). Ultimately, what is at stake is a nuanced understanding of experiences of health, sickness and injury experiences of SE'd people. Research-based on qualitative or mixed-method approaches is needed, and more quantitative research is needed to explore the prevalence and role of SE. As well, because SE in the gig economy often involves workers doing multiple jobs (e.g., Uber drivers), possible negative health repercussion needs to be explored.

Class and SE is a topic that requires attention. For instance, in economically advanced welfare state countries, research studies often present SE'd farmers as healthy, but it is historically evident that SE'd farmers are rich through inter-generational inheritance, and thus have a certain amount of land and housing, and annual farm production and profit. Therefore, their health status must be framed according to their privileged position and they cannot be compared with other

SE'd workers, such as those in the gig economy. Interestingly, some researchers expressed their concern about farmers because 'aging' is undermining their health status, and aging is connected to a variety of diseases (Beattie et al., 2018). Farmers are forced to work before complete recovery from hospital and rehabilitation because of workload and lack of help (Beattie et al., 2018). They are also vulnerable in terms of mental health, as they are socially isolated. While salaried workers are mentally supported by their coworkers, SE'd people work alone; thus, they are more vulnerable in terms of mental health and illness than salaried workers (Sharp et al., 2017; Stephan & Roesler, 2010). A timely concern of consequence is that the next generation is not willing to continue with farming,(Beattie et al., 2018) and this situation is aggravating the health of aging farmers.

A growing concern world-wide is that SE'd people working alone at home experience different physical and mental health hazards due to isolation; for example, 40% of SE'd people in the UK say they have felt lonely since becoming their own boss, which has profound impact related to depression, heart disease (Cassidy, 2017). Ultimately, the work and health of SE'd workers is unclear and requires analysis taking into account the nature and sector of jobs and income level. Though many governments are encouraging SE, Gevaert et al (Gevaert et al., 2018) acknowledged that the work-related mental well-being of SE'd people remains understudied and unexplored. In our view, mental and physical health issues of SE'd people need to be addressed in legislation and policies related to workers' compensation and labour standards, and more research addressing this lacuna is needed. Although SE'd workers make significant contributions to economies (Weil, 2019), the discourse of providing social security system support them is surprisingly ignored globally despite their similar life needs in relation to wage earners in terms of foods, housing, and health care (Boeri et al., 2020).

Our review suggests that government and statutory supports to SE'd people in economically developed countries are limited (e.g., Canada, Australia, and France) compared to salaried workers, although some countries have statutory policy, such as health insurance, sick leave claim, to support SE'd workers (e.g., USA), as described in several articles in our sample (Boeri et al., 2020; Grégoris et al., 2017; Sharp et al., 2017).

Our review also finds the existence of informal supports to help to grow an independent business (Hilbrecht, 2016). However, as Beattie et al stressed, without compelling government-sponsored social protection and support systems, there is no sustainable solution for the growing SE'd population (Beattie et al., 2018). In this context, we examine the situation of SE'd workers using a lens of social justice. Whether someone is working for wage or profit, under a contract, or providing gig services, their employment status should not be a determining factor or cornerstone to determine their eligibility for social protections, social insurance or tax legislations. All are workers with their only asset of human capital; thus, all workers who depend on the sale of their capacity to work and survive should be covered and protected by labour protections and social supports (Fudge, 2003). In this sense, there is a knowledge gap in understanding how SE'd workers are ensured social justice. In Australia, there is an assumption that SE'd are less likely to make compensation claims, compared to regular employees (Quinlan, 2004). SE is one of the four categories of employment with the highest underreporting of compensation claims (Quinlan & Mayhew, 1999). So, in Australia, similar to Canada, (Hilbrecht, 2016) SE'd workers are excluded from worker's compensation claims, and even those covered do not lodge claims because of lack of knowledge of their entitlement (Weil, 2019). The essence of the authors' (Hilbrecht, 2016; Quinlan, 1999, 2004; Quinlan & Mayhew, 1999) arguments draw attention to a recent debate in Canada about whether SE'd workers need

government supports or whether these external supports should be approached in a sector-specific manner. In 2013, the Ontario workers' compensation board imposed mandatory insurance on SE'd construction workers (Payne, 2013). This decision prompted large protests from the SE'd independent contractors, who resisted the policy, which required them to pay six to seven times more than their ongoing personal insurance policies. They saw this as unfair and discriminatory to SE'd workers because the workers' compensation insurance only covered work-related injury, while their private insurance covered all health conditions, regardless of the source of the injury or illness (Payne, 2013). In our view, this debate calls for further study to understand the nuanced motives of SE'd workers behind acceptance or rejection of the government support and what kinds of programs would provide the kinds of support needed by SE'd people.

In our review, sick leave claim, aging, and musculoskeletal disorders are found to be intimately connected, because sick leave rates increase with age and older claimants seek more sick leave, predominately due to musculoskeletal disorders (Beattie et al., 2018; Hartman et al., 2003). In a similar vein, we argue that researchers should investigate how age along with gender, race, or ethnicity may influence SE's health and return to work. Though several articles in our review addressed the role of health insurance and state subsidies or support systems, it remains unclear whether SE'd people who are subsidized by the government will take on the expense of health insurance (Beattie et al., 2018). We suggest that state-sponsored and subsidized health insurance can play a pivotal role in growing SE. However, there are job lock effects counteracting this, as more incentives or subsidies on health insurance do not guarantee that more wage earners enter into SE due to other drivers, such as payroll taxes, capital investment, and capital gain, which underpin the barriers to entry to SE (Barber III & Moffett, 2015).

3.6 Conclusion

Results from this critical interpretive review of SE in economically advanced countries draw attention to controversies over conceptualizing SE status, why people choose SE, merits, and demerits of SE, and how SE'd people are supported by formal and informal health systems. A common issue was a lack of eligibility among SE'd workers for social protections, and almost no studies addressed how SE'd workers manage when they are unable to work due to sickness and injury. Through this synthesis, we have provided a clearer picture of SE labour conditions, elucidating how the discourses of SE'd workers' health, sickness, and return to work are under-researched in academia and public policies. Under the circumstances, we believe that creating necessary support systems for sick and injured SE'd workers to support their return to work is of paramount importance and that future research should consider the broad diversity among SE'd workers and their contexts.

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Chapter 4

What Social Supports Are Available to Self-Employed People When Ill or Injured? A Comparative Policy Analysis of Canada and Australia

Status: Published

Khan, T. H., MacEachen, E., & Dunstan, D. (2022). What Social Supports Are Available to Self-Employed People When Ill or Injured? A Comparative Policy Analysis of Canada and Australia. *International journal of environmental research and public health*, 19(9), 5310. <https://doi.org/10.3390/ijerph19095310>.

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Overview

Self-employment (SE) is a growing precarious work arrangement internationally. In the current digital age, SE appears in configurations and contours that differ from the labour market of 50 years ago and is part of a ‘paradigm shift’ from manufacturing/managerial capitalism to entrepreneurial capitalism. Our purpose in this paper is to reflect on how a growing working population of self-employed people accesses social support systems when they are not working due to injury and sickness in the two comparable countries of Canada and Australia. We adopted ‘interpretive policy analysis’ as a methodological framework and searched a wide range of documents related to work disability policy and practice, including official data, legal and policy texts from both countries, and five prominent academic databases. Three major themes emerged from the policy review and analysis: (i) defining self-employment: contested views; (ii) the relationship between misclassification of SE and social security systems; (iii) existing social security systems for workers and self-employed workers: Ontario and NSW. Our comparative discussion leads us toward conclusions about what might need to be done to better protect self-employed workers in terms of reforming the existing social security systems for the countries. Because of similarities and differences in support available for SE’d workers in the two countries, our study provides insights into what might be required to move the different countries toward sustainable labour markets for their respective self-employed populations.

Keywords: precarious work; self-employed; work injury; work disability; social security; social support; Australia; Canada

4.1 Introduction

Self-employment (SE) has emerged as a non-standard, precarious, and contingent work relationship internationally (Khan, MacEachen, Hopwood, & Goyal, 2021; Ontario, 2012; Wall, 2015). The proportion of precarious work, including SE, has been growing rapidly in recent decades due to globalization, dramatic technological advances, the information revolution, and the decline of manufacturing industries (Ontario, 2012; Quinlan, 2015; Taylor, Marsh, Nicol, & Broadbent, 2017). It has been estimated that non-standard employment accounts for more than 60% of workers worldwide (ILO, 2015; Khan, MacEachen, & Dunstan, 2021). This trend is accelerated by the rising ‘gig’ economy, which is undermining traditional employment relations with secure jobs, predictable, advancement, and stable pay (Apouey, 2019; Facey & Eakin, 2010; Lewchuk, De Wolff, King, & Polanyi, 2003; OECD, 2019). Of importance, Self-employed (SE’d) workers now comprise 15% of employment in Europe (Sharp, Torp, Van Hoof, & de Boer, 2017) and 10% of the Australian workforce (Clare & Craston, 2016). In Canada, 2.9 million people were SE’d in 2018, double the number in 1976 (Yssad, 2019), although this increasing trend has remained stable in Canada for the last decade.

In general, women, recent immigrants, and other visible minorities tend to choose SE to meet their needs that derives from traditional social roles (e.g., women as a caregiver and to earn money to support their families, immigrants due to lack of suitable paid jobs) (Ontario, 2012).

Mounting international evidence stresses that precarious employment conditions are having profound adverse effects on workers’ safety, health, and wellbeing (Quinlan, 2004; Rietveld, Van Kippersluis, & Thurik, 2015; Yoon & Bernell, 2013). Despite this, SE’d workers are one of the ambiguous categories of working groups who are largely excluded from the workers’ compensation coverage internationally (Quinlan, 2015). However, research on SE’d people in

terms of their access to social supports systems when they are not working due to injury and sickness is scarce, and, as a consequence, policies geared towards building inclusive workers' compensation policies, upgrading the social safety net programs, and reforming statutory/legal frameworks often ignore complex interactions and responses within them.

Our purpose in this paper is to reflect on how a growing working population of SE'd people access welfare state social support systems when they are away from work due to injury and sickness in the two comparable countries of Canada and Australia- in terms of social, political, and cultural contexts. We take the cases of Canada and Australia, as both countries have key similarities in terms of comparable economies and liberal welfare states (Bambra, 2007). As well, both have social welfare policies that differ by state/province, and each addresses occupational illness and injury via workers' compensation systems. They also have a similar penetration of the new 'gig' economy and a similar proportion of SE'd workers, accounting for around 8–10% of employed people in 2016 (ILO, 2020) . Because of these similarities, a comparative analysis is useful for understanding actions that can support greater sustainability of labour markets and economies of their respective SE'd populations.

In this paper, we make three distinct contributions. First, we explore how challenges to defining the status of a worker/SE are connected to accessibility to social supports in general and comparative analysis of two jurisdictions of Australia and Canada that recognize differences (similarities as well) in their social support policies and legal protocols. Second, we unpack the debates around the definitions, classifications, and misclassifications of SE, shedding light on differences between the two countries, convergence and divergence of different stakeholders' views and perspectives, showing how they define, redefine, and reform the status of SE for the sake of their socio-political interest. Third, we make a snapshot of the social support systems

available for workers for the said jurisdictions, where the status and position of SE'd workers are conspicuously designated, by analysing when SE'd workers are entitled to the available support systems, can opt out or opt into the supports; this analysis demonstrates the relative strengths and limitations, and gaps of the existing systems, which provides lessons for both jurisdictions for further policy formulation and reformations. Finally, the paper concludes with policy implications, as this study is prescriptive in nature, that is, it follows a method of analysis aimed at new policy ideas in order to improve the social welfare of SE'd workers in Canada and Australia (Geva-May & Pal, 1999). In the context, mentioned above, our analysis was guided by 'interpretive policy analysis', focusing on meaning-making processes that are contextual, and situation-specific, instead of focusing on general laws or universal principles (Yanow, 2000, 2007).

4.2 Literature Review

Dynamics of SE'd Workers

SE'd workers are generally depicted as a special group of homogenous people (Taylor et al., 2017), who possess good health, enjoy the freedom of being their own boss and flexible working hours, do not rely on social security protection, and enjoy greater job satisfaction and improved quality of life (Kautonen, Kibler, & Minniti, 2017; Sharp et al., 2017). They are also described as taking on a high level of personal risk to grow their businesses and creating employment opportunities for others (Facey & Eakin, 2010; Rietveld et al., 2015; Sharp et al., 2017; Taylor et al., 2017). However, these depictions do not reflect the recent reality of the SE'd (Sharp et al., 2017). Surprisingly, very few attempts have been made in order to investigate systematically how these new forms of employment impact the SE'd in the face of occupational injury and disease (Quinlan, 2015). This is despite a growing body of research that argues that the rise of precarious employment, including outsourcing, downsizing, and small business, adversely affects workers'

occupational health and safety (Blank, Andersson, Lindén, & Nilsson, 1995; Nichols, 1997; Quinlan, 2004; Quinlan & Mayhew, 1999; Rousseau & Libuser, 1997; Saksvik, 1996).

A clear dark side of this SE labour market exists in that a significant number of SE'd workers are compelled to undertake this type of work due to unemployment, scarcity of alternatives, and everyday financial hardships (Ontario, 2012; Sharp et al., 2017; Taylor et al., 2017). As argued by The Law Commission of Ontario, all SE'd workers should not be treated in the same manner: “The experiences and vulnerabilities of this group range from billionaire entrepreneurs to taxi drivers working 90 hours a week simply to pay their bills and includes many people who are gaining income from self-employment activity alongside their main job”(Ontario, 2012, p. 75). As such, SE does not always mean self-sufficiency. Instead, some SE'd workers, with low earnings, are precarious workers at risk of poverty and social exclusion (Aya K, 2010).

In addition to income-based poverty, a key challenge facing SE'd workers is what happens when they are unable to work due to illness or injury/disabilities, whether on a short- or long-term basis. This is also connected to poverty but in a different fashion. Some SE'd workers do not expect sick pay, paid annual leave, or a future pension because they are well-off and have adequate savings for the future (Rietveld et al., 2015). Some literature stresses that low-income SE can have a considerable impact on workers' physical, social, and personal lives (e.g., family relations), promoting a greater risk of injury, illness, stress, and challenges to health care access (Apouey, 2019; Gevaert, De Moortel, Wilkens, & Vanroelen, 2018; Hilbrecht, 2016; Ontario, 2012). Mounting evidence also shows a strong relationship between the precarious job and poorer health outcomes (Lewchuk, Clarke, & De Wolff, 2008), and greater social costs such as the undermining of intimate relationships (Dahl, Nielsen, & Mojtabai, 2010; Quinlan, 2015). As well, SE'd workers are at higher risk for certain diseases compared to salaried workers (Rietveld et al., 2015).

However, SE'd workers are less likely to purchase health insurance policies in the USA, which may affect their health and wellbeing if they use little or inappropriate medical care (Rietveld et al., 2015; Zissimopoulos & Karoly, 2007).

Social Security Systems Protecting SE'd Workers: The Inclusion/Exclusion Game

Globally, many policies and much legislation, such as workers' compensation, employment insurance, and state pension plans, exclude SE'd workers. Indeed, Quinlan (2015) noted that SE'd workers are fully excluded from most countries' workers' compensation coverage policies. In some countries (e.g., Estonia, Latvia, Portugal, and the Slovick Republic), 40–50% of precarious workers are less likely to receive any form of income support when they are out of work due to injury, sickness, or any form of impairment (OECD, 2019). The ILO's (2020) study of G20 countries found a social protection coverage gap for SE'd workers in many of the countries. This report recommended several measures to protect the SE'd, including preventing the false classification of workers as SE'd and reducing the 'grey zone' of vague employment status (ILO, 2020). However, some welfare states play pivotal roles in terms of protecting SE'd workers. For example, Finland provides a broad support system to workers regardless of employment status, in which SE'd workers are covered with earnings-related pension schemes (old-age pension, disability pension, survivors' pension) and have access to a universal basic social security system (parental and sickness benefits, housing, and unemployment benefits) (Salonen, Koskinen, & Nummi, 2020). In the UK, there was a 'policy vacuum' observed in social security policy for SE'd people in the 1980s; however, SE'd people were included in state insurance systems and mainstream income-related benefits as of the 1990s (Corden, 1999). Despite this, they are still excluded from many benefits systems in the UK, such as income supports, housing benefits, council tax benefits, family credit, and disability working allowances, due to administrative

weakness (Corden, 1999). The British perspectives are consistent with Finland's estimation that there is a gulf between tax declared-income and pension declared-income scheme for self-employed workers (under-insurance) within the statutory pension; they pay too little to contributions, leading to inadequate protection against personal risks (Salonen et al., 2020).

Spasova, Bouget, Ghailani, and Vanhercke (2019) illustrated an interesting correlation between SE'd people's access to statutory social protection systems and types of welfare regimes in 35 European countries. They reveal that in countries with social democratic regimes (e.g., Finland, Denmark, Iceland, Norway, Sweden) where social protections depend on 'general taxation', the SE'd workers have access to all statutory schemes and are treated as salaried workers. They are also treated in a similar manner in the Liberal regime countries (e.g., Ireland and UK) in terms of social protection for the self-employed worker. However, the countries whose schemes rely on 'heavy taxations' make distinctions between salaried and self-employed workers in terms of access to social protections; while salaried workers can access both means-tested benefits and insurance-based benefits, SE'd workers can access means-tested, but often at a low level. Interestingly, some countries, such as the Corporatist (Austria, Belgium, and Germany) and Southern European regimes (Italy, Spain), show a variance in statutory access to social protections, including insurance schemes, and these differences not only exist between SE'd and salaried, but also within different SE'd patterns. In our view, this study shed new light on (which previous studies had not addressed), the uneven access to statutory social protections being brought about by the complicated and robust dynamics of SE'd themselves in terms of their actions and nomenclature.

Overall, Spasova et al.'s analysis shows that although the welfare countries show comparatively comprehensive social protection for self-employed people in terms of the access to

(basic) pension and (basic) health insurance, they still have social protection coverage gaps for SE'd in countries (Conen & Schulze Buschoff, 2019). To put it another way, although welfare economies are supportive of protecting SE'd workers, they still struggle with administrative and bureaucratic shortcomings in terms of supporting SE'd workers with social protections. As such, this exclusion of SE'd workers advances a central question to the agencies, employers, policymakers, government stakeholders, and workers: how do the established norms and existing legislative protocols fit with the changing labour market (MacEachen, 2018), with the special reference to SE? However, without social safety nets, many lower-income SE'd workers are unable to ensure their house rent, medical costs, food, and future security (e.g., retirement pension). Similar to employees in standard employment, they may encounter the same level of anxiety, stress, and illness due to being in work or when out of work. In this context, the absence of a social safety net can perpetuate their distress.

Although a growing body of research sheds light on SE'd workers in terms of their health and well-being, social mobility, and racial and gender discrimination (Clark & Drinkwater, 2000; Driscoll et al., 2003; Gevaert et al., 2018; Sohns & Revilla Diez, 2017; Wall, 2015; Wassink & Hagan, 2018), very few research or policy reports consider SE'd workers in terms of their social security and supports (Ontario, 2012; Taylor et al., 2017; Vermeulen, Wilkens, Biletta, & Fromm, 2017). Moreover, with some exceptions (Williams, 1999), a focus on work disability of SE'd workers in legislation (e.g., labour laws), policy (e.g., workers 'compensation), and academic research has been largely ignored. As such we know little about the role of government and policymakers in terms of providing supports to SE'd workers (Williams, 1999).

4.3 Methods

We adopted ‘interpretive policy analysis’ (Yanow, 2000) as a methodological framework, which is a widely used approach for policy analysis or policy research (Duncan et al., 2015; Prasad, 2002; Yanow, 2007) and involves analyzing public policies, as a form of text or representation of social actions. This approach focuses on contexts and meaning-making processes that are situation-specific, instead of focusing on general laws or universal principles (Kautonen et al., 2017). This approach then helps us to interpret and establish relationships between different issues, develop arguments, and eventually draw a cogent conclusion.

We collected and analysed a range of secondary data related to work disability policy and practice in Canada and Australia. We focused on ‘work disability policy’, which is diverse policies connected to workers’ compensation, sickness and disability policy, and the legal and regulatory protocols and frameworks of social security (MacEachen, 2018). The search for documents was performed in several phases. Official data, legal, and policy texts from both countries were used (i.e., material generated by governments and their agencies). These were identified using the Google search engine and by visiting libraries of the two universities -the University of Waterloo and the University of New England in Canada and Australia (Table 1). Apart from the established databases, Google was used because it is a popular tool for seeking specific information and relevant outcomes for a typical query (Behling & Harvey, 2015). In addition, observations and commentaries (e.g., updated statistics) from global agencies such as the World Health Organization, the World Bank, and the International Labour Organisation were utilized (Table 2). Then, the lead author identified possible peer-reviewed literature through a systematic search of five databases including PubMed, SCOPUS, PSYCHINFO, ABI/INFORM, AND CINAHL (See Appendix A for Keywords). A review of titles and abstracts for articles relevant to SE, work injury,

and return to work was conducted. In all, 22 articles were identified as relevant (Table 2). Of these, three articles (one for Canada, two for Australia) focused on Australia and Canada. After that, the lead author searched (the second search) the SCOPUS database separately, focusing on Australia and Canada (See Appendix A for keywords). Of 93 documents identified, three articles were relevant to our study. Finally, we also searched ‘Google scholar’ and ‘google.com’ separately using refined and specific key terms related to Canada, Ontario, Australia, and NSW, including SE in Canada/Australia, SE in Ontario/NSW, workers compensation in Canada/Australia, employment Insurance in Canada/Ontario, personal accident insurance in NSW, in order to get more specific peer-reviewed articles and grey literature related to Canada and Australia. This resulted in seven relevant documents (out of 144) for inclusion in our synthesis (Table 1).

Table 1. Description of literature identified by the non-systematic search.

Author, Year	Main Focus	Method	Country, Sector
Ontario (2012)	Providing comprehensive provincial strategy and recommendations based on Identifying vulnerable and precarious workers, employment standards, and related legislative reformations	Review/policy analysis/classical legal analysis	Canada, any type
Wall (2015)	Examining the experiences of SE'd nurses as self-employment in professional caring work.	Qualitative	Canada, Nurse
Bögenhold (2019)	Elaborating the heterogeneity of SE	Review	Global, any type
Weil (2019)	Providing an overview of core elements comprising fissuring workplaces.	Review	Global, any type

Yssad (2019)	Providing statistical overview of SE	Review	Canada, any type
(ASFA) (2016)	Providing demographic and economic characteristics of SE'd workers.	Review	Australia, any type
Facey and Eakin (2010)	Developing a framework for conceptualizing contingent work and its relationship to health.	Review	Global, any type
OECD (2019)	Discussing how labour market regulations can protect non-standard workers.	Review	OECD countries Any type
Apouey (2019)	Examining the effect of both self and temporary employment on mental health in the UK.	Review	UK, any type
Taylor et al. (2017)	Providing a comprehensive overview/review of modern working practices.	Review	UK, any type
Nordenmark, Vinberg, and Strandh (2012)	Showing linkage between job control and demands, the work-life balance, and wellbeing among SE'd men and women.	Quantitative	26 European countries, any type
Kautonen et al. (2017)	Examining how late-career transitions from org employment to entrepreneurship impact the returns from the monetary and quality of life.	Quantitative	UK, any type
Nordenmark, Hagqvist, and Vinberg (2019)	Examining the occurrence of sickness presenteeism among the organizationally employed SE and any differences can be explained by higher work demands among the SE'd.	Quantitative	European Union, any type
Bujacz, Eib, and Toivanen (2019)	Examining and identifying the profiles of the SE'd taking into account different well-being indicators.	Quantitative	Europe, any type

Vermeulen et al. (2017)	Identifying heterogeneity of SE'd in terms of wide-ranging attitudes, income levels, and health and well-being among this diverse group.	Review	European Union, any type
Fudge (2003)	Reviewing labour protection for SE'd workers	Review	Canada, any type
Dahl et al. (2010)	Investigating how entering entrepreneurship affects the people involved.	Quantitative	Denmark, any type
Stephan and Roesler (2010)	Comparing entrepreneurs' health with employees' health in a national representative sample.	Quantitative	German, any type
Bennaars (2019)	Assessing the EU concept of a worker, self-employed, dependent self-employment, and false self-employment, EU legislation providing social protection for the SE'd.	Review	European Union, any type
Boeri, Giupponi, Krueger, and Machin (2020)	Documenting features of solo SE, SE with employees, employment, and unemployment.	Review	OECD countries, any type
Dixon-Woods et al. (2006)	Focusing on a reflexive account of an attempt to conduct an interpretive review of the literature on access to healthcare by vulnerable groups in the UK.	Review	UK, any type
Hudon, Lippel, and MacEachen (2019)	Comparing critical literature on the practices of first-line providers for workers with musculoskeletal injuries.	Review	Canada, United States, Australia, any type
Cassidy (2017)	Understanding how to deal with the solitude of SE.	Newspaper article	UK, any type

MacEachen (2018)	Examining occupational health and safety conditions of Uber work.	Qualitative	Canada, Uber drivers
Thörnquist (2015)	Discussing the problem of false (bogus) SE and other precarious forms of employment in the ‘grey area’ between genuine SE and subordinate employment.	Review	Sweden, construction, & cleaning
Behling and Harvey (2015)	Examining how the co-evolution of employment status law and a sector-specific fiscal regime maps tightly onto the emergence of mass SE, as evidenced by the comparative labour market and sectoral statistics.	Quantitative	UK, construction
Bartel et al. (2019)	Focuses on ride-share drivers’ health risks on the job	Qualitative	Canada, rideshare
Tran and Sokas (2017)	Addressing the needs of workers in non-traditional employment relationships.	Review	USA, Physicians
Bajwa, Gastaldo, Di Ruggiero, and Knorr (2018)	Presenting a commentary on the implications of a globalized online platform labour market on the health of ‘gig’ workers in Canada and globally.	Review	Canada, gig workers
Browne (2018)	Review on reform to worker compensation systems of NSW.	Review	Australia, any type
Lippel (2006)	Identifying the impacts of compensation system characteristics on doctors in Quebec and Ontario.	Qualitative, Legal analysis	Canada, any type
Purse (2005)	Identifying the trajectory of workers’ compensation in Australia.	Review	Australia, any type

Spasova, Bouget, Ghailani, and Vanhercke (2017)	Synthesizing both statutory and effective access to social protection for people in non-standard employment and self-employment in Europe.	Review	Europe, any type
Rainone and Countouris (2021)	This policy report discusses a possible reconfiguration of the coexistence between collective bargaining and competition law.	Policy brief	Europe, any type
Pasma and Regehr (2019)	Constructing a model for basic income that is fair, effective, and feasible in Canada.	Policy analysis	Canada, any type
Busby and Muthukumar (2016)	Looking at the common meanings of precarious work in academic and policy research, by examining the trends in non-standard work in Canada.	Policy analysis	Canada, any type
Laflamme (2015)	Examining how the new working relationships and related protection systems are addressed in the province of Canada) and the Australian OHS regimes.	Policy analysis	Canada, Australia, Any type
May (2019)	Developing a definition of precarious employment and its indicators and identifying the role that precarious employment plays in the economy.	Policy analysis	Canada, any type
Lippel and Lötters (2013)	A comparison of cause-based and disability-based income support systems	Review	Global, any type
Whiteford and Heron (2018)	Assessing social protection systems for workers.	Review	Australia, any type

The final selected documents obtained from both searches-systematic and non-systematic were examined following Dixon-Woods and colleagues' processes of quality assessment, data extraction, and data synthesis (Dixon-Woods et al., 2006; Hudon et al., 2019). They underline the importance of assessing the quality of the articles to be included in the review and analysis in terms of their overall relevance to facilitating understanding of the topic under study (Khan et al., 2021). Systematic data extraction focused on demographic information, research questions, the purpose of the study/report/review, year of publication, place of publication, methods, main findings, and sector of SE. This approach resulted in a comprehensive overview of the selected articles and documents and facilitated analytical exchanges between the authors. A summary description of the documents is in Tables 1 and 2.

Data were synthesized by recurring concepts, which ultimately contributed to themes. A process of constant comparison and negative case analysis guided the synthesis, which involved assembling issues and grouping topics under common areas. For example, authors might use dissimilar words, but be addressing a similar general concept (e.g., SE, independent contractor). The negative case analysis focused on studies that appeared to contradict each other. For instance, the Canada Employment Insurance Commission (2014) reported that SE'd women (25 and 44 years) made 90.4% of all special benefits claims, mostly for maternity and parental benefits. However, according to Hilbrecht (2016), a significant number of entitled SE'd workers, irrespective of gender, do not seek and claim compensation mainly due to a lack of information about the supports (Hilbrecht, 2016). In these cases, we attempted to reconcile these contradictions by noting contexts and methods. In this example, the negative case analysis directed attention to the reasons why poor benefit claimant rates among SE'd exist, which provided insight into weaknesses in existing policies with supporting SE'd workers in both Canada and Australia. This

research followed three phases of synthesis leading to the final themes. First, an open-coding system was used to analyze the documents. This helped us to reflect on the overall patterns of our data, including identifying the repeated and common themes. In the second phase, open codes were re-reviewed and focused codes were generated. A focused code is a pattern or category that groups two or more open codes (Esterberg, 2002). Our focused codes then led to three major themes, together with sub-themes, focused on: (i) defining self-employment: contested views; (ii) the relationship between misclassification of SE and social security systems; (iii) existing social security systems for workers and SE'd workers: Ontario and NSW. The lead author met and consulted with senior authors on a regular basis to discuss ongoing analyses of findings and to challenge preliminary interpretations, which facilitated thorough interpretations of the findings.

Table 2. Description of literature identified by the systematic search.

Author (s), Year	Country	Method	Major Findings
McNaughton, Symons, Light, and Parsons (2006)	USA	Quantitative	<p>-Vocational rehabilitation counselors and support personnel should advocate for an appropriately challenging educational program</p> <p>-Vocational rehabilitation and support personnel can offer an important work-place perspective on the individual’s communication skills and priorities for intervention</p> <p>-Vocational rehabilitation counsellors and support personnel should help identify a wide variety of part-time or ‘work-experience’ jobs while the individual who uses AAC is still in school.</p>
Arnold and Ipsen (2005)	USA	Policy analysis	<p>-Unlike in the past, when counsellors assumed a great deal of responsibility for developing the business or writing the plan, now the counsellor usually facilitates the process, and the consumer develops the business and business plan with the help of external business developers.</p> <p>Most state agencies will not support development of a nonprofit business.</p>
Larson and Hill (2005)	USA	Quantitative	<p>-SE’d adults and those working in small establishments are less likely to be offered insurance.</p> <p>-Only in the most rural area does working in agriculture, fishing, and forestry have a statistically significant effect, controlling for other factors such as self-employment.</p>

<p>Hartman, Oude Vrielink, Huirne, and Metz (2003)</p>	<p>Netherlands</p>	<p>Quantitative</p>	<p>-In the Netherlands, there is no social insurance for SE'd persons during the first year of sick leave. After 1 year of sick leave, social insurance provides compensation for loss of income to a maximum of 70% of the statutory minimum income.</p> <p>-This financial gap can be bridged by an insurance policy.</p> <p>-An estimated 63% of self-employed farmers take out an insurance policy with a private insurance company, which provides supplementary compensation for loss of income if they are unable to work due to illness or an accident.</p>
<p>Rizzo (2002)</p>	<p>USA</p>	<p>Policy analysis</p>	<p>-Identifying the supports an individual may need in the employment setting requires a critical and unabashed look at skills and capacities. Essential to this process is the inclusion of the consumer in all aspects of need-assessment, decision-making, and plan development.</p> <p>-Opportunities to manage the business and perform business-related tasks allows the consumer to develop SE skills, as long as these are truly managerial and decision-making in nature.</p>

Fossen and König (2017)	Germany	Quantitative	<p>-Those who enter into SE are more often male, have had a SE'd father, and are more willing to take risks than the other paid employees.</p> <p>-They are more often active in the business services and construction industries and less often in manufacturing and public and personal services.</p> <p>-The health insurance system may provide incentives to enter SE for persons whose income is not high enough to opt out of the SHI as a paid employee. For them, self-employment lifts the barrier to PHI.</p>
Hilbrecht (2016)	Canada	Qualitative	<p>-Many were unaware of EI special benefit program, which provided maternity leave, parental leave, compassionate care leave, sickness benefits, and benefits for parents of critically ill children to self-employed people.</p> <p>-Different types of informal support often existed simultaneously: family support, spousal support (emotional and income support).</p> <p>-Some women expressed gendered assumptions about men as providers who could offer a financial safety net if their business floundered.</p>

USA	Quantitative	<p>-The probability that a SE'd individual in a state that had implemented a subsidy would be covered by private insurance increased by about 4 percentage points after the subsidies were implemented when compared to the self-employed in the control states.</p> <p>-The subsidies were not enough to increase the probability that an individual in the treatment states after the policies would decide to become SE'd.</p> <p>-The determinants of the choice to become SE'd involve much more than the cost of health insurance.</p>
France	Quantitative	<p>-SE'd workers have a higher morbidity than employees. Conversely, the SE'd group had greater task variation, which might reduce morbidity effects.</p> <p>-The lack of occupational health services also contributes to this difference.</p> <p>-Need for occupational health services for self-employed workers, with occupational health surveillance and prevention strategies in order to reduce occupational risks.</p>
European region	Commentary	<p>Evidence is lacking on how best to support SE'd survivors to (re-)engage with work or business after cancer. Most interventions to enhance cancer survivors' work outcomes have been pertinent (only) for salaried employees and have focused on return to work.</p>

Barber III and Moffett (2015)

Grégoire, Deschamps, Salles, and Sanchez (2017)

Sharp et al. (2017)

<p>Wijnvoord, Brouwer, Buienhuis, van der Klink, and de Boer (2016)</p>	<p>Netherlands</p>	<p>Quantitative</p>	<p>-Higher educated SE'd showed that the hazard of experiencing a new period of sickness absence increased with every previous period. This effect was found for both sexes and also for most diagnostic categories of the first period of sickness absence.</p> <p>-Musculoskeletal disorders and mental and behavioural disorders were the most frequent causes of long-term sickness absence.</p> <p>-Locomotor disorders were more frequent, but mental disorders lead to longer duration of sickness absence.</p>
<p>Ashley and Graf (2018)</p>	<p>USA</p>	<p>Quantitative</p>	<p>-Causes for choosing SE: a lack of decent wages and promotion opportunities, for intolerance of mental illness symptoms such as panic attacks, anxiety, and depression; difficulty in obtaining work accommodations; long hours; and being let go due to disability.</p> <p>-Participants noted their health challenges were easier to manage when self-employed, and they experience lower levels of stress and greater flexibility.</p>
<p>Ostrow, Smith, Penney, and Shumway (2018)</p>	<p>USA</p>	<p>Quantitative</p>	<p>-SE is acting as a financial bridge or means of exploring career opportunities.</p> <p>-Most respondents had not accessed Social Security's back to work programs.</p> <p>-While SE'd individuals struggle to access these benefits, they also have better access, or find these programs more attractive, than individuals with psychiatric disabilities seeking wage employment.</p>

Quinlan (2004)	Australia	Qualitative	<p>-17.7% of the workforce mainly are SE'd (two-thirds of whom are concentrated in four industries: agriculture, fishing and forestry; construction; retail; and property and business services), unpaid helpers and volunteers—were not covered by workers' compensation.</p> <p>-Where workers were deemed to be SE'd subcontractors by industrial relations and taxation law, they presumed they were denied workers' compensation.</p> <p>-Another problem determining eligibility occurred where workers changed employment status (e.g., from employee to self-employed or small employer and then back) on a regular basis (in response to aspirations or bankruptcy, principal contractor demands or shifts in the business cycle).</p>
(2015)	USA	Quantitative	<p>-SE is, to a certain extent, influenced by genetic factors. It is perceivable that the same genetic factors influence both SE and health (such a mechanism is called pleiotropy genetics)</p>
Gevaert et al. (2018)	European regions	Quantitative	<p>-Farmers and dependent freelancers and own account workers have worse mental well-being than medium to big employers.</p> <p>-Entrepreneurial characteristics are able to explain mental well-being differences between types of SE'd</p> <p>-Country-level perception of entrepreneurs influences their mental well-being.</p>

Beatie et al. (2018)	Australia	Qualitative	SE'd farmers are often not covered by workers' compensation insurance and therefore, if they have not purchased their own income protection policy, have no means for receiving financial assistance during the recovery phase.
Yoon and Bernell (2013)	USA	Quantitative	<p>SE'd individuals in the US are physically healthy, or healthier than wage-earners, despite the relative lack of health insurance among SE'd persons as compared to wage-earning persons.</p> <p>-No significant relationship between SE and mental health.</p> <p>-Individuals do not experience a greater barrier of access to necessary health care, despite a higher rate of being uninsured among SE'd individuals in the US, the SE'd may be able to finance their own health care using their incomes or accumulated savings.</p> <p>-SE'd are more likely than wage-earning individuals to engage in health-promoting activities, perhaps due to greater flexibility in making room for health promotion activities into their schedule.</p>

4.4 Findings

Defining Self-Employment: Contested Views

Prevailing definitions and conceptualizations of SE are contested and vary, which reflects that there is not one type or state of SE. Additionally, the existing legal protocols, in Canada and Australia, dealing with employee and employment minimally defines SE, as is shown in the Table 3. There is a debate around SE and whether it brings benefits or barriers for sustainability in terms of health (Rietveld et al., 2015), facilitates life-work balance (Hilbrecht, 2016) and is adequate in terms of income (FLEMING, 2016). Different stakeholders pertinent to employment, tax and

revenue management, workers’ compensation management, social supports agencies, judiciaries, politicians, public policy makers, researchers, and academics have been defining SE and naming this employment system from a variety of perspectives. The intentions and motivations differ behind these differing views, as they are derived from political (e.g., political public policy), ethical (e.g., social justice), and philosophical (e.g., neoliberal agenda) grounds. Thus, available literature (Bögenhold, 2019; Cohen, Hardy, & Valdez, 2019; Fudge, 2003; Jurik, 1998; Quinlan, 2015; Thörnquist, 2015) uses different names for SE interchangeably as depicted in Table 4.

Table 3. Legal Frameworks addressing Self-employment.

Ontario, Canada	
<p>Labour Relations Act, 1995</p> <p>The definition of employee under the Labour Relations Act includes dependent contractor:</p> <p>“<i>dependent contractor</i>” means a person, whether or not employed under a contract of employment, and whether or not furnishing tools, vehicles, equipment, machinery, material, or any other thing owned by the dependent contractor, who performs work or services for another person for compensation or reward on such terms and conditions that the dependent contractor is in a position of economic</p>	<p>WSIB, Ontario</p> <p><i>Independent operators (in construction):</i> WSIB consider a person an independent operator in construction sector if he/she is sole proprietor or sole executive officer of a corporation, and subject to performing Class G construction work, no employees, working as contractor or subcontractor for more than one person during an 18-month period, reporting as ‘self-employed’ to a government agency, like the Canada Revenue Agency.</p> <p>Workplace Safety and Insurance Act, 1997</p> <p>It defines “Worker” and “Employer.”</p> <p>“<i>Worker</i> means a person who has entered into or is employed under a contract of service or apprenticeship.”</p>

<p>dependence upon, and under an obligation to perform duties for, that person more closely resembling the relationship of an employee than that of an independent contractor”</p>	
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Employment Standards Act (ESA), 2000

It defines “Employee” and “Employer”.

“Employee” includes, (a) a person, including an officer of a corporation, who performs work for an employer for wages, (b) a person who supplies services to an employer for wages, (c) a person who receives training from a person who is an employer, if the skill in which the person is being trained is a skill used by the employer’s employees, or (d) a person who is a homemaker, and includes a person who was an employee.”

No information provided about dependent contractor or self-employment.

NSW, Australia

Workplace Injury Management and Workers Compensation Act. 1998

No definition of SE

Workers Compensation Regulation. 2003

Define two categories of employers.

But no definition of SE.

Workers Compensation Act. 1987

No definition of SE.

The Fair Work Act. 2009

The National Employment Standards (NES) cover 11 types of employees under National workplace relations system, but these talk nothing of SE.

The Industrial Relations Act. 1996, NSW

It broadens the definitions of employees, where SE'd can be accommodated: (1) in general definition, employee includes:(a) a person employed in any industry, whether on salary or wages or piece-work rates, or (b) any person taken to be an employee by subsection.

(2) A person is not prevented from being an employee only because—(a) the person is working under a contract for labour only, or substantially for labour only, or (b) the person works part-time or on a casual basis, or (c) the person is the lessee of any tools or other implements of production, or(d) the person is an outworker, or (e) the person is paid wholly or partly by commission (such as a person working in the capacity of salesperson, commercial traveler or insurance agent).

(3) Deemed employees: the persons described in Schedule 1 are taken to be employees for the purposes of this Act. Any person described in that Schedule as the employer of such an employee is taken to be the employer. (4) Exclusion: a person employed or engaged by his or her spouse, de facto partner or parent is not an employee for the purposes of this Act.

Table 4. Different terms for self-employment.

<ul style="list-style-type: none"> • Independent operator • ‘Gig’ worker • ‘Gig’ employment • Entrepreneur • Self-employment without employee • Self-employment with employee • Independent contractor • Dependent contractor • Disguised worker • Bogus worker • False Worker 	<ul style="list-style-type: none"> • Sham worker • Own account self-employment • Solo self-employment • Stable own account self-employment • Own boss employment • Own boss worker • Unincorporated self-employment • Incorporated self-employment • Dependent self-employment • Economically dependent self-employment
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These multiple terms make SE challenging to define, both conceptually and empirically (Hilbrecht, 2016). According to Cohen, Hardy and Valdez (2019), SE is not a fixed category/pattern and is contingent on changing structural relationships, which are subject to the mode of production and economy (e.g., manufacturing, service, and digital economy, or labour market, and economic status of society) (Cohen et al., 2019). For example, during the (2007/2008) global economic recession, three patterns of SE emerged (Cohen et al., 2019). First, while it is decreasing globally, the rate of SE'd workers is increasing in developed countries (Cohen et al., 2019). Second, SE appeared with new space (e.g., digital platforms), names (e.g., disguised wage work, 'gig' work, and contracting), sectors, and industries (e.g., creative industries). Third, there is an emerging ambiguity observed in the legal definition of SE as much as this term is increasingly popular (Cohen et al., 2019). This ambiguity or complexity of classification/misclassification is reinforced by newly emerging labour market traits and sectors, such as ICT based labour market, globalized labour market, and neoliberal labour market. For example, traditionally, 'own account' workers, such as agriculture, forestry, fishing, retail trade, and crafts are common SE'd workers over the world.

Similarly, SE'd workers from the sectors, such as building and construction, road and transport, media (e.g., journalist and photographer), actors, musicians and performers in the entertainment industry are also common sectors of SE. However, the non-traditional sectors for SE'd workers, such as graphic design, music composition, and information technology (IT) specialist, and software developer are recent developments due to the advent of globalization and technological advancement. These ever-changing work arrangements make it difficult to identify who is SE'd. On the one hand, the Australian Bureau of Statistics tried to draw a line between

independent contractors and other business operators in order to paint a simple picture for SE: they can either be employing or non-employing. According to the Australian Bureau of Statistics (ABS), the ‘independent contractors’ are owner operators who personally provide a service for clients under a commercial contract (e.g., a courier owner-driver contracted to perform a specific delivery run). The ‘other business operators’ are different from ‘independent contractors’ in terms of two factors: they provide the service directly to the public rather than under a client contract (e.g., a taxi operator); and/or they manage others to perform the service rather than provide the service personally (e.g., an owner-operator of a trucking fleet that spends more of their time managing other drivers than driving trucks). Despite these demarcations of definition, the ABS still argues that these categories remain unclear. For instance, if the courier owner-driver, mentioned above, worked in an ad hoc manner with different daily changing clients, they can be identified as both an independent contractor and another business operator. In Australia, ultimately the status of worker—whether he/she is employee, self-employed, or independent contractor—has evolved into disputed and contestable cases before the courts. Small business or solo traders are also often understood as SE’d. In practice, the smallest businesses are likely to be operated and/or managed by someone who is SE’d. However, it is unclear what percentage of small business owners regard themselves as SE’d, and there is no agreed standard to define their size and traits to be SE. According to Australian Business Statistics, small businesses include firms that are non-employing, microbusinesses employing less than five people, and other small businesses employing less than 20 people. On the other hand, Statistics Canada (2015) has more clear-cut distinctions in this context: owners of incorporated and unincorporated business, farm, and professional practices are deemed as SE’d. The latter groups are also SE’d, though they do not own a business, such as babysitters. Incorporated groups may be of two types: those who have

paid helping hands and those do not have such helpers. Statistics Canada (2015) also includes in SE'd groups those who help other family members' business, farm or professional practices, without receiving salary/wages.

The self-employed include working owners of an incorporated business, farm or professional practice, or working owners of an unincorporated business, farm or professional practice. The latter group also includes self-employed workers who do not own a business (such as babysitters and newspaper carriers). Self-employed workers are further subdivided by those with or without paid help. Also included among the self-employed are unpaid family workers. They are persons who work without pay on a farm or in a business or professional practice owned and operated by another family member living in the same dwelling. They represented in 2011 about 1% of the self-employed. To put the analysis succinctly, Australia seems conservative in demarcating the multidimensional features of SE. Although it distinguished independent contractor from the business operator, it still remains unclear. However, Statistics Canada is liberal to fragments the SE, by clearly defining incorporated and unincorporated SE.

Finally, we view, across all the national contexts and differences, the SE through a broader lens, as individuals who work for themselves instead of working for others like paid workers. Many may work alone, but others may have their own small business with or without employees. In this sense, there is an inevitable overlap between employers, self-employees, and employees. In short, SE is a diverse work arrangement, encompassing occupations ranging from highly paid professionals or billionaire entrepreneurs to low-skilled workers operating a business on their own.

Relationship between Misclassification of SE and Social Security Systems

SE'd workers are often misclassified because employers seek to reduce legal commitments and compensation. The potential (mis)classification of workers in dependent employment relationships

such as SE'd has been described by socio-legal scholars, as well as the European Commission and the International Labour Organization, due to the rising 'gig' economy in certain industries, such as construction industries (Innangard, 2019; Vermeulen et al., 2017). Not surprisingly, rights and obligations are less entertaining for SE'd workers than for regular employees (Innangard, 2019; OECD, 2019; Pedersini & Coletto, 2009; Vermeulen et al., 2017). In addition, sham contractors is a term which is widely used to misclassify SE'd workers. This refers to people who are wrongly regarded as independent contractors and who are identical to employees (Innangard, 2019). This problem is recognised by some authorities. For instance, the Australian NSW Road Transport Authority has prescribed a substantive system of collective rights in order to resolve disputes over compensations, introducing a new Road Safety Remuneration Tribunal, where minimum standards can be set for all truck drivers, whether they are employees or SE'd (Kaine & Rawling, 2010). In a nutshell, if employers misclassify employees as self-employed/independent contractors, in turn, they are denied access to critical benefits and protections in Ontario, Canada, and workers agree because they want to ensure certain income (Ontario, 2012). The Australian (NSW) labour market encounters similar experiences.

Existing Social Security Systems for Workers and SE'd Workers: Ontario and NSW

Both Ontario and NSW have multiple mediums to support their citizens as well as workers in terms of government and non-government agencies by involving different stakeholders, such as hospital, ministries of governments, insurance boards and companies (Table 5). Generally, Australian and Canadian social security systems are different from each other because, unlike Canada, Australian systems do not depend on social insurance or the workers' previous contributions, and their system relies on general government revenue (Whiteford & Heron, 2018).

Table 5. Government and Non-Government Supports for SE'd Workers following illness or injury.

Ontario, Canada

NSW, Australia

Supports That Cover/Required for all SE'd Workers

- | | |
|--|---|
| <ul style="list-style-type: none"> • Ontario Disability Support Program • Ontario Works • Ontario Health Insurance Plan (OHIP) • Workplace Safety and Insurance (for construction workers only) • Canada Pension Plan (Federal) | <ul style="list-style-type: none"> • Old Age Pension • Disability support pension (DSP) • Survivor's pension • Sickness and maternity benefits • Unemployment • Family allowances • Motor Accident Insurance (Compulsory Third Party) • National Disability Insurance Scheme (NDSI) |
|--|---|

Supports That Are Available to SE'd Workers Only if They Opt in and Pay a Premium

- | | |
|---|---|
| <ul style="list-style-type: none"> • Employment Insurance Special Benefits (federal) • WSIB (for all occupations except construction) | <ul style="list-style-type: none"> • Work injury • Personal injury/accident insurance |
|---|---|

Supports Available to People Regardless of Employment Status

In Ontario, Canada, people, regardless of prior employment status, are entitled to get support from the Ontario Disability Support Program (ODSP), if they are 18 years and older, disabled and need support to meet living expenses, and their family income and assets are below a cut-off line. As such, eligibility is assessed both financially and medically. ODSP offers financial assistance to claimants and their family for essential living expenses, prescription drugs, vision care, help to find jobs and training to continue their jobs. Similarly, 'Ontario Works' provides financial and employment assistance to people, regardless of the nature of the jobs, who are 16 years and older, and in need of meeting basic living expenses for themselves or their family (Ontario Ministry of Children, Community and Social Services, 2019). They are provided with financial assistance, including income support to help with the costs of basic needs, health benefits for clients and their families, and employment assistance to help clients find, prepare for, and keep a job.

In terms of Medicare, citizens and permanent residents in Ontario are entitled to the Ontario Health Insurance Plan (OHIP) in order to use medical facilities, cover appointments with doctors, hospital emergency rooms, medical tests and surgeries. Every Canadian citizen and permanent resident including their families, except people from Québec, which has its own plan, are entitled to have a Canada Pension Plan (CPP), covering partial replacement of earnings during retirement, disability or death. Benefits include a retirement pension, disability benefits, survivor's pension, death benefits, and children's benefits. To sum up, ODSP does not require contributions from workers, but it is means-tested, whereas OHIP and CPP are not means-tested. Workers have to contribute to a fund to be eligible for CPP, but not for OHIP.

Regardless of place of injury either in the course of work or outside of work, in NSW, Australia, anyone can have access to supports from icare, self-insurance, and specialised insurance,

which are managed/implemented by SIRA (State Insurance Regulatory Authority). These supports are provided to all Australian residents across social assistance and mandatory occupational pension systems, such as old age pension, disability pension, survivor's pension. The social assistance (cash sickness benefits) and universal (medical benefits) systems cover sickness and maternity benefits, temporary disability benefits, permanent disability benefits, and workers' medical benefits, and unemployment and family allowances, involving compulsory insurance with a public or private carrier under different schemes established and run by state and territory governments.

However, people in NSW, including the SE'd, are required to pay a Compulsory Third Party Premium (CTP) when a vehicle is registered for motor accident insurance, which is managed by SIRA under a Compulsory Third Party (CTP) scheme, which covers injury involving motor vehicles. The benefits coverage of this scheme includes compensation for people who are killed or injured. Compensation can also include hospital, medical and rehabilitation costs, loss of earnings, and pain and suffering. Some aspects of compensation are reliant on establishing fault by another party and some are payable regardless of fault. The third-party insurance component of the scheme (CTP) is underwritten by five insurers. Insurer pricing and behaviour is monitored and regulated by State Insurance Regulatory Authority (SIRA). Finally, the National Disability Insurance Scheme (NDIS) is also a federal government funded program for disabled (irrespective of causes) people from 7 to 64 years old living in Australia with permanent and significant disability, and it may be the main supplier of benefits, or additional to other state funded supports. Overall, most government benefits are income-tested and asset-tested, implying that workers' entitlements reduce as resources increase (Whiteford & Heron, 2018).

Supports Available That Self-employed Can Opt Into

In Ontario, an Employment Insurance special benefits (EI) exist, which SE'd workers in Ontario can opt into if they choose to register with CEIS (Canada Employment Insurance Commission). This provides benefits, one year after registering and paying monthly premiums, including maternity, parental, sickness, compassionate care, family caregiver for children, and family caregiver for adults (Government of Canada, 2013). In this case, a SE'd worker who claims for compensation may receive up to 55% of his/her average weekly pay up to a maximum annual limit. However, if business revenue is generated during their leave, the funds are reduced accordingly (Service Canada, 2014). According to a report by the Canada Employment Insurance Commission (2014), SE'd women between the ages of 25 and 44 years old made 90.4% of all special benefits claims, mostly for maternity and parental benefits. According to Hilbrecht (2016), there are some evidence that a significant number of entitled SE'd workers do not seek and claim compensations mainly due to lack of information about the supports (Hilbrecht, 2016) .

In Australia, including NSW, SE'd workers can opt into the work injury scheme if they voluntarily participate by paying premiums for self-insurance. This covers temporary and permanent disability benefits, and workers' medical benefits as well as unemployment and family allowances. In addition, SE'd workers in NSW can buy personal injury/accident insurance, though it is not connected to CTP. In addition to other injury, it may cover insurer for injury in the event of a motor vehicle accident, regardless the fault. It may also cover gaps or limitations in the private health insurance shows.

Generally, it is still challenging to define how many SE'd workers are under coverage of government and private supports because the existing evidence pertinent to SE and compensation regimes is scarce, conflicting, and partial (Rietveld et al., 2015). There is evidence that precarious

workers, including SE'd, are less likely to make compensations claims, compared to regular employees (Quinlan, 2015). SE is one of the four categories of employment-unskilled workers, occupationally mobile, SE'd, and geographically isolated-in terms of the highest underreporting for compensation claims, while 27% injured workers did not submit claims for compensation, as found in a study in Queensland, Australia, for example (Quinlan, 2015). The Australian Bureau of Statistics also investigated why a large number of injured workers do not claim for compensations, and found that 14.4% of workers are SE'd and they think they are not eligible for compensations (Quinlan, 1999). In some Australian jurisdictions, there are very uneven systems of coverage for SE. For example, some SE'd workers are included in compulsory coverage, but other forms of SE have the option of voluntary cover, private accident insurance, or nothing. Of importance, around 20% of SE'd workers have no coverage, whatever their pattern of work (Quinlan, 2015). The situation is more complicated in Queensland where compulsory coverage for some SE'd workers and a voluntary option for others was curtailed in 1997 (Quinlan, 2004, 2015).

In addition, occupational health and safety statistics mask the statistics of SE'd workers in mining industry in Australia (Quinlan, 2015). Thus, SE'd workers are excluded from workers compensation claims, as well as those who have coverage but do not lodge claims because of ignorance, lack of information, financial pressure to keep the job (Quinlan, 1999). Some studies also found that under-insurance and non-payment are responsible for being reported in the documents (e.g., NSW, Australia), and it is done intentionally in order to manipulate the classification of work and evade the tax and compensation (Quinlan, 2015).

To sum up, SE'd workers in NSW have more access to schemes based on voluntary participation than do these workers in Ontario. As such, supports are provided in Ontario irrespective of workers' employment status, whereas some are means-tested (e.g., ODSP) and

some schemes requires contributions from the workers (e.g., CPP). Similarly, workers in NSW regardless of their employment status have also access to several types of social supports. Of these, some of the schemes expect contributions from the workers (e.g., motor accident insurance). However, Ontario has limited provisions including the EI special benefits program, which provides SE'd people with a significant number of benefits in return for paying a premium, though it fails to attract low-earning SE'd workers because they cannot afford it with the high rate of premiums. In terms of mandatory schemes, both jurisdictions have multiple alternatives, but each provide limited provisions for SE'd due largely to complicated eligibility criteria.

4.5 Discussion

Currently, key challenges with SE are in its definition, conceptualization, and classification. Mounting evidence shows that SE is often misclassified and mistakenly defined (Bögenhold, 2019; Cohen et al., 2019; Fudge, 2003; Jurik, 1998; Ontario, 2012; Quinlan, 2015; Smeaton, 2003; Thörnquist, 2015). Consistent specification of the status of SE across employment frameworks and classifications is needed in order to design eligibility requirements for social supports and compensation for a work injury or disability. At the same time, the heterogeneity of SE's needs to be recognised (Bujacz et al., 2019). For instance, a growing problem exists with organisations, such as digital employment platforms, classifying their workers as SE'd for purposes of tax and insurance premium evasion. Our study reaffirms the need to reconsider the ambiguous position of SE'd in the current labour market, as the SE'd include a range from low-income digital platform workers to successful entrepreneurs (Behrendt & Nguyen, 2019). As most government bodies have homogenised support systems wherein SE'd are recognised as only one category of worker, deserving SE'd workers become deprived of government supports when they are in need. Our study found that the current 'objective' evidence framing who is SE'd overlooks the push/pull

factors that are critical to understanding their positioning in the SE labour market. For instance, workers may be ‘pushed’ in by lack of employment alternatives; and they might be ‘pulled’ in by the lure of neoliberal notions of freedom and autonomy (Khan et al., 2021). In this way, the labels of ‘autonomy’ and ‘healthier’ are not realistic for SE’d workers because the conventional measurement and assessment of well-being of SE’d workers overlooks the diversity of SE and self-exploitation (Bujacz et al., 2019; Lewin-Epstein & Yuchtman-Yaar, 1991). Against this backdrop, a central question is ubiquitous: who seeks government supports? The answer to this question lies in a robust understanding of the diversity of SE’d workers, as paramount for better (re)form policies in order to provide appropriate social protection for SE’d (Khan & MacEachen, 2022; OECD, 2019). However, a barrier to accomplishing this work is a dearth of data related to SE.

To date, it seems that policies in Canada and Australia continue to visualize SE’d workers as the highly paid variety who may not need financial support when ill or injured. However, many studies have documented that this assertion about SE’d workers is an over-generalization and refers to a group of people who are financially prosperous, younger and highly educated, and who became SE’d for opportunity rather than necessity (Bujacz et al., 2019; Khan & MacEachen, 2022; Khan, MacEachen, Ellen, Dunstan, Debra, 2021). In this context, we argue that a significant number of SE’d workers living in Canada, Australia, and elsewhere are poorly paid and need income support during their absence from work due to injury and sickness. The invisibility of these precarious SE’d workers in policy is amplified by their vague status in policy formulations (Collie, Di Donato, & Iles, 2019; Khan & MacEachen, 2022; Khan, MacEachen, Ellen, Dunstan, Debra, 2021). In addition, our study illustrates a strong relationship between precarious jobs and poorer health outcomes (Lewchuk et al., 2008; van den Groenendaal et al., 2022), and numerous social

costs (Dahl et al., 2010; Quinlan, 2004). For example, SE'd workers are at higher risk for certain diseases compared to salaried workers (Khan et al., 2021; Khan, MacEachen, E., Dunstan, D., 2021; Rietveld et al., 2015). However, this 'employment type and health' interplay is not always straightforward; rather, it is subject to the type of welfare state. For example, a systematic review suggests that Scandinavian welfare regimes show better or equal health outcomes for precarious workers compared to their counterparts (salaried, permanent employees), whereas precarious workers from other welfare regimes (e.g., Bismarckian, Southern European, Anglo-Saxon, Eastern European, and East Asian) show worse health outcomes compared to salaried and permanent employees (Kim et al., 2012; Spasova et al., 2017, 2019). Although Canada and Australia are well-developed welfare states, several studies demonstrate that precarious employment, including SE, plays a pivotal adverse role on people's health and well-being (Gevaert et al., 2018; Gevaert, Van Aerden, De Moortel, & Vanroelen, 2021; Guo et al., 2016; Rivero, Padrosa, Utzet, Benach, & Julià, 2021).

Our review reveals that both Ontario and NSW have limited social security provisions for SE'd workers when injured, ill or out of work (Table 6). In Ontario, SE'd workers are supported under the systems of the Ontario Disability Support Program, Ontario Works, Ontario Health Insurance Plan (OHIP), Workplace Safety and Insurance (for construction workers only), Canada Pension Plan, and Employment Insurance special benefits. However, there is uneven accessibility to available supports. For example, ODSP is means-tested, whereas OHIP and CPP are not. Because people in Ontario have to contribute to a fund to be eligible for CPP and EI special benefits, in practice this means that many low-earning SE'd workers, such as 'gig' workers, do not participate because they cannot afford the premiums (Khan & MacEachen, 2022). As such, these 'gig' workers are neither able to pay the premium nor be eligible for government accommodations

(Spasova et al., 2017). This is a potential threat to the Canadian welfare state. Similar challenges exist elsewhere. For example, in Spain, according to Corujo (Corujo, 2017), ‘Uberization’ of work devastated labour and social security regulation, making the state powerless to undermine the political, legal, and financial foundations of welfare states. One more gap identified in our review is that SE’d employed people are not always aware of existing government provided support (Hilbrecht, 2016; Ontario, 2012). Indeed, other Canadian studies found that when SE’d workers need extra support, they rely heavily on informal support systems, such family members and friends (Foster, 2021; Hilbrecht, 2016; Khan & MacEachen, 2022). Although some SE’d rely on personal savings (Behrendt & Nguyen, 2019; Hilbrecht, 2016), many lower earning SE’d workers cannot save enough to support non-working time (Hilbrecht, 2016). In NSW, most of the supports, such as old age benefits, disability benefits, unemployment allowance etc., include SE’d workers, together with compulsory premiums to access work injury and personal injury/accident insurance.

Overall, the Australian social security systems for workers, including SE, is remarkably different from other OECD countries, including Canada because Australian systems do not depend on workers’ previous contributions to be eligible for supports (Whiteford & Heron, 2018). In our view, these differences might create bureaucratic complications for Canadian claimants, irrespective of employment status.

Both jurisdictions, NSW and Ontario, have strengths and drawbacks in terms of support systems available for SE’d workers. On one hand, Ontario’s SE’d- focused special EI is comprehensive, and covers maternity, parental, sickness, compassionate care, family caregiver for children, and family caregiver for adults (Government of Canada, 2013). On the other hand, most of NSW’s systems are narrow and constrained by multiple conditions. For example, NSW’s workers’ compensation and work injury covers only injury, not sickness or disease, and the injury

needs to be caused by work. It is noteworthy that proving benefits for work-related injury for SE'd people is challenging because their working relationships and arrangements often blur, unlike those of many regular employees. For example, a SE'd person with a home office may have difficulty distinguishing a home-related versus a work-related accident. Another important difference between the two jurisdictions is that SE'd workers in NSW are entitled to apply for unemployment allowance, which is solely provided by government, whereas this is not possible for SE'd workers in Ontario. Similarly, SE'd people in NSW who have limited income can apply for sickness and maternity benefits, and family allowances. However, SE'd workers in NSW are excluded from other supports, such as old age pension, disability pension, survivor's pension.

SE'd workers can pay for private insurance with sickness and injury coverage in Ontario. However, when the WSIB imposed mandatory insurance on the SE'd construction workers in Ontario in 2013, they encountered protests from independent contractors who did not want to be required to pay this insurance premium that was more costly than what they had been paying for private insurance and that did not cover non-work-related illness and injury (Payne, 2013). In our view, however, this overlooks the reality that increasing numbers of SE'd workers are low earning and need income and health protection (Payne, 2013). Government provided schemes provide stronger protection than private ones, such as workers' compensation providing income support through the course of life, if needed. Further, several Eurocentric reports expressed concern that private insurance may exacerbate poverty and inequality, including gender gaps, because it has a limited capacity for 'risk pooling and redistribution' compared to social insurance (Alfers, Lund, & Moussié, 2017; Behrendt & Nguyen, 2019; Hossian & Khan, 2012; Khan & MacEachen, 2022; Khan, MacEachen, Ellen, Dunstan, Debra, 2021). In this context, where support systems are lacking for SE'd workers, they can encounter very adverse situations. In addition, studies show

that the precarious employment position of SE'd workers adversely affects their important life decisions, such as marriage and childbearing (Behrendt & Nguyen, 2019). Overall, there are ample drawbacks of SE that may outweigh the benefits (e.g., economic growth, flexible schedule), that can affect the quality of family life (e.g., work-life balance, irregular or anti-social work hours, fewer vacation and sick days, negotiating workload), if they have limited access to statutory and social benefits (Hilbrecht, 2016). These concerns, pertinent to social protections, and the future of SE, have also been raised in empirical research in Canada (Khan & MacEachen, 2022; Khan et al., 2021; Khan, MacEachen, & Dunstan, 2021).

Table 6. Key Supportive Policies.

Ontario, Canada	NSW, Australia
<ul style="list-style-type: none"> • Ontario Disability Support Program • Ontario Works • Ontario Health Insurance Plan (OHIP) • Workplace Safety and Insurance (for construction workers only) • Canada Pension Plan (Federal) • Employment Insurance Special Benefits (federal) • WSIB (for all occupations except construction) 	<ul style="list-style-type: none"> • Old Age Pension • Disability Support Pension (DSP) • Survivor's Pension • Sickness and Maternity Benefits • Unemployment Benefits • Family Allowances • Motor Accident Insurance • National Disability Insurance Scheme (NDSI) • Work Injury • Personal Injury/Accident Insurance

4.6 Conclusions and Recommendations

Regardless of the segment of SE, be it independent contractor, entrepreneurship, small business, startup, unlike employees, the issue of supporting SE'd workers during injury and sickness is an ignored discourse in Canada and Australia. There is a gulf between how the number of SE'd workers are ballooning against the backdrop of the 'gig' economy and how these rising working populations lack attention in social security systems in Ontario and NSW. Policies in both jurisdictions appear to be based on the traditional picture of prosperous, well-organized SE'd workers not needing support from the state. However, this is an overgeneralization and a hyper-reality because at present tens of thousands of low paying SE'd workers strive to lead a decent life. Undoubtedly, they face very difficult circumstances when they have to be away from work due to injury or sickness, as this strata of the SE'd population generally cannot afford private insurance. In fact, at present, compensation for SE'd workers in both Ontario and NSW remains deceptive. Work is needed at both the policy and practice level to incorporate the voices of SE'd workers into compensation. Our comparative discussion leads us toward conclusions about what might need to be done to continue with unmasking the illusion of the traditional well-to-do self-employed worker:

- (i) Although 'Employment Insurance special benefits' in Canada are not always used by SE'd workers in Canada due to the financial burden of premium payments, it nonetheless provides an example of a coverage system for SE'd workers that provides temporary income supports for parental, sickness or compassionate support leave etc. This is one way in which SE'd workers are recognized as a cohort. Hence, in the sense of equity, SE'd workers in NSW, Australia, might be treated in a similar manner, but after revisiting the issue of premiums.

- (ii) Basic income policies may be a solution to providing a basic social safety net to SE'd people, among others. An advantage of this approach is that it draws on the general tax fund rather than relying on taxing incomes of low-wage SE'd people, who are already income insecure (Pasma & Regehr, 2019; Ståhl & MacEachen, 2021).
- (iii) All workers, whether SE'd or not, should be covered by workers' compensation regimes. Digital platforms such as Uber should be required to pay into this scheme.
- (iv) For both jurisdictions, emergency income supports can be introduced for SE'd workers so that they can be supported when facing emergency circumstances, including but not limited to natural disaster, pandemic, injury/sickness. In this context, for example, COVID emergency benefits in Canada (CERB, Canada) was a successful program to address and protect SE'd workers.
- (v) Against the backdrop of a changing labour market in the digital age, SE is inevitable and obvious. A premise guiding policymaking is that SE'd workers should not be at a social security disadvantage relative to employees.
- (vi) Governments should create explicit policy to deal with SE'd and precarious workers to remove grey zones and clarify eligibility for compensation.
- (vii) As women and recent immigrants are more prone to be SE'd workers in recent years, childcare for the SE'd deserves special policy attention.
- (viii) Underreporting of compensation claims is a big issue for the labour market and social safety net policies. A strong social mobilization program may be required in order to reduce underreporting.
- (ix) A social supports literacy campaign may be introduced by both jurisdictions, using mass media or social media, because most of the SE'd workers in practice are not aware of the

available supports systems to which they are entitled. However, there are still some support systems available for the SE'd workers in both jurisdictions.

- (x) In the case of both jurisdictions, SE'd workers, irrespective of the sector of work, platforms (digital or offline), structure of working relations (solo or paid employees), size of the business/professional clients (small or solo traders) need to be given access to 'collective bargaining'. These rights should be granted whenever necessary to prevent the contracting party with the dominant bargaining position from exercising a compression of labour standards (Rainone & Countouris, 2021). In this context, both jurisdictions need to become 'open' to reforming the existing employment standards or other regulatory protocols pertinent to employment if necessary. As such, trade unions and businesses agree on a series of workers' prerogatives, leading to the creation of a level playing field in terms of labour costs and ensuring clients that a company's success does not depend on lowering working conditions (Rainone & Countouris, 2021).

We are aware of a number of limitations of our study. First, we were dogged by the dearth of data around SE'd workers for both countries. It was a challenge to sort the data for SE'd workers from other precarious workers because most of the documents overlap these segments of employment. In short, we agree with several researchers that SE is poorly documented and understood. Second, in both Ontario and NSW, the labour market is undergoing rapid change and development at both policy and practice levels. Therefore, what we have written about in both places is not static; nevertheless, we argue that the broad themes emerging from our work will be relevant in both places for a significant time to come. Apart from the established databases for scholarly articles and documents, we relied on Google's search engine to capture grey literature and ongoing government data. As the outcome of Google searches are filtered, we worked diligently to sort out

the relevant documents. Despite these limitations, consideration of the issues that emerged from our description and analysis of identifying SE'd workers and compensation or supports for absence for work due to sickness and injury policy and practice in both countries will, we hope, support policy makers, people working in administering workers and compensations, researchers in their task of moving toward a sustainable compensation policy, and the imperative of tackling the gaps in the existing systems.

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Chapter 5

Self-employment, illness, and the social security system: a qualitative study of the experiences of solo self-employed workers in Ontario, Canada

Status: BMC Public Health (under review)

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Overview

Background: Today's labour market has changed over time, shifting from mostly full-time, secured, and standard employment relationships to mostly entrepreneurial and precarious working arrangements. Thus, self-employment (SE) has been growing rapidly in recent decades due to globalization, automation, technological advances, and the recent rise of the 'gig' economy, among other factors. Accordingly, more than 60% of workers worldwide are non-standard and precarious. This precarity profoundly impacts workers' health and well-being, undermining the comprehensiveness of social security systems. This study aims to examine the experiences of self-employed (SE'd) workers on how they are protected with available social security systems following illness, injury, and income reduction or loss. **Methods:** Drawing on in-depth interviews with 24 solo SE'd people in Ontario (January – July 2021), thematic analysis was conducted based on participants' narratives of experiences with available security systems following illness or injury. The dataset was analyzed using NVIVO qualitative software to elicit narratives and themes. **Findings:** Four major themes emerged through the narrative analysis: (i) policy-practice (mis)matching, (ii) navigating Covid-19 emergency response benefits programs, (iii) compromise for a decent life, and (iv) equity in work and benefits. **Conclusions:** Meagre government-provided formal supports may adversely impact the health and wellbeing of self-employed workers. This study points to ways that statutory social protection programs should be decoupled from benefits provided by employers. Instead, government can introduce a comprehensive program that may compensate or protect low-income individuals irrespective of employment status.

Keywords: self-employment, health, illness, injury, social security, social support, social security, Covid-19, CERB.

5.1 Background

Today's labour market continues to evolve, and self-employment (SE) has become a prevalent non-standard, precarious, and contingent work arrangement internationally (Behrendt & Nguyen, 2019; Ontario, 2012, p. 39; Wall, 2015). By SE, we refer to individuals who work for themselves instead of working for others like paid workers. Some of these individuals may work alone, while others may have small business with or without employees. SE is a diverse work arrangement, encompassing occupations ranging from highly paid professionals or billionaire entrepreneurs to low-skilled workers operating a business on their own. SE appears in different forms and contours in the current digital age than it did 50 years ago. This transformation is a paradigm shift from managerial capitalism (employer-employee relations) to entrepreneurial capitalism (own boss) (Bögenhold, 2019; Weil, 2019). The proportion of precarious work, including SE, has been growing rapidly in recent decades due to globalization, automation, dramatic technological advances, the information revolution, socio-demographic changes, neoliberal policies, and the decline of manufacturing industries (Behrendt & Nguyen, 2019; Ontario, 2012; Quinlan, 2015; Taylor, Marsh, Nicol, & Broadbent, 2017). The International Labour Organization (ILO) has estimated that non-standard employment accounts for more than 60% of workers worldwide (ILO, 2015). For instance, in Canada, 2.9 million people were self-employed (SE'd) in 2018, which is more than double the number of SE'd in 1976 (Yssad, 2019). Overall, SE workers make up 15% of the workforce in Canada (Yssad, 2019), 10% of the Australian workforce ((ASFA), 2016; Quinlan, 2015), and 15% of the workforce in Europe (Sharp, Torp, Van Hoof, & de Boer, 2017). The rise of the 'gig' economy, as well as the breakdown of traditional employment systems that provided secure, lifetime positions with predictable development and stable income, contributes to this SE trend (Apouey, 2019; Behrendt & Nguyen, 2019; Facey & Eakin, 2010; OECD, 2019).

In tandem, globally, SE'd workers are excluded from most social security supports, such as income support when ill or injured, which are provided to employees via systems of employers' and workers' employment contributions (Khan, MacEachen, & Dunstan, 2022; Khan, MacEachen, Hopwood, & Goyal, 2021; Quinlan, 2015; Quinlan, 2004). Against this backdrop, it is unclear how and if existing workers' support and protection systems have adapted to new labour market situations and expectations (Behrendt & Nguyen, 2019).

SE'd workers have often been depicted in research literature as a distinct group of homogeneous people who enjoy good health, the freedom of being their own boss, flexible working hours and who do not rely on the government (e.g., social security protection). They are described as having a higher level of job satisfaction, quality of life, and opportunities for work-life balance than employees (Kautonen, Kibler, & Minniti, 2017; Nordenmark, Vinberg, & Strandh, 2012; Practices, 2017; Sharp et al., 2017). They have a reputation for taking on significant personal risk in order to build their company and create jobs for others (Facey & Eakin, 2010; Nordenmark, Hagqvist, & Vinberg, 2019; Rietveld, Van Kippersluis, & Thurik, 2015; Sharp et al., 2017). However, these depictions do not reflect the recent reality of the SE'd, in which a large number of SE'd workers in a given society are forced to do so due to unemployment, a lack of alternatives, and financial challenges (Arnold & Ipsen, 2005; Ashley & Graf, 2018; Fossen & König, 2017; Hartman, Oude Vrielink, Huirne, & Metz, 2003; McNaughton, Symons, Light, & Parsons, 2006; Rietveld et al., 2015; Sharp et al., 2017; Vermeulen, Wilkens, Biletta, & Fromm, 2017). These studies highlight a strong relationship between precarious jobs and poorer health outcomes (Benavides, Silva-Peñaherrera, & Vives, 2022; Lewchuk, Clarke, & De Wolff, 2008) and numerous social costs (Dahl, Nielsen, & Mojtabai, 2010; Rietveld et al., 2015). When compared to salaried workers, SE'd workers are at a higher risk for diseases (physical and mental)

including musculoskeletal disorders, joint pain, sleep disturbances, and digestive complaints (Dahl et al., 2010; Rietveld et al., 2015; Stephan & Roesler, 2010). SE'd people in some types of work face higher job demands and workloads (e.g., farmers), self-exploitation (drudgery), isolation due to working alone, reputational threat, customer and contractor betrayal, lack of social protection (e.g., lack of health insurance), and anxiety about financial matters due to volatile income (Rietveld et al., 2015). In addition, the dominant narrative that the SE'd tend to be healthier than salaried employees (Bradley & Roberts, 2004; Rietveld et al., 2015; Stephan & Roesler, 2010; Tetrick, Slack, Da Silva, & Sinclair, 2000) overlooks the 'selection effect' (Rietveld et al., 2015). That is, these studies might be biased by the 'healthy worker effect' in which only healthy workers are studied or healthier individuals self-select into SE (Rietveld et al., 2015). In contrast to depictions of SE'd as homogenous, the diversity of SE'd workers was described by the Law Commission of Ontario (2012), which noted that: "the experiences and vulnerabilities of this group range from billionaire entrepreneurs to taxi drivers working 90 hours a week simply to pay their bills and includes many people who are gaining income from SE activity alongside their main job" (LCO, 2012: 75). Therefore, SE does not always mean self-sufficiency.

Globally, SE'd workers are largely excluded from social security systems, such as workers' compensation coverage, employment insurance, and state pension plans (Behrendt & Nguyen, 2019; Quinlan, 2015). So, SE provides numerous challenges for social protection as well as labour market (Behrendt & Nguyen, 2019). In some countries (e.g., Estonia, Latvia, Portugal, and Slovak Republic), 40-50% of precarious workers are not likely to receive any form of income support when they are out of work due to injury, sickness or any form of impairment (OECD, 2019). The ILO's (2020) study of G20 countries found many social protection coverage gaps for SE'd workers (ILO, 2020).

However, some welfare states play pivotal roles in protecting SE'd workers. In the European social democratic countries, such as Finland, Denmark, Iceland, Norway, or Sweden, SE'd workers have access to all statutory schemes and are treated as salaried workers (Conen & Schulze Buschoff, 2019). For example, Finland provides a comprehensive support system to workers regardless of employment status: SE'd workers are covered with earnings-related pension schemes (old-age pension, disability pension, survivors' pension) and have access to a universal basic social security system (parental and sickness benefits, housing, and unemployment benefits) (Salonen, Koskinen, & Nummi, 2020). In the liberal regimes of UK and Ireland, SE'd workers experience similar social protections (Conen & Schulze Buschoff, 2019). In the UK, the SE'd have been included in state insurance systems and mainstream income-related benefits since the 1990s (Corden, 1999). In addition, some corporatist countries (e.g., Austria, Belgium, and Germany) and Southern European regimes (e.g., Italy, Spain) show a variance in statutory access to social protection, including insurance schemes. In all, although welfare states show comparatively comprehensive social protection for SE'd people in terms of access to government-regulated social protections, they still have social protection coverage gaps (Behrendt & Nguyen, 2019; Conen & Schulze Buschoff, 2019).

In Canada, the federal, provincial, and territory governments regulate labour and employment legislations, with the federal government regulating only a few labour market issues and the provinces and territories regulating the majority of employment-related matters. Canada is regarded as one of the world's advanced economies, with one of the most advanced welfare state systems (Vivekanandan, 2002). Some Canadian social security programs, such as Employment Insurance, are administered federally but many, including workers' compensation benefits and disability income support programs, are administered at the provincial level, and these programs

differ province-by-province(Vivekanandan, 2002) . In Ontario, excepting temporary COVID-19 pandemic measures, Canada, SE'd workers are supported under the systems of the Ontario Disability Support Program, Ontario Works, Ontario Health Insurance Plan (OHIP), Workplace Safety and Insurance (among SE'd, required for construction workers only), Canada Pension Plan, and Employment Insurance special benefits (Khan et al., 2022). However, these schemes are not fully accessible to SE'd workers due to challenges with accessibility, unaffordable premium rates, and bureaucratic complications.

Although a growing body of research examines SE'd workers' health and well-being, social mobility, and racial and gender discrimination (Brassolotto, Raphael, & Baldeo, 2014; Held et al., 2019; Martin et al., 2018; Ronkainen, Watkins, & Ryba, 2016; Ståhl & MacEachen, 2021; Wall, 2015), as well as their status as precarious workers, entrepreneurs, and small business owners, very few studies examine social security and support systems that SE'd workers have access to (Hartman et al., 2003; Ontario, 2012; Taylor et al., 2017). Though formal or statutory support systems concerning SE'd workers have received scholarly attention, their overarching foci are based on policy-level analysis, occupational health and safety of precarious workers, or on entrepreneurs and small business owners and based on census data (Behrendt & Nguyen, 2019; Bujacz, 2019; Razavi, 2020; Salonen, 2020).

Very little research has shed light on the formal social support systems using a holistic perspective; that is, how SE'd experience and navigate these support systems following their illness, injury, and income reduction/loss. Moreover, few studies have used qualitative methods to investigate the experiences of SE'd workers, and specifically, we have very thin knowledge about solo - self-employed workers in this context. This paper aims to fill these gaps by examining SE'd

workers' experiences of navigating formal supports systems, reflecting on how they are protected with available social security systems following illness, injury, and/or income reduction or loss.

5.2 Methodology

Study design

Given our interest in SE'd workers' narratives, including their personal experiences, perceptions, and practices of navigating formal support systems following their illness, injury, and income reduction or loss, this study adopted a qualitative methodological approach. Consistent with this approach, we reflected on the narratives our participants provided using an interpretative paradigm, which focuses on the understanding of phenomena through meanings people bring to them (Creswell, 2016). Accordingly, our study followed an interpretive narrative approach, which examines stories/narratives for how we interpret our everyday experiences (Rodriguez, 2016). This approach helped to unpack the underlying meanings embedded in SE'd workers' stories, including everyday practices and experiences situated in a larger cultural context. The study was approved by the Research Ethics Board of the University of Waterloo, Canada.

Participants, sampling, and recruitment

To be included, participants in this study had to meet the following criteria: solo SE'd workers (i.e., no employees), aged 18 years and older, experience (any duration) of illness or injury (work-related or not), work legally and living in Ontario, main income is from self-employment, and (due to researcher language limitations) fluent in English (Table 1). The study included similar numbers of men and women and their ages ranged from 21 to 62. Income levels varied greatly, with one participant earning \$200k/year and the lowest-earning participant earning only \$25k/year.

Participants were recruited from Ontario, Canada using different social media platforms: LinkedIn, Facebook, Kijiji, Twitter, and Tumblr. From among eligible participants, we selected participants purposively for information-rich and heterogeneous cases (Patton, 2001). The lead author (TK) interviewed 24 solo SE'd workers using audio/video conferencing with Zoom and WhatsApp between January and July 2021. Interviews lasted an average of 1.10 hours.

Pseudonym	Gender	Age	Education	Type of SE'd work	Type of illness/injury (any duration)	Family Income (CAD)/Year
1.Habibur	M	22	College diploma	Uber Driver	Depression Leg fracture	50K
2.Tasmina	F	32	College diploma	Home childcare	Flu/ fever	50K
3.Emma	F	36	Undergraduate degree	Catering	Pneumonia	25K-50K
4.Mamun	M	45	Graduate degree	IT consultant	Spinal Injury	45K
5.Zayan	M	22	College diploma	Food delivery: Door dash Skip dish	Breaking ankle	100K
6.Ruby	F	42-47	Graduate degree	Rotary Public commissioner	Depression Stress, Obesity	25K-50K
7.Patrick	M	62	Undergraduate degree	Actor, catering	Knee injury	50K-100K
8.Sarah	F	54	Graduate degree	Property manager	Stomach pain	50K-100K
9.Sumon	M	22	College diploma	Food Delivery	Breaking right hand	25K-50K
10.Mary	F	46	High school	Fashion design	Sjogren syndrome	< 25K
11.Faria	F	21	Undergraduate degree	Beautician	ADHD	25K-50K
12.Remi	F	45	College diploma	Financial Advisor	Asthma, Covid-19	50K-10K
13.Sarika	F	50	High school	Cleaner	Sleep disorder	25K-50K
14.Scott	M	50	College diploma	Construction	Arthritis	50K-100K
15.Ander	M	25	Postgraduate diploma	Online business/ E-commerce	Anxiety, stress, depression	25K-50K
16. Bob	M	33	College diploma	Singer, DJ	Anxiety, stress Back pain	25K-50K
17.Jane	F	33	Undergraduate degree	Actor, Writer	Nervous system disorder	130K
18.Jimmy	M	35	Graduate degree	Data analyst	Regular migran	200K
19. Paul	M	32	College diploma	Electrician	Backbone Injury	50K
20. Ayla	F	35	College diploma	Grocery business	Cardiology	50K-100K

					ADHD	
21.Miller	M	24	Undergraduate degree	Music trainer, musician	Leg injury	50K
22.Mila	F	35	Graduate degree	Tailoring	Backpain, Fatigue	50K-100K
23.Arnob	M	30	Graduate degree	Debate /public speaking trainer	Anxiety, stress, burn injury, depression,	25K-50K
24.Pablo	F	26	College diploma	Financial advisor	Stress	25K-50K

Data collection

As this study involves soliciting solo SE'd workers' personal experiences including culturally sensitive information (e.g., income, sickness, personal family lives), an in-depth interview approach was selected to give time and space to each person to explain their situation. In our research, we focused on disability support program, health insurance plan, workplace safety and insurance, pension plan, and employment insurance benefits, and defined formal support systems for the SE'd worker as those that include services provided by the government.

A semi-structured interview guide was used, which was informed by literature and discussion with the research team/committee. We used a combination of questions and probes (follow-up questions) to achieve breadths of coverage across the following key topics: (a) stories about their work-related experiences; (b) stories about their illness, injury or income reduction/loss; (c) their use and knowledge of social security programs available to them in relation to the experience of health and illness. With respect to government-provided support systems/programs, participants were asked about how they managed their work, health, and family affairs, following illness, injury, and income loss/reduction. In this context, to ensure an informed discussion, the interviewer informed the participants orally of Ontario social security programs

available to SE'd and asked for their experiences (those they dealt with) and views (those they did not know about or did not deal with) of these programs. Interviews were audio-recorded and transcribed verbatim by two professional transcriptionists. Along with reflexive journal/diaries, detailed field notes were taken after each interview to describe encounters, including the immediate impressions and context, and analytic insights.

Data analysis: narrative thematic analytical approach

Following Reissman's (2008) Narrative Thematic Analytical Approach we sought to understand in detail the experiences and practices of SE'd workers as lived and told stories (narratives) pertinent to accessing social security systems following illness and injury (Held et al., 2019; Ronkainen et al., 2016). The analysis involved several phases: reading the transcripts several times, developing a codebook, developing themes and subthemes, and identifying core narrative elements associated with each theme. Of importance, data analysis followed a mix of deductive and inductive coding. A codebook of 10 codes was created in this context. These codes helped us reflect on the overall patterns of the data, including identifying common themes. Our analysis led to the development of four key major themes as described below.

5.3 Findings

This paper discusses participant stories about their interactions with government support and social security systems following their illness, injury, and income reduction and/or loss. This section begins by discussing two themes, participants discussed their knowledge of available government support systems and reflected on their experiences dealing with and navigating these systems in terms of their work, health, illness/injury, and income loss/reduction. Then this section moves on

to examine participants' experiences, and related views of SE'd workers concerning opportunities provided by the existing social security systems, including their shortcomings and strengths.

Policy-practice (mis)matching

SE'd workers in our study described their understandings of the benefits and drawbacks of different government-regulated social protection systems and policies. They reflected on their experiences of navigating and dealing with these available systems, including medical benefits, income supports, and other government supports (Table 2).

**Table 2 Social Security Supports to SE'd workers in Ontario, Canada
Supports that cover /required for all SE'd workers**

- Ontario Disability Support Program
- Ontario Works
- Ontario Health Insurance Plan (OHIP)
- Workplace Safety and Insurance (among SE'd, required participation for construction workers only)
- Canada Pension Plan (Federal)
- Canadian Emergency Response Benefit (CERB) (Federal)
- OHIP+ (for age 24 and younger)

Supports that are available to SE'd workers only if they opt in and pay a premium

- Employment Insurance Special Benefits (Federal)
- WSIB (for all occupations except construction)

The first step for SE'd workers gaining access to government supports was awareness of the system, including their different requirements and procedures (Ståhl et al., 2021). This social security system literacy was critical for SE'd workers as they made important decisions about opting into a scheme based on the benefits and drawbacks of each scheme. In our study, several participants did not know about formal support systems available for them in Canada/Ontario (Table 2), and some knew about these schemes only partially. For example, Jimmy, a data analyst,

was unaware of available government support systems for SE'd: "But beyond that [savings] I say no [...] government support that I am not aware of any at least any one thing that is specific to SE'd". Similarly, Sarika, a cleaner, was surprised when asked about government support systems available for SE'd workers:

"Oh! government support? [...] for solo self-employed. I'm not aware of any I know if I had employees that then I could more easily get, like, group benefits at a lower cost."

As they were SE'd, many participants in this study believed that the government could do nothing for them; they were responsible for their own protection. It is possible that lack of knowledge about these programs among some participants could have been attributed to the fact that they were confident about their savings; and, indeed, some participants believed that they could support themselves with their savings when ill or facing a reduction of income.

The majority of participants were aware of options for purchasing private insurance. Some of them, whose annual income above 50k, described purchasing private insurance for critical and chronic diseases, retirement benefits, and life insurance, regardless of income ceiling, in this study, some participants described purchasing private insurance for critical illness.

In addition to lacking knowledge about government support systems, some participants also misunderstood what supports were available through the government systems. For example, Zayan, a young man studying at the undergraduate level, said he had heard about 'unemployment insurance' for SE'd workers, despite no unemployment insurance (regulated by federal and Ontario Government) being available in practice for them. These types of system misinformation reveal how SE'd workers had sometimes not looked into the availability of support systems.

Most Canadians feel proud of their global reputation for universal health coverage (Martin et al., 2018). The Ontario Health Insurance Plan (OHIP) is very well known and available to all citizens irrespective of working status, and SE'd workers are no exception. However, participants in our study described concerns about the scope of OHIP coverage. It is not fully comprehensive and does not cover many therapies. It fully excludes prescriptions, chiropractic treatment, massage, eye exams and dental treatment (OHIP+ program covers prescribed medicines for people who are under 24 years and over 65 years old). Along with the impacts on SE'd workers, it is noteworthy that this limited nature of OHIP also affects regular employees who are in jobs (usually low waged) with no health benefits. This study found that many of the SE'd interviewed were not satisfied with limited coverage provided by OHIP. Sumon, a delivery worker who broken his hand during work, noted on the issue of partial coverage of this health insurance:

No. It was not enough [...] the insurance [EI] and the provincial health card doesn't cover the most of it. Still, you have to pay from your pocket. I had to put the plaster/bandages that put in my hand when I broke my bone. So, I have to change it for 4 to 5 times, and I have to pay each and every time. Sorry I changed it 5 times, but insurance covered the price for two time. So, all together it is 600\$. However, my insurance paid 200\$ only.

Participants in our study stressed that they had to spend their own money on OHIP exclusions, which placed a burden on their finances. Ironically, in general, many low-wage SE'd workers rely heavily on OHIP for their health and wellness. For non-OHIP-covered health needs (e.g., prescriptions), they do not have employer-provided insurance and often cannot afford private insurance.

Many participants in our study were familiar with government support systems, such as Employment Insurance Special Benefit (EISB), which was introduced to SE'd workers in 2010 (Brassolotto et al., 2014) and provides them with income support related to leave for parental care, sickness, compassionate care, and family caregiving after registering and paying at least one year of monthly premiums, the premium is as much as the rate of regular EI (1.58% of annual income) and it is changeable year to year assessed by Canada Revenue Agency (CRA) (Government of Canada, 2013). Many SE'd in our study did not trust these government-regulated schemes. With respect to EISB, they described not being able to rely on this system because they had previous dissatisfying experiences with Ontario government-provided benefits programs in terms of procedure of claiming benefits, paperwork, premium systems, and other administrative issues. Remi, a 45-year-old financial advisor, reflected on her experience with claims to Employment Insurance (EI) before entering into SE:

[in response about EISB as government regulated programs] I would probably not. I'm paid into EI many years, jobs before I'm paid into. One time I had to claim. I don't trust the government they asked [for] lots of documentations, which I was not in that state to provide them, was too complicated and convoluted, mentally and physically I was not ok to meet their requirements.

In our study, no participants opted into EISB. Most of the SE'd workers stated that they could not afford the premiums. In addition, some used the metaphor of a "loan program" when describing their experience of EISB; that is, they questioned the point of getting this insurance if the premium and their amount of monthly income or savings are equal. For example, Sarika, a SE'd cleaner, showed wariness about the premiums: "But again, it would depend on what the premiums are if

it's [financially] worthwhile". As well, Scott, a construction worker, and Jane, an actor and writer, expressed similar concerns about premiums. Scott saw EISB as a loan instead of a benefit program: "It's more of a loan program as far as I'm concerned ... it gives me \$900/month, but I pay taxes \$900/month for [premiums]", Jane similarly didn't see the benefit:

I just found that it wasn't worth it like your premiums for the same number of benefits that you got. so, I don't know why you would have that insurance when you were essentially just paid monthly for the exact same thing that you are getting it back.

Our discussion with SE'd workers raised the question of whether programs, such as EISB, should be mandatory or optional. Some participants favored compulsory, while others preferred optional. In fact, the perceived necessity of opting into social security programs (that require premiums out of pocket) is likely to be influenced by the income level, type of SE'd work, and opportunity for informal or family supports. For example, although Jane, a 33-year-old actor and writer, has a family income of more than 100k, she strongly believes that it should be mandatory for their protections and safety because the arts industry, where she works, has volatility in terms of income and amount working hours:

I think it should be mandatory to be honest because, yes, when you're SE'd a lot of people [who] have trouble, paying into something like that. But if something were to happen [...] they really need that protection and I think a lot of people don't think that. They're just thinking about, you know, the invoice, the money that's coming in and they're thinking about today. They're not thinking about down the line, you know they are [potentially] heading to an uncertainty. Nobody knows what may happen.

On the other hand, Sarika disagreed that programs should be made mandatory, as she felt that people have different perspectives, contexts, and needs. For instance, although her own annual earnings were low (\$25k), she was in a dual-income household with support through her partner. She noted that others, like her, might not be in need of insurance if they have a dual source of income:

I don't feel it should be mandatory because everybody's circumstances are different. Like, you know ... if I was married ... I would have somebody else as financial to help as well. So, I don't think it should be mandatory. But I think it should be ... more known [campaign] so that people look into that more often.

Thus, Jane and Sarika's conflicting views regarding adopting social security programs may have been, in part, derived from their different financial positionality as SE'd workers.

Ontario Works provides means-tested programs and is only available for people who have assets no more significant than the limits set out by the program. In the case of Ontario Disability Support Program (ODSP), a sub-program of Ontario Works, in addition to the financial ceiling requirement, people have to meet their administrative definition of disability. However, many of our participants found inclusion criteria for benefits were unrealistic and overwhelming. Remi, a financial advisor, described her non-use of ODSP services in this way: "I have disability insurance, myself disability insurance, however, there lots of conditions that needed be met in order to collect disability benefits [ODSP]." She was disappointed that, to be eligible, she needed to be "absolutely disabled." This ODSP requirement of absolute disability was controversial for many SE'd workers in this study. Similarly, Mary, a fashion designer suffering from a long-term chronic disease, was aware of ODSP and that it was not available for her:

“I know that ODSP is available right now. It's not available for me [due to eligibility criteria]. There are different community agencies. Like, if I was struggling with food and security more than I am currently, I can go to a food bank”.

SE'd workers who opt into the Workplace Safety and Insurance Board (WSIB) and pay monthly premiums are eligible for income support when ill or injured at a rate of 85% of the worker's net wages. However, for a SE'd person, this amount can be substantially smaller than their regular monthly income, which includes income to cover business as well as personal costs. Paul, a licensed electrician who subscribed to WSIB insurance, discussed his benefit experiences. He had been working for less than six months when he fell in an accident at his workplace and injured his leg. Although he was receiving WSIB income benefits, he was dissatisfied with the benefit amount because it was substantially less than his usual monthly income. In addition, he questioned WSIB's compensation calculation method, which he saw as unfair because it did not cover his overhead expenses:

[...] Its 20% of my gross income. And they have based that upon the average type, the average ah, invoicing that I did per month. Well. Ideally, I like every dollar that I could have made reimbursed. But you know, they have to take into consideration that, [...] My ability to generate income is forecasted over the last year of my proof of income based on income tax, you understand. So, they cannot forecast that next month, I will make a million dollars when I can't show that in the past. I made a million, right? is it acceptable based on probability of my ability to generate income. So, I have to be satisfied with their compensation [though unfair].

With this reduced income, he had to adjust his spending in terms of groceries, transportation, and recreation.

As discussed above, a group of participants in our study did not take up government - provided formal support systems due, in part, to high premiums. Another group of SE'd workers could not afford premiums for private health and income insurance coverage and instead relied substantially on informal support systems. Several important issues emerged in this context. First, SE'd workers who could afford premiums preferred private insurance instead of government regulated schemes. Second, the SE'd workers, who could not afford private insurance thought that government-group insurance, rather than private insurance, would be preferable because group insurance is relatively less expensive, as echoed in Sarika's narratives:

“Yeah, private [insurance was an option].... but it was even more expensive, like, it was crazy! So, I decided I would rather try to save the money myself first [because my income is inconsistent].”

Jane suggested that some sort of government group insurance might help SE'd workers, as its premiums could be affordable. Sarika also reflected on how, for her, even private insurance was out of its reach because her hours were variable, and so she did not meet the eligibility criteria of three months of consistent income. As such, SE'd workers in this study indicated that to be helpful, insurance needed to be flexible because their income was unstable. In a nutshell, most participants in our study had information/knowledge gaps and misinformation regarding existing social security programs from which SE'd workers could opt into or opt out. In terms of health coverage, many of them had to spend out of pocket because OHIP did not cover some expenses, including dental and mental health services, or drugs. With respect to EISB, even when participants were

aware of the program, they could not afford it due to the high premiums. In addition, some participants described bureaucratic complications and limited trust in the government provided schemes. Overall, they saw social insurance as preferable to private insurance due to perceived lower premium rates.

Navigating Covid-19 Emergency Response Benefit Programs

Most participants in our study were highly engaged in discussing how they were supported by the Canadian Government-regulated emergency response programs during Covid-19. Their focus of discussion mainly centered on Canada Emergency Response Benefit (CERB) and a little on Canada Emergency Student Benefit (CESB). The CERB provided lump sum income support (\$500/week) based on some eligibility criteria, including people who had employment and/or self-employment income of at least \$5,000 in 2019 or in the 12 months prior to the date of their application. CESB provided \$1,250/month to post-secondary students, and recent post-secondary and high school graduates who did not apply, receive, nor qualify, for the CERB or EI benefits for the same eligibility period. Most participants saw these programs as excellent (“fantastic,” “wonderful”) and as acknowledging SE’d workers as contributors to the economy. Mary, a fashion designer, elaborated by comparing Canadian and US policies.

I mean, Canada as a whole has done a great job in supporting its citizens through the pandemic. We've done our best [...] Ah, you look at the United States, and they've given out how much? Very little [...] and people are dying. They're the [high] numbers in the States because people cannot go to work. But here, people who had their jobs canceled are still able to meet their basic needs? [...] There's so much more we can do to support people

when they go through hard times, whether it's a lifelong chronic illness or something acute that is distributable. We could do more for people.”

However, several participants critiqued the program for having vague eligibility criteria. They felt that the Canadian government’s request to CERB recipients not meeting eligibility criteria to repay benefits was an example of government mismanagement. This group of SE’d workers also argued that the government did not provide a sustainable solution to protect the incomes of SE’d workers. In addition, several participants raised a question about misuse of the system in the event that people are doing cash jobs and receiving benefits simultaneously. They witnessed friends and relatives who were not going back to jobs intentionally as they were getting \$2000/month with CERB. Thus, some study participants felt that it was better to have no government-provided funds at all rather than to have a program open to misuse:

“Because [...] system would be abused completely. You can even see it now that people [I know] ... have traveled outside of Canada [while collecting these benefits]. They're cracking down on them [but government should] not going to give them COVID relief [leading to] people go on vacation and are getting money”.

In a nutshell, participants saw CERB as helpful for the ‘really needy’ SE’ workers who abruptly lost their jobs and income. Even though it was launched during an emergency, they also argued that the program should have provided more clarity. Finally, our participants went on to discuss a sustainable protection system for SE’d during any time of financial distress, including pandemics, sickness, and natural disasters. Many participants focused on Universal Basic Income for workers, including SE’d people, arguing that this type of support is necessary for SE’d if they lose income or become sick or injured. In this context, although Jimmy, a 35-year-old data analyst,

had a family annual income of 200k, he strongly supported the Universal Basic Income because he felt there was no guarantee that his health would always favor his ability to earn an income.

Compromise for a decent life: a potential threat to health and wellness

As discussed above, most participants felt the available government-provided support systems did not sufficiently protect their incomes. When ill or injured, they had to rely substantially on limited savings or on programs such as OHIP because, as SE'd, they had no employer-provided income support benefits or health insurance. In addition, many solo SE'd workers could not afford private insurance for health and income support. As a result, they were forced to compromise their living standards and fell into conundrums such as whether they should buy groceries or medicine. As such, many participants in our study stressed that they were often compelled not to take medication when ill in order to stay financially afloat. Even Scott, a SE'd construction worker and one of the top earners in our sample (up to \$100k/year), reported not being able to afford medication:

“I don't take medication either for it. So, because we can't afford it [...] Well, health care is free in Ontario, but medications, I can't afford them. So, I get what I can do, when I can do”.

He further expressed his dismay with this lack of coverage: “It sucks because I have to live with the pain”. He cannot afford his required medications, which OHIP does not covers his needs of medications (because he is 50 years old), and he has no savings as well.

Similarly, Ander, who ran an e-commerce business, noted the tension between food and medicine, “I would rather spend this much money on groceries rather than on medicine. However, medicine is important”. These compromises between health and a decent life are echoed in the

narratives of Mary, a SE'd fashion designer, who has been wrestling to manage her chronic health problem by sometimes using undermined quality of health services:

“I have to pay for my medication from my own pocket. I have to pay for my IV therapy, a small fee, because part of it is covered under OHIP. [have to pay for transportation, rheumatologist, neurologist] blood work is covered [...] except what I need a special test every now and then and it's \$60 [...] I can't afford them right now. Like an hour's massages expensive \$80 to \$120. I don't have money for that. So, I bought a massage pad to try to help ease those symptoms that massage would help. [seeking another way] they are colleges students [...] massage therapy osteopath those kinds of things where they need people to practice on and they'll do it for free.”

Several SE'd workers in our study asserted that their savings were not always sufficient to support their health and daily necessities following their illness or injury. In turn, they were compelled to depend on credit card loans. In this context, they were concerned about falling into a vicious cycle of loans and poverty. Mamun, a SE'd IT expert (\$45,000.00/year), reflected on the issue of debt: “My savings was very poor [...] not enough to support my unworked period. So, I had to charge my credit card a lot, and after [finding more] work, I have to pay those [bills]”. In a nutshell, though Scott (a construction worker) and Mamun (IT expert) were in a good position in terms of income, their financial concerns signaled economic uncertainty for SE'd workers.

Equity in work and benefits: a call for restorative justice

In terms of equity or fairness for SE'd workers in relation to government support systems, many participants argued that they should be treated equally to the salaried workers in terms of social

security system protections, as they are also contributing to the economy. Scott strongly raised his voice against this injustice by comparing SE'd with salaried and unionized workers:

“You know what need treat everybody equal. Just because I’m SE’d doesn’t mean that I’m not deemed as human as a person ... We don’t have any protection as a self-employed person.”.

Jane, an actor, and writer, also raised a similar point about SE rights:

“Everyone has the right to have housing and food and you do not worry about those things. You wouldn't have to worry about being hungry because worrying about those things or struggling with those things definitely contributes to not being able to work as hard when you're self-employed”.

Faria, a beautician, called for paid sick leave for SE'd workers, suggesting that this would be justice for them:

“I think that is unfair, because If you are a worker or employed person in a company and a self-employed person, they are both work. So, I think having paid sick leave is fair for self-employed people [such as] ourselves”.

As such, most of the SE'd workers in our study called for restorative justice in terms of social equality in accessing work and support systems provided by the government. By restorative justice, we refer to equality in relationships and restoring relationships, which exist “when relationships are such that each party has their rights to dignity, equal concern and respect satisfied” (Llewellyn & Howse, 1999, p. 39). In this context, the state or government can play a pivotal and critical role

as an agent of restorative justice, which is a commitment from the government to be open to and facilitate change in the current system to make the system workable (Llewellyn & Howse, 1999). Many SE'd workers in our study lived pay cheque-to-pay cheque, experiencing insecurity and precariousness in their lives.

5.4 Discussion

While workers with regular employment relationships are protected with statutory and employer support systems, SE'd workers often slip through the cracks. In this context, our study reaffirms existing research findings that SE'd workers are left out of social security systems (Behrendt & Nguyen, 2019; ILO, 2020; Khan et al., 2021; Khan, MacEachen, & Dunstan, 2021; Lynch, Everson, Kaplan, Salonen, & Salonen, 1998; OECD, 2019; Quinlan, 2015; Salonen et al., 2020). However, few studies have considered SE'd experiences of how they are supported (e.g., income, health services, emotional, and mental) following illness, injury, and related to income loss or reduction. Although some studies focused on social support and social security available for SE'd workers, focusing on a particular regime of social protection (Beattie et al., 2018; Behrendt & Nguyen, 2019; Corden, 1999; Fossen & König, 2017; Hartman et al., 2003; Quinlan, 2004, 2015; Salonen et al., 2020; Spasova, Bouget, Ghailani, & Vanhercke, 2019; Yoon & Bernell, 2013), very little research has addressed their experiences with the broader landscape of formal support systems. Moreover, research sometimes addressing SE workers has ignored SE heterogeneity and has homogenized SE experiences of support systems (Hilbrecht, 2016). However, their life experiences vary in terms of whether they are solo SE, or small business owners with or without paid employees and whether SE provides a primary or secondary income source. Finally, most research focusing on the government-provided support systems for SE'd workers centers on

government-provided quantitative data. This leaves a grey zone of understanding of the experiences of SE'd workers. Given this backdrop, our unique contribution is that this paper shed light on solo-SE'd workers knowledge and experiences of utilizing formal support systems following illness or injury.

This study revealed structural (premium affordability, lack of information, lack of SE 'd-focused support programs) and non-structural factors (e.g., lack of trust in government systems, discretion) that led to poor access to formal support for SE'd workers. Yet little has been documented in the existing literature regarding the formal support system's effectiveness and accessibility, as experienced by SE'd workers. Findings presented in the paper thus contribute to this literature to fill these gaps.

In our study, SE'd workers described a conspicuous knowledge gap with respect to existing formal support systems. Previous studies have underlined why social security literacy is primary requirement for populations to avail the social security systems (Ståhl et al., 2021). Why were SE'd workers in our study not aware of the formal support systems? Two groups of SE'd workers prevailed in our research: first, some people were very unfamiliar with the social security system. This is consistent with several studies of developed economies, including Canada and Australia, and implies that eligible and entitled SE'd workers do not seek and claim compensation due to a lack of government-provided information about available programs (Hilbrecht, 2016; Quinlan, 2004). In this context, SE'd workers in this research suggested that the government run a rigorous social insurance literacy program using social and mass media. The second group in our study knew about these systems but decided not to opt into a formal support system. We are more concerned about the latter group than the former because understanding reasons for ill-fit between

policy and population needs is paramount for policy formulations and implementation. In this context, our study reveals several factors pertinent to premium affordability, lack of SE-focused support programs, lack of trust in government systems, red-tape of bureaucracy, discretion, confidence about savings, and relative affordability of private insurance. Most of the reasons mentioned above are not unique to Canadian SE'd workers. Countries with comprehensive social protection systems have similar limitations in protecting SE'd workers {Jacqueson, 2021 #579}.

Although SE'd workers in this study underscored the bureaucratic challenges of claiming benefits from the government agencies, they did not focus on the issues related to employment misclassification or challenges with defining SE. However, a recent scoping review asserted that defining SE'd workers is a pressing challenge in most economically developed countries (e.g., Canada, Australia, USA, Denmark, UK) (Sharp, 2017;Grégoris, 2017;Khan, 2022;Gevaert, De Moortel, Wilkens, & Vanroelen, 2018). As well, their employment status can be vague in policy and legal documents (Khan et al., 2021). Undoubtedly, the definition of SE'd is currently one of the constraints to protecting better SE'd workers against the backdrop of evolving work arrangements (OECD, 2019).

Interestingly, many SE'd workers showed positive attitudes towards opting into formal support systems after being informed about them by the interviewer. They were highly interested in having access to social security because they experienced insecurity and precarity with their work and income and had no easy access to government or privately regulated support systems. Several other studies have also found that job and income insecurity creates psychological distress and anxiety among workers (Watson & Osberg, 2018). SE'd workers in this study singled out the challenging bureaucratic aspects of benefit claims and related complications in terms of claiming

procedures and fitting into eligibility criteria. As mentioned above, after participants were informed about the social security systems (e.g., EISB), they showed a positive attitude towards programs. However, no single participant we found in this study opted into this program, and very few had even a vague understanding of it. Given this context, there is a gap between policy and programs and the implementation of the policy or programs.

Our discussion, based on the findings, advances a central question: Why did SE'd people in this study not opt into the available government programs (e.g., EISB)? If bureaucratic issues are there, governments may need to revisit their policy implementation strategies. In addition to gaps between policy and practice, this study reminds us that the extension or modernization of benefit coverage cannot adequately protect SE'd workers unless the constraints (premium affordability, knowledge gaps, lack of SE-focused programs) are resolved. A significant coverage gap for SE'd workers still exists, despite extending legal coverage in many countries (Behrendt & Nguyen, 2019). Given this backdrop, although people may have different views regarding mandatory or optional social security programs, in our view, the necessity of income support might outweigh the issue of 'choice' (mandatory or optional). In this case, the Canadian Government might consult the European Commission's proposed mandatory social protection. This proposes that people, regardless of employment status, should come under the mandatory social protection coverage, but it will be means-tested (Jacqueson, 2021).

In our study, although SE'd workers castigated the existing government-regulated programs due to their partial and limited coverage (WSIB, OHIP/UHIP), faulty eligibility assessment (WSIB, ODSP), and costly premiums (EISB), they appreciated Covid-19's emergency response programs (e.g., CERB) as successful and effective in addressing issues of SE'd workers.

However, these programs are dogged by limitations such as moral hazard (i. e., some people have a tendency to abuse/misuse government funding, as it is free) and financial unsustainability (i.e., CERB might be excellent programs during the pandemic, but it is not a sustainable solution because people might have to stop working due to illness in a regular time). This is consistent with studies related to the effectiveness of social security programs during Covid-19 from other welfare states (Fletcher, 2020; Gosselin, Godbout, Gagné-Dubé, & St-Cerny, 2020; Lord, 2020; Schmid, 2020). Despite these limitations, Canada's goodwill in terms of successfully protecting SE'd workers during pandemic was comparable with OECD countries (Gosselin et al., 2020).

In this study, participants experienced that, due to limited health coverage by government health insurance, they had to spend out of their pocket for medications, diagnosis, eye examinations, therapies, and many more. In turn, they were sometimes forced to depend on loans or credit cards to stay afloat when ill or injured, which sometimes pushed them into the cycles of loans and poverty. Studies from other countries show that Canadians are not alone with health-related financial strain. Many economically developed countries, including the UK, Canada, United States, Australia, and New Zealand, have been cutting their state funding for health and health care supports every year (McGregor, 2001). All countries, regardless of less advanced or advanced economies, have been forming policies in a favor of neoliberal mindsets, that is, to be independent, need freedom, not supported by the government, and many more feelings. Neoliberal ideas also shape the mindset of people by encouraging self-dependence based on saving instead of relying on states' contributions. Of importance, this political game is played with young people, leaving them at risk of becoming trapped in unprotected forms of work (e.g., gig workers)(Behrendt & Nguyen, 2019).

In our study, SE'd workers shared concerns about compromising basic needs, such as shelter, food, education, recreation, health services, and medications, because of insufficient income and social protections. Hence, their right to a decent/quality life was adversely affected by their SE'd status. SE'd in this study questioned existing social security systems in terms of equity and social justice. They believed that they were not equally treated in terms of support systems, compared to salaried workers, despite the fact that they contribute to the economy as their employee counterparts do. In this context, their accounts represented a call for 'restorative justice' in terms of fair treatment of work and benefits. Accordingly, the ILO proposed Universal Labour Guarantee (ULG), which will be applied to all workers regardless of their contractual arrangements or employment status, and, therefore to SE'd workers as well. In our study, some SE'd workers called for universal guaranteed income (UGI) to protect them, in times of sickness, injury, or job loss. While supporters of Universal Basic Income (UBI) contend that everybody has the right to food and shelter based on redistributive justice, skeptics believe that UBI will decrease workers' incentive to work (Ståhl & MacEachen, 2021). European research proposed reconciling these conflicting views that social protections should be 'decoupled' from employment (Behrendt & Nguyen, 2019). Instead, it should be linked to a 'safety net' for lower-income individuals (Behrendt & Nguyen, 2019).

Our study suggests that a privately arranged income security plan can leave many SE'd workers unprotected because many low -earning SE'd workers cannot afford the premiums. In this context, in agreement with many scholars, we emphasize the need for social insurance systems to cover all workers regardless of their employment status because underpinning private insurance and savings arrangements will likely widen the protection gaps, increase poverty, and exacerbate the inequality (Behrendt & Nguyen, 2019). In addition to ILO' assertions, Canada has an

obligation to create an equal social protections system because it ratified ILO's convention 111("any distinction, exclusion, or preference ... which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation", ... "any distinction, exclusion or preference in respect of particular job based ..."). In addition, support for SE'd people can also be found in the European Commission statement (2019): "The future of work demands the development of equitable, inclusive, and sustainable social protection systems, which ensure protection to meet people's needs over the life cycle" (Behrendt & Nguyen, 2019) p.207. Similarly, Canada needs to address the protection of SE'd workers because it is committed to UN, which is implied in the three goals of UN Sustainable Development Goals (SDG): Goal 3: Good health and well-being for people, Goal 8: Decent work and economic growth, Goal 10: Reducing inequalities.

5.5 Conclusion

To date, there has been little understanding of how to solo SE'd workers experience and navigate their health and work following illness, injury, or income reduction or loss. What are the existing formal support systems that SE'd workers can seek and use? Although scholars have previously engaged with existing statutory or formal support systems for SE'd workers, little is known about the experiences of solo SE'd workers regarding how they navigate their work, health, illness, or injury with the existing formal support systems. In this study, SE'd workers described encountering several constraints regarding access to formal support systems: premium affordability, information/knowledge gap, lack of SE social support programs, red tape of bureaucracy, confidence about savings, and lack of trust in government-regulated system. They also criticized the government-regulated formal support systems (e.g., OHIP, ODSP, EISB) on the grounds of partial coverage, vague and intricated eligibility issues, and affordability. Although

they appreciated receiving COVID-related government income support, some SE'd workers had reservations about the emergency programs because of weak management. While we cannot recommend a cookie-cutter solution to better protect SE'd workers when they cannot work and earn an income, this study points to ways that statutory social protection programs should be uncoupled from the employment benefits. Instead, governments might introduce a comprehensive program that may compensate or protects workers irrespective of employment status. For example, we could encourage social insurance systems instead of private insurance plans because private insurance usually requires higher premium payments than pooled social or group insurance. Overall, SE'd workers as growing working populations require the consideration of equitable, inclusive, and sustainable social protection systems that ensure protection to meet people's needs over the life cycle.

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Chapter 6

Conclusion

6.1 Overview

This final chapter of the dissertation presents an overview of the contributions of each of the three manuscripts as they relate to the aim of the dissertation, which was to establish an understanding of how social security system protects SE'd workers following illness, injury, and income reduction and/or loss. This chapter ends by stating recommendations, driven by data collected, that might help to improve social security systems for SE'd workers (and beyond) in Canada (or beyond) and identifying the limitations and strengths of the studies.

6.2 Summary of the key findings

Chapter 3, a scoping review, examined peer-reviewed articles to understand how SE'd workers in advanced economies are supported when they are unable to work due to illness, injury, and disability. This study identified factors behind entering into SE, and revealed that some pull factors (e.g., flexibility) draw people to enter into SE (Gevaert et al., 2018; Rizzo, 2002; Sharp et al., 2017). This study suggested that one-sided assertion that SE'd workers are healthier than salaried because of the flexibility in SE'd work may not be the case in today's world of work. As such, many SE'd people may not be taking care of their health (e.g., buying private health insurance and medical care) with their savings, enjoy a better quality of life and health status, greater job satisfaction (Gevaert et al., 2018; Hilbrecht, 2016; Sharp et al., 2017). This study explored the dark side of SE'd workers in cases when people are compelled to do SE work due to unemployment, and lack of appropriate jobs. This study also revealed that some people choose SE because SE is a good fit with a disability, and this mode of work allows them to integrate into mainstream society (Ashley & Graf, 2018; Ostrow et al., 2018; Rizzo, 2002). In a similar vein,

people who earn low wages (e.g., gig workers) and struggle to lead a decent life generally adopt SE (Ashley & Graf, 2018; Fossen & König, 2017; Hilbrecht, 2016; Ostrow et al., 2018; Sharp et al., 2017; Wall, 2015). Thus, SE might be seen as a double-edged sword (flexibility vs involuntary SE) (Rietveld et al., 2015).

In this study, I unmasked an interesting health aspect of some traditional SE connected to aging, in another words a linkage between aging and health of SE'd; SE'd farmers are forced to work before complete recovery from hospital and rehabilitation because of workload and lack of help (as their next generations are not coming into farming) (Beattie et al., 2018). SE'd workers in food industry encountered similar health impacts because they were at higher risk of physical hazards (e.g., joint pain, musculoskeletal disorder, cardiovascular disease) than regular employees (Grégoris et al., 2017). There were no significant differences found in this study between SE'd and employees in the most cases in terms of the higher prevalence of disease, however this study detected higher level of alcoholism as determinant of various diseases in SE'd than employees (Grégoris et al., 2017). In general, SE'd are also more vulnerable in terms of mental health, as they are more socially isolated than salaried workers (Grégoris et al., 2017).

This study also stressed that, although SE'd workers can opt into some social security schemes in some countries, their participation is very poor. For example, in Australia (e.g., NSW), SE'd workers can opt into the work injury scheme if they voluntarily participate by paying premiums for self-insurance. This covers temporary and permanent disability benefits, and workers' medical benefits as well as unemployment and family allowances. In addition, SE'd workers in NSW can buy personal injury/accident insurance, though it is not connected to CTP (Compulsory Third Party Insurance) (Khan et al., 2021). However, Australian SE'd are less likely to make compensation claims, compared to regular employees (Quinlan, 2004, 2015). Of

importance, there is no data on what percentage of SE'd workers opted into the schemes, mentioned above, in Australia. SE is one of the four categories (unskilled workers, occupationally mobile, SE'd, and geographically isolated) of employment with the highest underreporting of compensation claims (Quinlan, 1999). So, in Australia, similar to Canada, (Hilbrecht, 2016) SE'd workers are excluded from worker's compensation claims, and even those covered do not lodge claims because of lack of knowledge of their entitlement, ignorance, lack of information, and financial pressure to keep their job (Quinlan & Mayhew, 1999). Like other advanced economies (e.g., Canada), Australian people have access to some coverage, regardless of their employment status. In this context, SE'd workers had poor participation rate to claim compensation. For example, the Australian Bureau of Statistics investigated why a large number of injured workers do not claim for compensation and found that 14.4% of workers are SE'd and they think they are not eligible for compensations (Quinlan and Mayhew 1999).

This critical review suggests that government and statutory support to SE'd people in economically advanced countries is limited compared to salaried workers (e.g., Canada, Australia, and France). In this context, using a social justice lens, this study argues that whether someone is working for wage or profit, under a contract, or providing gig services, their employment status should not be a determining factor or cornerstone to determining their eligibility for social protections and social insurance. Finally, this study explored informal support systems (e.g., emotional, instrumental, and informational) that some SE'd workers received from their family members and friends. In terms of occupational health services and rehabilitation, this review showed that injured or disabled SE'd workers have meager access to occupational health services and limited, or a complete lack of, vocational rehabilitation. However, this study stressed that they require basic support for rehabilitation and reintegration in

labour markets following illness or injury, including education, degrees, training, and occupational health services.

Chapter 4, using comparative interpretive policy analysis, examined the available social security supports for SE'd workers in two welfare states, Canada (Ontario) and Australia (NSW). While the previous chapter (study) focused on overall circumstances of SE'd workers in advanced economies in terms of occupational health, safety, disease, social security systems, and rehabilitation, chapter 4 broadly sheds light on the social security systems for the two specific jurisdictions because they have some similarities in terms of socio-economic, political, and cultural contexts. We take the cases of Canada and Australia, as both countries have key similarities in terms of comparable economies and liberal welfare states (Bambra, 2007). As well, both have social welfare policies that differ by state/province and each address occupational illness and injury via workers' compensation systems. They also have a similar penetration of the new "gig economy", and the similar proportion of SE'd workers, accounting around 8-10% of the employed population in 2016 (ILO, 2020). Because of these similarities, comparative analysis is useful for understanding actions that can support greater sustainability of labour markets and economies of their respective SE'd populations.

Like the scoping review, this policy analysis revealed that there is no concrete way of defining SE in both countries' academic and working documents, implying that there was no one dimension of SE. Different government bodies have defined it differently, for their own administrative purposes. Moreover, legal protocols dealing with work, employment, and employee minimally defined SE in both jurisdictions. This study argued that SE is not a fixed category/pattern and is contingent on changing structural relationships, which are subject to the mode of production and economy (e.g., manufacturing, service, and digital economy), and it is a

historical reality for both countries; hence this ambiguity or complexity of classification/misclassification is reinforced by newly emerging labour market traits and sectors, such as information and communication technology (ICT) - based labour market, globalized labour market, and neoliberal labour market. These ever-changing work arrangements make it difficult to identify who is SE'd. This review found that supporting SE'd workers is connected to how SE is defined, conceptualized, and classified. This review also attempted to demystify the conceptualization of SE, because it has become common for employers to misclassify employees (intentionally creating confusions over definition of worker) to avoid welfare compensation coverage (e.g., Australia)(Quinlan, 2004). So, it is important to have a concrete definition of SE to protect workers who are not actually SE'd and should be considered as employees, regardless of jurisdiction.

This study found that both Ontario and NSW have multiple programs to support their citizens and workers, including SE'd workers, in terms of government and non-government agencies through different stakeholders, such as hospitals, ministries of government, insurance boards, and companies. With some exceptions, generally Australian social protection systems (e.g., minimum wages, paid sick, care, parental and holiday leave, workers' compensation and mandatory occupational pensions) do not depend on the workers' previous contributions, instead their system relies on general government revenue (Whiteford & Heron, 2018). For example, workers in NSW, including SE'd, have more access to social security schemes (e.g., old age pension, disability support pension, unemployment benefits, family allowances, motor accident insurance, national disability insurance scheme, sickness and maternity benefits, and survivor's pension) than those in Ontario. In Ontario, social supports such as ODSP, OHIP and CPP are provided irrespective of workers' employment status, although some are means-tested (e.g.,

ODSP), and some schemes require contributions from the workers (e.g., CPP). Similarly, workers in NSW, regardless of their employment status, have also access to several types of social support (e.g., old age pension, disability support pension, unemployment benefits motor accident insurance). Of these, some schemes require contributions from the workers (e.g., motor accident insurance). However, Ontario has some provisions, such as EI special benefits program (e.g., maternity, parental, sickness, compassionate care, family caregiver for children, and family caregiver for adults), which provides SE'd people with a significant number of benefits in return for paying a premium, though it likely fails to attract low-earning SE'd workers because they likely cannot afford it with the high rate of premiums and information gaps. In a nutshell, both Ontario and NSW have multiple social security schemes, but each provides limited provisions for SE'd due largely to lacking eligibility, complicated eligibility criteria, or high-cost premiums.

Finally, chapter 5 extended the previous studies with empirical qualitative data to examine how SE'd workers in Ontario experience and navigate social security systems following illness, injury, and income reduction and /or loss. Findings revealed that scanty policy support for the SE'd is a pressing challenge to protect them following illness or injury. Very few participants are aware of the few governments supports available to SE'd workers. Both structural (e.g., premium affordability, lack of SE 'd-focused support programs, red-tape) and non-structural factors (e.g., lack of trust in government systems, discretion) contributed to poor access to government support for SE'd workers. This study also found that many participants felt they were victims of social injustice because they were not treated equally to salaried workers in terms of social protection. They sought equality to salaried workers and restorative justice in terms of governments setting up work and health support systems for the SE'd. In addition, this study revealed that participants described having had to compromise with their basic needs (e.g.,

shelter, food, nutrition intake, education, medications) when ill or injured due to their reduced ability to work and earn an income. As such, meager government support systems exacerbated their vulnerabilities.

6.3 Policy implications

The issue of supporting SE'd workers during injury and sickness is a neglected discourse in Canada. There is a gulf between how the number of SE'd workers are ballooning against the backdrop of the gig economy and how these rising working populations lack attention in social security systems in Ontario, Canada. Policies in the advanced economies, including Canada, and Australia, appear to be based on the traditional picture of prosperous, well-organized SE'd workers not needing support from the state. However, this is an overgeneralization because many low-paying SE'd workers currently strive to lead a decent life. Undoubtedly, they face very difficult circumstances when they have to be away from work due to injury or sickness, as this strata of SE'd population generally cannot afford private insurance and lack access to many supports geared to employees. In fact, at present, supports for SE'd workers remain illusionary. Meager government-provided formal support may adversely impact the health and wellbeing of SE'd workers. For a sustainable sector of SE'd entrepreneurs, policy interventions may be needed to support SE'd people who are unable to work due to work disability or illness to help them to reintegrate into the workforce. Work (evidence/research based new policies) is needed at both the policy and practice levels to incorporate the voices of SE'd workers into social security systems. Findings in this dissertation prompt the following suggestions about federal or provincial government policy and practice changes to better support SE'd workers:

- (i) Although ‘Employment Insurance Special Benefits’ in Canada are not always used by SE’d workers, possibly due to the financial burden of premium payments, it nonetheless provides an example of a coverage system for SE’d workers that provide temporary income supports for parental, sickness, or compassionate support leave, etc. This is one way in which SE’d workers are recognised as a cohort of workers who are deserving of support during difficult economic periods. In all, it is encouraging to see in Canada that SE'd are recognised in these policies as it may create room for them to be covered by other national/provincial programs too, such as workers’ compensation and employment insurance.
- (ii) In our study, most SE’d workers were unaware of the available support systems, such as CERB and EISB, to which they were entitled, and this may be a widely prevalent situation among SE’d workers. Given this possibility, a social support literacy campaign may be introduced using mass media or social media.
- (iii) Basic income policies may be a solution to providing a basic social safety net to SE’d people, among others. An advantage of this approach is that it draws on the general tax fund rather than relying on taxing incomes of low-wage SE’d people, who are already income insecure (Pasma & Regehr, 2019; Ståhl & MacEachen, 2021). In a sense, all are workers with their only asset of human capital; thus, all workers who depend on the sale of their capacity to work and survive should be covered and protected by labour protections and social supports (Fudge, 2003). This builds on my study participants’ suggestions that universal guaranteed income (UGI) would be a good mechanism to protect them when experiencing sickness, injury, or job loss.

- (iv) Emergency income supports can be introduced for SE'd workers so that they can be supported when faced with temporary emergency circumstances, including but not limited to natural disasters, pandemic, and injury/sickness. In this context, for example, Covid emergency benefits in Canada (CERB, Canada) was an example of a successful program to address and protect SE'd workers.
- (v) Separating social security packages from 'employment' may be a way to improve social security program coverage for SE'd workers (Behrendt & Nguyen, 2019). A comprehensive support program that is not based on employment, building on the example of CERB support provided to all Canadian workers, including the SE'd, during Covid-19, could protect low-income people, irrespective of employment status. This would facilitate an equitable, inclusive, and sustainable social protection system, which is needed for a sustainable labour market, by facilitating labour market transitions and labour mobility.
- (vi) Similarly, I would recommended that the Canadian government heeds the call of the "Global Commission on the Future of Work (2019)" for universal social security from birth to old age, financed by a combination of taxes and contributions to social security, and on the principle of solidarity and risk sharing, to realize the human right to social security and to support workers and their families in the transition to the future of work, including SE (Behrendt & Nguyen, 2019). Ensuring universal social protection for SE'd workers requires closing the coverage gap and adapting to the new circumstances associated with the emergence of new forms of employment, such as gig workers and respond to the specific situations and needs of these workers (Behrendt & Nguyen, 2019).

- (vii) As women and recent immigrants are more prone to be SE'd workers in recent years (Beland, Fakorede, & Mikola, 2020; Picot, 2021), childcare for the SE'd deserves special policy attention.
- (viii) A growing concern worldwide is that SE'd people working alone at home experience numerous mental health hazards due to isolation (Grégoris et al., 2017; Patzelt & Shepherd, 2011). The occupational mental health of SE'd workers is understudied and require analysis, taking into account the nature and sector of jobs and income level. Though many governments are encouraging SE (Fuerlinger, Fandl, & Funke, 2015; Von Bargen, Freedman, & Pages, 2003), the work-related mental well-being of SE'd people remains understudied and unexplored. Given this backdrop, the mental and physical health issues of SE'd people need to be addressed in legislation and policies related to workers' compensation and labour standards. More research addressing this lacuna is needed.
- (ix) An Australian study found that SE'd are less likely to make work injury compensation claims than regular employees (Quinlan, 1999, 2004, 2015). SE is one of the four employment categories with the highest underreporting of compensation claims (Quinlan, 2004, 2015; Quinlan & Mayhew, 1999). So, in Australia, like in Canada, SE'd workers are excluded from worker's compensation claims because even those covered do not lodge claims because they lack knowledge of their entitlement (Quinlan, 2004). Underreporting compensation claims is a big issue for the labour market and social safety net policies. A strong social mobilization program may be required to reduce underreporting. For example, the Canadian Labour Congress created April 28th as the National Day of Mourning in Canada in 1984 to

remember and honour individuals who died, were injured, or were ill at work (since the occasion of 70th anniversary of the day the first Ontario Worker's Compensation Act was approved by the government in 1914). This was highly compelling social campaign, resulting in that 90% Ontarians now know that they have right to refuse unsafe work, as the WSIB (2022) published a survey report.

- (x) A recent Canadian study, based on 2016 census and tax data, revealed that gig workers among all workers in Canada rose from 5.5% in 2005 to 8.2%. According to the “2021 Canadian Self-employment Report”, SE is also heading to new trends in the post-Covid-19 labour market: of the 30 million working Canadians, nearly 7 million are expecting to make the jump to SE within the next two years, and the higher rate is even pronounced for those SE’d people who are under the age of 35 years (FreshBooks, 2021). Given this backdrop, I would recommend that governments take a special focus on young people who are SE’d. As this cohort is the future resource of Canadian labour market, their health and well-being is of paramount importance, and needs to be addressed in public policies, including social security, health policy, and labour market policy.

Above all, forming laws and policy to protect SE’s workers is important, but policy does not always guarantee effective coverage for SE’d workers. For instance, many European countries still show social protection coverage gaps, despite they extended legal coverage for SE’d workers (Behrendt & Nguyen, 2019). In this context, the issues, discussed above, including contributory capacities/premium affordability, complicated administrative procedure, weak compliance, and enforcement system may be constraining for accessing social security.

6.4 Strengths and limitations

There are several limitations to this research. In terms of scoping review (chapter 3), I considered articles published up to 2019; hence I missed the articles from 2020-21, which was an important period for SE'd workers due to the COVID-19 pandemic. Further, in my search, I found only four articles with a qualitative approach in the final sample (n=18). This signifies limitations of current understanding regarding how SE'd workers are protected when they become ill, injured, or unable to work and calls for more comprehensive and robust research based on qualitative approach.

In the case of policy analysis (chapter 4), I was dogged by a dearth of data around SE'd workers for Canada and Australia. It was challenging to sort the data for SE'd workers from other precarious workers because most documents overlap these employment segments. In short, I agree with several researchers that SE is poorly documented and understood. In both Ontario and NSW, the labour market is undergoing rapid change and development at policy and practice levels. Therefore, what I have written about them is not static; nevertheless, I argue that the broad themes emerging from my work will be relevant in many advanced economies for a significant time to come. Apart from the established databases for scholarly articles and documents, I relied on Google's search engine to capture gray literature and ongoing government data because it is a popular tool for seeking specific information and relevant outcomes for a typical query (Jamali and Asadi 2010). Although Google searchers are influenced by the user profile, I found that I was able to identify key observations and commentaries (e.g., updated statistics) from global agencies, such as the World Health Organization, the World Bank, and the International Labour Organisation.

In chapter 5, narrative analysis, some shortcomings exist. First, in terms of recruitment, I recruited a good number of types of SE, but not all kinds of SE. However, I included many types, including gig workers (n=3), information technology field (n=2), art industry (n=6), financial management (n=3), tailoring, small business, electrician, construction worker, cleaner, rotary commissioner, catering, and home childcare provider. Second, I recruited more than half of the participants with a family income of 50k and above. As I recruited and conducted interviews online using digital platforms, I might not have reached a substantial number of low-income SE'd workers because they might have no access to digital technologies or recruiting platforms, such as Kijiji, and other social media might be out of their reach. For example, I recruited only one participant who was a cleaner. Her experiences were different to those of other participants and enriched my data. More people from lower income groups could underpin my data. Third, as this was a student project, I could not include people other than English speakers due to time and budget constraints. Fourth, due to the COVID-19 Ontario provincial lockdown measure, I had to conduct audio/videoconferencing interviews. This created some practical challenges that conflicted with the holistic quality of qualitative research, including dropped calls, loss of intimacy, failure to capture the non-verbal communication and gestures, compared to in-person interviews. However, it provided a unique opportunity for the participants and me by compressing the time-space divide, facilitating safety, reducing travel-related expenses, maintaining social distance, and protecting personal space and privacy. Videoconferencing allowed this study to cover province-wide participants. Fifth, I encountered much 'absenteeism' from some participants. For example, several people fixed an interview appointment with me, but ultimately, they did not appear for the interview. However, this issue is prevalent in the case of online interviews (Khan & MacEachen, 2022a). Finally, this study could have used a gender-

based analysis to better understand how SE'd men and women may have differently experienced their interactions with social security systems, following their illness, injury, or income reduction/loss. Similarly, an intersectional analysis (considering gender, age, income level, and sector of SE, race/country of origin, immigration status, education, and their health issues-mental or physical) might have shed different light on how SE'd workers experienced social security systems, following illness, injury, and income education or loss.

Despite these limitations, there are strengths in this research. This study addressed numerous gaps in the literature and can inform policy and programs that may successfully and effectively protect a growing working population of SE'd workers in Canada and beyond. First, though many studies shed light on SE'd workers, there have been limited investigations of the intersection of SE'd status, health, illness, and the social security system. This study is the first of its kind that addressed the experiences of SE'd workers regarding their health and illness, considering social security systems for them in Canada and beyond. Second, this dissertation portrayed a comprehensive picture of developed economies, then a snapshot of the socio-politically two similar welfare states on how they treat SE'd workers. Third, this study provides robust empirical evidence of how SE'd workers experience social security systems in Ontario, Canada. Finally, this dissertation offers a timely revisiting of the changing labour market, where SE'd workers hold a substantial space in Canada, which is particularly needed given the current socio-economic-political upheaval. I would hope that consideration of the issues that emerged from our description and analysis of identifying SE'd workers and compensation or supports for absence from work due to sickness and injury will help policymakers, people working in administering workers' compensation, and researchers in their task of moving toward a sustainable compensation policy and the imperative of tackling the gaps in the existing systems.

Thus, Canada might establish an inclusive labour market to achieve a sustainable economy in the post-pandemic period.

6.5 Directions for future research

This dissertation sought to explore solo SE'd workers' experiences regarding illness and injuries in the context of social security systems in Canada. While this study provided an understanding of the underlying context and circumstances of SE'd workers' work, health, and illness in the context of existing social security systems, further research is needed to build upon the findings of this study.

With few exceptions (Bajwa, Gastaldo, Di Ruggiero, & Knorr, 2018; Bartel et al., 2019; Tran & Sokas, 2017), we know very little from the existing literature on how contemporary SE'd people experience their work and health. As mentioned earlier, SE is incredibly diverse; it is necessary to empirically explore how sector specific SE'd people survive with low incomes, especially when injured or ill. For example, there is a need to better understand SE'd gig workers because SE in the gig economy often involves workers doing multiple jobs (e.g., Uber drivers). Possible adverse health repercussions need to be explored comprehensively, especially because a growing number of young people are doing gig work.

Currently, statistical analyses do not accurately reflect the situation of SE'd people in economically advanced countries and may not be applicable to other countries. It is noteworthy that most of the articles in our sample (scoping review, chapter 3) are based on quantitative analysis and national surveys and are concentrated in the USA (Fossen & König, 2017; Yoon & Bernell, 2013). Ultimately, what is at stake is a nuanced understanding of the experiences of health, sickness, and injury of SE'd people. Therefore, more research based on qualitative or mixed-method approaches is needed.

Although my research explored and raised the issue of SE'd workers, we do not know what percentage of SE'd workers are opting into (or out) social security systems (which they are entitled to and can opt into) in Canada (e.g., EISB), what are the driving factors in choosing to opt in or not, the prevalence of SE'd workers in general, and solo SE'd workers in particular, what are the major occupational diseases and prevalence, and many more issues that require a broader picture. In this context, more quantitative approach-based research is needed to explore the above-mentioned issues.

Mental health is a high concern issue for SE'd workers. Although many quantitative studies, predominately based on census data, provide evidence that SE'd workers are more vulnerable in terms of their mental health due to their work and isolation (no coworkers) than salaried workers, further qualitative studies are essential to understand better what mental health issues they are encountering and how they manage. In addition, a special investigation is required to understand the mental health reality of solo SE'd workers because their lifestyle and experiences are different from other conventional entrepreneur-type SE'd workers.

It is paramount to create necessary support systems for sick and injured SE'd workers to support their return to work. Hence, future research should consider how ill and injured SE'd workers can be reintegrated into the labour market.

It is unclear in the literature how the gig economy impacts occupational health, health-related services, and social security of SE'd workers. Hence, future research needs to investigate the experiences of SE'd workers in the gig economy.

Some operational research and comparative policy analysis (with comparable countries, predominantly Canada and European countries) would assist the reformation and formation of

workers' compensations, employment standards, and other social security systems, using social justice and human rights lens, and socio-legal approach.

Given that many low income SE'd workers are left unprotected by social security systems, they may become reliant on informal supports from their family members, friends, other social networks for financial, emotional, informational, and psychological support (Hilbrecht, 2016). Against this backdrop, research should examine how informal support systems might protect SE'd workers, following illness, injury, income loss/reduction, and any emergency time¹. In addition, a gender-based analysis might be useful to understand how these formal and informal support systems protect SE'd workers, following illness, injury, and income reduction/loss.

Finally, there is no doubt that the SE'd labour market is booming under the circumstances of current socio-political and economic context with different dimensions, by infusing 'entrepreneurial spirit' among people; hence, 'flexibility' has become synonymous with 'precarity' of lives. It is high time to understand how this precarity outweighs flexibility vis-à-vis health and wellness of SE'd workers.

Against the backdrop of changing labour market in the digital age, in finale, SE is inevitable due to digitalization and globalization of labour market. A premise guiding policymaker is that SE'd workers should not be at a social security disadvantage relative to employees. Governments should create an explicit policy to deal SE'd and precarious workers to remove grey zones and clarify eligibility for compensation.

¹ This paper is not included in the thesis but is currently drafted.

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Appendices

Appendix A: Information Letter

Study Title: A narrative analysis of how self-employed workers navigate work, injury, and illness

Principal Investigator: Dr. Ellen MacEachen, Professor, School of Public Health Sciences,

The University of Waterloo, Phone: +01 519 888 4567 ext. 37248, E-mail:

ellen.maceachen@uwaterloo.ca

Student Investigator: Tauhid Hossain Khan, School of Public Health Sciences,

The University of Waterloo, E-mail: th3khan@uwaterloo.ca

What is the study about?

You are invited to participate in research that involves your experiences about work, sickness/illness/injury. The general purpose of this research is to document the experiences of solo self-employed workers – how they manage their work and injuries /illnesses. This study is being undertaken as part of my (Tauhid Khan) PhD research. I plan to combine my literature, document review and your experiences to understand how self-employed people can be better protected when they experienced illness/injures.

What does participation involve?

As a participant, you will be involved in an interview – through phone or Skype video for around one hour. The questions that will be asked during the interview will address how you navigated and managed your work and health when you experience sickness/illness. I will ask about your demographic information, such as age, gender, income etc. in order to describe the participants in the study and examine differences and trends across these characteristics. Then, you will be asked about your work what you are currently doing, what type of work, how long you are doing this work, how you became self-employed etc. Other questions will focus on your health – what type of sickness or illnesses you had faced, in this

context how you managed your work and illness. You will also be asked what the available supports systems from the government and other sources you obtained to manage your illnesses. We shall further discuss whether you encountered any challenges to manage your illnesses, particularly how you returned to your work after illness. Finally, we will discuss your general opinions and recommendations about how the systems and policies can be improved.

The interview will be audio recorded to ensure an accurate transcript. With your permission, anonymous quotations may be used in publications and/or presentations. The interviews will be conducted by Tauhid Khan in English.

Who may participate in the study?

In order to participate in the study, you must be from Ontario, Canada, be at least 18 years of age and able to speak and understand English. Your main income should be from self-employment, and you must have no employees. You must have had the experience of illness or injury (work related or not).

Is participation in the study voluntary?

Participation in this study is entirely voluntary. In addition, if you wish, you may decline to answer any specific questions. Furthermore, you may decide to withdraw from this study at any time and may do so without loss of remuneration. If you choose to withdraw during or after your interview, your interview data will be deleted from any electronic storage and hard copies destroyed. However, you can request your data be removed from the study up until August 2022 as it is not possible to withdraw your data once my thesis has been submitted.

Will I receive anything for participating in the study?

To thank you for your time you will receive **\$40** cash via email transfer. If you leave the study during or after the interview, you will still receive that amount. The amount received is taxable. It is your responsibility to report this amount for income tax purposes.

What are the possible benefits of the study?

Participation in this study may not provide any personal benefit to you, but your responses will be valuable in furthering our understanding of the working and health conditions of a distinct population, self-employed, more specifically the findings will help us to develop better policy recommendations to improve the well-being of self-employed workers. Participants will have the opportunity to share their concerns, challenges, misconceptions, potential state-sponsored supports related to their work, experiences of the time when they unable to work due to sickness and injury. Having the opportunity to narrate the experiences in this study may help the participants to explore the potential opportunity of their work, the government supports, provide awareness of what to do when unable to work due to sickness and injury.

What are the risks associated with the study?

There might be a risk at a very minimal level with feelings of distress or sadness when recounting stories in terms of some participants' illness or injury or family conditions. In this case, we will skip those questions and move to the next questions. As well, at the end of this form we list some support resources.

Will my identity be known to others?

Only the research team, including a student researcher and three academic supervisors will know your identity, and your identity will be kept confidential.

Will my information be kept confidential?

Only the research team (myself and three academic supervisors) will know your identity. Your identity will be kept confidential. The information you share will be kept confidential. Identifying information will be removed from the transcripts and the audio recordings will be retained for 7 years. I will report the findings in this study using some participants' quotes and these quotations will be anonymous – including removing any identifying features (personal names, dates, and places) that might inadvertently identify

you. The transcripts and other electronic data will be retained for a minimum of 7 years, after which they will be destroyed. Data will be stored in an encrypted folder on my password protected laptop. Only the research team will have access to study data. No identifying information will be used in my thesis or any presentations or publications based on this research, in every case, a pseudonym will be used instead of real name.

If you participate through an online forum such as Skype, information is transmitted over the internet and privacy cannot be guaranteed. There is always a risk your responses may be intercepted by a third party (e.g., government agencies, hackers). University of Waterloo researchers will not collect or use internet protocol (IP) addresses or other information which could link your participation to your computer or electronic device.

Questions, comments, or concerns

Who is sponsoring/funding this study?

This study is funded by a SSHRC/CIHR Healthy Productive Workforce Partnership Grant (#50702-10007).

Has the study received ethics clearance?

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee (ORE # 42202). If you have questions for the Committee, contact the Office of Research Ethics, at 1-519-888-4567 ext. 36005 or oreceo@uwaterloo.ca.

Who should I contact if I have questions regarding my participation in the study?

If you have any questions regarding this study or would like additional information to assist you in reaching a decision about participation, please contact **Tauhid Hossain Khan**, E-mail:

th3khan@uwaterloo.ca.

Support Resources

Occupational Health Clinics for Ontario Workers

Our aim is to protect workers and their communities from occupational disease, injuries and illnesses.

We strive to address occupational hazards, to promote the social, mental and physical well-being of workers and their families.

All clinics can be reached toll free at 1-877-817-0336. Clinic locations are available at:

<https://www.ohcow.on.ca/contact.html>

Workers' Health and Safety Legal Clinic

We advise and represent individuals with employment and health and safety related issues, including those advocating for a healthier and safer workplace. Toll free: 1-877-832-6090; Website:

www.workers-safety.ca

Workers Action Centre

The Workers' Action Centre (WAC) is a worker-based organization. We are committed to improving the lives and working conditions of people in low-wage and unstable employment. Our members are workers in precarious jobs. Most of us don't belong to unions because we work in small workplaces, are temporary workers, on contract, independent contractors or unemployed. Workers call our Workers' Rights Info Line at (416) 531-0778 to get information about their rights and help with strategies to resolve the issue.

Appendix B: Verbal Consent Script

STUDY TITLE: A narrative analysis of how self-employed workers navigate work, injury and illness

Dear participant (s),

This is Tauhid Khan, I am currently doing Ph.D. in Public Health and Health Systems, University of Waterloo. You are invited to participate in research that involves your experiences about work, sickness/illness/injury. This study is being undertaken as part of my PhD research.

As a participant, you will be involved in an interview – through phone or Skype video for around one hour. The questions that will be asked during the interview will address how you navigated and managed your work and health when you experience sickness/illness. I will ask about your demographic information, such as age, income, gender etc. Then, you will be asked about your work what you are currently doing, what type of work, how long you are doing this work, how you became self-employed etc. Other questions will focus on your health – what type of sickness or illnesses you had faced, in this context how you managed your work and illness. You will also be asked what the available supports systems from the government and other sources you obtained to manage your illnesses.

We shall further discuss whether you encountered any challenges to manage your illnesses, particularly how you returned to your work after illness. Finally, we will discuss your general opinions and recommendations about how the systems and policies can be improved. The interview will be audio

recorded to ensure an accurate transcript. With your permission, anonymous quotations may be used in publications and/or presentations.

Participation in this study is entirely voluntary. In addition, if you wish, you may decline to answer any specific questions. Furthermore, you may decide to withdraw from this study at any time and may do so without losing remuneration. If you choose to withdraw during or after your interview, your interview data will be deleted from any electronic storage and hard copies destroyed. You may not provide any personal benefit to you, but your responses will be valuable in furthering our understanding of the working and health conditions of a distinct population, self-employed, more specifically the findings will help us to develop better policy recommendations to improve the well-being of self-employed workers. You will have the opportunity to share their concerns, challenges, misconceptions, potential state-sponsored supports related to their work, experiences of the time when they unable to work due to sickness and injury. Having the opportunity to narrate the experiences in this study may help the participants to explore the potential opportunity of their work, the government supports, provide awareness of what to do when unable to work due to sickness and injury. However, there might be a risk at a very minimal level with feelings of distress or sadness when recounting stories in terms of your illness or injury or family conditions. In this case, we will skip those questions and move to the next questions.

Only the research team (myself and three academic supervisors) will know your identity. Your identity will be kept confidential. Identifying information will be removed from the transcripts and the audio recordings will be retained for 7 years. The transcripts and other electronic data will be retained for a minimum of 7 years, after which they will be destroyed. Data will be stored in an encrypted folder on my

password protected laptop. Only the research team will have access to study data. No identifying information will be used in my thesis or any presentations or publications based on this research, in every case, a pseudonym will be used instead of real name.

Can we start the interview? (If the respondent agrees, interview will be started)

Appendix C: Participant Feedback Letter and Email script

Date:

Dear [Name of Participant],

We greatly appreciate your participation in our study titled “A narrative analysis of how self-employed workers navigate work, injury and illness” and thank you for spending the time helping us with our research.

Our study is a PhD research project, which will provide information to regulators, industries and other stakeholders as they plan how to develop policies to better protect self-employed and other precariously employed workers.

Please remember that any data pertaining to you as an individual participant will be kept confidential. Once all the data are collected and analyzed for this research, we will share this information with the research community through seminars, conferences, presentations, and journal articles.

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee (ORE#42022). If you have questions for the Committee contact the Office of Research Ethics, at 1-519-888-4567 ext. 36005 or researchethics@uwaterloo.ca

If you have any other questions about the study, please feel free to contact the student investigator Tauhid Khan anytime through email: th3khan@uwaterloo.ca. This study is expected to finish by summer 2022. You can receive a copy of research summary/findings once study is completed by contacting the researcher at th3khan@uwaterloo.ca.

Thank you for your great participation!

Yours sincerely,

Tauhid Hossain Khan, Student Investigator
School of Public Health and Health Systems
University of Waterloo, E-mail: th3khan@uwaterloo.ca

Dr. Ellen MacEachen, Principal Investigator
Professor, School of Public Health and Health Systems
University of Waterloo
Email : ellen.maceachen@uwaterloo.ca

Email script

Dear [Name of Participant],

I would like to thank you for your participation in our study. Please find attached to this email a thank you letter and information about the progress of our study and plans to share findings.

Sincerely,

[Name of researcher]

Appendix D : Interview Guide

I am interested in your experience about how you navigate your jobs, health, and illness when experiencing illness and injury. Over the next hour, I will go through some open-ended questions to learn more about your experience, for instance, some of the challenges you’ve faced and recommendations for improvement. Feel free to stop me at any point if you have any questions or need further clarifications. Consider this is a conversation, we can go in any direction you please.

A. Demographic Characteristics of the participants

Demographic Characteristics of the participants		
1	What is your age range?	18 – 23 24 – 29 30 – 35 36 – 41 42 - 47 48 – 53 54 - 59 60 – 65 Above 65
2	What gender do you identify as?	Male Female Trans-gender Non-binary Prefer not to answer. Other_..._____
3	What is your marital status?	Single, never married. Divorced Separated Married or cohabitating. Widow or widower Other ...
4	Have any children or other dependents living with you?	If yes, how many? Who are they?.....
5	If you have a partner, does he/she work?	Yes NO Don’t know

6	Does your any other family member work to support your family?	Yes No Don't know	
7	What is the highest level of education you have completed?	Incomplete elementary school Elementary school Incomplete high school High school College diploma Trade course Bachelor's degree Master's degree Ph.D. or higher Prefer not to say Other	
8	What is the annual income range of your household?	Under \$25,000 \$25,000 – \$50,000 \$50,001 – \$100,000 \$100,001 – \$250,000 \$250,001 – \$500,000 \$500,001 – \$1,000,000 Above \$1 million	
9	In addition to your main income from your self-employment, do you have other work or income? Please describe.		
10	What's your citizenship status?	Born and raised in Canada Raised in Canada Immigrant –living for 3 and more years Recent immigrant –PR Foreign worker/work permit Other	
11	What languages do you speak fluently (select all that apply)?	English Spanish Italian German French Russian Mandarin Hindi Punjabi Arabic Bengali Urdu Other	

B. Can you tell me about work that you are doing?

1. What type of work you are doing now?
2. How long you are doing this job?
3. What is your work history since you started working in your life?
4. Tell me how did you become being SE?
 - *Did you start your working life as a self-employed?*
 - *If yes, why you choose self-employment type work?*
 - *If not, why you change your profession from regular to self-employment?*
 - *When you started self-employment, was it full time? or along with full time?*

C. Can you tell me about your health status?

1. Can you tell me what types of experience of physical and mental health issues that you have, and how these impacted your work as a SE'd person?
 - *Work related or out of work-related injury?*
 - *Or any other health and wellness issue?*
 - *How impacted your earning?*
 - *How impacted your everyday lives?*
 - *To what extent your job is secured, you feel? Do you feel uncertainty with your job, income, and future career or life? How these uncertainties affect your mental health or overall wellness?*

D. Please can you tell me about formal, informal support systems to manage your health and wellness when you face illness or injury, when you might be unable to work /income loss/reduction? By supports, I mean any income, emotional support or help from family, friends, or community members as well as government agencies.

[The following information was provided to inform about government /formal supports

systems to participants as a SE'd, who did not know about or did not use them: The Ontario

Health Insurance Plan (OHIP): is available to all citizens irrespective of working status. SE'd workers are no exception, covering the basic medical services, including doctor visits and diagnosis. However, it is not fully comprehensive and does not cover many therapies. For example, it fully excludes prescriptions, chiropractic treatment, massage, eye exams, and dental treatment (the OHIP+ program covers prescribed medicines for people under 24 years and over 65 years old).

The Ontario Works: provides means-tested programs and is only available for people who have assets no more significant than the limits set out by the program. For example, the Ontario Disability Support Program (ODSP), a sub-program of Ontario Works, in addition to the financial ceiling requirement, people have to meet their administrative definition of disability. Similarly, Ontario Works provides emergency assistance, employment support, and temporary care assistance to those people, irrespective of employment status, who are eligible for the support.

The Workplace Safety and Insurance Board (WSIB): SE'd workers who opt into this program pay monthly premiums and are eligible for income support when ill or injured at a rate of 85% of the worker's net wages. However, for a SE'd person, this amount can be substantially smaller than their regular monthly income, which includes income to cover business as well as personal costs.

The Employment Insurance Special Benefit (EISB): was introduced to SE'd workers in 2010 and provides them with income support related to leave for parental care, sickness, compassionate care, and family caregiving after registering and paying at least one year of monthly premiums. The premium is as much as the rate of regular EI (1.58% of annual income), and it is changeable year to year assessed by Canada Revenue Agency (CRA).

The Covid-19 emergency response programs: provided by the Canadian government supported people, regardless of employment status, during Covid-19, such as Canada Emergency Response Benefit (CERB) and Canada Emergency Student Benefit (CESB). The CERB provided lump sum income support (\$500/week) based on some eligibility criteria, including people who had employment and/or self-employment income of at least \$5,000 in 2019 or the 12 months prior to the date of their application. CESB provided \$1,250/month to post-secondary students and recent post-secondary and high school graduates who did not apply, receive or qualify for the CERB or EI benefits for the same eligibility **period**].

1. When you get sick or injured, how do you manage your work?
 - *Are there times when you have been less productive, or not been able to work at all due to sickness or injury?*
 - *How do you manage then?*
 - *Describe situations. who support you?*
 - *How they support?*
2. When you get sick or cannot work due to sickness or injury, how you would you manage health issues, including access to health care services?
3. When any of your family members get sick, how does it affect your work, income, and your wellness? how were these challenging, how would you manage these challenges?
4. Do you have any insurance to support or compensate your income during sickness or injury?

- *If yes, what are these insurance or support systems?*
 - *If not, how you support your livelihood, including food, housing, recreation, or any other necessary and essential stuffs?*
5. Do you get informal supports from your relative, friends, community people or charity when you need supports?
- *if yes, how they support? Mentally, financially, advising... How would you evaluate their supports compared to government sponsored supports?*
6. What are the government support or coverage you know available for self-employed workers like you?
- *If there are some, how they are effective, helpful, useful to keep your wellness?*
 - *Tell me about your ideas and views about paid sick leave?*
 - *Tell me about your ideas and views about universal coverage, and basic guaranteed income plans?*
7. Do you know about EI special benefit for self-employed workers? If you have this, how you would have experienced dealing with it?
- *Should be opt out or mandatory? Why?*

E. Government funded emergency response benefit during covid-19

- *So far you know, can you Tell me about the government supports for workers in general during covid-19?*
- *What do you think of government support for self-employed people during COVID -19 pandemic?*
- *whether CERB should be extended to permanent policy?*
- *How would you evaluate these emergency benefit programs?*
- *Do you think CERB is successful to address the insecurity – income and health – of self-employed people?*
- *Should someone lost job or cannot work, or cannot earn regardless of causes (not merely pandemic) be provided support like CERB? why?*
- *What type of supports you are thinking?*
- *are there any other government intervention that support worker like you or universal coverage, basic income like this?*

F. Return to work after sickness and injury.

1. Tell me about how you returned to job after your illness/injury.

- *how did you return in your old job? how long it took?*
 - *If you returned new job, why?*
 - *How the available government supports help you in the process?*
 - *How the informal help from your relatives, friends or other sources helped you in that process?*
2. Finally, to what extent do you agree or not agree, why: Some people argue self-employed are rich, they don't need government supports.

G. Recommendations

- *In your own experiences and own words, can you tell me how government can secure your job in a more sustainable way?*
- *Do you have ...What are the potential health risk involving your jobs? How can government well protect your health and safety?*
- *How can government support your income if you need when you unable to earn?*
- *In your view, which government - provincial or federal government – should take this responsibility to change, why? Or both –why?*

H. Any final thoughts you want to add, please?

Appendix E: Search terms for scoping review

SEARCH TERMS	
Category	Keywords used in the search
Self-employment	“Self employ*” OR “Self-employ*” OR “Independent Operator ” OR “Gig Work*” OR “Gig Employ*” OR Entrepreneur OR “Employment Without Employ*” OR “Independent Contract*” OR “Dependent Contract*” OR “Disguised Work*” OR “Bogus Work*” OR “False Work*” OR “Own Account Self-employ*” OR “Solo Self employ*” OR “Solo Self-employ*” OR “Stable Own Account Self-employ*” OR “Own Boss Employ*” OR “Own Boss Work*” OR “Unincorporated Self employ*” OR “Dependent Self Employ*” OR “Economically Dependent Self-employ*”
Health Status	Health OR Injury OR Disability OR Impairment OR Stress OR “Well-being*” OR Wellness OR “Long and Irregular Working*” OR “Flexible Working Schedule*” OR “Work-life Balance” OR “Access to Care” OR “Access to Health Care” OR “Body Mass Index” OR “Physical Health” OR “Mental Health” OR Diabetes OR “High Blood Pressure” OR “High Cholesterol” OR Arthritis
Support systems	“Return to Work” OR RTW OR “Work Reintegration” OR “Sick Leave*” OR Pension* OR Insurance OR “Vocational Rehabilitation” OR “Disability Insurance” OR “Sickness Absence” OR “Retirement Disability Pension” OR “Public Health Insurance”

Appendix F: Search terms for comparative policy analysis

(italic terms were used for the second search): Self employ, independent operator, ‘gig’ Work, ‘gig’ employ, entrepreneur, employment without employ, independent contract, dependent contract, disguised work, bogus work, false work, own account self-employ, solo self employ, solo self-employ, stable own account self-employ, own boss employ, own boss work, unincorporated self-employ, dependent self-employ, economically dependent self-employ, health, injury, disability, impairment, stress, well-being, wellness, long and irregular working, flexible working schedule, work-life Balance, access to care, access to health care, body mass index, physical health, mental health, diabetes, high blood pressure, high cholesterol, arthritis, return to work, RTW, work reintegration, sick leave, pension, insurance, vocational rehabilitation, disability insurance, sickness absence, retirement disability pension, and public health insurance. work disability policy, workers rehabilitate, occupational safety regulations, social safety net programs, Australia, Ontario, Canada.

*****LOOKING FOR PARTICIPANTS*****

Are you a solo self-employed person?

A University of Waterloo study would like to hear from you about how you manage when you are ill or injured.

- Interested participants can choose to be interviewed via Skype or phone. The interview should take 40-60 minutes. In appreciation of your time, you will receive **\$40** cash via e-mail transfer.

Who are eligible?

- Must live in Ontario and be 18+ years
- Experience with illness and/or injury since starting work
- Main income is self-employment and have no employees
- Can communicate in English

For more information about this study, or to volunteer for this study, please contact University of Waterloo researcher:

Tauhid Khan at th3khan@uwaterloo.ca

This study has been reviewed by and received ethics clearance through a University of Waterloo Research Ethics Committee.

