Young, non-student workers in casual employment: A core-periphery examination of health outcomes

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ABSTRACT

From the 1980s onwards, Australia has seen an increase in peripheral forms of employment such as casual employment. Unlike ‘core’ employment, which refers to work that is ongoing and full-time, and which usually confers a range of legal rights and protection, most peripheral employment is not ongoing or full-time and has fewer, or no, entitlements. The core-periphery model suggests that because of this, peripheral workers are likely to experience poorer health than core workers.

This thesis tests the core-periphery model by examining if casual employment - the most common form of peripheral employment in Australia - is related to significantly different health outcomes than permanent employment. In order to add to current knowledge, this thesis examines this relationship amongst young, non-student workers only. This age-specific cohort is an important group of workers to examine because they are largely over-represented in peripheral forms of employment in Australia. Findings from the research are summarised in four manuscripts, each of which has addressed a distinct research aim/s.

Study One addressed two aims. The first aim was to understand if young, non-student casual workers were more likely to experience poorer health than young, non-student permanent workers or full-time students, using cross-sectional measures. A second aim was to understand if the relationship between casual employment and health was moderated by any individual-level variables (job insecurity, job dissatisfaction, financial strain, low social support). The results found no evidence of poor health outcomes in the casually employed group or that this relationship was moderated by the aforementioned variables.

The aim of Study Two was to examine the associations between different periods of exposure to casual employment and health outcomes. A three year longitudinal design was used to measure four employment paths, each which was characterised by varying periods of
exposure to either casual or permanent employment in young, non-students. It was hypothesised that paths characterised by longer exposure to casual employment would result in the largest health deterioration over time. The results did not support the hypothesis as longer periods of exposure to casual employment were not found to be related to poorer health outcomes. It was argued that this might be because young people working in casual employment are at a stage-of-life where the flexibility, higher pay and skills training which is often associated with casual arrangements, are considered beneficial.

Study Three aimed to understand if volition (voluntary or involuntary engagement in casual employment) could more sensitively predict health outcomes in young, non-student casual workers. This was approached within a ‘relative deprivation’ framework, where involuntary casuals were assumed to experience poorer health outcomes than voluntary casuals, or permanent employees, because of feelings of deprivation (wanting core employment and feeling as though they deserved it). However, casual employment was again found to be unrelated to health outcomes, even when casual workers disclosed that they would prefer permanent employment.

Study Four interviewed 20 young, non-student casuals and utilised qualitative analysis to understand how they appraised their work and health. The findings indicated that young, casual workers experienced many of the negative pressures outlined in research based on older populations; such as underemployment, financial strain and feelings of powerlessness. However, most respondents also identified some age-specific protective factors which they felt helped them to cope with the negative pressures. These included living at home and receiving financial support from their parents, as well as perceptions that they would eventually find more secure and meaningful work in the future.
Overall, this research programme did not provide strong support for the core-periphery model, which suggests that core workers should experience better health than peripheral workers. Instead, the quantitative findings indicated that the health of young, non-student casuals is no different to the health of young, non-student permanent workers.

However, the qualitative study still identified some of the negative pressures associated with casual employment and the degree to which these factors led to poor health, predominantly stress. A brief discussion of why the quantitative and qualitative results did not align, are provided in the conclusion, along with some suggestions on how to regulate casual employment in Australia so as to better protect worker health.
DECLARATION

I, Natalie Matthews, certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

I give consent to this copy of my thesis when deposited in the University Library, being made available for loan and photocopying, subject to the provisions of the Copyright Act 1968. I acknowledge that copyright of published works contained within this thesis resides with the copyright holder(s) of those works. I also give permission for the digital version of my thesis to be made available on the web, via the University’s digital research repository, the Library Search and also through web search engines, unless permission has been granted by the University to restrict access for a period of time.

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ACKNOWLEDGEMENTS

My PhD journey can be best explained with two real-world analogies. The first is riding on a rollercoaster (up….aaaaarrggghhhhh… doooowwn). The second is child birth (keep pushing, keep pushing! Almost there! I know it hurts, but push just a little harder!) So, in light of this it is now finally safe to say that the rollercoaster ride is over; the baby has been delivered.

Of course, I was not alone on my PhD journey and have an endless list of people to acknowledge. There have been my friends who have provided my social support, my family who has offered unconditional love, my father who has spent hours formatting my entire thesis (any noticeable mistakes are his fault!) and SafeWork SA who provided me with financial support through the Work, Health & Safety Supplementary Scholarship. Then there has been chocolate, alcohol, my hairdresser and Netflix, all of whom have helped me to relax and indulge when the PhD rollercoaster was on a downwards trajectory, when the pushing became just too hard.

There are a few people, however, who deserve special mention for their time and generosity in helping me complete this thesis:

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I thank Paul for being such a committed supervisor, one who obviously genuinely cares for his students. Paul has always been very patient and helpful, even in the face of never ending questions and emails. His energy and sense of humour have worked to keep me motivated during difficult times. I have learnt a lot under his supervision and am grateful for how willing he is to share his time and expertise.

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I thank Tony for letting me be a part of the School Leavers Project and for allowing me to utilise a dataset that he has put so much time and effort into over the past 10 years. I also thank him for so tirelessly editing my work, which has been full of grammatical mistakes (just to keep Tony on his toes). I am now wholly confident that my dissertation does not contain any split infinitives.

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**Paul (my fiancé)**

I thank Paul for his support on every level. He is my rock and my best friend. Now that my PhD is written, I am so excited to start our next journey together; whatever that may be and wherever it may take us.

**LHB Grande Marron aka Bobby**

The only thing as challenging as a PhD is show jumping! I thank my beautiful horse for allowing me to communicate with him free of the words or writing that often so overwhelmed me during my candidature.
THESIS STRUCTURE

This thesis describes a programme of research on peripheral employment and its association with worker health. It specifically examines one type of peripheral employment, known as casual employment, and its relationship with health outcomes in a cohort of young, non-student workers in South Australia. This is achieved through the examination of five distinct research aims that are contained within four study manuscripts.

Chapter 1 provides the definitions of frequently used terms in this thesis and outlines the historical development of labour policy in Australia. It moves on to summarise the literature on peripheral employment and health and describes the theoretical framework, known as the core-periphery model, which will be used to conceptualise the relationship between health and employment. This chapter also reviews the literature on this topic which indicates that current findings are inconsistent. This is attributed to research that hasn’t been sensitive enough to the heterogeneity of peripheral employment, and its workforce.

Chapter 2 outlines the overarching research hypothesis, which is based on the core-periphery model. The hypothesis states that young, non-student casual workers will experience significantly poorer health outcomes than young, non-student permanent workers due to the less favourable characteristics of peripheral employment arrangements. The highly specific hypothesis, which examines only young, non-student workers in casual employment (and thus excludes older workers and all other forms of peripheral employment), is in response to the review in Chapter 1, which suggests that research should be more narrowly focused. Five specific research aims are developed, each of which independently assists in proving or disproving the hypothesis. In Chapter 2, each aim is presented and discussed in turn, and justified in relation to the relevant literature.
Chapter 3 provides an overview of the data sources that were analysed in this thesis. This predominantly entails a detailed description of the principal source of longitudinal data used for the quantitative analysis, known as the South Australian School Leavers Study (SASLS). It also briefly discusses how the qualitative data (as used in Study Four) was collected. References are made to the Appendix section, which contains full disclosure of all the survey material and the interview schedule used in the last study.

Chapters 4-7 provide the findings of four separate studies, written in manuscript form. Each of the four manuscripts employs a different methodological approach to examine one or two of the aims outlined in Chapter 2. Although all analyses were conducted for the purpose of addressing the governing research hypothesis, each manuscript is considered to be a study in its own right and contains its own introduction, literature review and methods section.

Chapter 8 is the final chapter and is responsible for summarising the research programme. Each of the study aims and findings are re-visited and briefly outlined, and this is followed by a discussion of why the results of this thesis do not issue strong support for the research hypothesis. This Chapter proceeds to discuss the broader implications of this thesis, including insights into the theoretical and practical applications of the findings. Limitations of the thesis and directions for future research are provided.

The reader should note that the reference list for all Chapters is found at the end of the thesis, under ‘Reference List’ (starting on page 185). After the reference list appears the Appendix section (starting on page 195).

**Format**

This is a ‘thesis by publication’ which requires published, accepted or submitted manuscripts to comprise the research chapters (Adelaide Graduate Centre, 2015). This format was chosen to enable dissemination of the findings to occur quickly and efficiently, given the
need for more research on casual employment and health in Australia. Consequently, the research in this thesis is outlined in the form of four manuscripts, each of which is formatted according to publication guidelines. Currently, one manuscript has been published and three are under review.

Publications

Chapter 4: Study One

Under review

Chapter 5: Study Two

Chapter 6: Study Three
Matthews, N., Delfabbro, P., & Winefield, A. Is volition they key? Comparing the health of young, non-student casual workers based on voluntary or involuntary engagement.

Chapter 7: Study Four
Matthews, N., Delfabbro, P., Augoustinos, M. & Winefield, A. A thematic analysis of young, non-student workers’ experiences in casual employment in Australia

Outline of Candidature
This thesis was completed as part of the Combined Master of Psychology (Organisational & Human Factors) / Doctor of Philosophy program at the University of
Adelaide. This degree incorporates a traditional three year PhD program with a two year Master program; this creates a combined degree that is four years in length. Thesis topics are required to relate to organisational psychology so that they can assist students in their practice as psychologists once registered. The following thesis is submitted to fulfil the requirements of the Doctor of Philosophy component.
Flexibility was a key factor in protecting jobs during the global financial crisis when, without the ability to reduce working hours, many firms would have had to sack employees. Far from being a source of insecurity, our changing labour market has provided the foundation for the nation’s wealth to be shared more broadly.

Tony Shepherd
President of the Business Council of Australia

There is a message here for Australian business, which ignores the rise of insecure work at its peril. A business model that is predicated on short-term profits generated by widespread use of insecure work is unsustainable in the long run.

Brian Howe
Chair of the Independent Inquiry into Insecure Employment in Australia

Funded by the Australian Council of Trade Unions
CHAPTER 1: INTRODUCTION

1.1 Preamble

Chapter 1 provides the background for the research project. It commences by outlining important definitions which represent key terms used in this thesis. It then proceeds to summarise the history of employment regulation in Australia, including a discussion of the factors that have led to the more recent rise in peripheral employment arrangements. Chapter 1 also reviews the literature on peripheral employment and health and outlines the inconsistent findings that presently exist in the literature. These inconsistencies are attributed to the fact that peripheral employment pertains to numerous types of employment which are engaged in by a wide variety of workers from different demographic populations. It is suggested at the end of the chapter that future research needs to be more sensitive to these differences if more consistent and inclusive results are to be obtained.

1.2 Definitions

Employment / work

In this thesis employment and work are terms that are used interchangeably. These terms describe, at the most basic level, an arrangement in which a person offers their physical or intellectual labour to a business / person, in exchange for money or other non-monetary payments (International Labour Organization, 2015).

Core employment

Core employment is defined as “full-time, permanent employment with benefits” (Benach, Amable, Muntaner, & Benavides, 2002, p. 1). In Australia these benefits are outlined under the ‘National Employment Standards’ and entitle core workers to annual, long-service, sick, personal/carers, maternity and community service leave with pay. Core
employees are also entitled to public holidays with pay, a minimum of two weeks’ notice (with pay) if employment is terminated and a minimum and maximum number of hours per week (Fair Work Ombudsman, 2013).

**Peripheral employment**

Any employment that is not core employment is defined as peripheral employment (Menéndez, Benach, Muntaner, Amable, & O’Campo, 2007). This means that peripheral employment is either not permanent or full-time (or both). It usually does not entitle employees to the non-monetary rights and benefits that are associated with core employment, although exceptions do exist for some types of peripheral employment (Fair Work Commission, 2014). Forms of peripheral employment include casual, part-time, fixed-term contracts, agency, self-employment and seasonal or home-based employment (Fair Work Ombudsman, 2009).

Peripheral employment is the term chosen to describe such employment in this thesis, despite the existence of other labels in the literature including ‘atypical’ (Bardasi & Francesconi, 2003, 2004; Keller & Seifert, 2005), ‘precarious’ (Benach & Muntaner, 2007; Vosko, 2006), ‘contingent’ (Feldman & Turnley, 2004; Tregaskis & Brewster, 2006; Virtanen, Kivimäki, Eloainio, Vahtera, & Cooper, 2001), marginal (SA Unions, 2005), ‘flexible’ (Shepherd, 2012) and ‘non-standard’ employment (Price & Burgard, 2006). This is because the theoretical framework underpinning the investigations in this thesis is known as the ‘core-periphery model’ (Aronsson, Gustafsson, & Dallner, 2000) and therefore, for reasons of continuity, it was considered appropriate to adopt these employment labels for the entire thesis.
Casual employment

There is no statutory definition for casual employment in the *Fair Work Act* (the main legislation outlining employment rights and conditions in Australia) or any modern awards (employment rights and conditions for specific industries; Parliament of Australia, 2015). However, there are features of casual employment that are commonly agreed upon by government bodies (Australian Bureau of Statistics, 2012; Parliament of Australia, 2015), unions (Australian Council of Trade Unions, 2012a), employer associations (Australian Federation of Employers and Industries, 2015) and academics (Burgess, Campbell, & May, 2008; Campbell & Burgess, 2001). These include: no guaranteed hours; no paid leave entitlements (including sick days; annual leave; carers leave or maternity leave); and, employment that can end without notice (by choice of either the employer or employee).

These characteristics make casual employment one of the least regulated forms of peripheral employment in the developed world, and so although casual employment is the generic term for temporary employment as used in Australia and New Zealand, the statutory rights of casual employees compared to temporary employees overseas, differ vastly. Casual employees in Australia are not legally entitled to anything beyond the exchange of one hours pay for one hours work (Campbell & Burgess, 2001). In comparison, temporary employment in Europe or Canada still legally entitles workers to some employment rights and benefits (European Comission, 2014; Ontario Ministry of Labour, 2015).

Young workers

Young workers are defined by the Foundation for Young Australians (2013) as those aged 15-24 who are engaged in any form of employment.
CHAPTER 1: INTRODUCTION

**Young, non-student casual workers**

Young non-student casual workers are defined in this thesis as any young worker who is engaged in a casual position, but **not** engaged in any form of full-time or part-time study.

**Health**

Health is defined by the World Health Organisation (WHO; 2015) as “A complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity.” In this thesis, health is more narrowly defined into smaller components such as physical and mental health.

1.3 The History of Peripheral Employment in Australia

The next section provides a brief history of employment regulation in Australia. This includes a discussion of the factors which helped to shape the core employment relationship, as well as its erosion more recently. More importantly, it highlights the fact that peripheral employment is not a newly emerging phenomenon and that unregulated forms of employment were pervasive in Australia’s labour market not that long ago.

**Historical context**

During the industrial revolution and up until the initial decades of the 20th century, the concept of an employer having any legal or moral duty for the care of their employees was unfamiliar. Instead, workers were hired and fired as determined by fluctuating or seasonal requirements and many had to accept work in poor conditions to avoid unemployment (Lewchuk, Clarke, & de Wolff, 2011; Quinlan, Mayhew, & Bohle, 2001b).

For example, wharf work in 19th Century Australia was notorious for being physically gruelling (Maritime Union of Australia, 2014). Workers were hired using a ‘bull-system’ which entailed morning line-ups of men hopeful to be chosen by management for a day’s
work. Generally the youngest, largest and most healthy – known as the ‘young bulls’ - would be picked first and expected to set a fast working pace that all other workers had to emulate if they were to stay employed. Another common type of work was in factories, which was similarly accompanied by little consideration of workers’ rights and safety. As documented by McKinlay (1981), Australian factory workers were often engaged in long hours of physically intensive and repetitive work in poorly ventilated and shoddily constructed sheds or lofts. Whilst the emergence of machinery in such operations did provide some solace from heavy lifting; mechanisation came with a new element of danger as workers were rarely trained in how to operate safely or work alongside this new technology. The lack of employment laws and regulations meant that subcontracting and home-based employment was also widespread. This work was known as ‘sweated’ work (a term now frequently used to describe ‘sweat shops’ that encompass similar conditions in developing countries) as it was characterised by piece rate payment that was so low, that only unsustainable output could earn a living (Quinlan et al., 2001b).

Beyond the physical hardship and inherent dangers associated with such work, there was also no wage regulation or welfare safety net. This meant that when times were hard, employers could easily set wages at prices that did not even cover living expenses, and yet still be able to draw upon a pool of desperate men (and even women and children) willing to work for them (Beasley, 1999; McKinlay, 1981). This kind of employment, characterised by its low pay, unstable nature and poor work conditions, frequently resulted in a range of negative health and safety outcomes for workers. Indeed work related injuries were high (including accidents with machinery) and malnutrition and muscle-skeletal disorders were common amongst the working poor (Quinlan et al., 2001b). As was noted by one physician who examined the health of wharf workers in the 1940s:
Their endless search for the infrequent job which would keep them and their families from the precarious borderline of malnutrition had taken its devastating toll. The feverish high-tension work performed when the job is secured in order to ensure its repetition had been paid for at the shocking high price of premature old age and physical calamity (Nelson, 1957, p. 119 as quoted in; Quinlan et al., 2001b, p. 514)

The rise of the ‘core-employment relationship’

The need for improved labour regulation became exigent as the detrimental impact of these precarious forms of work with “few restrictions and unscrupulous development”, (McKinlay, 1981, p. 4) on employees and their families, became increasingly apparent. Although some employers took the initiative to improve their work environments and conditions upon observations that healthier and well-rested workers performed better, it was pressure from the workers themselves that provided the strongest initiative for change (Turner & Sandercock, 1983). Workers began to identify the power of the collective in negotiating and securing their rights and pushed for better working conditions through the development of unions and organised forms of protest such as strikes.

In the mid-1890s the formation of specialised industrial tribunals in Australia occurred with their main function to act as a third party in arbitrating industrial disputes (Australian Trade Union Archives, 2010). This was namely borne as the result of some bitter and prolonged battles between unions and employers including the maritime strike of 1890, the shearers’ strike of 1891 and the Broken Hill miners’ strike of 1892 (Walker, 1972).

It was in 1907 that Justice Higgins of the Federal Tribunal (known as the Commonwealth Court of Conciliation and Arbitration), made one of the most important and influential rulings, commonly known as the ‘Harvester Judgement’ based on a wage dispute at Sunshine Harvester Works (Australian Council of Trade Unions, 2014). In his
interpretation of a ‘fair and reasonable wage’ Higgins ruled that it must adequately cover the living expenses of a worker. As stated by him at the time:

If A lets B have the use of his horses on the terms that he gives them ‘fair and reasonable’ treatment, I have no doubt that it is B’s duty to give them proper food and water, and such shelter and rest as they need; and, as wages are the means of obtaining commodities, surely the State in stipulating for fair and reasonable remuneration for the employees means that the wages shall be sufficient to provide these things, and clothing and a condition of frugal comfort estimated by current human cores (Higgins, 1907 as quoted in Wilson, 1996, p. 22).

This ruling was one of the first forms of wage regulation in Australia and essentially entitled male earners to a ‘minimum wage’ (Australian Council of Trade Unions, 2014).

Following the Harvester Judgement, employment rights in Australia evolved slowly, largely underpinned by strong union pressure for better working conditions (Australian Trade Union Archives, 2010; Turner & Sandercock, 1983). For example, in 1935 one week’s paid leave was introduced into awards; in 1938 coal miners won a reduction in their hours from 48 to 40 hours a week and in 1966 married women were legally allowed to work (Parliament of Australia, 2013). Alongside employment gains were also gains in laws pertaining to welfare, especially following the Great Depression (Australian Government, 2015). This safety net gave workers’ a stronger platform upon which to negotiate working conditions.

The gradual attainment of employment laws, abetted by Keynesian economic management policies aimed at the macroeconomic objectives of economic growth and full employment (Markwell, 2000), progressively functioned to develop what is now known as the ‘core employment relationship’ (Lewchuk et al., 2011; Quinlan et al., 2001b); full-time
and permanent work that is generally at one consistent site and that comes with a host of legal
rights and entitlements (Fair Work Ombudsman, 2013).

By post World War II, the core employment relationship in Australia was the most
common form of employment available for white, working males (Australian Council of
Trade Unions, 2012a) and the precariousness that characterised the previous decades became
generally restricted to already disadvantaged pockets of the labour force, such as immigrants
and women (Lewchuk et al., 2011; although for many women this was by choice - see next
section). As a consequence, many organisations now moved to establish strong working
relationships with their employees and identified the benefits of providing stability in return
for loyalty and commitment. As explained by Lewchuk et al. (2011, p. 51):

There were real gains under the ‘[core] employment relationship’ compared to the
individualized markets of the late nineteenth century. Workers had acquired significant
rights to further employment once employed and to negotiate changes in the terms and
conditions of employment, in a context where employees’ and workers’ long-term
commitments supported each other’s interests. These gains were extended to a broader
population through the formation of households with at least one member in a ‘[core] employment relationship’.

The erosion of the ‘core employment relationship’

By the late 1970s the core employment relationship started to experience corrosive
pressures in Australia and other developed nations (Campbell & Brosnan, 1999; Lewchuk et
al., 2011; May, Campbell, & Burgess, 2005; Quinlan et al., 2001b). This was underpinned by
the adoption of increasingly intensive neo-liberal approaches by governments that resulted in
policies that were aimed at achieving free-trade, deregulation and a reduction in government
ownership and intervention (Campbell & Brosnan, 1999).
CHAPTER 1: INTRODUCTION

The new global market place resulted in the rise of multi-national companies that had to be innovative, adaptable and technologically savvy if they were to survive (Kalleberg, 2009). Business strategies intensified and were targeted at gaining competitive advantage through improved organisational efficiency and stream-lined workforces; all of which were implemented through practices like downsizing, restructuring, privatisation and outsourcing, and stood to undermine the concept of a ‘job for life’ (Lewchuk et al., 2011; Quinlan et al., 2001b). The sites of many organisations became increasingly transient and the practice of off-shoring production to regions where labour was cheap and unregulated - generally industrialising nations in Asia, Central and South America – was seen as an effective way to reduce production costs (Business Council of Australia, 2004).

All of the above put pressure on the core employment relationship as it started to be identified as a barrier to more efficient production (Shepherd, 2012). Core employment made it hard for organisations to attain numerical flexibility, and incurred high costs as a result of the benefits it entitled to workers. Consequently, the need for more ‘flexible labour’ was actively marketed by powerful business groups including the World Trade Organisation, International Monetary Fund (Quinlan et al., 2001b) and Business Council of Australia (Shepherd, 2012), as a key strategy for enabling companies to take advantage of shifts occurring in the global market place.

This initiative was largely supported by governments worldwide. In Australia, legislation was passed that assisted industries in squeezing out union membership which was seen to be antithetical to neo-liberal ideas, and establishing a more flexible workforce that could adhere to business requirements (Campbell & Brosnan, 1999). The Work Place Relations Act 1996 removed the clauses within many Awards that had previously limited the number of casual workers that could be hired in an organisation whilst the Work Choices 2005 legislation enabled organisations to determine wages through negotiations with
individual workers, effectively reducing the power of collective bargaining (Burgess et al., 2008).

Simultaneously, the composition of the workforce was also undergoing a transformation. Women secured greater access for employment in the public sphere due to the feminist movement, changing gender roles and falling birth rates, (Preston & Burgess, 2003); the male-bread-winner family model (which assumed that the male was the sole worker) declined in importance (Campbell, Whitehouse, Baxter, & Vosko, 2009); and, more diversified family arrangements (beyond the nuclear family) emerged. Government initiatives to retain young people in education, abetted by a growing tertiary and vocational education sector, led to the emphasis on qualifications for entry into the skilled labour market place. Thus, more young people started to complete High School and engage in higher education (National Centre for Vocational Education Research, 2013). With this came demand for more flexible working arrangements that would better allow workers to balance family or study commitments with employment (Campbell et al., 2009).

It is within this context that peripheral employment started to increase in Australia; most noticeably from the 1980s onwards (Australian Bureau of Statistics, 2014).

1.4 Peripheral Employment and Health

Understanding how the re-emergence of peripheral employment has affected those who engage it in has been the focus of much research scrutiny and debate over the recent decades, both internationally and in Australia. Opinions on this employment “…have been controversial” (Buddelmeyer, McVicar, & Wooden, 2015, p. 1) and the discourses are largely polarised. On the one hand there are those who consider peripheral employment to be representative of low-quality and insecure employment that advantages employers only (Australian Council of Trade Unions, 2012a, 2012b; Quinlan et al., 2001b), on the other hand
are those who construct peripheral employment as the solution to an economy and workforce that have both demanded (and benefited from) greater labour flexibility (Shepherd, 2012; Wooden, 2001).

It is argued that a focus on the health outcomes for workers engaged in peripheral employment, rather than just the economic consequences, provides a more valid and objective way in which to assess how variations in employment arrangements influence worker’s lives. For example, the literature on unemployment and health now strongly indicates that it is associated with poor health outcomes, particularly mental health (Kieselbach, Winefield, Boyd, & Anderson, 2006; Paul & Moser, 2009; Wanberg, 2012), and this has been used to inform government policies that aim to mitigate such outcomes (Burdorf & Schuring, 2015; Davis & Howden-Chapman, 1996). It is hoped that the same level of understanding can be achieved in the peripheral employment and health domain, especially given that there are so many workers engaged in peripheral arrangements, and that the health of the work-force has such important implications for individuals, their families and the broader society (Kirsten, 2010; Manning & Napier, 2014).

**Theoretical framework**

One of the most popular theories used to explain health outcomes for peripheral workers is known as the core-periphery model (also known as the centre-periphery model; Aronsson et al., 2000). At its most basic, this model assumes that the closer a worker is to full-time and permanent employment, the better their health will be. The core-periphery model was developed by Aronsson et al. (2000) in response to the increase in less secure forms of employment, which left the common practice of dichotomising the workforce based on employment or unemployment, largely redundant (Waenerlund, Gustafsson, Virtanen, & Hammarström, 2011). Instead, the core-periphery model works to explain heath differences
both between the unemployed and employed, as well as within the employed, based on “labour market conditions and employment relations” (Aronsson, Gustafsson, & Dallner, 2002, p. 151). Consequently, this model also represents a departure from models such as Karesek’s (1979) job strain model, which explains workers' health based on intra-company conditions such as demand and control only, and which Aronsson et al. (2002) argue ignores how broader level variables (such as one’s position in the labour market) affect health. The core-periphery model provides the theoretical framework for this research programme and will now be described in further detail.

**The flexible firm model**

The core-periphery model is derived from Atkinson’s flexible firm model, which was developed to explain how organisational flexibility is achieved through hiring strategies (Atkinson & Gregory, 1986). The flexible firm model was first devised in 1986 amidst a decade of restructuring activities by organisations across the developed world. According to this model, most organisations divide their internal labour markets into “separate components, in which the worker’s experience, and the employer’s expectations of him/ her, are increasingly differentiated” (p.13). The flexible firm model proposes that two groups of employees exist - the core group and the peripheral group. The core workforce relates to employees who are fundamental to the core operations of an organisation as they are “permanent, highly skilled employees with internal career paths” (Deery & Jago, 2002, p. 5).

In comparison, the peripheral workforce represents those who are only employed in the short-term to meet periods of high operational demand.

According to the flexible firm model both core and peripheral workers are used to achieve organisational flexibility (Atkinson & Gregory, 1986). The core workforce provides functional flexibility, such as that required when new technologies emerge or production
methods change. Investments into the training of core workers are made so that they can adapt and up-skill to meet these new demands. In comparison, the peripheral workforce provides numerical flexibility, or the ability for the organisation to expand or detract its workforce in response to fluctuating demand and output. In today’s increasingly competitive market, where changes in demand need to be responded to very rapidly, the flexible firm model provides an explanation as to why the core workforce is shrinking, while the peripheral workforce is expanding (Virtanen, Liukkonen, Vahtera, Kivimäki, & Koskenvuo, 2003).

**The core-periphery model**

Aronsson et al. (2000) have expanded on the flexible firm model and developed the core-periphery model. All the important tenants of the flexible firm model remain the same; organisations are still considered to contain core and peripheral workers. The main difference is that the core-periphery model extends to conceptualise differences in workers’ experiences of job security and health outcomes rather than focusing solely on organisational flexibility. The basic premise of the model is that there exists “health-relative dimensions” (Aronsson et al., 2002, p. 151) along the core-periphery axis whereby worker health deteriorates in a core-to-periphery direction, namely as job insecurity increases and employment benefits or regulations decrease. Figure 1 visually represents the core-periphery model and this is followed by a more detailed explanation of the differences between core and peripheral workers, and the unemployed.
CHAPTER 1: INTRODUCTION

Core workers (full-time and/or permanent): According to the core-periphery model, core workers are the most likely to experience good health (Aronsson et al., 2000; 2002). This is because they enjoy more favourable working conditions than peripheral workers; their employment is ongoing and secure, and comes with rights and entitlements (for example, in Australia they are entitled to paid leave and unfair dismissal laws; Fair work Ombudsman, 2014b). They are more likely to receive commitment from their organisation and to have money and time invested into their training and development making it easier for them to forge a ‘career path’. Their longer tenure gives them opportunity to develop social contacts and support at work, and their stable position and regular income assists them to organise life outside of work (e.g. to secure a house loan, or to know what days they can participate in sporting activities).

Peripheral workers (not full-time and/or permanent): Peripheral workers do not enjoy the same working conditions as core workers and so are considered to experience poorer

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Figure 1: The Core-Periphery Model

Health deteriorates along the core-periphery axis in a core-periphery direction. It is assumed that core workers will experience the best health whilst the unemployed will experience the worst.
health outcomes (Aronsson et al., 2000; 2002). Peripheral work comes with little legal protection - meaning workers can be easily given the same-day-notice of termination, may not be covered by unfair dismissal laws, work unregulated hours and may not be entitled to receive sick or holiday pay. Employment is typically insecure and unstable and may result in intermittent working hours and pay that leaves these workers with a high degree of financial volatility and unpredictability in their lives. They may find it impossible to organise their social life or plan into the future, which can impede greatly on their sense of security or ability to achieve a healthy work-life balance. As these workers are seen by employers as non-permanent and disposable, it is less likely that they will receive training or development making it hard for them to further their careers. Furthermore, they are often not in one workplace for long enough to be able to secure strong social contacts, nor to gain the organisation specific knowledge that is often essential in keeping workers satisfied and safe (Virtanen et al., 2008).

The unemployed (looking for employment but not employed): Finally, there are the unemployed who are considered to experience the worst health (Aronsson et al., 2000; 2002; Virtanen et al., 2003). The unemployed are those who cannot enter the employment arena despite actively seeking work. Accordingly, these non-workers are excluded from the benefits of paid work altogether and are predominantly supported through government payments (such as Newstart allowance in Australia; Department of Human Services, 2015a). They are unable to meet social contacts at work, to advance their careers and to feel as though they are participating in society. Although they are given enough money to be able to live and look after themselves they are unlikely to be able to afford any luxuries beyond this.

Although this model distinguishes between the core and peripheral workforce, it does not consider them all to be equal and suggests that there are variations within this population (Aronsson et al., 2000; Aronsson et al., 2002). For example a worker hired for a long-term
In this model, a contract or project would be positioned towards the inside of the periphery, closer to the core, whilst an on-call worker who has no influence over when or where they work would be on the outside of the periphery. Health outcomes are thus considered to differ in a gradient like fashion with better health outcomes experienced the closer one is to the core, and worsening with each step along the axis towards the periphery (Virtanen et al., 2003).

Another conceptual feature of this model is that it does not consider a worker’s status to be permanent. The unemployed can cross the employment barrier to become either core or peripheral workers. Peripheral workers may transition to core employment and core workers may lose their jobs and become part of the unemployed category. While some research indicates that peripheral employment is more likely to result in future core employment than unemployment (Gash, 2008), other researchers suggest that some workers, especially those who are less-skilled, are likely to deviate between the peripheral and unemployed groups (largely due to the insecure nature of peripheral employment) and that the instability characterised by these transitions may pose additional negative risks for health (Benach et al., 2002).

**Limitations of the core-periphery model**

Given the importance of the core-periphery model in the studies which follow, it is important to acknowledge two major limitations of this framework. The first limitation is that the model assigns workers to a taxonomic position based on their position in the core or periphery of the labour market. In reality, work arrangements and conditions are not often easily classified along these simple dimensions and may differ within and between organisations and industries. As a result, it is possible that this model is too simplistic. It may also overlook other context variables which may have an important role in influencing health outcomes. Similar sentiments have been expressed by other authors (see Bohle, Willaby,
Quinlan, & McNamara, 2011; Louie et al., 2006; Virtanen et al., 2003 for some discussion). For example, recent research relating to foreign workers on short-term visas in Australia argues that peripheral workers may be exposed to many different layers of vulnerability that may be difficult to capture using simplistic binary models such as the core-periphery model (Underhill & Rimmer, 2015). Having said this, it is the very complexity of working arrangements, which perhaps makes the core-periphery model one of the neater and more reliable ways in which to measure precarity in working arrangements and to capture the basic but fundamental differences between workers who enjoy permanency and those who do not. Indeed, this research program aims to use the core periphery model as the basis of its investigations, whilst still investigating differences within and between the core and periphery workforce (see Chapter 2 for further details of each study and its aims).

The second limitation of the core-periphery model is that it is static in its approach to the core and periphery. It does not consider the influence that the presence of peripheral workers may have on the core workforce and only conceptualises the periphery as servicing the core. However, research indicates that temporary workers can function to undermine core workers’ perceptions of job security and can serve to pressure them to engage in and accept work intensification, especially in light of downsizing and restructuring processes that have become increasingly more common over the past three decades (Quinlan et al., 2001b). Other studies indicate that peripheral workers erode workplace safety and may undermine the existing safety culture. Such workers may be unfamiliar to the procedures and behaviours required to work safely and are often not provided with adequate training (Rousseau & Libuser, 1997). Consequently, it is probable that the erosion of working rights and conditions for peripheral workers affects not only their health and safety, but those of the core workers with whom they often work alongside. Complexities of this nature are unlikely to be captured by core-periphery model.
The literature on peripheral employment and health

Today, despite considerable research in this area, the core-periphery model has not been well validated. Although there is strong evidence to suggest that the unemployed are more likely to experience poor health outcomes than the employed (either core or peripheral workers; Wanberg, 2012), there is less understanding of whether health differences exist between the core and periphery. Although some authors have found evidence that peripheral work is associated with poorer health outcomes, others have found no relationship, or conclude that core workers face unique health risks.

Virtanen et al. (2003) studied a large sample of Finnish respondents, and their results supported the core-periphery model; permanent workers were found to experience better health than peripheral workers such as temporary workers, whereas temporary workers were more likely to experience better health than the unemployed. Other studies have supported these results. For example, a Korean study by Kim, Kim, Park, and Kawachi (2008) found that temporary and part-time workers were more likely to have poorer health than their full-time counterparts, even when socioeconomic status was held constant. Another study by Sirviö et al. (2012) found poorer mental health in peripheral workers than those with ongoing employment. In an Australian study, Bohle, Quinlan, Kennedy, and Williamson (2004) found that casual hotel workers reported more negative health complaints than permanent workers doing exactly the same job.

In contrast to the research findings outlined above, the results of other studies have not offered the same conclusions. Indeed there exists a substantial body of literature that has found no significant health differences between peripheral and core employment, thus discounting the idea of a core-periphery health gradient. One British study, used a 10 year longitudinal design to assess if health in temporary or part-time employment would result in
poorer health when compared to permanent, full-time employment. The results found no health differences between the employment groups (Bardasi & Francesconi, 2004). In another study undertaken by Gracia, Ramos, PEIRÓ, Caballer, and Sora (2011), which involved sampling respondents from 11 different countries, significant differences in job attitudes were found between temporary and permanent workers, but the same study revealed no significant differences in well-being outcomes. In addition, an Australian study that assessed the mental health of casual, fixed-term, part-time and permanent workers found no significant differences between employment groups and concluded that peripheral employment was not related to poorer health outcomes (Richardson, Lester, & Zhang, 2012).

To further complicate the situation, studies exist that have found negative health outcomes within groups of core, compared to peripheral workers. For example, Bohle, Willaby, Quinlan, and McNamara (2011) found that permanent workers in call centres reported higher levels of work intensity and subsequent burn out whilst research by Benavides, Benach, Diez-Roux, and Roman (2000) using respondents from 15 different countries in the European Union, found that stress was higher amongst permanent than temporary workers. These findings strongly contradict the core-periphery model as they suggest that core workers are more likely to experience poorer health than peripheral workers.

Even the literature reviews on this topic differ in their findings. For example, a review by Virtanen, Kivimäki, et al. (2005) on the mental and physical outcomes of temporary employment concluded that psychological morbidity was higher in temporary workers when compared to permanent workers. By contrast, another review of the literature by De Cuyper et al. (2008), which was focused exclusively on mental health asserted that “…research results have been inconsistent and inconclusive” (p.26) in this domain.
The inconsistency in the research highlights the complexity of this area, and suggests that, despite the existence of theoretical perspectives such as the core-periphery model (Aronsson et al., 2000), it is unlikely that all peripheral workers experience the negative health impacts that have been hypothesised.

Narrowing the focus of research

Peripheral employment is a label that can be applied to a myriad of jobs and workers. Improving the clarity of results may only be achieved through a collection of smaller research projects that have a more narrow and specific focus. This may mean abandoning the broader aim of linking the general category of peripheral employment with health or poor health, and instead conducting more sensitive research that considers the heterogeneity of peripheral employment and its workforce (Hammarström, Virtanen, & Janlert, 2011; Wagenaar et al., 2012). This idea will now be expanded on:

Types of peripheral employment

Peripheral employment captures a wide variety of employment types, ranging from casual employment to subcontractors and the self-employed. Each is unique and affords workers different entitlements and protections (Fair work Ombudsman, 2014b). Statutory regulations and even definitions of employment may differ cross-nationally (creating many difficulties in comparing the results of international studies). Thus, it may be important to examine how each type of peripheral employment is independently related to health outcomes within the context of a nation’s specific industrial relations system.

To date the literature has been mostly successful at examining the differences between types of peripheral employment (for example, see: Aronsson et al., 2002 or; Bernhard-Oettel, Sverke, & De Witte, 2005); however, some types of peripheral employment have received far more attention than others and misguided attempts to compare the results of studies borne in
different nations has been common. Temporary employment (Clarke, Lewchuk, de Wolff, & King, 2007; De Cuyper et al., 2008; Quesnel-Vallée, DeHaney, & Ciampi, 2010; Underhill & Quinlan, 2011; Virtanen, Janlert, & Hammarström, 2011; Virtanen et al., 2008), fixed-term contracts (Benavides et al., 2000; Guadalupe, 2003; Mauno, Kinnunen, Mäkikangas, & Nätti, 2005) and part-time employment (Booth & Van Ours, 2009; Gannon & Roberts, 2011; Kalleberg, 2000) have all been studied extensively in relation to the health outcomes of workers, especially in Canada and nations within Scandinavia.

In comparison the literature relating to casual employment in Australia is still not well developed. Although there are some studies of worker health (Keuskamp, Mackenzie, Ziersch, & Baum, 2013; Richardson et al., 2012), greater attention has been directed towards assessing the perceived quality of such employment (Lumley, Stanton, & Bartram, 2004; Watson, 2005) or transitions out of it (Buddelmeyer, Wooden, & Ghantous, 2008; Burgess & Campbell, 1998; Burgess et al., 2008). This is surprising given that it is the most common type of peripheral employment in Australia. However, casual employment is not the only type of peripheral employment to receive limited attention. For example, the health of the self-employed, seasonal workers, guest workers and subcontractors (across a range of industries such as construction to domestic services) has also been largely neglected despite the fact that they are possibly even more unregulated and vulnerable than other forms of peripheral employment (Quinlan et al., 2001b).

Categories of peripheral workers

The peripheral workforce is highly diverse, but most research has considered this group to be relatively homogenous (Wagenaar et al., 2012). Indeed, many studies in this area have been based on very large, non-descript samples of peripheral workers which may have
failed to capture important health differences between them (Sirviö et al., 2012; Waenerlund, Gustafsson, et al., 2011).

In Australia, peripheral employment is more prevalent amongst women, young people and immigrants; groups who are already traditionally more powerless and vulnerable to exploitation in the labour market (Australian Council of Trade Unions, 2012a). However, there is a need for greater understanding of how health outcomes might be moderated by demographic characteristics. Given the inconsistencies in studies relating to the effects of peripheral employment on health, a potentially useful avenue for research is to conduct more systematic studies of different cohorts of workers and how health outcomes differ between them. For example, work that is suitable and healthy for a single male, may not be similarly beneficial for a mother raising children and having to balance family commitments. In a similar vein, work that is suitable and healthy for a mid-career worker may not be suitable and psychologically beneficial for someone close to retirement.

**Length of exposure**

The current literature has largely ignored attempts to examine if different periods of exposure to peripheral employment result in different health outcomes. This is importance because it is probable that health erodes gradually over time, and yet the simplicity of previous studies means that this has remained mostly unexplored. Most of this is attributable to the predominance of cross-sectional methodologies, which has resulted in limitations in examining differences in exposure. Greater consistency may be achieved by using longitudinal designs that provide a better understanding of the relationship between exposure to peripheral employment and longer-term health outcomes.
1.5 Chapter Summary

This chapter has summarised some of the working definitions that are used in this thesis. It has also reviewed the history of employment regulation in Australia and discussed the factors that have more recently worked to erode the core employment relationship. This was followed by a discussion of the core-periphery model and a review of the inconsistent literature that both confirms and disconfirms the idea that peripheral workers will experience poorer health than permanent workers. The chapter was concluded with a discussion of how more consistent research can be achieved using a narrower research focus that systematically examines different types of peripheral employment within different cohorts of peripheral workers.
CHAPTER 2: RESEARCH HYPOTHESIS AND AIMS

2.1 Preamble

Chapter 2 outlines how this thesis will address the inconsistent literature by adopting a narrow examination of the health associations between only one type of peripheral employment and one distinct demographic population of peripheral workers. The broad research hypothesis, and five smaller aims which underpin this research programme, are outlined and a rationale for their development is provided based on the findings and gaps of previous research. This thesis contains several methodological and conceptual features that are also summarised in this Chapter.

2.2 The Present Thesis

In response to the inconsistent results of the current literature on peripheral employment and health, this thesis is purposively narrow in its focus. First it examines only one type of peripheral employment known as casual employment. Casual employment is one of the less regulated forms of peripheral employment in Australia and the developed world (although more unregulated forms of employment such as self-employed subcontractors do exist), and yet has not received the same research scrutiny as other employment (Campbell & Brosnan, 1999). Second, it focuses only on workers who are young and not engaged in any study. This cohort is considered to be distinct from other workers, particularly older workers, given their young age, position as recent entrants into the labour market (meaning that they do not have much employment experience behind them) and absence of study commitments. The aim of this thesis is to see if health gradients exist between young casual and permanent employees who are not studying, as is suggested should occur by the core-periphery model (Aronsson et al., 2000; 2002). Casual employment and young non-student casuals are now discussed in further detail:
Casual employment in Australia

Casual employment is the most common type of peripheral employment in Australia. According to Buddelmeyer et al. (2008, p. 1), “One of the most distinctive features of the contemporary Australian labour market is the high incidence of casual employment.” In 2013 it represented 23.9% of all employment (Australian Bureau of Statistics, 2014 as sourced from; Parliament of Australia, 2015). When placed in an international context, these figures give Australia one of the highest rates of casual employment in the countries belonging to the Organisation for Economic Co-operation and Development (OECD; Australian Council of Trade Unions, 2012a).

The majority of casual working arrangements are contained within industries such as ‘retail’, ‘health care and social assistance’, ‘manufacturing’, and ‘accommodation and food services’. For example, in the accommodation and food services industry, 65% of all employees are hired on a casual basis (Australian Council of Trade Unions, 2012b). There is also uneven distribution of casual employment within Australia. The Australian Capital Territory has the lowest rates (17% of all employment; Parliament of Australia, 2015) and South Australia has the highest (28% of all employment). Indeed, since 1988, 54% of all new jobs formed in the South Australian economy have been casual positions (SA Unions, 2005). Certain sections of society are also over represented. This includes women, people of a culturally or linguistically diverse background and young people aged 15-24 (Australian Council of Trade Unions, 2012a; Foundation for Young Australians, 2013).

Young people and casual employment

Young people are considered to be an especially vulnerable part of the labour force; they are ‘new-entrants’ into the labour market and as such, have little workplace experience, or knowledge of their employment rights and entitlements (Worth, 2002). They also do not
have much bargaining power with employers because of their lack of skill and experience and are more likely to be offered work under exploitative conditions (NSW Childrens' Comission, 2005). For example, Australian research has found that many young workers did not know which Award they were covered by (SA Unions, 2005); were too scared to speak out when they were being illegally paid under minimum wage (Smiljanic & Watch, 2004); and, were found to be exploited by employers who took illegal deductions out of their pay (SA Unions, 2005). As a consequence, young people may be even more vulnerable in forms of peripheral employment such as casual employment, as legal protection is only further diminished (Worth, 2002). According to one report by SA Unions (2005, p. 1), young people are often seen by employers as “dirt cheap and disposable” labour.

This situation is further compounded by the fact that youth unemployment in Australia, and particularly in South Australia, is currently high. For example in June 2015, national statistics indicated that youth unemployment stood at 13.8% (Trading Economics, 2015). In South Australia this figure was even higher than the national average at 15.5% (Skills SA, 2015). According to Australian statistics this has resulted in youth who have become discouraged from seeking employment and are now hidden unemployed (National Centre for Vocational Education Research, 2013). Consequently, in conditions where jobs are scarce, insecure casual employment may appear relatively more attractive.

Young people aged 15 – 24 represent approximately 40% of all casual employment in Australia (Australian Bureau of Statistics, 2009). As the retention of young people in full-time education has increased by 20% since 1986 (National Centre for Vocational Education Research, 2013), many of these casual workers are also full-time students who engage in casual arrangements whilst studying (Foundation for Young Australians, 2013). The influence of casual employment on the lives and health of these young student workers is likely to be less severe (May et al., 2005; McDonald, Bailey, Oliver, & Pini, 2007). They are
more likely to engage in such work for fewer hours per week and for a shorter and more specified period of time. Once they have attained qualifications, they are in a better position to secure more skilled and permanent employment and to negotiate better working conditions and pay (Karmel, Lu, & Oliver, 2013).

Figure 2: Rates of young, non-student casuals in Australia 2001-2011

In comparison, other young people engage in casual employment as their sole activity, generally after leaving high school prematurely or on completion of Year 12 (or they may begin tertiary / vocational study and drop out; National Centre for Vocational Education Research, 2013). Indeed, longitudinal research undertaken in Australia, has found that those who leave high school and go straight into the workforce are more likely to engage in low-skilled positions and are more likely to work part-time or casually (Karmel et al., 2013). Figure 2 shows the rates of young non-student casuals and highlights how they have increased over the last decade (Source: Foundation for Young Australians, 2013, p. 16).
This increase has been attributed to the Global Financial Crisis of 2008, which saw the availability of full-time positions decline for youth and continue to remain low (Foundation for Young Australians, 2013), abetted by a job market that now increasingly demands tertiary or vocational qualifications to secure skilled or permanent work. These workers are what the National Centre for Vocational Education Research (2013) label as ‘not-fully engaged’ in that they are neither in full-time study, nor working in permanent, full-time employment. They are suggested to be “at risk of suffering long-term disadvantage.” (p.24). Despite this, young non-student casuals in Australia have received little research attention in relation to how such work may be related to health outcomes (Mayhew & Quinlan, 2002; McDonald et al., 2007; Winefield, Winefield, Tiggemann, & Goldney, 1991).

Research hypothesis

This thesis examines the following research hypothesis: **Young, non-student casual employees will experience poorer health than young, non-student permanent employees.** This hypothesis is guided by the theoretical framework of the core-periphery model, which suggests that peripheral workers will experience poorer health than core workers (Aronsson et al., 2000; 2002). Although this model is not well validated, this thesis will explore it within the narrow context of young, non-student workers in casual employment only. As young workers are already identified as vulnerable workers (Gash, 2008), differences between their positions on the core-periphery axis may be especially significant to health outcomes. The absence of legal protection that so strongly characterises peripheral casual employment, may only compound with the existing vulnerability of this young cohort (SA Unions, 2005), thus resulting in poorer health outcomes.

Research aims and approach
CHAPTER 2: RESEARCH HYPOTHESIS AND AIMS

To answer the overarching hypothesis, this thesis has several research aims and strategies. Each of these will confirm or disconfirm the research hypothesis from a particular angle, and in a way that provides different insights into the complexity of this research topic. These aims and strategies are now discussed in further detail and situated within the literature on peripheral employment and health more broadly.

Aim 1: To replicate cross-sectional findings and understand if casual employment status is related to health outcomes when compared to permanent employment or full-time student status.

The majority of research in this area has been conducted using simple cross-sectional designs that compare the health of peripheral workers to those in core employment (Kim et al., 2008; Virtanen et al., 2008; Virtanen, Kivimäki, et al., 2005). For this reason, a useful starting point in this thesis is to examine the health of young casual workers to young permanent workers, using measures from one time point.

A full-time student sample will also be included in the comparison, because although this does not align with the core-periphery model, this is a major population group in this age-specific cohort. This will enable insights into which post-high-school option (casual employment, permanent employment or full-time study) is related to the best health outcomes for young Australians.

Aim 2: To understand if the relationship between casual employment and health is moderated by job insecurity, job dissatisfaction, financial strain or low social support.

Existing research suggests that one’s position on the core-periphery model may not be the only factor influencing health and that individual-level variables play an important role in moderating the relationship between employment status and health. For example, one
Swedish study found that the association between temporary employment and poor health was contingent on cash margin (or how much disposable income one had; Waenerlund, Virtanen, & Hammarström, 2011). Peripheral workers who were experiencing a low cash margin (or low disposable income) were more likely to experience poor health. In comparison, Lewchuk, Clarke, and de Wolff (2008) found that high levels of social support (either through friends, family or colleagues) worked to buffer peripheral workers from negative health effects by providing them with a network in which to seek advice, emotional support and reassurance. Qualitative research has indicated that peripheral workers who are dissatisfied with their employment report higher levels of stress than those who find their work satisfying and sustainable (Clarke et al., 2007).

Job insecurity has also been researched, which is important given the short tenure of most peripheral employment relationships and how easily they can be terminated. Sirviö et al. (2012) found that psychological distress was more common amongst temporary workers who reported high levels of job insecurity. Similarly, a Dutch study found that health differences within peripheral workers (in this case agency or on-call) could be partially explained by differences in perceived job insecurity (Wagenaar et al., 2012). However, other research has indicated that job insecurity may be well tolerated by temporary workers because they identify it as an inherent part of their employment relationship. In this research, it was found that permanent workers expected job security and were more likely to experience poorer health in its absence (Bernhard-Oettel et al., 2005; De Cuyper & De Witte, 2007b).

In light of this, a second strategy is to contribute to current knowledge by examining if different levels of job insecurity, job dissatisfaction, financial strain and low social support, moderate the relationship between casual employment and health outcomes in young, non-student casuals. This will provide a more sensitive understanding of health differences within
this cohort and function to better identify the mechanisms by which casual employment and health may be related.

**Aim 3: To identify how different periods of exposure to casual employment are associated with health changes over time.**

In their reviews of the literature, Virtanen, Kivimäki, et al. (2005) and De Cuyper et al. (2008) both found that cross-sectional study designs dominate this research area. This is problematic, as cross-sectional methodology does not control for selection effects or the possibility that healthy workers are more likely to secure permanent positions, thus leaving unhealthy workers in peripheral arrangements. Indeed, a recent study by Dawson, Veliziotis, Pacheco, and Webber (2015) found that those with pre-existing poor mental health were more likely to end up in temporary employment and the authors suggest that existing cross-sectional studies may have “overestimated the influence of employment type on mental health” (p.1).

Beyond this, measures taken at only one time period do not provide insight into how longer periods of exposure to peripheral employment may be related with health. Some longitudinal studies do exist, although these have predominantly used samples of the temporary workforce in Europe, and they vary in their findings (Bardasi & Francesconi, 2004; Pirani & Salvini, 2015; Price & Burgard, 2006; Waenerlund, Gustafsson, et al., 2011).

In Australia, the *Fair Work Act* classifies any casual position that exceeds a 12 month period to be ‘long-term’ (Fair Work Ombudsman, 2014a). Many casual workers are employed in long-term arrangements of this nature. In 2003, 57% of the casual workforce had worked in their position for longer than one year, with the mean tenure for casual workers standing at 2.6 years (Louie et al., 2006). More recent statistics indicate that just over one quarter of all casual workers in Australia have been engaged in their casual position for five
CHAPTER 2: RESEARCH HYPOTHESIS AND AIMS

years or longer (Australian Bureau of Statistics, 2010b). Such workers are essentially in permanent working arrangements but without the benefits. Given these statistics, a third strategy will be to investigate how different lengths of exposure (ranging from no exposure to several years) are associated with health outcomes in young, non-student workers. It is possible that exposure to peripheral employment has a cumulative rather than spontaneous effect on health.

**Aim 4: To understand if volition (preference for or against casual employment) can significantly predict health outcomes.**

The research on peripheral employment highlights two contrasting discourses on why people engage in such employment. On the one hand it is argued that most peripheral employment is voluntarily sought after by sections of society who desire more flexible work options such as parents, those close to retirement, and students (Shepherd, 2012; Wooden, 2001). On the other hand, there are suggestions that most workers engage in peripheral employment involuntarily and out of necessity because they are unable to secure core employment (Australian Council of Trade Unions, 2012a; Quinlan et al., 2001b).

Statistics on casual employment in Australia indicate that both discourses hold true, although the latter is more accurate; just over 52% of the casual workforce would prefer their employment to be ongoing and felt that their lives would be improved if given access to paid leave entitlements (Australian Bureau of Statistics, 2010a). The remainder were satisfied in their casual arrangement and did not want to engage in other employment if given the option. Given the contrasting situations of these workers, it is highly likely that volition (involuntary or voluntary engagement in casual employment) may result in health differences within the casual workforce.
CHAPTER 2: RESEARCH HYPOTHESIS AND AIMS

There has been research which has examined the effects of volition but this has been predominantly on job attitudes and performance instead of health outcomes (De Cuyper & De Witte, 2007a; Tan & Tan, 2002). The results have also been mixed and indicate that being in the occupation of choice may be more important to workers than being in the contract of choice (Bernhard-Oettel, De Cuyper, Berntson, & Isaksson, 2008). This research will build on these existing studies by examining the effects that volition status has on the health of young non-student casual workers.

Aim 5: To understand how young non-student casuals appraise their work and health using qualitative data.

A fifth strategy used in this research will be to draw upon qualitative methods. Currently qualitative analysis has been limited compared to the use of quantitative approaches, with only a handful of studies in existence (Clarke et al., 2007; Malenfant, LaRue, & Vézina, 2007; Underhill & Quinlan, 2011). However, the existing qualitative studies highlight the valuable insights that such research provides in terms of capturing the complex experiences and attitudes of workers in peripheral employment. This methodology enables workers themselves provide a narrative account of the extent to which their health is affected by their employment.

Given that young, non-students are a demographic population that has received limited attention in the literature, qualitative analysis will provide a more detailed and comprehensive understanding of the health status of this group, possibly including any age-specific attitudes or characteristics that may assist in the interpretation of their health outcomes. Indeed, it is hoped that Aim 5 may assist the interpretation of some of the questions or inconsistencies that arise from the quantitative analysis. In light of this, Aim 5
CHAPTER 2: RESEARCH HYPOTHESIS AND AIMS

seeks to understand how young non-student casuals appraise their work and health using qualitative data.

2.3 Chapter Summary

This Chapter outlined the research hypothesis that will be examined in this thesis: Young, non-student casual employees will experience poorer health than young, non-student permanent employees. This was followed by an explanation of how the hypothesis will be addressed through five smaller and distinct aims; each which has been developed based on the findings and gaps of previous literature.
CHAPTER 3: DATA

3.1 Preamble

This Chapter provides a brief description of the data that were analysed in this thesis. First it outlines the pre-existing longitudinal dataset, known as the ‘South Australian School Leavers Study’ (SASLS), which was analysed in Studies One, Two and Three. Second it provides information on how the qualitative data was collected for Study Four. Although each study manuscript contains an independent ‘methods’ section, this chapter provides important additional information.

3.2 The South Australian School Leavers Study

The first four aims (Studies One, Two & Three) were addressed using data from a longitudinal study known as the SASLS. The SASLS was a ten year longitudinal study aimed at ‘producing an understanding of work experiences and wellbeing, including an investigation of what predicts successful employment, and how people cope with unfavourable working conditions’ [taken from the SASLS information pamphlet provided to all respondents and their parents/caregivers]. The survey was divided into five sections, labelled Section A – Section E. Each section grouped together common items under the headings of: demographics, health & wellbeing, leisure activities, work & attitudes and expectations. In total, the survey included 36 different measures including family support, bullying, attribution style, employment type, mental health and financial security. The survey also included 24 well-validated scales ranging from the job satisfaction scale to the social alienation scale. The entire SASLS survey can be viewed in Appendix A, located on page 195.

The target sample was young school leavers who were only just entering the labour market. For this reason, the study approached Year.10 students in High School (aged 15) and
aimed to do follow up surveys with them annually for 10 years (until they were aged 25). This time period was considered an appropriate length in which to longitudinally capture young people’s employment / unemployment / higher education trajectories and experiences, in order to examine if they were related to a range of outcome variables including health, substance use and life satisfaction.

Schools were randomly chosen from a representative sample, as sourced from the Australian Bureau of Statistics, and was based on features such as location (rural / metropolitan), gender orientation (single-sex / co-ed) and ownership (government or privately owned). The response rate from schools was 55% - out of 45 schools that were approached, 25 agreed to participate. The study was done in three waves, starting in 2000, 2001 & 2002, and finishing in 2010, 2011 & 2012 respectively. Each wave was combined so that the first year of all three surveys was considered as time 1 and the last year of all three surveys was considered as time 10. The total number of respondents stood at 2552 in time 1.

**Demographic characteristics at time 1**

At baseline, the demographics of the sample were as follows: 58% were female, 41% were male (1% did not disclose gender); 71% resided within metropolitan Adelaide and 27% resided in rural or regional communities (the small remainder did not disclose this information). Students from government owned co-education schools (containing both male and female students) comprised 66.5% of the sample, whilst the remainder were from private schools – either single-sex (17%) or co-educational (14.5%) – or did not disclose which school they came from (2%).

**Attrition analysis**

Attrition describes the process in which respondents cease participation in a study. These respondents are labelled as ‘drop-outs’, whilst those who remain until study
completion, are labelled as ‘stayers’. Drop-out can be caused by a range of factors; the most common are that the respondent moves postal address and is therefore no longer reachable, or that the respondent becomes bored with repeatedly answering the same survey or no longer sees value or benefit in responding. Attrition is particularly problematic in longitudinal studies, as inherent to this methodology, is the requirement that respondents participate over multiple time points (Menard, 2002). Resultantly, this increases the likelihood that respondents may relocate or change their attitude towards survey participation.

In relation to the SASLS, attrition of the sample occurred on average at 10% each year. However, some differences between the time periods can be noted; for example, attrition was the highest between times 1 and 2 and the lowest between times 7 and 8. By time 10, 80% of the original sample had been lost to attrition. This makes the attrition rate of the SASLS one of the highest identified in longitudinal research on school-leavers (Delfabbro, Winefield, Winefield, Malvaso, & Plueckenham, 2015). The response rates at each time period is summarised in Table 1:

Table 1

*Response rates at each time period*

<table>
<thead>
<tr>
<th>TIME</th>
<th>NO OF RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2552</td>
</tr>
<tr>
<td>2</td>
<td>1498</td>
</tr>
<tr>
<td>3</td>
<td>1165</td>
</tr>
<tr>
<td>4</td>
<td>1072</td>
</tr>
<tr>
<td>5</td>
<td>817</td>
</tr>
<tr>
<td>6</td>
<td>672</td>
</tr>
<tr>
<td>7</td>
<td>555</td>
</tr>
<tr>
<td>8</td>
<td>563</td>
</tr>
<tr>
<td>9</td>
<td>524</td>
</tr>
<tr>
<td>10</td>
<td>446</td>
</tr>
</tbody>
</table>
The high rate of attrition in the SASLS may be attributable to the fact that it relied predominantly on only one form of tracking respondents, which was by mail delivery (and in subsequent waves, and only at the discretion of the respondent, also by email). Accordingly, any respondents who changed address without disclosure were unable to be tracked. Lower attrition rates tend to occur in countries where respondents can be tracked using a national database, as available in Scandinavia.

Attrition analysis was conducted to identify if attrition of the sample significantly reduced the internal validity of the SASLS data, particularly in relation to its ability to examine if employment status was related to a range of health and well-being outcomes in school-leavers. Given that that the present thesis is concerned with examining the association between casual employment and physical and mental health, the findings of the attrition analysis is of particular relevance. One-way ANOVA was used to detect if drop-outs differed significantly from stayers in relation to “age, gender, substance use (alcohol, smoking, marijuana and illicit drugs), employment status, suicide ideation, self-esteem, and psychological wellbeing” (Delfabbro et al., 2015, pp. 5-6).

The results of the analysis indicated that males, those who were the oldest in their age group, and those who reported smoking tobacco and marijuana or using other illicit substances, were significantly more likely drop-out. Such results are similar to the findings of other researchers who have also identified these variables as resulting in higher drop-out (Cunradi, Moore, Killoran, & Ames, 2005; Snow, Tebes, & Arthur, 1992). However, the attrition analysis also indicated that drop-outs did not differ significantly to stayers in relation to any of the other variables measured, including their physical and mental health or employment status; the authors concluded that: “Overall, the analyses provided limited to no support to the notion that attrition has an impact upon the internal validity of the School Leavers Project [SASLS]” (Delfabbro et al., 2015, p. 14). These results are supportive of the
idea, that despite the high attrition of the SASLS sample, it still contains adequate internal validity and provides suitable data for assessing the relationship between employment status and health, although it must be noted that males may be under-represented in the results.

These results should be considered when examining the findings of the three studies in this thesis, which analyse SASLS data to explore their aims. In this thesis, the SASLS data is not used in its entirety and instead select groups of respondents and times of the SASLS are chosen based on the study aims.

**Strengths and weaknesses**

The SASLS dataset has several strengths and weaknesses which will be briefly discussed. One of the major strengths of the SASLS dataset (10 collection points over a 10-year study period) is its longitudinal design. Longitudinal analysis provides the opportunity to better understand the nature and pattern of relationships between variables (such as employment status and health) over a continuing rather than static time frame (Menard, 2002). As a consequence, the SASLS dataset is well positioned to overcome some of the weaknesses of previous cross-sectional studies in this area; for example, by ensuring that previous health status is held constant and that selection effects are controlled for. Given that cross-sectional studies dominate the literature (Virtanen, Kivimäki, et al., 2005), the longitudinal nature of the SASLS is one of the primary reasons that it was chosen as the core dataset for this research program.

Other strengths pertain to the wide scope of the dataset, where employment status is measured alongside with an array of different variables and scales, and not restricted solely to health. This provides an opportunity to explore how different contextual or personal features may interact or moderate the relationship between employment and health (see Chapter 4: Study One for an example of this). Finally, the wide target range of schools used in the
SASLS means that the data is likely to be inclusive of young people from a range of different backgrounds and regions across South Australia, rather than being restricted to more commonly participating schools (such as those in the metropolitan area or of public funding). This increases the generalisability of the thesis findings to the rest of the young, non-student casual population in Australia.

The SASLS dataset is however, not without its limitations; one of the most notable being the high attrition rate of participants over the course of the 10-year study period. Although the attrition analysis conducted on drop-outs (see above section titled ‘Attrition analysis’) indicated that they did not significantly differ from those who stayed in the study (on variables important to this thesis at least), the limited number of participants by the higher waves of the study limits the power and generalisability of each analysis.

Further, the pre-existing nature of the SASLS means that questions that would have been important to ask, have been omitted. For example, only questions pertaining to general health were asked, with no specific data collected on the source (e.g. muscular-skeletal, stomach, headaches) or perceived causes (car accident, hereditary, work-related) of poor health, which may be important when interpreting results. Additionally, some measures are questionable in terms of their reliability. For example, employment status was based only on asking participants if they were ‘casual’ or ‘permanently’ employed, with no other questions to verify their employment status. Unfortunately, as indicated by problems encountered in data collection by the Australian Bureau of Statistics (Ray Morgan Research, 2014), many workers cannot accurately identify their employment status (e.g. they may think that permanent part-time work constitutes as casual employment). To overcome this, other studies have prompted participants with further verification questions about paid leave entitlements (Bohle et al., 2004). The SASLS did not do this and therefore there is the possibility that some of the participants have been incorrectly categorised.
3.3 Qualitative Data

Study Four addressed Aim 5, which was to understand how young, non-student casuals appraise their work using qualitative analysis. Even though the SASLS was completed in 2012, and Study Four began in 2014, there was initial consideration of interviewing SASLS respondents for Study Four given that respondent contact information was still available. However, after some deliberation this was considered too problematic; all SASLS respondents were now over 24 years old meaning that they were no longer classified as ‘young’ workers. Further, retrospective interviewing has been found to limit the reliability and validity of findings (Magnusson, 1990) and so, despite the desire to maintain continuity, it was decided that new respondents outside of the SASLS respondent pool, and who were currently aged 18-24, would be recruited.

Recruitment was undertaken by advertising online (GumTree and FaceBook) and through placing pamphlets on advertising boards across large shopping centres in Adelaide. Respondents had to be aged 18-24, not studying and employed casually to be accepted for an interview. Recruitment commenced in January 2014, and interviewing finished in May 2014 once 20 interviews were complete. Respondent demographic information is contained below in Table 2.
Table 2

Respondents' demographic information

<table>
<thead>
<tr>
<th>DEMOGRAPHIC</th>
<th>NUMBER (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8 (40%)</td>
</tr>
<tr>
<td>Female</td>
<td>12 (60%)</td>
</tr>
<tr>
<td><strong>Age:</strong></td>
<td></td>
</tr>
<tr>
<td>18 -21</td>
<td>4 (20%)</td>
</tr>
<tr>
<td>21-24</td>
<td>16 (80%)</td>
</tr>
<tr>
<td><strong>Relationship status</strong></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>8 (40%)</td>
</tr>
<tr>
<td>In relationship</td>
<td>9 (45%)</td>
</tr>
<tr>
<td>Married</td>
<td>3 (15%)</td>
</tr>
<tr>
<td><strong>Living arrangement</strong></td>
<td></td>
</tr>
<tr>
<td>With parents/family</td>
<td>12 (60%)</td>
</tr>
<tr>
<td>With partner</td>
<td>4 (20%)</td>
</tr>
<tr>
<td>Independent</td>
<td>4 (20%)</td>
</tr>
<tr>
<td><strong>Dependents</strong></td>
<td></td>
</tr>
<tr>
<td>No children</td>
<td>18 (90%)</td>
</tr>
<tr>
<td>Children</td>
<td>2 (10%)</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Transport, postal and warehousing</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Accommodation &amp; food Services</td>
<td>6 (30%)</td>
</tr>
<tr>
<td>Retail trade</td>
<td>6 (30%)</td>
</tr>
<tr>
<td>Arts and recreation services</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>2 (10%)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Public administration &amp; safety</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Health care &amp; social assistance</td>
<td>1 (5%)</td>
</tr>
</tbody>
</table>

The interview questions were based on six main areas of enquiry: ‘background information’, ‘employment information’, ‘perceptions of casual and permanent work’, ‘experiences in casual employment’, ‘health’ and ‘future aspirations’. These six areas were
considered important in developing a good understanding of young, non-students’ experiences in casual employment. Also included were specific questions that would assist to interpret the findings of Studies One, Two and Three. The full set of interview questions (as given to respondents during the interview schedule) can be viewed in Appendix B (page 209).

**Strengths and weaknesses**

The qualitative data has several strengths and weaknesses which will be briefly noted. A notable strength is that a variety of different participants with varying demographic characteristics were included. For example, the sample included males and females, those living with parents, friends or independently, those with children and without children, in relationships and single etc. Such variety is important as it not only captures a variety of different viewpoints and experiences, but also means that the findings of Study Four can be more easily generalised to the rest of the young, non-student, casual population in Australia. Moreover, in contrast to the SASLS study, it was possible to ensure that participants understood what it meant to be considered a casual employee (generally contingent on whether they received paid leave entitlements). Further, the qualitative data was collected based on questions that had been considered exclusively for the purpose of this thesis and its aims whereas the SASLS was collected for research purposes beyond this thesis.

A limitation of the qualitative study was that it was based on only a small number of respondents. Although 20 interviewees are considered adequate for a qualitative, thematic analysis, especially given that saturation was reached (Guest, Bunce, & Johnson, 2006), the generalisability of the findings may be limited. It is also possible that the study may have over-represented those who were dissatisfied with their casual employment. Such
respondents may have been more likely to respond to advertisements for participation, so as be able to share their negative experiences.

3.4 Chapter Summary

This Chapter has described the data sources that have been used in this thesis. It has outlined the SASLS, and described important information on the procedure used to collect the longitudinal data, as well as outlining respondent characteristics and sample attrition. This was followed by a discussion of how the qualitative data was collected for Study Four. Both the SASLS surveys, as well as the interview questions used in Study Four, are referred to as Appendix A and Appendix B respectively and are located at the end of this thesis.
CHAPTER 4: STUDY ONE

4.1 Preamble

The first paper addresses the following two thesis aims: Aim 1: To replicate cross-sectional findings and understand if casual employment status is related to health outcomes when compared to permanent or full-time student status; and Aim 2: To understand if the relationship between casual employment and health is moderated by job insecurity, job dissatisfaction, financial strain or low social support.

This first study adopts a common study design used by other researchers to examine peripheral employment and health (Kim et al., 2008; McNamara, Bohle, & Quinlan, 2011; Waenerlund, Virtanen, et al., 2011). The health of casual workers is compared to the health of permanent workers using cross-sectional measures. This will test the validity of the core-periphery model as it applies to young, non-student casuals in Australia. This first study also examines if the relationship between casual employment and health outcomes is moderated by four different variables; job insecurity, job dissatisfaction, financial strain and low social support. These variables have been chosen based on previous research, which has indicated that they may play an important role in better identifying which peripheral workers experience poor health and which do not (Clarke et al., 2007; Lewchuk et al., 2008; Sirviö et al., 2012; Waenerlund, Virtanen, et al., 2011; Wagenaar et al., 2012).

Study One uses data from the SASLS (time 6) when respondents were 19-20 years old. Given that this thesis is interested in examining non-students, this time period was chosen because it corresponds with an age when most young people in Australia have completed high school and have either moved on to tertiary / vocational education, or employment. Mental health, physical health and job stress are examined as outcome variables and are dichotomized to enable analysis using logistic regression, a common statistical
approach used by researchers in this area (Bardasi & Francesconi, 2003; Benavides et al., 2000; Price & Burgard, 2006; Virtanen et al., 2008).

In short, this study does not aim to be novel in its design or analysis, and rather purposively attempts to closely adhere to the most common research approach used in the literature - so that easier comparisons can be drawn. Instead, Study One contributes to the research because of its narrow examination of casual employment and the health of young, non-student casuals, both of which have received limited research attention.
Casual catastrophe or contentment: Is casual employment related to poor health in young, non-student South Australians? - PUBLISHED -

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Publication


4.2 Statement of Contribution

Natalie Matthews (first author)

I am responsible for the primary authorship and conception of this paper. I conducted the literature review, developed the research hypothesis and aims, ran the statistical analysis and wrote-up the manuscript. I was identified as the first author when this article was submitted for publication, and I have been responsible for all communications with journal administration including responses to reviewer feedback. With authority from Professor Anthony Winefield and Professor Paul Delfabbro, the analysis was based on raw data from the SASLS which they were responsible for collecting without my assistance.

Ms. Natalie Matthews

SIGNED_______________________ DATE____________________________

Professor Paul Delfabbro; Professor Anthony Winefield (co-authors)
As Natalie Matthews’ supervisors we were responsible for assisting Natalie in the development of her manuscript. Natalie was responsible for the conceptualisation of the research hypothesis and aims, literature review, statistical analysis and write-up. Our role was to discuss the feasibility of her research proposals, provide her with support and assistance when she encountered difficulties and to give feedback on manuscript drafts. We also collected the raw data for the SASLS but have given Natalie the permission to use this data for her current analysis, and we identify that she did this independently. The SASLS research was supported by grants numbered A00104359, DP0556377, DP0879497 from the Australian Research Council. We give permission for Natalie to use this paper for the fulfilment of her Doctor of Philosophy.

Professor Paul Delfabbro

SIGNED_______________________________ DATE______________________________

Professor Anthony Winefield

SIGNED_______________________________ DATE______________________________
4.3 Abstract

The past two decades have seen Australia experience a trend towards workforce casualisation, which has been most strongly observed in younger age cohorts. Concerns have been raised that casual employment is a form of low-quality employment that erodes workers’ physical and mental health. These conclusions have generally been drawn by an emerging international literature and often based on simplistic measures of employment status that may not always be easily generalised to the current economic climate in Australia. In this paper, we report the findings of an Australian study involving a cross-sectional sample of 453 recent South Australian school leavers, aged 19-20 years, to examine the relationship between employment status (casual, permanent or full-time study) and poor health in young people. Job insecurity, job dissatisfaction, financial strain and low social support were tested as moderators and as a means to move beyond only taxonomic measures of employment status. The results indicated that employment status was not associated with poor health. No interaction between employment status and the moderator variables was found. Instead, the moderator variables alone were better predictors of non-optimal mental health and job stress. The results suggest that, for young people at least, casual employment is not associated with poorer health.
4.4 Introduction

The context of casual employment in Australia

Australia is one of the highest employers of causal workers in the Organisation for Economic Co-operation and Development (OECD), behind only Spain (Figure 3). The Australian Bureau of Statistics indicates that casual employment in Australia has increased from 15.8% of all labour in 1984, to 23.9% (2.2 million workers) in 2012 (Australian Bureau of Statistics, 2012). This is an increase of 8.1% over 28 years. Diversity in the labour market is not problematic itself, but of concern is that those working in casual arrangements are not afforded the same rights as those in permanent positions. Casual workers are legally only entitled to a minimum of 0-4 hours work per week (depending on the industry award); are not eligible for annual leave, sick leave, carer’s leave or maternity leave; and, are not entitled to any notice before the termination of their employment (Fair Work Ombudsmen, 2013). Of further concern is that the increase in casual employment has not been born equally by all workers and is most commonly observed amongst women, immigrants, and young Australians. For example, statistics indicate that since the 1980s, young people have been twice as likely to hold a part-time or casual position than any other age group (Foundation for Young Australians, 2011). These are groups who already experience traditionally less power to negotiate labour rights and conditions.
Figure 3: Casual employment in Australia compared with OECD in 2012

This rapid casualisation of the Australian workforce has been largely attributed to the growing adoption of neo-liberal economic practices that reduce protection, promote free-trade and advance globalisation (Gash, 2008). The constant pursuit of higher profits in today’s global market has pressured organisations to be as innovative, responsive, flexible and cost-efficient as possible if they are to remain profitable. Simultaneously, work rights and protection, especially for permanent employees have increased over the decades largely as a result of union pressure and government regulation. This has possibly made permanent positions less attractive for employers, who see them as less flexible and more costly than a casual workforce. Consequently, many organisations of today lean towards what Atkinson and Gregory (1986) define as ‘numerical flexibility’ whereby core workers (or permanent employees) are hired on a continuing basis to provide the ‘skeleton’ labour for the organisation, while peripheral workers (such as casuals) are hired and fired on a needs basis.
(Creegan, Duffield, & Forrester, 2003; Procter, Rowlinson, McArdle, Hassard, & Forrester, 1994). The statistics indicate that while the core workforce is shrinking, the peripheral workforce is expanding.

**Casual employment and health**

As a result of these developments, questions have been raised concerning the potential effects of the casualisation of work arrangements on workers’ physical and mental health. There are now a large number of researchers who argue that peripheral work such as casual employment, is a ‘low quality’ form of employment (Malenfant et al., 2007) comparable to unemployment (now strongly linked to ill-health, see metanalysis by Wanberg, 2012). Such employment can lead to high levels of job insecurity (Australian Council of Trade Unions, 2012a); intermittent working days and hours (Malenfant et al., 2007); financial pressure to engage in more than one job simultaneously (defined as multiple job holding, see Quinlan & Bohle, 2009); limited opportunities for training and development; and, a reduced capacity to raise concerns about working conditions (Aronsson, 1999). Many researchers hypothesise that working in peripheral employment has negative consequences for workers’ health (Bernhard-Oettel et al., 2005; Rousseau & Libuser, 1997; Virtanen et al., 2003). According to these authors, variations in health status can be observed as a ‘core-periphery health gradient’ whereby good health is most likely in the core workforce, less likely amongst the peripheral workforce, and least likely amongst the unemployed (Aronsson et al., 2000; 2002).

In support of such claims are studies such as Virtanen et al. (2003), which was based on a large sample of 15,000 Finnish workers, and included a representative sample of all occupational groups. The findings indicated that compared to permanent and fixed term workers, peripheral employees (such as temporary workers) were more likely to suffer from chronic diseases, and for women, depression. In support of the core-periphery hypothesis, low-income unemployed reported the poorest health status. The findings of this study led the
authors to conclude that health is linked to the “stability of the formal contract” (p.1019). Similarly other studies in this area indicate that compared to permanent employees, peripheral employees are more likely to suffer from psychological distress, poorer overall physical health (Lewchuk, de Wolff, King, & Polanyi, 2003), more health complaints (Bohle et al., 2004), and are more likely to use anti-depressants (Virtanen et al., 2008). These findings suggest that health inequalities are not restricted to the traditional employed / unemployed dichotomy but rather also exist between different ‘types’ of employment, possibly reflecting different levels of employment security and quality.

Other studies offer a different conclusion. Bardasi and Francesconi (2004) examined the health of 7000 British workers and concluded that the health of temporary and other peripheral workers did not differ significantly from permanent employees, even when analyses were separated by gender. Similar work by Gracia et al. (2011) on employees from six different countries, including Israel, found no difference between permanent and temporary employees on any of the psychological outcome variables that they measured, which included mental well-being and life satisfaction. The authors argued against the “equation of temporary employment with low-skilled workers unable to find a permanent job” (p.235) and instead suggested that temporary employees were just as skilled, satisfied, and healthy as permanents. Other studies have concluded that core employees face an increased risk of negative health outcomes such as high job stress (Benavides et al., 2000), burn out (Bohle et al., 2004) or health-related absenteeism (Virtanen, Vahtera, et al., 2005) when compared to peripheral employees.

Consequently the literature in this area leaves unanswered the questions of if, and how, peripheral employment is affecting the health of workers. There is even less understanding of how casual employment (the most common type of peripheral employment in Australia) is affecting Australian workers given that most of the research has occurred on
temporary employees in Europe or Canada (De Cuyper et al., 2008). It is clear that greater scrutiny of current research methods must take place with particular emphasis on determining how future studies can better capture and address the myriad of possible variables that stand to affect results, and which makes this research area so complex. A review of the literature highlights three plausible reasons for the current inconsistencies, as well as gaps requiring further attention.

**Explaining inconsistencies in the literature**

*Generalisability*

Economic conditions, as well as the laws pertaining to the rights of casual employees, vary from nation to nation (Kalleberg, 2009). Rodriguez (2002) conducted the same research in Britain and Germany, but with different results; whilst in Britain peripheral employment was not significantly related to poor health, in Germany it led to a 42% increase in the odds of experiencing poor health when compared to core, permanent employment.

To date most research in this area has been conducted in Northern Europe where laws concerning their temporary employment workforce (the closest parallel to casual employment in Australia; Campbell & Burgess, 2001) are more protective than regulations relating to casual workers Australia. In Sweden for example, which is renowned for its “equal, social democratic labour institutions” (Kim et al., 2008, p. 1983) temporary employees are entitled to sick leave, holiday pay and travelling time compensation (European Industrial Relations, 2008). By contrast, Australian casuals do not receive such benefits, and may face a far different, harsher reality.

Further, relatively little research, both internationally and domestically, has been conducted on the groups most affected by casual employment; namely women (Menéndez et al., 2007; Vosko, 2000), immigrants (Teelucksingh & Grace-Edward, 2005) and young
people (Mayhew & Quinlan, 2002) who are all overrepresented in such work. The findings of current studies beyond the ones cited above, may fail to generalise to the groups of most concern.

*Healthy worker effect*

A second explanation for the inconsistent results in this area is what Virtanen, Kivimäki, et al. (2005) define as the ‘healthy worker effect’; an umbrella term used to describe two time related factors of concern for cross-sectional studies in this area. First the ‘healthy hire effect’ suggests that those who have better health are more likely to be screened and employed into permanent positions than are those with poor health. Second ‘the healthy survivor effect’ suggests that healthier people are more likely to remain in employment for a longer period than sick people (who are more likely to stop working due to poor health and as a result will move intermittently between short-term positions). All of this cumulates in the healthy worker effect and suggests that permanent employees may be healthier on a basis of selection, or pro-active factors, rather than due to the characteristics of their employment, or re-active factors. As research in this area is predominantly interested in re-active factors, disentangling the two is vital in order to identify if it is the characteristics of casual employment that leads to poor health rather than vice-versa. Currently the majority of studies, with some exceptions (Dooley, Prause, & Ham-Rowbottom, 2000; Waenerlund, Virtanen, et al., 2011), have been unsuccessful in understanding the order of sequence due to their cross-sectional designs. This may be inflating the findings on the poor health of peripheral workers.

*Moderators*

Finally, casual employees are not a homogenous group all living under the same conditions and rather, their health may be influenced by factors other than employment status (such as job / economic / social circumstances). Current research has poorly controlled for such covariates, both in terms of identifying how they may influence health directly, or in
combination with employment type. Authors such as Bernhard-Oettel et al. (2005) and McNamara et al. (2011) assert that the taxonomic measures of employment status used in the majority of current studies do not adequately account for the complex myriad of other variables that may impact on workers’ health.

Although the precise nature of the relevant covariates remains subject to some debate, there exists literature that has discussed several employment, economic and lifestyle factors that may play a role in moderating the relationship between employment status and health. These include job insecurity (Bernhard-Oettel et al., 2005; Ferrie, 2001; Ferrie, Shipley, Stansfeld, & Marmot, 2002), social support (Lewchuk et al., 2008; who defined it as employment relationship support), financial strain (Waenerlund, Virtanen, et al., 2011) and job dissatisfaction (Benavides et al., 2000). One only has to consider the different health stressors that would exist between two casual employees; one who is a single parent, with low social support, paying off a mortgage and the other who is childless, with many friends, married to someone on a high-income (Australian Council of Trade Unions, 2012a). More research, including Australian research, is needed to identify the role that such variables play in the wellbeing of casual employees. This shortcoming may be responsible for the wide disparity in current research results.

4.5 The Present Study

The present study aims to address some of the above limitations. It will examine the relationship between casual employment and health in a sample of young people aged 19-20 who are not studying, and compare their health outcomes with those of their peers engaged in permanent employment or full-time study. In doing so, it will assist in either supporting or disconfirming the concept of the core-periphery health gradient.
Generalisability

The findings of the present study should provide better insight into the health of young casual employees. This is an age group that is well recognised as being over represented in casual employment in Australia, and yet, one that has received limited research attention. This study will draw on respondents of only 19-20 years, an age where most young people have finished high school, and are engaged in either work or study.

Understanding how casual employment affects younger workers is paramount as giving them a healthy start is vital for the future prosperity of Australia. If work is responsible for making young people ‘unhealthy’ at the outset, then this a worrying trend that must be identified and mitigated as soon as possible.

This study also includes a full-time study group in the analysis, something that has not been done before in research on young, casual employees. If a true understanding of the health of casual employees, compared to their peers, is to be established, then a full-time study group must be included, given the high numbers of young people choosing to engage in tertiary or vocational education following high school. This will develop a better understanding of how different school-leaver trajectories are correlated with health outcomes.

Healthy worker effect

Although the present study used a cross-sectional design, the data will be drawn from an existing longitudinal study known as the South Australian School Leavers Study (SASLS). This will enable previous health status to be controlled for, addressing the healthy worker effect discussed by Virtanen, Kivimäki, et al. (2005).

Moderators
The present study will be the first Australian study to systematically test the moderators of job insecurity, social support, financial strain and job satisfaction to see how they are related to health outcomes in young Australians, either alone or in interaction with casual employment status.

4.6 Method

Setting and sample

The population for this study was drawn from the SASLS, a ten year longitudinal study that examined the health, wellbeing and work trajectories of young South Australians from the school age of 15 to later adulthood at 25. The study commenced in 2001 and finished in 2012 and in that period three cohorts of school leavers, from a representative sample of schools, were surveyed annually for 10 years.

At baseline, ABS figures were used to indicate the proportion of schools in South Australia that were regional, metropolitan, co-educational, same-sex, private or government. On this basis, 45 schools were randomly chosen based on type and area with a 55% (25 schools) response rate. A letter was sent out to all Year 10 students in their last year of compulsory schooling (approximate age of 15 years) explaining the aims of the study. A consent form had to be completed before the student could participate. Between 45-70% of consent forms were returned, contingent on the school. Students who received consent to participate in the study were briefed on the study and made aware that participation was voluntary and confidential.

At baseline the amalgamated number of respondents from all three cohorts was 2499 (male=1030, female=1469, m.age=15.2). By time 10, participation had decreased to 446 (male=126, female=316 age =25). For this study only time 6 was utilised (as well as health variables from time 4 for control purposes). Time 6 comprised of 671 respondents (male = 218, female = 453) made up of 291 permanent employees, 131 casual employees and 199
full-time students. This time frame was considered ideal as it captured respondents between the ages of 19-20, a few years after school was completed, and at an age where many may start to seek meaningful employment.

**Attrition analysis**

The attrition rate was the highest between time 1 and time 2 (40%), but then stabilised to an annual figure of around 10%. Analysis of the characteristics of those who did not remain in the study, showed that these people were more likely to be males, the oldest in their age group and to report smoking and/or using other illicit substances (Delfabbro et al., 2015). However, employment status and health outcomes were not related to drop out rates. This indicates that despite attrition of the sample, the SASLS still contains good internal validity for assessing the relationship between employment status and health, although males may be underrepresented in these findings. Overall, although the rate of attrition was high, it differs little from that obtained in the widely cited School-Leavers study of the 1980s (Winefield, Tiggemann, Winefield, & Goldney, 1993; Winefield et al., 1991).

**Measures**

*Employment status*

Respondents were categorised into three different categories of ‘employment status’, those in casual or permanent employment (similar groupings to those done by Waenerlund et al., 2011) and those who were full-time students. Casual or permanent employment status was determined by first identifying any respondent who had a job, and then filtering out all students. This was justified on the assumption that workers who are also students may see their employment as a short-term means of earning money, rather than meaningful employment. Non-students were then asked a binary forced response question of ‘Was your work casual or permanent?’ Those who responded with ‘casual’ were coded as casuals, and those who responded with ‘permanent’ were coded as permanents; this categorisation was
based solely on the premise that participants could properly identify their own employment status and report it correctly.

Full-time students were categorised using a question which asked respondents to tick if ‘full-time student’ best described their present situation. To ensure the purity of responses, full-time students who also identified as working (permanent or casual), were excluded from the full-time student category. Casual and full-time students were dummy coded with permanent employees as the comparison group.

**Demographics**

Gender, relationships status and Socioeconomic Status (SES) were the three demographic variables used in this study. Gender was measured using the question Are you male (= 0) or female (= 1)? Relationship status was measured using the question Have you had a girlfriend or boyfriend during the last 12 months? (No = 0, Yes = 1). SES was measured through asking respondents What occupation does your father and mother have? These responses were then coded into either ‘Professional / Managerial role’ or ‘other’. Respondents who had neither a mother nor father in a professional / managerial occupation were classified as having a low SES (=0), whilst those who had one or both parents in a professional / managerial role were classified as having a high SES (=1). This measure of SES has been successfully employed in other studies using the same SASLS dataset (e.g. Delfabbro, Winefield, Trainor, Dollard, Anderson, et al., 2006; Trainor, Delfabbro, Anderson & Winefield, 2010).

**Health variables**

Current non-optimal mental health, as well as that collected two years previously, was measured using the General Health Questionnaire-12 (GHQ-12; Goldberg & Williams, 2006) designed to assess the mental health of community samples. The GHQ-12 is a shortened
version of the GHQ; it consists of only 12 items compared to 60 on the original instrument. Respondents are required to rate the degree to which they have experienced 12 different mental health symptoms. Four response categories are available ranging from 1=more so than usual to 4=much less than usual. The 00-11 scoring scale was used where a 1 is allocated to the negative response of a question. Twelve is the maximum total points that can be scored and indicates those who are suffering from non-optimal mental health. Zero is the lowest and indicates optimal mental health. As done by Virtanen, Vahtera, et al. (2005), anyone who had scored a 0-3 was classified as having optimal mental health (=0), whilst anyone who scored a 4 or above was classified as having non-optimal health (=1).

Current non-optimal physical health, as well as that collected two years previously, was measured by a question which asked respondents how they perceived their health to be over the past 12 months. Responses of Very healthy most of the time or Quite healthy most of the time were coded as zero (=0) and classified as having optimal physical health. Responses of Sometimes well, sometimes not, Often not very well or Nearly always ill were coded as one (=1) and classified as having non-optimal physical health. Similar binary coding of health status has been conducted by Virtanen, Vahtera, et al. (2005) and Waenerlund, Virtanen, et al. (2011).

Job stress was measured by asking How stressful did you find your work? Those scoring 1-2 (Not at all stressful - Slightly stressful) were coded as having low job stress and coded as zero (=0). Those scoring 3-5 (Moderately stressful - Extremely stressful) were categorised as experiencing job stress and coded as one (=1). Both current job stress, as well as that collected two years previously was measured using this question.

Moderators

Financial strain was measured using the question I am under strain as far as money is concerned (a similar question to that used by Waenerlund, Virtanen, et al. 2011 to gauge
‘cash flow’). Here respondents were given the choice of four responses where Disagree and Strongly Disagree was coded as zero (No financial strain =0) and Agree and Strongly Agree was coded as one (Financial strain = 1).

Low social support was measured using two separate questions, relating to family support and friendship support as done by Lewchuk et al. (2008) in their measurement of ‘employment relationship support’ (although our measurement did not contain union support). Family support was operationalised using the statement In my immediate family we can talk to each other when we feel sad. Responses of Strongly Agree or Agree were classified as having high family support, whilst responses of Strongly Disagree or Disagree were classified as having low family support. Friendship support was operationalised through getting respondents to number how many ‘close friends’ they had from 0 to 30. Those who fell below the median were classified as having ‘low friendship support’ whilst those whose number of friends was above the median of the group were classified as having ‘high friendship support’. Low social support was then calculated from those who had scored low on friendship support and low on family support and were coded as one (=1). High social support was coded as zero (=0) and contained all those who scored high on either friendship support or family support, or both.

No job satisfaction was measured by asking the employed How do you feel about your work overall? Respondents had four responses to choose from, with those who responded with Quite satisfied or Extremely satisfied being coded having Job Satisfaction (=0), whilst those who responded with Extremely dissatisfied, Slightly dissatisfied or Neither satisfied or dissatisfied coded as having ‘No Job Satisfaction’ (=1).

Job insecurity was measured by getting respondents to rate their ‘job security’ out of seven categories. Responses of Extremely satisfied, Very satisfied or Moderately satisfied
were coded as having ‘Job Security’ (=0). Responses of *Not sure, Moderately dissatisfied, Very dissatisfied* or *Extremely dissatisfied* were coded as having ‘Job insecurity’ (=1).

Statistical analysis

Data analysis was conducted on SPSS Version 19.0. *p* values were two tailed, with values of .05 or below indicating statistical significance. Logistic regression analysis was used with 95% confidence intervals. Three separate models were constructed for each of the health outcome variables. At step 1, all demographic variables were entered. At step 2 the model was adjusted for either non-optimal health, non-optimal mental health or job stress measured two years ago. The aim of this was to control for those whose poor health was not caused from current work circumstances, therefore trying to reduce the likelihood of selection effects, as discussed by Virtanen, Vahtera, et al. (2005). At step 3 the four moderators were entered into the model. The dummy coded employment status variables were entered at step 4. At step 5, interactions between each individual moderator, and each individual dummy coded employment status variable were entered. Only those interactions that were found to be significant were retained to maintain the parsimony of the models.

4.7 Results

Correlations

Bivariate correlation analysis was conducted to examine the relationships between all variables and to detect multicollinearity (Table 3). Inspection of Table 1 showed that this was unlikely to be an issue. The highest correlation was between non-optimal physical health and non-optimal mental health (*r* = .27) and this was only of a small to moderate magnitude.
### Table 3

**Correlation between measures**

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<td>.12**</td>
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<td>.16**</td>
<td>.09*</td>
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*Note:* p < 0.05, **p < 0.01
CHAPTER 4: STUDY ONE

Descriptives

Table 4 (below) shows the distributions (%) of the study variables by employment status. As health outcomes have been measured in negative terms (as poor health rather than good health), higher scores indicate poorer health outcomes. The descriptive statistics indicate that the prevalence of non-optimal mental and physical health were higher in the casual employees group compared to the permanent employees, whereas full-time students experienced the worst outcomes overall. Permanent employees were more likely to report higher levels of job stress, whilst casual employees had the lowest. Similar results were obtained when analyses were based on health outcomes obtained two years previously.

Further demographic comparisons showed that casual employees were more likely to be female, less likely to be in a relationship and more likely to come from families of a low socio-economic status. The highest level of financial strain was observed in full-time students, followed by permanent employees and then casual employees. Casual employees were more likely to experience low social support and job dissatisfaction compared to permanent employees. There were significant associations between employment status and current non-optimal metal health, current job stress, all demographic variables and only the moderator of job insecurity.
Table 4

Distribution of dependent and independent variables amongst permanent, temporary and full-time students (%) and frequency differences (X2 test)

<table>
<thead>
<tr>
<th></th>
<th>Permanent (n = 291)</th>
<th>Temporary (n = 131)</th>
<th>Full-Time Student (n = 199)</th>
<th>X² (Sig Value)</th>
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<td>29.4</td>
<td>18.55**</td>
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<td>Female</td>
<td>61.4</td>
<td>78.6</td>
<td>67.3</td>
<td>12.15**</td>
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<td>In a relationship</td>
<td>77.2</td>
<td>71</td>
<td>66</td>
<td>7.57*</td>
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<td>High SES (t1)</td>
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<td>62.2</td>
<td>67.4</td>
<td>8.56*</td>
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<td>18.4</td>
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<td>16.4</td>
<td>19.8</td>
<td>23.6</td>
<td>3.04</td>
</tr>
<tr>
<td>Job stress</td>
<td>32.4</td>
<td>28.4</td>
<td>26.9</td>
<td>18.55**</td>
</tr>
<tr>
<td><strong>Moderators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial strain</td>
<td>24.5</td>
<td>22.1</td>
<td>27.1</td>
<td>1.10</td>
</tr>
<tr>
<td>Low social support</td>
<td>6.7</td>
<td>11.7</td>
<td>11.7</td>
<td>4.41</td>
</tr>
<tr>
<td>Job insecurity</td>
<td>15.7</td>
<td>41.3</td>
<td>21.4</td>
<td>32.65**</td>
</tr>
<tr>
<td>Job dissatisfaction</td>
<td>35.8</td>
<td>40.6</td>
<td>41.2</td>
<td>1.64</td>
</tr>
</tbody>
</table>

*Note: *p < 0.05, **p < 0.01

**Odds ratios**

Table 5 shows the results for the final models of the hierarchical logistic regression analysis that was conducted separately for each of the three health outcomes. Inspection of the models shows that, of the demographic factors entered at step 1, only gender was related to health outcomes, with women found to report poorer health. Inspection of the results at
step 2 showed that a respondent’s self-reported health two years earlier, at age 16-17 years, was a significant predictor in all three models. In this case, reporting non-optimal physical health, non-optimal mental health or job stress two years previously significantly increased the odds ratio of a respondent being unhealthy at the subsequent measurement point. The four moderating variables were entered together in step 3. None of the moderators were related to current non-optimal physical health, although job dissatisfaction increased the odds ratio of people experiencing job stress. For non-optimal mental health, three of the moderators emerged as significant. Those who reported low social support, experienced financial strain or job dissatisfaction were much more likely to fall into the category of non-optimal mental health compared to those who did not.

    Inspection of the findings from the next step in the models showed that being in casual employment was not associated with any increase in the chances of reporting negative health outcomes. On the whole, adding employment status to the models had very little influence on model fit (as assessed using the -2LLR test). Models including employment status were not significant improvements on those that did not contain these variables.

    Finally, at the last step the interaction terms between the moderators and each type of employment was entered in order to examine whether experiencing financial strain, low social support, job insecurity or job dissatisfaction interacted with employment status to negatively affect one’s health. Interactions were not conducted between the moderators and full-time student status as we considered this beyond the focus of the research. None of the interactions were significant.
Table 5

Odds ratio’s and 95% confidence intervals for non-optimal physical health, non-optimal mental health and job stress at age 19-20

<table>
<thead>
<tr>
<th></th>
<th>Non-optimal physical health</th>
<th>Non-optimal mental health</th>
<th>Job stress</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>2.99 (1.08 – 8.29)*</td>
<td>2.64 (1.41 – 4.95)**</td>
<td>0.91 (0.56 – 1.51)</td>
</tr>
<tr>
<td>SES</td>
<td>0.59 (0.28 – 1.25)</td>
<td>1.26 (0.73 – 2.18)</td>
<td>1.08 (0.67 – 1.75)</td>
</tr>
<tr>
<td>Relationship status</td>
<td>0.66 (0.28 – 1.53)</td>
<td>0.82 (0.45 – 1.50)</td>
<td>0.92 (0.54 – 1.58)</td>
</tr>
<tr>
<td>Previous health</td>
<td>3.77 (1.67 – 8.53)**</td>
<td>2.92 (1.63 – 5.24)**</td>
<td>2.55 (1.54 – 4.23)**</td>
</tr>
<tr>
<td><strong>Moderators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial strain</td>
<td>1.46 (0.64 – 3.31)</td>
<td>1.93 (1.08 – 3.46)*</td>
<td>0.96 (0.55 – 1.67)</td>
</tr>
<tr>
<td>Low social support</td>
<td>2.40 (0.85 – 6.83)</td>
<td>2.70 (1.15 – 6.34)*</td>
<td>1.85 (0.80 – 4.29)</td>
</tr>
<tr>
<td>Job insecurity</td>
<td>0.78 (0.32 – 1.90)</td>
<td>1.21 (0.64 – 2.28)</td>
<td>1.14 (-0.62 – 2.09)</td>
</tr>
<tr>
<td>Job dissatisfaction</td>
<td>1.96 (0.93 – 4.14)</td>
<td>1.98 (1.16 – 3.39)*</td>
<td>1.94 (1.19 – 3.14)**</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary</td>
<td>0.83 (0.93 – 4.14)</td>
<td>0.86 (0.42 – 1.75)</td>
<td>0.49 (0.26 – 9.94)</td>
</tr>
<tr>
<td>Full-time student</td>
<td>0.50 (0.19 – 1.31)</td>
<td>1.39 (0.75 – 2.59)</td>
<td>0.63 (0.36 – 1.12)</td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casual x Financial strain</td>
<td>0.89 (0.17 – 4.03)</td>
<td>3.51 (1.57 – 7.85)</td>
<td>1.82 (0.39 – 8.56)</td>
</tr>
<tr>
<td>Casual x Low social support</td>
<td>5.48 (0.44 – 68.88)</td>
<td>0.42 (0.04 – 4.04)</td>
<td>0.64 (0.06 – 6.39)</td>
</tr>
<tr>
<td>Casual x Job insecurity</td>
<td>0.44 (0.05 – 3.59)</td>
<td>0.40 (0.09 – 1.74)</td>
<td>1.11 (0.28 – 4.40)</td>
</tr>
<tr>
<td>Casual x Job dissatisfaction</td>
<td>0.29 (0.05 – 1.82)</td>
<td>0.42 (0.04 – 4.04)</td>
<td>0.65 (0.19 – 2.24)</td>
</tr>
</tbody>
</table>

*Note:* p < 0.05, **p < 0.01
4.8 Discussion

The results of this study indicated that employment status was not significantly associated with negative self-reported health outcomes at age 19-20 years. Consequently this study did not issue support for the core-periphery model which suggests that core workers (in this case permanent workers) should experience better health than peripheral workers (in this case casual workers). These findings support other studies which have also disconfirmed the assumptions of the core-periphery model (Bardasi & Francesconi, 2003; Benavides et al., 2000; Bernhard-Oettel et al., 2005) and indicate that more complex models may be of higher validity (see Lewchuk et al., 2011; Quinlan, Mayhew, & Bohle, 2001a for a discussion of the Employment Strain and PDR model respectively, which have also been proposed to explain health outcomes in peripheral workers). These results must however, be considered as relating to young people only; a unique age group and therefore one that is hard to make generalisations to the older workforce from.

This study also investigated the potential role of four variables, job insecurity, job dissatisfaction, financial strain and low social support, in moderating the relationship between employment type and health outcomes. The results revealed no significant interactions between the moderator variables and casual employment. Instead, three of the variables (job dissatisfaction, financial strain and low social support) were significant predictors of non-optimal mental health and job stress. For example, scoring high on financial strain, low social support or job dissatisfaction all significantly increased the odds of a respondent experiencing non-optimal mental health, whereas differences in employment status held no effect.

Improving the health of the younger generation may therefore be better achieved by educating employers on how to improve job satisfaction or by improving financial or social support services for young adults.
In comparison to the other three moderators, and in contrast to what the core-periphery model suggests is one of the reasons that peripheral workers experience poorer health (Aronsson et al., 2002; Virtanen et al., 2003), job insecurity had no association with health, either alone or in interaction with employment status. This is despite the analysis indicating that casual employees were significantly more likely to experience job insecurity than were permanent employees (refer to Table 4). One plausible explanation for this result is that job insecurity may affect school leavers differently than older workers. Older workers are generally more established in the workplace and may expect job security to be linked to length of service, whilst young people may perceive job insecurity as a ‘rite of passage’ into the labour market and one that may unlock future job security. Young people may also have less commitments (such as child-rearing duties or mortgage repayments), possibly making job insecurity more manageable and less threatening. Further, research by Krausz (2000) found that some workers view casual employment as an essential way to develop their skill-set, and this may be especially true of younger workers who see job security as secondary to gaining experience and advancing their careers.

Based on these findings, it is suggested that casual employment, for young Australians at least, is not correlated with poor health and that job insecurity is generally well tolerated in this age cohort. Instead, such work may offer the employment flexibility and opportunity for skill development (free of organisational commitment) desired by workers of this age group, many of whom are only just starting to participate in the labour market. However, given that this is one of the first Australian studies to focus on the health of young people in casual employment more evidence is needed to before any strong conclusions can be made.

Limitations
Attrition and sample size were the biggest limitations of this study. By the study period (time 6 of a 10 year study), approximately 70% of respondents had dropped out (Delfabbro et al., 2015). The low numbers restricted the different work categories that could be made. For example there were not enough numbers to create an unemployed group which prevented the idea of a core-periphery health gradient from being tested in full.

Although this study tested moderator variables as a means to move beyond simple taxonomic measures of employment status, it still relied on formally recognised employment definitions as a measure of precarious employment. As discussed in the introduction, research in this area has now illustrated the unreliability of using a taxonomic approach (Bernhard-Oettel et al., 2005; McNamara et al., 2011), with suggestions that ‘precariousness’ is far more complex and occurs through the combination of many variables, including psychological perceptions. Consequently, this study is limited in being able to advance the understanding or measurement of what it means to be ‘precariously employed’.

Some important measures used in this study were weak. Job insecurity for example, was binary coded and based on one question only. Research now indicates that job security may be better measured using a multi-question scale and operationalised as a continuous variable, to allow a more sensitive ‘range’ of job security to be measured and to address the idea that some levels of insecurity may be more detrimental to health than others (Lewchuk et al., 2011; Vives et al., 2013; Vosko, 2006). This puts into question the validity of the job security measure used in this paper, and could explain some of the non-significant findings.

This research was also cross-sectional in nature and did not allow the effects of casual employment to be assessed over time. As discussed by Virtanen, Kivimäki, et al. (2005) quantitative heterogeneity may have a significant influence on health outcomes. Being
exposed to six months of casual employment with the experience of job insecurity may be a different experience to six years spent in the same position.

Finally, given that youth is a time largely characterised by instability and change, making generalisations about young people from a sample of only 19-20 year olds is limiting. It is possible that results would be different if based on a different age group sample, including young people of an older age (e.g. 20+ year olds).

**Future research**

Future research should address the limitations in the current literature, as well as the ones that are exclusive to this study. A more comprehensive measure of ‘young people’ should be used, such as one that includes respondents from an age range of 16-25. Longitudinal research is needed in order to understand how casual employment may affect employees over a longer time period. Qualitative assessments are also lacking in this area, and required to capture a richer understanding of the lived experiences of young (and older) casual workers. More focus on other groups who are overrepresented in casual employment in Australia, namely women and immigrants, is needed.

**4.9 Conclusion**

This study examined whether employment status could predict health status. The results indicated that being a full-time student, permanently employed or casually employed had no effect on physical health, mental health or job stress, contradicting the idea of a core-periphery health gradient for young workers. Instead, economic / lifestyle variables such as financial strain, job dissatisfaction and low social support were better predictors of poor health in the young South Australian population.
4.10 Final Remarks

Study One does not issue support for the overarching research hypothesis that Young, non-student casual employees will experience poorer health than young, non-student permanent employees. Support for this hypothesis would require the physical and psychological health of young casual employees to be significantly worse than that of their peers - especially those in permanent employment. Instead, as outlined in the Results and Discussion sections, casual employment was found to be unrelated to health outcomes when compared to permanent or full-time students. The study also investigated one of the central tenants of the core-periphery model; namely, that peripheral employees would experience poorer health than permanent workers due to the higher levels of job insecurity that they experience (Aronsson et al., 2000). However, when tested as a moderator variable, job insecurity was not found to be significant in explaining the relationship between casual employment and health.

The findings of Study One highlight the possibility that young, non-students in Australia may be an age-group who fare well in casual employment, possibly enjoying the lack of commitment it entails, the higher pay and the opportunity for skill acquisition. The findings also indicate that this cohort are likely to appraise job insecurity differently to older workers perhaps seeing short-term and casual employment as a way to gain skills, or a rite of passage to more permanent work in the future.

Study 2 will longitudinally examine the relationship between casual employment and health outcomes, working to identify if casual employment remains a healthy employment option for young people over a longer period of engagement.
CHAPTER 5: STUDY TWO

5.1 Preamble

The second paper addresses research Aim 3: To identify how different periods of exposure to casual employment are associated with health changes over time.

Research on the area of peripheral employment and health has been predominantly cross-sectional (De Cuyper et al., 2008; Virtanen, Kivimäki, et al., 2005). Study Two works to improve knowledge in this area by using a longitudinal research design which will examine how different lengths of exposure to casual employment (ranging from no exposure, to three years exposure) is related to health outcomes in young, non-students. Although Study One did not find a relationship between casual employment and health using cross-sectional measures, it is possible that the association between casual employment and health accumulates over time, which is yet another important reason to adopt a longitudinal methodology.

This study analyses data from time 4, 5 and 6 of the SASLS, when respondents were approximately 18, 19 and 20 years old respectively. As this study followed the employment paths of respondents over a three year period, it required that they completed the annual survey consecutively at each three time points. For example, any respondent that answered at time 4 and 6, but not time 5 was excluded from the analysis. Initially a longer time period was chosen (time 4 to time 8), but attrition started to substantially limit the amount of respondents who had answered consecutively after time 6. Accordingly the analysis was narrowed down to a smaller time frame (3 years instead of 5 years) and the earlier years of the study (e.g. time 4-6 instead of time 6-8) were chosen given that that these periods contained higher numbers.
In comparison to Study One, which measured health outcomes in binary terms, Study Two measures physical and mental health as continuous variables. This is because the health outcome measures used in this study relate to health ‘change’ over time, where health measured at time 4 is subtracted from health measured at the time 6. A multiple regression is used to assess if the different employment paths are associated with health change. Binary measures do not allow health differences to be measured in this fashion. Further, unlike Study One, Study Two excludes job stress as an outcome measure due to low numbers of respondents answering this question consecutively.
CHAPTER 5: STUDY TWO

Young, non-student workers in casual employment: A longitudinal analysis of health outcomes

- UNDER REVIEW –

Natalie Matthews¹, Paul Delfabbro¹, Anthony Winefield²

¹University of Adelaide, School of Psychology
²University of South Australia, School of Psychology, Social Work & Social Policy

5.2 Statement of Contribution

Ms. Natalie Matthews (first author)

I am responsible for the primary authorship and conception of this paper. I conducted the literature review, developed the research hypothesis and aims, ran the statistical analysis and wrote-up the manuscript. I was identified as the first author when this article was submitted for publication, and I have been responsible for all communications with journal administration including responses to reviewer feedback. With authority from Anthony Winefield and Paul Delfabbro, the analysis was based on raw data from the SASLS which they were responsible for collecting without my assistance.

Ms. Natalie Matthews

SIGNED________________________________ DATE________________________________

Professor Paul Delfabbro; Professor Anthony Winefield (co-authors)

As Natalie Matthews’ supervisors we were responsible for assisting Natalie in the development of her manuscript. Natalie was responsible for the conceptualisation of the paper’s hypothesis and aims, literature review, statistical analysis and write-up. Our role was to discuss the feasibility of her research proposals, provide her with support and assistance
when she encountered difficulties and to give feedback on manuscript draft. We also collected the raw data for the SASLS but have given Natalie the permission to use this data for her current analysis and identify that she did this independently. The SASLS research was supported by grants numbered A00104359, DP0556377, DP0879497 from the Australian Research Council. We give permission for Natalie to use this paper for the fulfilment of her Doctor of Philosophy.

**Professor Paul Delfabbro**

SIGNED_______________________________ DATE______________________________

**Professor Anthony Winefield**

SIGNED_______________________________ DATE______________________________
5.3 Abstract

At present, little research exists on whether casual employment is associated with negative health outcomes in young school-leavers who choose not to engage in further study. Longitudinal studies in the area of casual employment and health more broadly, have also been lacking despite the existence of ‘long-term’ casual employment in Australia. This study employed a longitudinal design to test if three distinct employment paths, characterised by different periods of exposure to either casual and/or permanent employment, were associated with physical and mental health changes over a three year study period (when respondents were aged 18-20). The hypothesis advanced was that paths containing more exposure to casual employment would have higher correlations with health deterioration, when compared to paths containing less or no exposure to casual employment. The results did not support the hypothesis and suggest that young people remain healthy in casual employment regardless of the exposure period. The stage-of-life that young people are in is discussed as an explanation for this result and options for future research are suggested.
CHAPTER 5: STUDY TWO

5.4 Introduction

The context of casual employment in Australia

Common law in Australia considers casual employment to be of “so minimal duration as to barely exist” (Campbell & Brosnan, 1999, p. 358) and indeed the term ‘casual employment’ was initially used to describe those whose work was short-term and intermittent in nature and only used by organisations to fill in employment gaps. However, rather than being based on the length of employment, casual work in Australia today is defined on a basis of exclusion; casual work, by description of institutions such as the Australian Government’s Fair Work Ombudsman (2014a), applies to anyone who is not a permanent employee and is instead paid hourly, employed on a shift-by-shift basis and is not entitled to receive the non-monetary benefits afforded to permanent workers, such as guaranteed minimum hours, paid annual, sick, maternity or carer’s leave, or notice of dismissal. Consequently, exactly what constitutes as ‘casual’ employment in Australia varies considerably ranging from short-term (12 months and under) to long-term arrangements (over 12 months in duration; Fair Work Ombudsman, 2014a). Figures indicate that in 2006 more than half (57%) of all casual workers were employed ‘long-term’ with an average tenure of 2.6 years (Louie et al., 2006). More recent statistics from 2012 indicate that 18% of all casual workers have been employed in casual work for 5 years or longer (Australian Council of Trade Unions, 2012a).

Casual employment arrangements have increased in Australia from the 1980s onwards (Creegan et al., 2003; Watson, 2005). According to Campbell and Brosnan (1999) this increase has risen progressively alongside labour deregulation strategies which also started in the 1980s, beginning with policies which aimed to dismantle Australia’s centralised award system. As Australian businesses faced increasing international competition, largely underpinned by the process of globalisation, the Keating-Labour government of 1991 and the
Liberal-Howard government of 1996 faced mounting pressure by the business sector (and their representative, the ‘Business Council of Australia’, or BCA) to give power back to employers in relation to the conditions and organisation of their labour (Business Council of Australia, 1988). This was promoted on a platform of increased productivity, decreased costs and associated benefits for both employers who could tailor employment conditions to their needs, and employees who could negotiate higher wages based on skills and performance. Consequently in 1996 the Awards system was only further dismantled when Howard introduced the *Workplace Relations Act (1996)*. Not only did this Act see the implementation of Australian Workplace Agreements (or AWAs which allowed employers to negotiate wages and work conditions with individual employees), and a restriction on union activity in order to increase labour flexibility, but it also abolished the casual clauses often found in industrial awards that restricted how many casual employees an employer could hire (Sheridan & Conway, 2001).

It is within this changing industrial climate, that many argue, casual employment was allowed to reach some of the highest levels found in a nation belonging to the Organisation for Economic Cooperation and Development (OECD), peaking in 2004 at 27.7% before dropping slightly to 24.9% in 2012 once the global financial crisis hit and casuals were the first to lose their jobs (Australian Council of Trade Unions, 2012a). However, the increase in casual employment is not isolated and instead it is largely characteristic of a broader trend occurring in developed nations around the world (Quinlan et al., 2001b). The past two decades has seen the re-emergence of peripheral employment (work that *is not* permanent and / or full-time) and a decrease in core employment (work that *is* permanent and full-time).

In Australia, casual employment is the most common type of peripheral employment and of particular concern is that the increase in casual arrangements are most prevalent in already vulnerable cohorts of workers such as immigrants, women and young people.
(Australian Council of Trade Unions, 2012a). For example, in 2013, 50% of all casual workers were aged 30 and under, with the percentage of young casual workers climbing steadily over the past decade and a half. For the 20-24 year old age group, casual employment rates have risen from 30% in 1998, to 38.5% in 2013 (ABS, 2014 as cited in Jericho, 2014). Whilst many young people may choose to work casually due to study commitments, there is concern that others simply cannot find full-time and permanent positions and end up underemployed in insecure positions (Foundation for Young Australians, 2011).

Peripheral employment and health: Is there a relationship?

The World Health Organisation (2013) identifies employment as a key social determinant of health. Given the increase in peripheral forms of employment around the world, it urges an examination of how this has affected the health of workers. One model that attempts to explain this is known as the core-periphery model (Aronsson et al., 2000; 2002). In this model, employment arrangements are conceptualised in a circular formation, where the core represents arrangements which are permanent and full-time and are characterised by strong attachments between employees and the organisation. In contrast, peripheral workers are on the outside of the circle, further away from the core, and working in non-permanent or full-time arrangements with reduced, or no, attachments to the organisation. Accordingly, this model suggests that peripheral work, including casual employment, is more likely to result in poor health outcomes than core, permanent employment (Bamberry, 2011; Campbell, 2000; Quinlan et al., 2001a). This is attributed to the fact that peripheral work is often less regulated and exposes workers to higher levels of job insecurity, intermittent hours and finances and less power to negotiate safe working conditions (Australian Council of Trade Unions, 2012a, 2012b; Johnstone, Mayhew, & Quinlan, 2000; Lewchuk et al., 2011).
There have been studies that have supported these claims and found that peripheral employment is positively associated with psychological morbidity (Virtanen, Kivimäki, et al., 2005), negative self-rated physical health (Waenerlund, Virtanen, et al., 2011), antidepressant use (Virtanen et al., 2008), low work-time control (McNamara, 2009) and poorer workplace safety outcomes (Aronsson, 1999; Quinlan et al., 2001a). Some findings go further to suggest that peripheral employment health gradients exist where less secure forms of peripheral employment (such as agency work) is likely to result in poorer health outcomes than more secure types of peripheral employment (such as fixed term contracts; Virtanen et al., 2003).

However, the current literature is not definitive. Other findings do not support the aforementioned research and have either found no correlation between peripheral employment and health outcomes (Bernhard-Oettel et al., 2005; Lewchuk et al., 2008), or have found that core, permanent employment is associated with negative outcomes like high work-intensity (Bohle et al., 2011), interpersonal conflict (McNamara et al., 2011) and absenteeism and stress (Benavides et al., 2000). These findings have led to suggestions that peripheral employment is not low quality employment but rather provides a “source of variety, flexibility or extra money” (Gracia et al., 2011, p. 237)

The contradiction of the findings clearly indicates that current research on this topic needs further development. Currently, research has been very broad and hasn’t demonstrated adequate sensitivity to the different types of peripheral employment, or the heterogeneous range of workers engaged in it (De Cuyper et al., 2008; Gracia et al., 2011; Matthews, Delfabbro, & Winefield, 2015). As the findings of Virtanen et al. (2003) suggest, it is likely that different types of peripheral employment are associated with different health outcomes, predominantly because of the diverse characteristics of each type of employment and the fact that they differ on important measures, such as job insecurity. Unfortunately, differences between employment types are currently not well understood, and research has not only been
prone to making claims about the health of peripheral employment based on findings from only one particular sub-set of this employment, but there are also imbalances of knowledge in favour of temporary employment, particularly in Europe (De Cuyper et al., 2008). In comparison, casual employment in Australia has received very little examination, despite it being more unregulated and precarious than its temporary cousin. Of further concern is that societal groups who are traditionally over-represented in casual employment (and peripheral employment more broadly), such as young people, have not been well examined in the literature even though their distinct demographic position may result in health outcomes that are restricted to these populations.

Another notable limitation of the current literature is the domination of cross-sectional methodologies which measure both health and employment status at one time point. Research exists which has found that those with pre-existing poor mental health are more likely to end up in peripheral arrangements (suggesting that cross-sectional findings that have found poor health may be inflated) and so it is important that longitudinal studies are employed to help to control for these selection effects (Dawson et al., 2015). Longitudinal research can also provide a better understanding of how different lengths of exposure to peripheral employment are associated with health outcomes, and this may possibly assist in explaining the inconsistent findings in this area more broadly. Of importance to understand is whether peripheral employment has an immediate effect on health, or whether health effects take longer to accumulate and are perhaps only damaging to those engaged in such work for many years.

To date a limited number of longitudinal studies exist; however, there is some evidence that higher exposure to peripheral employment and less stable employment trajectories are associated with poorer health outcomes (Kim et al., 2008; Pirani & Salvini, 2015; Virtanen, Vahtera, et al., 2005). Other findings are less easy to interpret such as those
CHAPTER 5: STUDY TWO

by Quesnel-Vallée et al. (2010) who found that only a 2 year lag between exposure and measurement was associated with poorer mental health in temporary workers, whilst a three year lag, or immediate exposure had no relationship. Consistent with the fact that the health effects of casual employment have been scarcely researched, all the longitudinal studies conducted to date have been on temporary or agency workers in other countries, predominantly Europe, where different labour regulations make it hard to generalise the findings to casual workers in Australia. For example, in Sweden temporary workers are legally required to be placed onto a permanent contract if they have engaged in 14 months of temporary work within the past five years, meaning that such employment can never reach the lengths of exposure experienced by casual workers in Australia (Lewchuk et al., 2011). Overall, more longitudinal research that examines the association between peripheral employment and health, particularly in casual workers, is needed if knowledge is to be improved on this topic.

5.5 The Present Study

The present study aims to build knowledge on the relationship between casual employment and health by adopting a longitudinal research design that examines the health of young, casual workers in Australia. Young people are a well justified choice of workers to focus on given their over-representation in casual employment. In this study only young workers who are not studying (non-students) will be examined – an approach that has been used in other studies (Lewchuk et al., 2011; Matthews et al., 2015). Student workers are not seen to embody what it means to be a ‘true casual’; they are more likely to see such employment as having an expiry date and as secondary to their aims of completing study. Further, research indicates that tertiary or vocational qualifications make young workers more marketable and improves their ability to secure permanent employment (Australian Council of Trade Unions, 2012a). As such, non-students are more likely to end up in long-term casual
arrangements without the advantage of eventually securing further qualifications. It is therefore important to understand how casual arrangements affect this young, non-student cohort.

Previous research by the authors suggest that young people may be more resilient to casual employment than older workers, due to a variety of factors such as less burden of responsibility and the desire for greater lifestyle flexibility (Matthews et al., 2015). Yet, long-term exposure to casual employment is likely to be different and we suggest that the ongoing exposure to low legal protection and aspects such as unpredictable work hours may have an attrition, rather than spontaneous effect on the mental and physical health of casual employees – as suggested by the results of longitudinal studies on older populations of temporary workers (Pirani & Salvini, 2015) and the unemployed (Gordo, 2006). We consider it likely that school leavers may initially be happy to accept casual employment as a transition between High School and more permanent employment, but that when it becomes a more enduring aspect of their lives that it will be less well-received and that health may suffer as a result. Research does exist which suggests that despite an increase in the uptake of peripheral forms of employment amongst young people, young school leavers still aspire to become permanently employed (Worth, 2002).

This study will examine three different employment paths which are characterised by different levels of exposure to casual and permanent employment over a three year period. The aim is to assess the relationship between each employment path and physical and mental health outcomes. More specifically, and based on the premise of the core-periphery model, it is expected that peripheral workers should experience poorer health than core workers. The following hypothesis will be tested:
Employment paths with higher levels of exposure to casual employment will be more strongly correlated to negative health changes. It is expected that the ‘CCC Pathway’ (casual for three years in a row) will have a stronger correlation with negative health change than the ‘PPP Pathway’ (Permanent for three years in a row). The ‘CCP Pathway’ (Casual for two years, permanent for one year) will have a stronger correlation to negative health change than the ‘CPP Pathway’ (Casual for one year, permanent for two years), but a weaker correlation than the ‘CCC Pathway’ and so on.

**5.6 Method**

**Setting and sample**

This study was based on time’s 4 to 6 of a larger 10 year longitudinal study known as the South Australian School Leavers Study (SASLS). The aim of SASLS was to examine the health, wellbeing and employment trajectories of young South Australians from high school life to early adulthood. Three different ‘cohorts’ of young people were captured starting from the years 2000, 2001 and 2002 and finishing in years 2010, 2011 and 2012 respectively.

A representative sample of secondary schools within South Australia were chosen to participate randomly, based on demographic characteristics such as rural or metropolitan location, private or public, and single sex or co-ed. In total, 45 schools were approached, with a 55% response rate. Yr.10 students of participating Schools’ were sent out information on the study and a consent form to sign; around 45-70% of students subsequently consented, dependent on the school.

At baseline the amalgamated number of respondents from all three cohorts was 2499 (male=1030, female=1469, m.age=15.2). By time 10, participation had decreased to only 446 (male=126, female=316 age =25). The present study used three times of data (time 4, n=1072; time 5, n =817 and time 6) when respondents were aged 18, 19 and 20. These particular times of data were considered ideal because they captured respondents at an age when they would have all finished high school (age 18-19) and started to seek either
employment or tertiary education. The study only used respondents who were engaged in either casual or permanent employment consecutively for the three year study period.

**Attrition analysis**

An attrition analysis was conducted on ‘drop outs’ (Delfabbro et al., 2015). Inspection of the paper indicates that the attrition rate was highest between time 1 and time 2 (40%) and then stabilised to an annual drop out-rate of 10%; drop outs were more likely to be males, the eldest in their age-cohort, and smokers and / or users of illicit drugs. There was little differential, or evidence of bias, for those who dropped out after the first two times of data collection. Although other authors have suggested that those with poor health are more likely to drop out rates (Virtanen, Kivimäki, et al., 2005), this study showed no signs of this, and health status at baseline was found to be unrelated to subsequent dropout (Delfabbro et al., 2015). In general, the level of attrition differs little from the school leavers study of the 1980’s which led to the publications of many widely cited papers (Winefield et al., 1993; Winefield et al., 1991).

**Measures**

*Employment paths*

Only those who were engaged in either casual or permanent employment at each time point, over the three year period were used, with all other cases filtered out of the data. At each time point, respondents were classified as either being a ‘casual’ or ‘permanent’ worker based on a question which asked them *Was your work casual or permanent?*, with permanent (abbreviated as P) coded as 1 and casual (abbreviated as C) coded as 2.

Like other research in this area, only those who were engaged in paid employment as their sole activity, were used to ensure the purity of responses. As such, anyone who was also studying during any of the three time points was removed as they were not seen to embody
what it meant to be a ‘true casual’, in that they would be more likely to see such employment as having an expiration date and as secondary to their aims of completing study.

Four different employment paths were established based on the employment status of the respondent at each time point. The ‘PPP path’ captured those who were in permanent employment at time 4, 5 and 6. The ‘CCC path’ captured those who were in casual employment at time 4, 5 and 6. The ‘CCP path’ captured those who were in casual employment at time 4 and 5, and then were in permanent employment at time 6. Finally, the ‘CPP path’ captured those who were in casual employment at time 4, and then permanent employment for time 5 and 6. Movement between casual and permanent employment over the three year study period is illustrated in Figure 4. The numerals are indicative of the number of workers in each employment type at each period of time.
Three demographic variables were chosen for this study: gender, socioeconomic status and relationship stability. Gender was coded as male = 0, female = 1. Socioeconomic status (SES) was measured through parental occupation at time 4 (*What occupation does your father and mother have?*); and classifying each occupation as either being of a professional / managerial nature or non-professional/non-managerial nature. Then (and as done in other studies; see Delfabbro et al., 2006; Matthews et al., 2015) respondents whose neither mother nor father was in a professional / managerial occupation were classified as having a low SES (=0), whilst those who had one or both parents in a professional / managerial role were classified as having a high SES (=1). Relationship stability was measured from the stability
of one’s relationship across the study period of time 4, time 5 and time 6. Those who had been in a relationship for all three time times were classified as having relationship stability (=1), whilst those who were either single the whole time, or single at some times but in a relationship at other times, were classified as single/unstable relationship (=0).

Health change

Two health outcome measures were used in this study: physical health and mental health.

Physical health: The question *How would you rate your health over the past 12 months?* Was the key question employed to measure physical health, with a response choice of 1-5. Lower scores indicated worse health (1 = *Nearly always ill*), whilst higher scores indicated poorer health (5 = *Very healthy most of the time*).

Mental Health: This was measured using the General Health Questionnaire-12 (GHQ-12; Goldberg & Williams, 2006) which is designed to assess the mental health of community samples. The GHQ-12 is a shortened version consisting of only 12 items instead of 60. Respondents were required to rate the degree to which they had experienced 12 different symptoms pertaining to mental health, ranging from 1=more so than usual to 4=much less than usual. Scores were added using the (00-11) scoring scale where a 1 is allocated to the negative response of a question. Scores were reversed to maintain consistency with the physical health measure. As such higher scores became indicative of higher levels of mental health (12 the highest), whilst low scores indicated lower levels of mental health (0 the lowest). Reliability analysis was conducted on the scale and found to be satisfactory (t4 $\alpha = .84$; t5 $\alpha = .84$; t6 $\alpha = .86$)

Health changes for both physical and mental health were then computed through subtracting health at time 4, from health at time 6. This allowed assessment of how health had
changed from time 4 to time 6; namely whether it had improved, deteriorated or remained stable. This method also ensured that different levels of baseline health at time 4 were held constant.

**Statistical analysis**

Data analysis was conducted on SPSS Version 19.0, *p* values were two tailed, with values of .05 or below indicating statistical significance. A two-step hierarchical multiple regression analysis was conducted separately for each health change variable.

At step 1, the three demographic variables were entered into the model. At step 2 the dummy coded employment pathway variables were entered, with the ‘CCC path’ (longest exposure to casual employment) as the reference group.

**5.7 Results**

**Correlations**

Bivariate correlation analysis was conducted on demographic and health difference measures to examine the relationship between variables. Table 6 highlights significant correlations between gender and relationships stability, as well as physical health change and relationship stability. These correlations are not large enough to result in problems associated with multicollinearity.
Table 6

**Correlation between demographic and health change variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Gender</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.SES</td>
<td>.02</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.Relationship stability</td>
<td>.12*</td>
<td>.07</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.Physical health change</td>
<td>.02</td>
<td>-.03</td>
<td>-.17**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5.Mental health change</td>
<td>-.08</td>
<td>-.08</td>
<td>.04</td>
<td>-.14</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note:* p < 0.05, **p < 0.01

Descriptives

Table 7 shows the percentages and means of the study variables by employment path. As the demographic and health change variables contained both categorical and continuous variables, both a chi square and one-way ANOVA analysis were conducted respectively.

The results indicated that there was a significant difference for gender; inspection of the standardised residuals (significance reached at > 1.96) indicated that the PPP path contained significantly more males than females, whilst the CCC path contained significantly more females than males. This is consistent with the fact that females are overrepresented in casual employment (Australian Bureau of Statistics, 2014). For health change, a significant difference in the mean scores for mental health was found. Post hoc tests revealed this difference occurred between the PPP and CCC paths, whereby those in the CCC path reported a significantly higher mean deterioration in mental health scores than those in the PPP path.
CHAPTER 5: STUDY TWO

Table 7

Descriptive statistics for demographic and health change variables within employment groups using chi square and one-way ANOVA’s

<table>
<thead>
<tr>
<th>Variable</th>
<th>PPP Path (n = 87)</th>
<th>CCC Path (n = 70)</th>
<th>CPP Path (n = 32)</th>
<th>CCP Path (n = 26)</th>
<th>(X^2 (df = 2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>52 (59)</td>
<td>57 (81)</td>
<td>23 (72)</td>
<td>19 (73)</td>
<td>8.89*</td>
</tr>
<tr>
<td>High SES</td>
<td>45 (51)</td>
<td>50 (77)</td>
<td>20 (65)</td>
<td>16 (62)</td>
<td>4.76</td>
</tr>
<tr>
<td>Stable relationship</td>
<td>48 (55)</td>
<td>40 (57)</td>
<td>19 (62)</td>
<td>17 (65)</td>
<td>3.87</td>
</tr>
<tr>
<td>Health Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical health change</td>
<td>-.01 (.39)</td>
<td>.06 (.45)</td>
<td>.03 (.31)</td>
<td>.01 (.49)</td>
<td>.39</td>
</tr>
<tr>
<td>Mental health change</td>
<td>.04 (2.26)</td>
<td>-1.26 (2.83)</td>
<td>-1.06 (2.18)</td>
<td>-.62 (2.21)</td>
<td>3.98*</td>
</tr>
</tbody>
</table>

Note: *\(p < 0.05\), **\(p < 0.01\)

Regression analysis

Table 8 and Table 9 display the results for the hierarchical multiple regression analyses conducted for physical health change and mental health change respectively.

Inspection of Table 8 for physical health change indicates that model 1 (demographic variables only) significantly explains only 4% of the variance. At step 1, relationship stability was significant; on average those with relationship stability scored 0.18 less on physical health change than did those who were single or did not have a stable relationship over the study period; a very small difference. After employment paths were entered at step 2, the model was no longer significant. Relationship stability was still significant, but again this difference was very small.
Table 8  

Summary of hierarchical regression analysis for variables predicting physical health change scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.05</td>
<td>.05</td>
<td>.05</td>
<td>.04</td>
<td>.05</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High SES</td>
<td>-.02</td>
<td>.04</td>
<td>-.02</td>
<td>-.03</td>
<td>.05</td>
<td>-.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship stability</td>
<td>-.18</td>
<td>.05</td>
<td>.22*</td>
<td>-.18</td>
<td>.05</td>
<td>-.22*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPP vs CCC</td>
<td>-.06</td>
<td>.06</td>
<td>-.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPP vs CCC</td>
<td>.12</td>
<td>.08</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCP vs CCC</td>
<td>.05</td>
<td>.09</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Model Summary

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² change</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.01</td>
<td></td>
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<tr>
<td>F for change in R²</td>
<td>5.37*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *p < 0.05, **p < 0.01

Inspection of Table 9 for mental health change indicates that none of the variables entered at either step 1 (demographic variables) or step 2 (employment path variables) could significantly predict health change. The R² for both analyses was very small at step 1 and remained small and insignificant at step 2. This indicates that the variables put into the model were poor predictors of health changes over time and that the model more generally was a poor fit to the data.
Chapter 5: Study Two

Table 9

Summary of hierarchical regression analysis for variables predicting mental health change scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-0.38</td>
<td>-0.33</td>
<td>-0.07</td>
<td>-0.33</td>
<td>0.33</td>
<td>-0.06</td>
<td></td>
</tr>
<tr>
<td>High SES</td>
<td>-0.58</td>
<td>0.30</td>
<td>-0.11</td>
<td>-0.54</td>
<td>0.30</td>
<td>-0.10</td>
<td></td>
</tr>
<tr>
<td>Relationship stability</td>
<td>0.36</td>
<td>0.31</td>
<td>0.07</td>
<td>0.33</td>
<td>0.31</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>PPP vs CCC</td>
<td></td>
<td></td>
<td></td>
<td>0.59</td>
<td>0.38</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>CPP vs CCC</td>
<td></td>
<td></td>
<td></td>
<td>0.34</td>
<td>0.53</td>
<td>-0.04</td>
<td></td>
</tr>
<tr>
<td>CCP vs CCC</td>
<td></td>
<td></td>
<td></td>
<td>0.03</td>
<td>0.58</td>
<td>0.01</td>
<td></td>
</tr>
</tbody>
</table>

Model Summary

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
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</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>0.02</td>
<td></td>
<td></td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.01</td>
<td></td>
<td></td>
<td>0.01</td>
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<td></td>
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<tr>
<td>R² change</td>
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<tr>
<td>F for change in R²</td>
<td>1.94</td>
<td></td>
<td></td>
<td>1.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *p < 0.05, ** p < 0.01

5.8 Discussion

The core-periphery model suggests that peripheral employment is more damaging to health than core employment (Aronsson et al., 2000; 2002). This study tested the hypothesis that longer exposure to one form of peripheral employment, known as casual employment, would be associated with poorer health outcomes than shorter exposure. This was tested in an age-specific cohort of young adults aged 18-20 who were not studying. The findings of this study did not support this hypothesis; different periods of exposure to casual employment had no correlation with health outcomes. None of the employment paths could significantly predict health changes over the three year study period.
The findings can be interpreted from a range of perspectives. The hypothesis was based on the assumption that the negative characteristics of casual employment, such as its lack of paid benefits (sick/annual leave and minimum hours) and the fact that it can be instantly terminated (low job insecurity), would have an attrition effect on health over time, causing it to deteriorate with longer periods of exposure. However it is likely that the very nature of long-term casual employment (especially that which was 3 years in length, as contained in the ‘CCC path’) may have had the opposite effect on workers’ health. For example, rather than magnifying the effects of job insecurity, the very nature of long-term casual employment may have worked to reduce feelings of job insecurity (as also suggested about long-term temporary workers; see Benach et al., 2002) The lack of paid benefits may have been overlooked by the fact that casual workers are often given a casual loading (Fair Work Ombudsman, 2014a) - usually a 25% increase on the wages of a permanent worker in the same position (although it must be noted that more recently this loading has been under attack, see: Australian Council of Trade Unions, 2015; Shop Distribution & Allied Employers Association, 2010). Longer exposure to casual employment may therefore not have been seen as a long-term denial of paid benefits, but rather as the opportunity to enjoy a secure position with a higher income (to save more money or spend more money).

The hypothesis was also based on the premise that long-term casual employment is not an arrangement desired by young, non-students who were considered likely to accept it only for a short-term transitionary period between high school and more permanent employment. Here it was assumed that their health was more likely to deteriorate in paths of longer exposure (such as the CCC path), as these young workers came to realise that casual work was going to be a more enduring aspect of their lives. In reality, casual employment may instead be well accepted, if not desired by young people, even over longer periods of time. As new entrants into the labour market, young people may weigh the importance of
employment in relation to its ability to provide flexibility (easier to take time off and to
decide availability for work), quick cash, and experience and exposure, rather than ongoing
status. Indeed, it is possible that those in the CCC Path were not workers who had been
unable to secure permanent employment, but rather those who were more satisfied in their
casual position and did not want to transfer out of this arrangement, making health
deterioration unlikely.

Alternatively it is likely that young people do not desire casual employment but are
instead buffered against its negative pressures due to the unique nature of their young-adult
‘stage-of-life’. Young adulthood is a period of life that is generally characterised by lower
levels of responsibility than that experienced in later adulthood; Australian statistics indicate
that young people are now reaching important milestones such as moving out of the parental
home, buying their own homes or starting their own families at older ages than previously
before (Australian Bureau of Statistics, 2009). These characteristics may assist young
workers in better absorbing the job and income insecurity that is often associated with casual
employment because it comes with less severe repercussions; for a young worker losing their
job or receiving irregular income is less likely to mean that they will be unable to provide for
their children, or that they will default on a house mortgage.

The final possibility to be considered is that the length of this study was not long
enough to capture any meaningful changes in young people’s attitudes towards their
employment. It could be that young people do want to eventually transition into permanent
employment but that the time frame in which they consider this appropriate exceeds that
measured in this study. Longitudinal research on Australian youth has found that the ages of
18-24 are characterised by high levels of life satisfaction, both in general and in relation to
more specific domains like living arrangements, social life and career (Nguyen, 2011). The
same research also found that by age 25, this life satisfaction had deteriorated, and the
authors attributed this to young people’s growing independence and realisation that their careers may not eventuate the way they planned. It is likely that 18-21 year olds see casual employment as acceptable for their age, but that these appraisals begin to change once they mature to ages 25 and above. Indeed research by Siegrist and Marmot (2004) indicates that it is midlife ages when job quality has the strongest effects on one’s health, perhaps because this is the age where workers are more likely to consider themselves at the peak of their careers and more deserving of quality employment. In comparison young workers may view lower quality work, which some suggest includes casual employment (Quinlan et al., 2001a), as normal or acceptable for their age as they anticipate future improvements to occur as they gain more employment experience.

Overall, the results of this study do not support the core-periphery model and suggest that its fundamental weakness relates to its inability to account for differences within the peripheral workforce. Instead this study highlights the importance of research that is more sensitive to the heterogeneity of the casual workforce given that such employment, as well as other types of peripheral employment, is associated with health outcomes that are specific to the demographic population in focus.

Limitations

Attrition and sample size were weaknesses of this study; drop out may have biased the results towards those who are better adjusted and more responsive to surveys. The reduced numbers, combined with a period of economic prosperity, also made it difficult to conduct any comparisons involving the unemployed, a group that would have been important to benchmark against given its well-established relationship with poor health (Wanberg, 2012). Further, the numbers of some of the employment paths were small, and it could be that this
study lacked the power to identify any significant relationships between employment paths and health changes that may have emerged with a more highly powered analysis.

Surveys were only rolled out at 1 year intervals. This left a large period in between survey times where respondents could have moved between employment types without it being captured in the study. For example, someone who reported being permanent at time 1 and time 2 could have experienced a period of unemployment for several months in between, even though they would have been considered in this study to have been only permanently employment over the two year period.

Future Research

It important to assess if longer periods (three years and beyond) exposure to casual employment is associated with poor health in young people. Further, different age ranges of young people should be more systematically targeted (e.g. older than 21). This will help to ascertain whether casual employment has more effect on health as age increases and young people transition into later adulthood.

Future research on young or older workers would also benefit from gathering more demographic information, such as workers residential status, number of dependents and disclosure of any large financial obligations. It would be interesting to assess if these variables, in interaction with employment status, can more accurately predict health outcomes.

Conducting longitudinal research with measurement intervals that are more frequent, or at least constructing questions that can ascertain how long someone has been in their casual or permanent position will also increase the sensitivity, and validity, of future research.
5.9 Conclusion

The health of young casual workers was not correlated with negative health outcomes even when exposure was for as long as three years. These findings suggest that such employment may be desired by young people seeking greater flexibility or work experience, or if not, is at least well-tolerated. Casual employment should not be broadly labelled as less desirable or low quality employment; the heterogeneity of the casual workforce means that what doesn’t suit one person (or age group) may still suit another.

5.10 Final Remarks

In line with Study One, the findings from Study Two also did not support the principal hypothesis in this thesis; namely that Young, non-student casual employees will experience poorer health than young, non-student permanent employees. Support for this hypothesis would be consistent with the finding of poorer health outcomes for those with longer exposure to casual employment. However, as indicated in this chapter, health outcomes were generally similar, irrespective of the employment arrangement experienced. The findings of Study Two do not support the notion of a clear health division between young, non-student core-periphery workers, even when exposure to casual employment extends beyond a 12-month period.

It is possible that many young workers enjoy the flexibility, higher pay and lack of commitment that such employment entails, and positively appraise the opportunity to develop their skills in casual employment despite its inherent insecurity. Study Three, in the chapter which follows, examines how young worker’s attitudes towards casual employment correlates with health outcomes by examining the role of volition.
CHAPTER 6: STUDY THREE

6.1 Preamble

The third study addresses the following thesis aim: Aim 4: To understand if involuntary engagement in casual employment leads to worse health than voluntary engagement in casual employment.

An important difference between casual workers that may assist in more reliably predicting poor health is volition (voluntary or involuntary engagement in casual employment). Current volition findings issue mixed support for the importance of this variable in explaining health outcomes, although research has been limited to European and Canadian populations (De Cuyper & De Witte, 2008; De Jong, De Cuyper, De Witte, Silla, & Bernhard-Oettel, 2009; Krausz, 2000). This paper aims to build on current knowledge by assessing if volition can explain health differences in young, non-student casuals in Australia. Involuntary engagement is measured based on whether young casuals would prefer permanent employment or not.

Although Study Two found that different levels of exposure to casual employment were not associated with health outcomes, Study Three still adopts a longitudinal design, given that casual workers have now been differentiated based on their volition status. A longitudinal design helps to assess the relationship between volition and health over a longer period of time and also assists to overcome some of the limitations of the current literature which is dominated by cross-sectional methodologies (Virtanen, Kivimäki, et al., 2005).

In comparison to Study Two which required respondents to consecutively answer the SASLS survey over a three year period, this is not essential for Study Three given that employment paths are not being measured. Further, Study Three uses a linear mixed model.
analysis which can effectively deal with missing cases when compared to multiple regression (which was used in Study Two). Accordingly, Study Three measures the association between volition status and health outcomes over a five year time period or time 4-8 of the SASLS. This is when respondents were aged 18-22. Similar to Study Two, Study Three also measures mental and physical health; however, in this study the analysis examines the combined health scores over the entire five year period instead of calculating health change scores. Finally, Study Three replaces the demographic variable ‘relationship status’, examined in Study One and 2, with ‘living arrangement’. Living arrangement looks at whether a respondent is still living at home with their parents or whether they are living independently. This is considered important to control as living at home with parents may act as a form of support to young casuals, as considered in the discussion section of Study Two.
Is volition the key? Comparing the health of casual workers based on voluntary or involuntary engagement

- UNDER REVIEW –

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6.2 Statement of Contribution

Ms. Natalie Matthews (first author)

I am responsible for the primary authorship and conception of this paper. I conducted the literature review, developed the research hypothesis and aims, ran the statistical analysis and wrote-up the manuscript. I was identified as the first author when this article was submitted for publication, and I have been responsible for all communications with journal administration including responses to reviewer feedback. With authority from Anthony Winefield and Paul Delfabbro, the analysis was based on raw data from the SASLS which they were responsible for collecting without my assistance.

Ms. Natalie Matthews

SIGNED___________________________________ DATE___________________________________

Professor Paul Delfabbro; Professor Anthony Winefield (co-authors)

As Natalie Matthews’ supervisors we were responsible for assisting Natalie in the development of her manuscript. Natalie was responsible for the conceptualisation of the paper’s aims, literature review, statistical analysis and write-up. Our role was to discuss the feasibility of her research proposals, provide her with support and assistance when she encountered difficulties and to give feedback on manuscript drafts. We also collected the raw
data for the SASLS but have given Natalie the permission to use this data for her current analysis and identify that she did this independently. The SASLS research was supported by grants numbered A00104359, DP0556377, DP0879497 from the Australian Research Council. We give permission for Natalie to use this paper for the fulfilment of her Doctor of Philosophy.

Professor Paul Delfabbro

SIGNED_______________________________ DATE______________________________

Professor Anthony Winefield

SIGNED_______________________________ DATE______________________________
6.3 Abstract

In Australia, the number of young people employed on a casual basis has increased over the past two decades. Although many young people may choose to uptake such employment whilst studying, there is concern that many non-student workers are involuntarily employed as casuals and that this may negatively affect their health due to perceptions of relative deprivation. This five year longitudinal study measured volition in a cohort of non-student casuals aged 18-23. A mixed model analysis was conducted and tested the hypothesis that involuntary casual employment would be associated with poorer health when compared to voluntary casual or permanent employment. The results did not support the hypothesis; the health of the respondents did not significantly decline, even when they were not in their desired work arrangement. Discussion is focused on the idea that young non-student casuals are in a stage-of-life where future improvements are anticipated and where many peers are also engaged in casual employment, making relative deprivation and poor health less likely.
CHAPTER 6: STUDY THREE

6.4 Introduction

Background

In Australia over the past two decades there has been a significant shift in the design and nature of work, particularly the large increase in non-permanent forms of employment such as casual employment (casual employment is similar to temporary employment overseas, but not wholly transferrable because of different laws and regulations that are independently decided by each country; see Buddelmeyer et al., 2008 for further discussion).

Casual employment in Australia means that workers are not guaranteed continuing employment. Under the clauses contained within many Awards, this exempts them from being entitled to non-monetary benefits such as guaranteed minimum hours, sick leave, holiday pay, maternity leave, or notice of termination (Department of Commerce, 2010).

During the period of 1992-2007, full-time casual employment grew at “three times the rate of total employment in the economy” (Lewchuk et al., 2011, p. 13) in Australia whilst permanent employment fell by 10%. Statistics released in 2012 indicate that casual employment now represents 23.9% of employment, an 8.1% increase from 1984 (Australian Bureau of Statistics, 2012). However, this increase has not been distributed equally amongst age groups; young people aged 15 to 24 are the most likely to fall into this employment category. For example, in 2013, 39.3% of casuals were aged 24 years and under (see Figure 5).
Recent statistics indicate that although a considerable proportion of young adults are working in casual positions whilst also in full-time education, there are still many young people who are engaged in casual employment as their sole activity (Foundation for Young Australians, 2013). Indeed, since the global financial crises started in 2007, rates of full-time employment for young non-students have declined, and continue to remain low. In comparison, the percentage of casual employment uptake in this period has increased, and this aligns well with claims that many non-student workers engage in casual employment only due to the absence of permanent positions (Lucas, 2012). The lack of legal protection that is characteristic of casual employment is especially concerning for young people who are often inexperienced in the workforce and therefore more vulnerable to exploitation (Australian Concil of Trade Unions, 2012).

One model that has been used to explain health differences between permanent and casual workers is known as the core-periphery model (Aronsson et al., 2000; 2002). This model suggests that permanent workers reside at the core of an organisations operations.
because they are permanent and full-time staff and therefore are considered important, both in the eyes of the organisation who enjoys their organisation-specific knowledge, as well as in the eyes of the law, which grants them many rights and benefits. In comparison, peripheral workers, such as casual workers, sit on the outside of the organisation’s key operations and as such are considered less important, if not disposable. They face work insecurity as they are the first to lose their jobs when demand goes down, and they are often wholly unprotected by labour regulations. Accordingly, the core-periphery model suggests that permanent workers should experience better health than casual workers. Further, it is likely that this may only be magnified in young workers given their existing vulnerabilities.

Although the core-periphery model has good face validity, a lot of contradictory findings have emerged in the literature (predominantly in international studies on peripheral temporary employment), some which have correlated temporary employment with poor health (Quinlan et al., 2001a; Virtanen et al., 2008; Virtanen et al., 2003; Waenerlund, Virtanen, et al., 2011), others which have found no effect (Bardasi & Francesconi, 2003; Bernhard-Oettel et al., 2005; Virtanen, Kivimäki, et al., 2005) and finally a smaller minority which suggest that core permanent work may also compromise worker health, especially in more stressful workplaces where longer hours may only compound existing pressures (McNamara et al., 2011; Rodriguez, 2002). This has led to suggestions that greater emphasis needs to be placed on capturing the heterogeneity of the peripheral workforce (including the casual workforce), so that health differences within the casual workforce itself can be better understood.

Capturing workforce heterogeneity: Is volition the key?

Volition is one potential variable that may explain why some peripheral workers experience good health, whilst others do not. It is defined as “the faculty or power of using
ones will” (Cambridge Dictionary Online, 2012) and in relation to casual employment, differentiates between those who have voluntarily or involuntarily entered into this employment arrangement. International research on temporary employment indicates that workers voluntarily choose such work for a variety of reasons, including family responsibilities (provides flexibility for parents raising children), economic incentives (extra money on the side of permanent employment), self-improvement (a good way to gain skills for future jobs) and personal preference (permanent jobs are too stressful; see De Cuyper & De Witte, 2007a for a more thorough discussion). In comparison Morris and Vekker (2001) suggested that the predominant reason that people involuntarily enter into temporary work is because they simply cannot find any permanent employment; when faced with the choice of unemployment or temporary work, they choose the latter.

The reason that volition may hold the key for understanding health differences in casual workers, can be explained using Relative Deprivation Theory (RDT; Crosby, 1976; Crosby, Muehrer, & Loewenstein, 1986). Although RDT has predominantly been used in the field of social psychology, to explain things such as collective action, it has also been successfully used in workplace health research (Buunk & Janssen, 1992; Crosby, 1984; Eibner & Evans, 2005; Feldman, Leana, & Bolino, 2002). The most recent two-factor theory of RDT postulates that people feel ‘deprived’ if they meet the following two criteria: 1) They desire or ‘want’ something that they currently do not have, and 2) They feel that they are entitled or deserve the thing that they want. This can be simplified as the equation ‘deprivation = wanting + deserving’. RDT further concedes that deprivation is only relative to a comparison; for one to feel that they are missing out on something they must compare themselves to a ‘reference’ that has what they themselves do not. There is now research to suggest that deprivation results in outcomes such as poor health (Eibner & Evans, 2005) and negative career attitudes (Feldman & Turnley, 2004).
According to the principles of RDT, those who enter into casual employment involuntarily should be more likely to experience deprivation and the subsequent poor health and employment outcomes associated with it. In this case the reference group would be permanent employees, who receive a plethora of non-monetary entitlements and more legal protection than their casual counterparts, even though they may often be engaged in exactly the same work. On the other hand the principles of RDT suggest that voluntary casual employees should feel less deprived because they are in an employment arrangement of their choice. Permanent employees may be not perceived to be in an advantageous position, and instead voluntary casuals may see themselves as being better off, reducing the likelihood that they will experience poorer health.

**Previous research and limitations**

To date, several international studies have incorporated a measure of volition as a means to identify which peripheral workers are more likely to experience poorer health outcomes. Krausz (2000) looked at the temporary help industry in Canada and concluded that those who were voluntarily engaged in temporary contracts were more likely to report high levels of job satisfaction (a health related indicator correlated to psychological issues, predominantly burnout; see Faragher, Cass, & Cooper, 2005 for further discussion) and lower role conflict than those who were involuntarily employed. Tan and Tan (2002) also found that volition was significantly correlated to higher levels of job satisfaction in Singaporean workers. However other studies, such as that by Bernhard-Oettel et al. (2008) and De Cuyper and De Witte (2008), did not support this hypothesis. Bernhard-Oettel et al. (2008) found that it was job preference (being in the occupation of choice) and not contract preference (being in temporary or permanent employment) that significantly predicted job outcomes, such as organisational commitment, in their Swedish sample. Similarly, De Cuyper and De Witte (2008) found that volition had no relationship with job satisfaction, or with turnover
CHAPTER 6: STUDY THREE

intention. Furthermore, the results indicated that volition in temporary workers had a negative relationship with organisational commitment. The authors went as far as stating that “volition and reasons for accepting temporary employment may have little potential to improve prediction on differences between temporary and permanent workers.” (p.363)

Although inconsistencies in the results relating to volition raises a question as to whether this variable is the key to better capturing the heterogeneity of the casual workforce and to understanding health differences, some limitations in previous studies should be noted. Volition research has predominantly been based on Canadian or Scandinavian temporary workers, who are different to casual workers in Australia because they are generally more protected by employment regulations (Buddelmeyer et al., 2008). As noted by De Cuyper et al. (2008) a lot of the research has not benchmarked against permanent worker groups (instead only comparing the health of involuntary and voluntary peripheral workers), which is important given that they are assumed to enjoy the gold standard of employment arrangements. Further, many previous studies have attempted to correlate volition exclusively with occupational outcomes, such as intent to leave and organisational commitment, with little examination of how it affects physical and mental health more directly. Like a lot of the research on peripheral employment and health, that which has measured volition has been predominantly cross-sectional meaning there has been little examination of how longer periods of involuntary engagement may be associated with health. Finally, volition research has failed to target the most overrepresented groups in peripheral employment; immigrants, women, and young people. In Australia, young non-student workers have received limited attention despite their high representation in casual employment, and despite the fact that a reduction in permanent positions may be forcing them to involuntarily take on less secure, casual employment (Foundation for Young Australians, 2013).
6.5 The Present Study

This study was designed to address some of the limitations identified in previous studies. First, it examines an Australian sample so that conclusions can be made about casual, rather than temporary workers. Second, direct measures of physical and mental health are used in order to move beyond the job-related outcome measures used by other studies. Third, it employs a longitudinal design so that the relationship between employment, volition status and health can be examined over a longer time. Finally, it focuses specifically on young non-students aged 18-23 years. The following hypothesis will be tested:

Involuntary casual employees will have lower physical health and mental health scores over a five year time period than voluntary casual employees and permanent employees.

The hypothesis is advanced on the premise of RDT (Crosby, 1976), which suggests that involuntary casual workers are more likely to feel deprived when compared to permanent workers who receive more benefits, and are therefore more likely to report poor health outcomes. While research results in this area have been inconsistent, volition may have more of an effect when studied longitudinally, as the accumulation of feelings of deprivation over time may result in a more discernibly negative impact on health.

Although this study was primarily interested in the health differences of casual workers based on volition, permanent employees were added to the study for health comparisons. Permanent workers are important to include as they considered by the core-periphery model to be engaged in the ‘gold standard’ of employment contracts, and thus assumed to be the healthiest (Aronsson et al., 2000; Virtanen et al., 2003).
6.6 Method

Setting and sample

The current study utilised data from the South Australian School Leavers Study (SASLS). The SASLS is a longitudinal study that was aimed at examining the health, wellbeing and employment trajectories of recent school leavers. It commenced in 2001 and operated successively for 13 years, following three different and annually staggered cohorts of school leavers for a period of 10 years, from the ages of 15 onwards to 25.

The SASLS derived figures from the Australian Bureau of Statistics to gain a proportional profile of South Australian schools at baseline, along the dimensions of whether they were regional, metropolitan, co-ed, same-sex, private or government. On these characteristics, 45 schools were chosen randomly and invited to participate in the study. Of the 45 schools chosen, 25 agreed to take part, equalling a 55% response rate. As respondents were required to be close to the age of 15 years at baseline, Year 10 students were targeted and sent out a letter detailing the study and its aims. A consent form was also dispatched and had to be signed by parents/caregivers and returned before participation was allowed. The response rates of students varied amongst schools, ranging from 45% to 75%.

Upon receiving consent, all respondents were made aware that participation was voluntary and that responses were confidential. They were also assured that they could withdraw at any time. The first round of questionnaires were given to students at school and took approximately 40 minutes to complete. Following the initial questionnaire, respondents were mailed nine more questionnaires every year thereafter.

At baseline the amalgamated number of respondents from all three cohorts was 2499 (male=1030, female=1469, \(m.\) age=15.2). By time 10, participation had decreased to only 446 (male=126, female=316 \(m.\) age =25). The present study used data from five time periods (time
4, \( n = 1072 \); time 5, \( n = 817 \); time 6, \( n = 672 \); time 7, \( n = 555 \); and time 8, \( n = 563 \). These particular times were considered ideal because they captured respondents at an age where they had finished high school (18-19 years of age). Five times were chosen as this was considered enough time to capture longitudinal effects, without compromising the sample size as a result of attrition.

**Attrition analysis**

In order to examine whether certain characteristics made respondents more likely to drop out, an attrition analysis was conducted for results (Delfabbro et al., 2015). The findings of the analysis revealed that attrition was highest between time 1 and 2 (40%), before dropping to an annual rate of 10% for each consecutive time period. By time 10, attrition was at 80%. Examination of variables measured at baseline indicated that males, those who were older in their age-range, and those who smoked and / or used illicit substances were more likely to drop-out of the study.

Further analysis was conducted in order to examine whether health effects had any influence on dropout rates, with some researchers suggesting that unhealthy workers are more likely to leave a study, thus inflating the chances of concluding that casual workers are ‘healthy’ (Virtanen, Kivimäki, et al., 2005). The attrition analysis did not support these claims, and health status at baseline was not found to be related to subsequent dropout rates (Delfabbro et al., 2015).

On the whole, the sample for the tracking period used for this study was stable, although the findings should be generalised with some caveats given that some demographic groups, such as males, are under-represented. It is unclear whether such biases could have been avoided using other epidemiological methods. In general, the level of attrition differs
little from that obtained in a previous school-leavers study, which resulted in many widely cited papers (Winefield et al., 1993; Winefield et al., 1991).

**Measures**

*Employment type*

Respondents were categorised into three different types of employment: involuntary casual employment, voluntary casual employment and permanent employment.

To create these groups, respondents were first separated into casual or permanent employment. This was done through annually asking respondents which employment type they were engaged in. Those who identified as casual and permanent workers could only do so if they were not simultaneously engaged in any form of study. This ensured the employment categories were captured in their purest form. Excluding students has also been a methodological feature of other studies in this area (Lewchuk et al., 2011).

Casual employees were further segregated by asking them: *Would you prefer a permanent job if there was one available?* With a yes/no response choice. Those who answered yes were categorised as involuntary casuals; those who answered no were categorised as voluntary casuals.

**Demographics**

Three demographic variables were chosen for this study: gender (*are you: male = 0, or female = 1*), living at home (*Living independently = 0, Living at home with parents/caregivers = 1*) and Socio-Economic Status (SES: *What occupation does your Father and Mother have?*). For SES, parental occupation was further broken down into either professional / managerial roles or ‘other’. Those respondents whose neither mother nor father was in a professional / managerial occupation were classified as having a low SES (=0), whilst those who had one or both parents in a professional / managerial role were classified as
having a high SES (=1). This measure of SES has been successfully employed in other studies using the SASLS dataset (Delfabbro et al., 2006; Matthews et al., 2015).

**Health outcomes**

Three health measures were used in this study:

*Physical health*

This was measured using a question which asked respondents how to rate their health over the past 12 months, where 5 = *very good health*, and 1 = *very poor health*.

*Mental health*

This was measured using the General Health Questionnaire -12 (GHQ; Goldberg & Williams, 2006) designed to assess the mental health of community samples. The GHQ-12 is a shortened version consisting of only 12 items compared to 60 on the original instrument. Respondents were required to rate the degree to which they had experienced 12 different symptoms pertaining to mental health. Four response categories were available ranging from 1=*

more so than usual* to 4=*
much less than usual*. Scores were added using the (00-11) scoring scale where a 1 is allocated to the negative response of a question; however scores were reversed to maintain consistency among health outcome measures. Consequently, twelve was the maximum total points someone could score and indicates those who are suffering from optimal mental health, whilst zero was the lowest and indicates non-optimal mental health. Reliability analysis was conducted and indicated good internal consistency for the sample across all five times (t4 $\alpha = .84$; t5 $\alpha = .84$; t6 $\alpha = .86$; t7 $\alpha = .86$; t8 $\alpha = .86$).

**Statistical analysis**

Data analysis was conducted on SPSS Version 19.0; p values were two sided, with values of .05 or below indicating statistical significance. A repeated measure Linear Mixed
Model (LMM) was built for each of the four health outcome measures. LMM is considered to be a more appropriate method for analysing longitudinal data where observations recorded across time are repeated and likely to be correlated. For this reason, it reduces the likelihood of type 1 error (a false positive), which is possible if using conventional regression models based upon individual cross-sectional times.

LMM are said to contain different ‘levels’ in which the data is nested. For this study, time was considered to be the level 1 data, in which individuals were nested. Individuals were the level 2 data, in which all subsequent observations were nested. The model was built in steps to see whether entering new variables improved the model fit. At step 1 an intercept-only or base model was estimated. At step 2, all demographic variables were entered. At step 3 employment status was entered into the model and in step 4 an employment status\*time interaction was added. Model improvement was assessed using the -2LLR statistic and corresponding chi square critical values.

6.7 Results

Correlation analysis

Bivariate correlation analysis was conducted between the demographic and health outcome variables to ensure that they were independent of one another. Inspection of Table 10 indicated that none of the variables entered shared more than a weak correlation with one another. The highest significant correlation occurred between physical health and mental health (.26). This correlation is weak and would not make either of these outcome measures redundant.
Table 10

*Correlation between demographic variables and health outcome variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics (t4)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Gender</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Live at home</td>
<td>-.01</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. SES</td>
<td>-.03</td>
<td>-.01</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td><strong>Health outcomes (t4-t8)</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>4. Physical health</td>
<td>-.19**</td>
<td>.01</td>
<td>.04</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. Mental health</td>
<td>-.14**</td>
<td>.01</td>
<td>-.06**</td>
<td>.26**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: *p < 0.05, **p < 0.01

Descriptive statistics

Table 11 shows the distributions (percentages and means) of the study variables for each of the three employment groups, across the five time times used in this study. Chi square analysis was used for the categorical demographic variables and one-way ANOVA’s were conducted for the continuous health outcome variables. Where significance was found on the chi square tests, interpretation of the standardised residuals (> 1.96) was used to determine between which groups the difference occurred. For the one-way ANOVA’s this was assessed using post-hoc tests.

In relation to the demographic variables, gender and socioeconomic status were significant at most times. Inspection of the standardised residuals indicated that for time 4 gender, this significance lay between permanent and involuntary employment groups with significantly more males present in the permanent employment group. For time 4 and time 5 gender, this difference lay between permanent employment and voluntary employment groups, with significantly more males again present in the permanent employment group. For socioeconomic status at time 4, 5, 6 and 8, significant differences were found between
permanent employment and voluntary employment groups, where the permanent group contained significantly more respondents from a low socioeconomic status than the voluntary casual employment group. Finally living arrangement at time 8 was significant due to differences between the permanent and involuntary casual employment groups. Here permanent employees had a significantly higher proportion of respondents still living at home with their parents than did the involuntary casual employment group.

The results for health outcome variables contained one significant result. Post hoc tests were conducted and indicated that for mental health at time 5, the significant difference occurred between permanent and voluntary casual employment groups.
Table 11

Descriptive statistics for demographic and health variables within employment groups using chi square and one-way ANOVA

<table>
<thead>
<tr>
<th>Variable</th>
<th>Time 4</th>
<th></th>
<th>Time 5</th>
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<th>Time 6</th>
<th></th>
<th>Time 7</th>
<th></th>
<th>Time 8</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Invol Cas (IC) n=199</td>
<td></td>
<td>IC n=130</td>
<td></td>
<td>IC n=88</td>
<td></td>
<td>IC n=65</td>
<td></td>
<td>IC n=38</td>
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<td></td>
<td>Vol Cas (VC) n=251</td>
<td></td>
<td>VC n=192</td>
<td></td>
<td>VC n=155</td>
<td></td>
<td>VC n=53</td>
<td></td>
<td>VC n=72</td>
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<td></td>
<td>Permanent (P) n=354</td>
<td></td>
<td>P n=351</td>
<td></td>
<td>P n=291</td>
<td></td>
<td>P n=349</td>
<td></td>
<td>P n=467</td>
<td></td>
</tr>
<tr>
<td><strong>Demographic</strong></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>IC 142(72)</td>
<td>12.46**</td>
<td>93(72)</td>
<td>9.26</td>
<td>65(74)</td>
<td>11.87**</td>
<td>47(72)</td>
<td>2.68</td>
<td>57(79)</td>
<td>4.29</td>
</tr>
<tr>
<td></td>
<td>VC 176(70)</td>
<td></td>
<td>142(74)</td>
<td></td>
<td>118(76)</td>
<td></td>
<td>41(77)</td>
<td></td>
<td>25(66)</td>
<td></td>
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<tr>
<td></td>
<td>P 208(59)</td>
<td></td>
<td>219(62)</td>
<td></td>
<td>178(61)</td>
<td></td>
<td>234(67)</td>
<td></td>
<td>242(67)</td>
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<tr>
<td>Live indep</td>
<td>IC 33(31)</td>
<td>1.25</td>
<td>26(40)</td>
<td>2.48</td>
<td>13(93)</td>
<td>5.46</td>
<td>36(67)</td>
<td>3.24</td>
<td>46(64)</td>
<td>20.99**</td>
</tr>
<tr>
<td></td>
<td>VC 31(30)</td>
<td></td>
<td>28(39)</td>
<td></td>
<td>27(90)</td>
<td></td>
<td>27(60)</td>
<td></td>
<td>26(70)</td>
<td></td>
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<tr>
<td></td>
<td>P 50(36)</td>
<td></td>
<td>80(49)</td>
<td></td>
<td>35(72)</td>
<td></td>
<td>161(54)</td>
<td></td>
<td>146(41)</td>
<td></td>
</tr>
<tr>
<td>High SES</td>
<td>IC 80(46)</td>
<td>12.83**</td>
<td>51(46)</td>
<td>28.36**</td>
<td>46(64)</td>
<td>9.63**</td>
<td>30(56)</td>
<td>3.19</td>
<td>37(60)</td>
<td>7.39**</td>
</tr>
<tr>
<td></td>
<td>VC 129(56)</td>
<td></td>
<td>117(68)</td>
<td></td>
<td>99(69)</td>
<td></td>
<td>35(67)</td>
<td></td>
<td>26(72)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P 123(40)</td>
<td></td>
<td>133(44)</td>
<td></td>
<td>140(49)</td>
<td></td>
<td>173(54)</td>
<td></td>
<td>167(50)</td>
<td></td>
</tr>
<tr>
<td><strong>Health outcome</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phys health</td>
<td>IC .21(.41)</td>
<td>.2.10</td>
<td>.19(.40)</td>
<td>.87</td>
<td>.16(.37)</td>
<td>.68</td>
<td>.08(.27)</td>
<td>.58</td>
<td>.17(.38)</td>
<td>.28</td>
</tr>
<tr>
<td></td>
<td>VC .15(.36)</td>
<td></td>
<td>.15(.36)</td>
<td></td>
<td>.12(.32)</td>
<td></td>
<td>.13(.34)</td>
<td></td>
<td>.13(.34)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P .14(.35)</td>
<td></td>
<td>.15(.35)</td>
<td></td>
<td>.11(.32)</td>
<td></td>
<td>.12(.33)</td>
<td></td>
<td>.13(.34)</td>
<td></td>
</tr>
<tr>
<td>Psych Health</td>
<td>IC 9.61(2.10)</td>
<td>.83</td>
<td>8.89(2.64)</td>
<td>1.79</td>
<td>9.06(2.79)</td>
<td>3.54*</td>
<td>9.11(2.06)</td>
<td>1.30</td>
<td>9.14(2.42)</td>
<td>.60</td>
</tr>
<tr>
<td></td>
<td>VC 9.57(2.18)</td>
<td></td>
<td>9.03(2.59)</td>
<td></td>
<td>8.89(2.66)</td>
<td></td>
<td>8.98(2.31)</td>
<td></td>
<td>9.11(2.73)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P 9.77(1.90)</td>
<td></td>
<td>9.33(2.37)</td>
<td></td>
<td>9.51(2.23)</td>
<td></td>
<td>9.44(2.34)</td>
<td></td>
<td>9.41(2.21)</td>
<td></td>
</tr>
</tbody>
</table>
Linear mixed models

Tables 12 and 13 show the results for each of the three models constructed for physical health and mental health. Initially four models were built, with the last one modelling an interaction between time and health outcomes. However, as none of the interactions were significant and instead only decreased the model fit, these were left out of the final results.

As can be seen in the Tables, a transition from model 1 (intercept only) to model 2 (demographic variables) was significant for all health outcomes. This means that the addition of gender, living arrangement and SES improved the model fit to the data. In terms of individual demographic predictors, significance was reported only for gender for physical health (Table 3) and for gender and socioeconomic status for mental health (Table 5). Interpretation of this indicated that males were more likely to experience better physical health and mental health than females over the five time times; similarly those with higher socioeconomic status were more likely to experience better mental health.

A transition from model 2 (demographic variables) to model 3 (employment status variables) was also significant for each health outcome, with a reduction in the -2LL and a significant chi square value (refer to Table 3, Table 4 and Table 5). However, inspection of the models indicated that none of the individual employment groups alone were significant predictors. This suggests that although employment status generally may have improved model fit, the type of employment a worker belonged to was not predictive of any of the health outcomes over time.
### Table 12 Linear mixed model: Demographic and employment predictors of physical health

<table>
<thead>
<tr>
<th>Physical Health</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameter</strong></td>
<td><strong>SE</strong></td>
<td><strong>Parameter</strong></td>
<td><strong>SE</strong></td>
</tr>
<tr>
<td>Intercept</td>
<td>4.16&quot;</td>
<td>.02</td>
<td>4.14&quot;</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (male compared to female)</td>
<td>.24&quot;</td>
<td>.05</td>
<td>.26&quot;</td>
</tr>
<tr>
<td>Living arrangement (live independently compared to live with parents)</td>
<td>-.02</td>
<td>.04</td>
<td>-.01</td>
</tr>
<tr>
<td>SES (low SES compared to high SES)</td>
<td>-.09</td>
<td>.05</td>
<td>-.05</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent (compared to involuntary casual)</td>
<td></td>
<td>.06</td>
<td>.05</td>
</tr>
<tr>
<td>Voluntary casual (compared to involuntary casual)</td>
<td></td>
<td>.05</td>
<td>.07</td>
</tr>
<tr>
<td>Model Change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2LLR</td>
<td>7887, df=7</td>
<td>2942, df=10</td>
<td>2385, df=12</td>
</tr>
<tr>
<td>X² for -2LLR change</td>
<td>4945&quot;, df=3</td>
<td>557&quot;, df=2</td>
<td></td>
</tr>
</tbody>
</table>

Note: *p < 0.05, ** p < 0.01

### Table 13 Linear mixed model: Demographic and employment predictors of mental health

<table>
<thead>
<tr>
<th>Mental health</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameter</strong></td>
<td><strong>SE</strong></td>
<td><strong>Parameter</strong></td>
<td><strong>SE</strong></td>
</tr>
<tr>
<td>Intercept</td>
<td>9.31&quot;</td>
<td>.05</td>
<td>8.75&quot;</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (male compared to female)</td>
<td>.68&quot;</td>
<td>.16</td>
<td>.67&quot;</td>
</tr>
<tr>
<td>Living arrangement (live independently compared to live with parents)</td>
<td>-.01</td>
<td>.13</td>
<td>-.06</td>
</tr>
<tr>
<td>SES (high SES compared to low SES)</td>
<td>.41&quot;</td>
<td>.15</td>
<td>.55&quot;</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent (compared to involuntary casual)</td>
<td></td>
<td>-.01</td>
<td>.17</td>
</tr>
<tr>
<td>Voluntary casual (compared to involuntary casual)</td>
<td></td>
<td>-.14</td>
<td>.21</td>
</tr>
<tr>
<td>Model Change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2LLR</td>
<td>16208, df=7</td>
<td>6170, df=10</td>
<td>4939, df=12</td>
</tr>
<tr>
<td>X² for -2LLR change</td>
<td>10038&quot;, df=3</td>
<td>1231&quot;, df=2</td>
<td></td>
</tr>
</tbody>
</table>

Note: *p < 0.05, ** p < 0.01
6.8 Discussion

This study tested the hypothesis that involuntary casual employment is more likely to be associated with poor health than voluntary casual or permanent employment. The results did not support the hypothesis and found no significant health differences between any of the employment types that were measured. The findings of this study are supportive of claims made by other authors that volition is not the ‘key’ to understanding health differences within the casual and broader peripheral workforce (De Cuyper & De Witte, 2007a; Kinnunen, Mäkikangas, Mauno, Siponen, & Nätti, 2011). Further this study does not issue support for the core-periphery model which suggests that any casual (peripheral) worker should experience poorer health than a permanent (core) worker (Aronsson et al., 2000; Aronsson et al., 2002).

Given the null findings, and contrary to what was suggested in the introduction, it is likely that involuntary casual work is not associated with poorer health because these workers do not experience feelings of deprivation, despite their self-reported preference for permanent employment. Deprivation can only occur from combined feelings of wanting something and thinking that it is deserved. One reason to explain these findings could relate to the young age of the sample studied, and their over-representation in casual employment. Currently, more young people aged 18-23 (the age range captured in this study) work in casual than permanent arrangements. Therefore although young, involuntary casual workers may want more permanent employment, they are possibly less likely to feel as though they deserve it given that so many of their peers are also in casual positions. Instead these workers may feel that their casual position is one that is still appropriate or common for their stage-of-life and that they will become more deserving of a permanent role as they become better established in the labour market (a ‘rite of passage’).
Indeed, the young age of the casual workers examined in this study means that they are still recent entrants into the labour market. Considering that the sample was also comprised of young workers not engaged in any tertiary or vocational study, casual employment for this cohort may have been considered particularly beneficial for providing them with the experience and skill set needed to secure permanent employment in the future. This means that although the involuntary casuals desired a permanent contract, feelings of deprivation (especially wanting) may have been reduced or eliminated by the fact that they felt that casual employment was still beneficial. Qualitative research by Lewchuk et al. (2008) supports this idea, and indicates that workers who believe that their temporary position is putting them on ‘a path’ to more permanent employment in the future, remain healthy even if temporary employment is not their preference.

There is also the possibility that the young age of the workers in this study helped to buffer them against some of the negative pressures of casual employment (as has been suggested in a previous cross-sectional study using the same dataset, and where again no association between casual employment and health was identified; Matthews et al., 2015). For example, statistics indicate that young people today are more likely to still be living at home with their parents, free of dependents and a mortgage (Australian Bureau of Statistics, 2009). This may increase their capacity to cope with the insecurity and irregular shifts / income that can be associated with casual employment, even if it is not their occupation of choice. From this perspective, the aforementioned buffers may prevent young people from feeling deprived because the discrepancy between the benefits associated with permanent and casual employment are reduced when workers have less responsibilities, and are better safeguarded from financial strain.

A final and important note to make about the results relates to the raw numbers of involuntary and voluntary casual employees (refer to Results section Table 11). These
numbers indicate that in this cohort of young people at least, there is a considerable percentage of young workers who were voluntarily engaged in casual work and did not desire more permanent employment. Indeed, at each time there were more voluntary casual employees than involuntary casual employees. This contradicts suggestions that casual employment is predominantly low quality employment that young people only engage in because they cannot find permanent employment. Instead it indicates that there exists a substantial amount of young workers who actively want to engage in casual employment. The fact that all students were excluded from the analysis indicates that this remains true even when casual employment is a young person’s predominant activity, and not just a financial endeavour on the side of completing tertiary/ vocational education.

**Limitations**

This research contained notable limitations. It assumed that the ‘gold standard’ or contract of choice was permanent employment, and consequently only measured volition within casual workers. The reality is that there could have been permanent workers who were not in their contract of choice, and perhaps desired casual or part-time work in order to ease stress or burnout, but were simply not in the position (e.g. financially) to leave their permanent position. The measurement of volition used in this study was one-dimensional and measured through the use of only a single question. In other studies, volition has frequently been measured as a scale, with a variety of questions used to gauge an overall score (De Cuyper & De Witte, 2008). The results also indicate that it would have been beneficial to measure workers perceptions of future employment.

**Future research**

It is integral that a universal measurement of volition is established, so that the findings of research in this area can be more easily benchmarked against one another. This
CHAPTER 6: STUDY THREE

may mean incorporating other aspects of volition, including occupational volition into the measurement. Where possible, future studies should also aim to measure volition in all groups of employees, rather than just between casual employees as was done in this study. Future studies may also benefit from taking a systematic approach to understanding how volition is linked to health across a variety of age groups to see if involuntary casual work is more likely to have a negative effect during older age. As the current findings could only be interpreted using educated reasoning, this research area would benefit from qualitative methodologies that could speak to involuntary casual workers directly to understand how they appraise their health in involuntary employment.

6.9 Conclusion

Young non-students engage in casual employment on both a voluntary and involuntary basis. This study found no significant health differences between casual workers when they are separated by a measure of volition. It is suggested that young casual employees who involuntarily engage with casual employment may be buffered from experiencing poor health as they do not feel that deprived; they may see their situation as likely to change and are surrounded by many other young people who are also employed casually.

6.10 Final Remarks

In line with the findings of Studies One and Two, the findings of Study Three were also not consistent with the principal hypothesis of this thesis that **Young, non-student casual employees will experience poorer health than young, non-student permanent employees.** Support for this hypothesis would require involuntary casual employment to result in significantly poorer health outcomes than permanent employment. Instead, it was found that the health of involuntary casual employees was not significantly different from that of their peers in voluntary casual employment or permanent employment.
Accordingly, the findings of Study Three raises questions about the propositions outlined in Study One and Study Two; namely, that young non-students would remain healthy in casual employment because they associate it with benefits such as higher pay, skill development and flexibility. Instead, Study Three indicates that young people remain healthy in such employment regardless of whether they desire permanent employment or not and this creates a further challenge for the assumptions of the core-periphery argument. In Study Four, in the chapter which follows, young, non-student workers are interviewed to understand how they appraise casual employment and their health.
CHAPTER 7: STUDY FOUR

7.1 Preamble

The fourth study addresses research Aim 5: To understand how young non-student casuals appraise their work and health using qualitative data.

Study Four represents the last study of this research programme. This study differs from Study One, Two and Three in that it uses respondents from outside of the SASLS data set. This is because Study Four occurred when SALS respondents were over 24 years old (and no longer considered as young adults). This study is also different from the last three studies because it uses qualitative methodology, collected through semi-structured interviews. Qualitative analysis is considered to be a beneficial way to compliment the previous studies, as it can provide deeper insights into young worker’s experiences, and in doing so, can assist in interpreting the previous quantitative findings. Study Four uses thematic analysis to examine how young, non-students appraise casual employment and their health. It also looks at if these workers feel that their young age influences this relationship.
CHAPTER 7: STUDY FOUR

A thematic analysis of young, non-students’ experiences in casual employment

- UNDER REVIEW -

Natalie Matthews¹, Paul Delfabbro¹, Anthony Winefield²

¹University of Adelaide, School of Psychology
²University of South Australia, School of Psychology, Social Work & Social Policy

7.2 Statement of Contribution

Ms. Natalie Matthews (first author)

I am responsible for the primary authorship and conception of this paper. I conducted the literature review, developed the aims and interview questions, collected and analysed the qualitative data and wrote-up the manuscript. I was identified as the first author when this article was submitted for publication, and I have been responsible for all communications with journal administration including responses to reviewer feedback.

Ms. Natalie Matthews

SIGNED_______________________________ DATE______________________________

Professor Paul Delfabbro; Professor Anthony Winefield (co-authors)

As Natalie Matthews’ supervisors we were responsible for assisting Natalie in the development of her manuscript. Natalie was responsible for the conceptualisation of the paper’s aims, literature review, collection and analysis of the qualitative data and the write-up of the manuscript. Our role was to discuss the feasibility of her research proposals, provide her with support and assistance when she encountered difficulties and to give feedback on
manuscript drafts. We give permission for Natalie to use this paper for her Doctor of Philosophy.

Professor Paul Delfabbro

SIGNED_______________________________ DATE______________________________

Professor Anthony Winefield

SIGNED_______________________________ DATE______________________________
7.3 Abstract

The increase of casual employment in Australia over the past two decades, has been largely absorbed by young workers aged 15-24. Despite this, they have received limited research attention in relation to if, and how, such employment is associated with their health. The purpose of this study was to understand the experiences of young casual employees who are not simultaneously engaged in study commitments (non-students). More specifically, this study aimed to ascertain if their experiences fit into a narrative which positions them as vulnerable young workers whose health is jeopardised by casual employment, or a narrative that describes them as workers who actively seek the flexibility of such employment, and whose stage-of-life is well suited to its characteristics. Twenty semi-structured interviews were conducted and analysed using thematic analysis. Five themes were identified pertaining to the experiences of young, non-student casual workers: ‘irregular roster’, ‘the financial aspects of casual employment’, ‘the relationship with management is everything’, ‘being younger makes it easier’ and ‘casual employment is short term’. The results indicated that neither of the narratives is entirely correct, and that a combination of aspects of each narrative is needed to understand health outcomes.
7.4 Introduction

The rise of casual employment in Australia

‘Core’ employment is the term used to define work that is full-time and ongoing; it is employment that has evolved from the basic victory of the ‘living wage’ to include a host of other rights and entitlements that help to ensure workers are not exploited (Campbell et al., 2009). The past two decades have seen a variety of different economic, political and social pressures combine to erode the core employment relationship, and increase incentives for employers to recruit peripheral labour, or work which is not full-time and/or permanent (Australian Bureau of Statistics, 2006, 2012; Lewchuk et al., 2011). This includes competition pressures such as globalisation, neoliberal economic policies, and a movement away from the traditional ‘male-bread-winner’ family model (Burgess et al., 2008; Quinlan et al., 2001b).

Although there are many different types of peripheral employment, including part-time, fixed-term, seasonal, contract, agency, dispatch work and self-employment, the most common type in Australia is ‘casual’ employment (Australian Council of Trade Unions, 2012a). Casual employment has increased in Australia since labour deregulation started to accelerate in the 1980’s. The Australian Bureau of Statistics (2013) indicates that approximately one in five (1/5) workers are employed in a casual position. Young people aged 15-24, are particularly overrepresented in such employment and are four times more likely to be in casual position than other age groups (Australian Council of Trade Unions, 2012c).

Casual employment is paid per-hour and often at a higher rate of pay (or ‘casual loading’) than a permanent position because it does not come with the associated rights and entitlements given to permanent employees (Fair Work Ombudsman, 2014a) although it must
be noted that more recently this loading has been under attack and has even been removed from some Awards (Australian Council of Trade Unions, 2015; Shop Distribution & Allied Employers Association, 2010). Legally, casual workers are not required to receive sick pay, annual leave with pay or maternity leave; they are not entitled to any notice of employment termination, or minimum hours of work. This makes casual employment in Australia one of the least protected forms of peripheral employment in the Organisation for Economic Co-operation & Development (OECD). As explained by Campbell et al. (2009, p. 66)

The existence of this category of [casual] workers is a surprising but crucial feature of the Australian system. It is difficult to find any other OECD country, with the exception of the U.S., where it is legal to deprive employees of such standard leave entitlements as paid annual leave and paid public holidays. Even in the case of New Zealand, which offers the closest parallel to Australia, casual workers have access to basic leave entitlements through national legislation.

**Casual employment and health**

As a result of these characteristics, casual employment (and other forms of peripheral employment), have become the scrutiny of much debate and discussion regarding the effects that it has on workers. Of particular interest has been the examination of how peripheral employment affects the health of those who engage in it. One model, known as the core-periphery model (Atkinson & Gregory, 1986), suggests that as peripheral workers are less likely to receive legal protection or enjoy job security, their health is at risk when compared to core workers (Aronsson et al., 2000; Aronsson et al., 2002). However, other commentators view casual employment, and other forms of peripheral work, as representing improved flexibility for both employers and employees (Jericho, 2014; Lumley et al., 2004; Wooden, 2001; Wooden & Warren, 2004) and therefore suggest that health outcomes are unlikely to differ on a core-periphery basis.
Despite confident assertions from both sides, research assessing the health outcomes associated with casual employment has yielded inconsistent results. Some studies have found significant relationships between poor health and those engaged in peripheral employment (see Virtanen et al., 2003; Waenerlund, Virtanen, et al., 2011), others have found that core workers are more susceptible to specific negative health outcomes (e.g. burnout) when compared to peripheral workers (see Benavides et al., 2000; Bohle et al., 2004) and finally some studies have been unable to detect any significant health differences between the core or periphery (see Bardasi & Francesconi, 2004; Lewchuk et al., 2008).

One claim made by some researchers, is that the inconsistency of research findings is predominantly derived from the heterogeneity of peripheral employment – both in relation to the different types of employment it relates to, as well as the demographically varied workforce who engage in it (Bernhard-Oettel et al., 2005; De Cuyper et al., 2008). Consequently, a good way to narrow research is to focus on casual employment. This is the most common type of peripheral employment in Australia and one of the least secure. Further, research can narrow down the heterogeneity of the casual workforce by focusing on the over-represented groups who are employed in it.

**Casual employment and young people’s health**

Despite young people being overrepresented in casual employment, this group has received minimal research scrutiny and it may be difficult to generalise findings from studies based on older workers, given the particular characteristics of teenage/young adult workers (Erikson & Erikson, 1998). One reason for the lack of research attention may lie with the fact that many young workers are also students (or whom McDonald et al., 2007 labels as ‘student-workers’) who take on casual work to earn money while completing high school, tertiary, or vocational studies. These ‘student-worker’ characteristics, position young people
as being well-suited to, if not actively seeking, casual employment in that they are likely to desire employment flexibility to work around their classes or lectures, and are also more likely to be satisfied with short-term employment commitments (Tucker & Turner, 2013). Their health is therefore less focus of concern, given that they are more likely to enter into such working arrangements voluntarily, and instead they (as well as working mothers, see Hannif & Lamm, 2005; Henly, Shaefer, & Waxman, 2006) are often framed as the ‘winners’ in an economy that is transitioning towards ever-increasing employment flexibility (SafeWork SA, 2012).

Often forgotten about are the young, non-students who are casually employed but not studying (whom McDonald et al., 2007 labels as ‘worker simpliciter’). These non-students may not see education as a viable or inspiring prospect (or may have started education and then dropped out), and instead seek to leave school and go straight into the workforce, where, many end up working casually (Foundation for Young Australians, 2013). What is clear is that there needs to be more attention directed towards understanding the health outcomes of these young, non-student casuals, especially as their uptake of casual employment is generally based on entirely different circumstances from those of student-workers. Statistics indicate that a considerable percentage of the increase in casual employment amongst young people has involved non-students (Campbell, 2000; Pocock, Buchanan, & Campbell, 2004), and yet, it is the student-workers that are often discussed when considering young people’s representation in casual employment more broadly (Vickers, Lamb, & Hinkley, 2003).

Although there is only limited research on the health of these workers, the literature on youth employment more generally provides two very different narratives for understanding the potential health outcomes for non-student casuals.

**Vulnerable young, non-student casuals**
On the one hand there is evidence to suggest that young workers are more susceptible than older workers to injury and exploitation; namely, because of their lack of experience in the workplace, low knowledge on their legal rights and limited understanding of appropriate safety behaviours and conditions (Youth Action & Policy Association, 2013). Research further suggests that even when young people have identified a violation in their working rights / conditions, they are less likely than older workers to complain for fear of retribution, or lack of confidence in approaching their manager (McDonald et al., 2007). Young, non-students may therefore be even further disadvantaged when working casually as this form of employment comes with such limited legal protection, making exploitation easier and the ability to voice concerns even more challenging (Aronsson, 1999; Tompa, Scott-Marshall, Dolinschi, Trevithick, & Bhattacharyya, 2007).

**Young, non-students are well suited to casual employment**

On the other hand, the limited research conducted on young non-students indicates that their health is usually unaffected by such employment. One study, by the same authors of this paper, compared the health of young non-student casuals to young non-student permanent workers (Matthews et al., 2015). The results indicated that employment type (casual or permanent) had no significant relationship with negative health outcomes. Instead, variables such as job dissatisfaction, financial strain and low social support were found to significantly pose risks to health (these variables were also tested for interactions with employment status, with no significance reported). This study indicated that young, non-students were faring well in casual employment arrangements and did not experience the poor physical or mental health identified in some older cohorts (see Virtanen et al., 2003; Waenerlund, Virtanen, et al., 2011). Instead, it was suggested that like student-workers, young non-students are also in a ‘stage-of-life’ that is well suited to less secure, but more flexible forms of employment such as casual employment. This is because as new entrants to
the labour market, they may desire experience and skill acquisition through a variety of short

term positions, over and above the security of committing to one organisation. They are likely
to have less financial or familial obligations (often cited as stressors in older populations; see
Clarke et al., 2007) which may make flexible arrangements less stressful and more appealing.
Further, the reality is that young people have grown up in an economy that is far different
from that of their parents; the notion of a job for life has been increasingly eroded and even
permanent workers face the insecurity of job loss through downsizing and restructuring
(Quinlan et al., 2001a). Accordingly, young people may simply not view permanent
employment as being attractive and may even accept casual employment as part of the new
‘norm’ (Matthews et al., 2015).

7.5 The Present Study

In response to the above, the present study aims to use detailed one-on-one interviews
with young, non-student casual workers, to understand which narrative is more suitable for
understanding the health of this cohort. Of particular interest is how young people appraise
the benefits and disadvantages of their casual position; how they feel their stage-of-life
influences these appraisals, and their thoughts on if, and how, such employment affects their
physical and mental health. To date, no qualitative studies on young casual employees have
been conducted, and it is expected that this study will provide more detailed insights into
their experiences and attitudes.

7.6 Method

Respondents

Respondents had to meet the following criteria: they had to be aged 18-24 and had to
be a non-student, meaning that they could not be engaged in any form of study (high school,
vocational or tertiary education). Participation was reimbursed with $50 cash per interview as
a means to subsidise any lost income that may be incurred from taking the time to conduct the interview. In total, 20 respondents were recruited, ranging from the ages of 18-24 (mean age = 22); 60% of respondents were female. The most common industries of employment were ‘Accommodation and Food Services’ (30%) and ‘Retail Trade’ (30%). Tenure in casual employment ranged between 3 months to over 4 years (mean tenure = 19 months).

**Procedure**

Respondents were recruited through advertising in the ‘Events’ section of a free online advertising site known as Gum Tree, as well as advertising using the first authors face book page. Fliers were also distributed on the message boards of large shopping centres across Adelaide. The background information regarding the study was that researchers at the University of Adelaide wanted to gain a ‘realistic appreciation of what it is like to work as a young, casual employee’. Respondents were encouraged to be as detailed and open as possible. No emotive or biased language either for or against casual employment was used in any of the briefing material so that respondents answers were not swayed by researcher expectations or bias.

Upon contacting the researcher, each potential respondent was sent an information pack that again listed the study objectives and the fact that the interview would be audio-taped. Respondents were also briefed as to their rights to confidentiality and ability to withdraw from the study at any time, without consequence. The interview questions were included in the information pack to allow respondents to become familiar with the questions and consider their responses. If respondents were still interested in participating after reading the information pack, a convenient time was arranged at a café local to the respondent. Upon meeting with the researcher, respondents were asked to sign a form stating their consent and given $50 for their attendance.
The interview comprised of a series of brief background and demographic questions. The interview also included 21 open ended questions along four main areas of enquiry: the respondents understanding of casual and permanent employment (including labour regulations); their experiences in casual employment; their current wellbeing; and their future life aspirations. Questions included those such as ‘Would you prefer to be employed permanently in your current position? Why/Why not?’, ‘Do you think being younger makes casual employment a more feasible option? Why/Why not?’, ‘Describe your current physical health?’ and ‘Describe your current mental health?’ (See Appendix B for full interview schedule starting on page 209). Interviews ranged from 20 minutes to 1.5 hours in length. Respondents were encouraged to discuss experiences / concepts that were unrelated to the initial question asked, but that had come up during the interview. Respondents were given the opportunity at the end of the interview to add any other information that they felt had not been covered in the interview, but was important for researchers to know. All interviews were tape recorded and transcribed at a later date verbatim.

Analysis

Thematic Analysis (TA) was used to analyse and interpret the data. TA is one of the most common forms of qualititative analysis and looks for recurring patterns or “identifiable themes” (Aronson, 1994, p. 1) in the data corpus. The thematic analysis used in this research adhered to a realist methodology; the accounts of respondents were considered to be a true reflection of their lived realities. Consequently, analysis took place at the ‘semantic’ level where “the themes are identified within the explicit or surface meanings of the data” (Braun & Clarke, 2006, p. 84). Further, this thematic analysis was theoretically driven (defined as a ‘theoretical thematic analysis’ by Braun & Clarke, 2006) in that the research topic, interview questions, and subsequent themes were all informed (and constrained) by the existing literature and preconceived interests of the researchers.
All transcribed interviews were entered into QSR’s *Nvivo 10*, a software programme designed to assist in the logistical aspects of qualitative analysis. Analysis was conducted by the primary researcher only. At stage 1 the data corpus was exhaustively reviewed to identify all topic areas (labelled as ‘codes’ by *Nvivo*), which emerged in the interviews; 118 codes were formed. During stage 2, the researcher worked systematically through the codes with the aim of collapsing codes into similar and meaningful categories, or ‘themes’. Although the majority of codes were mapped onto a theme, some codes were later discarded because they were considered irrelevant to the study topic. Five main themes were established, each with their own set of sub-themes (see Table 14). Themes were then named using data extracts that best represented the core of the theme, a practice advocated by Kissling (1996). Finally, at stage 3 the themes were summarised by the researcher to produce the results section of this paper (please note that subthemes are not discussed explicitly under separate headings but rather incorporated into each theme to improve the cohesiveness of the text). Interview extracts were used to represent each theme, with respondents’ names coded as alphabetic letters to maintain anonymity.

Table 14

*Themes and sub-themes*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-themes</th>
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| ‘It just goes up and down’: Irregular roster | • Stress of irregular hours  
• Underemployment  
• Hard to make plans  
• Shifts cancelled on last minute  
• Provides flexibility |
| ‘I know money isn’t everything, but to me I’m struggling without it’: The financial aspects of casual employment | • Casual loading helps to save  
• Living pay-to-pay  
• Can’t afford sick days  
• Difficult to secure loan |
| ‘The love me’: The relationship with management is everything | • Job security linked to relationship with manager  
• Rostered hours linked to relationship |
with manager
- Too scared to raise concerns over working conditions

| ‘It’s the kind of lifestyle that a young person doesn’t mind putting up with’: Being younger makes it easier | • Young people want to gain experience
• Living at home helps
• Parents provide financial backup
• Couldn’t do this job when older |

| ‘I have bigger and better dreams’: Casual employment is short term | • No job satisfaction
• No career progression
• Stepping stone to permanent work
• Sees a different future for oneself |

7.7 Results

The data corpus consisted of five main themes and twenty smaller subthemes pertaining to the experiences of young casual employees.

‘It just goes up and down’: Irregular roster

One of the most discussed topics amongst respondents was the frustration of having no set roster as a casual employee, a finding that has been consistently obtained in other studies on peripheral workers of all age groups (Bohle et al., 2011; Clarke et al., 2007; Malenfant et al., 2007). Almost all of the respondents in the present study recognised that their employer was not legally entitled to give them set hours and could change the days, times and number of hours worked at their own discretion. Only two had signed a legal contract, which stated that they were entitled to a minimum of four hours a week. Although several of the respondents asserted that they were happy with their roster, and received regular and predictable hours, the majority of respondents described their work hours as irregular and unpredictable. Most put this down to changes in demand, with several who worked in the retail industry explaining how staff members received a lot of hours over the Christmas period and school holidays, only to have their hours substantially reduced afterwards. Other respondents felt less able to explain why their hours varied so much. What
these respondents did agree on was that the irregularity in hours increased their stress levels and added an element of unpredictability to their lives:

It’s that stress of going full gear, work, work, work, work, work, work early in the morning, going to work, sleeping in the truck, being on the road all the time, being absolutely exhausted - to being bored out of your mind and twiddling your thumbs and not doing anything – **Respondent A** (24yo, female, horse trainer).

Further, many of the young, casual respondents felt a sense of ‘underemployment’ during periods when they received low hours. According to Feldman (1996) underemployment occurs when there is a discrepancy between what the worker desires/ or is capable of, and what the job requires. In this case, many respondents disclosed the fact that they wanted to work full-time hours, but couldn’t, leaving them to feel underutilised and as if they were wasting time. **Respondent S** explained that her hours had recently dropped down to only one shift a week and that this made her feel as if her life was poorly balanced, with too much time at home:

It’s giving me too much [time] for me to just fill in my days pretty much, to fill in my days with other things. And I just want a balance, I’m a person that wants to work. I don’t want to sit around just like that – **Respondent S** (23yo, female, animal kennel worker)

Some respondents explained that their organisation hired a lot of casual workers but only gave each limited hours, creating a workforce full of employees who wanted more shifts. Many workers had approached their managers, expressing their desire to work more hours, only to be knocked back, predominantly using explanations that there were simply not enough hours to go around. As a result, five of the workers interviewed were either already working two jobs, or were in the process of looking for another job for financial reasons. Indeed multiple job holding has been found in other studies on peripheral workers to be a common, and to add an extra additional burden for these workers (Australian Council of
Trade Unions, 2012a; Bohle et al., 2004; Quinlan et al., 2001a). One casual worker found that having two jobs worked well for her, whilst others discussed the exhaustion of having to juggle two rosters:

With the stress, that’s something that I definitely struggle to deal with because with trying to organise other little things just with myself in between, like cool down time where I just do house work, it just gets so overwhelming. I don’t want to think about it – Respondent D (22yo, female, waitress)

Another way that the irregular hours affected those interviewed was that it made it difficult for them to make plans. Many respondents said they felt frustrated at the rostering system, which often only indicated what shifts they were working from up to a fortnight, to just a few days in advance:

I get my roster two weeks before and it makes it really hard to plan things not knowing what my days are going to be like - Respondent I (23yo, male, retail worker)

Pre-arranged plans that fell on the same day as a shift often had to be abandoned as money was more important. Some respondents were lucky enough to be able to swap a shift, or gave up their shift if they could afford it. Such ‘plans’ ranged from doctors/specialists appointments to attending regular gym classes or making time to socialise with friends. For example, Respondent P explained how he felt isolated from his friends because his irregular hours made it difficult to find time for them:

I find I have to be the one to organise to catch up with people just because of my hours. So then people often stop trying to catch up with me because I say ‘no’ so often as my shifts are so infrequent – Respondent P (19yo, male, cook)

Several respondents also expressed anger at the fact that their shift could be cancelled without warning even when they had already made the effort to get ready for work and had
purposefully not made plans for that day:

Sometimes they’ve called me like fifteen minutes before and I’m like well I’m already ready. Or they’ll text me and I have to turn around as I’m already on my way –  

*Respondent R* (20yo, female, retail worker)

However, other young, casual respondents discussed how having an irregular roster also had its advantages in that it allowed their work hours to be more flexible and made it easier for them to achieve a good work-life balance. These respondents discussed the fact that they could easily request days off from work, something that they felt would be a lot more difficult for a permanent worker with regular shifts:

With the casual employees like, well it’s always really good because you can always like change your roster at any time. So you can have time off here, you can have time off there  

– *Respondent D* (22yo, female, waitress)

Respondents’ stated that time off was used for things such as travelling, attending music concerts or having weekends away with friends. Four of the respondents explained how their rostering system didn’t just enable them to secure time off, but also to be specific about exactly what days and times they could work, giving them total control over their lifestyle and time-management:

It [casual employment] fits with me quite well because I can also put in when I want to work, I can go no I don’t want to start until this time, or I have this, this, and this that I want to do. So in that sense it works out well – *Respondent A* (24yo, female, horse trainer)

Indeed, several respondents expressed the fact that having irregular hours was both positive and negative; they enjoyed the flexibility, but for many of them, they still struggled with underemployment. A typical response was one such as that given by *Respondent R*:  

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It’s really good for flexibility if I want to go away or anything but at the moment I need more hours – Respondent R (20yo, female, retail worker)

‘I know money isn’t everything, but to me I’m struggling without it’: The financial aspects of casual employment

Casual workers in Australia generally receive a casual ‘loading’ or increased rate of pay, as compensation for the fact that they aren’t entitled to benefits such as sick pay and annual leave (Fair Work Ombudsman, 2014a). Most of the respondents interviewed acknowledged that they received a casual loading; however, three of the workers said that they did not receive a casual loading, and a further three did not know if they were receiving it or not. Indeed, Australian research suggests that despite the existence of casual loading as a compensatory mechanism for workers who lack the paid benefits and job security entitled to permanent workers, many organisations still do not offer it to employees (Burgess & Campbell, 1998; Campbell & Burgess, 2001). Furthermore, the replacement of awards with agreements has made it more difficult for workers to identify if casual loading is a legal requirement for their industry, and harder for Fair Work Australia to enforce it (Quinlan & Sheldon, 2011).

Of those who did receive a casual loading, several of them felt that it helped them significantly in terms of saving and affording the things they wanted. These respondents explained that they would decline a permanent position (in their current role) if it were made available, as they liked the higher rate of pay. Weekend pay was especially good due to penalty rates. Respondent C explained that he now had a substantial amount of savings, which he felt wouldn’t have been achievable without his casual loading:

I’m saving up lots of money. I’d never have the savings I have if it was not for casual loading – Respondent C (22yo, male, warehouse worker)
However, this group of workers was the minority; the majority of those interviewed talked instead of their financial hardships and explained that the casual loading made little difference. Many argued that it only benefited those who received a high amount of hours and therefore was of no use when experiencing underemployment. A common response was one such as that made by ‘Respondent G’, who was currently only getting 3 hours a week:

If you were getting twenty hours a week with that loading yeah it might compensate, but if you’re just getting three hours then it doesn’t make a difference… What are you making? An extra twelve dollars compared to a permanent employee? As long as you’re getting minimal hours then it doesn’t work – Respondent G (21yo, female, retail worker)

Many respondents felt that they were living from pay-to-pay, and found it difficult to budget for the periods when work slowed down. It was common for respondents to be struggling to meet their financial obligations due to underemployment:

I would like things to be different and I would like to go out and have as much food as I want and go for a coffee or go for a beer, any activity and not have to think like ‘oh no’ because if I spend this twenty dollars then maybe next week I won’t get a shift – Respondent H (24yo, female, waitress)

Several respondents felt that their financial struggles increased their stress levels and made them feel as though they were constantly monitoring their finances and having to spend as little as possible in order to survive. Two interviewees explained how they had difficulties sleeping because of the financial stress that they felt:

I would find it hard to go to sleep, knowing that I’m not making enough money. I know money isn’t everything, but to me I’m struggling without it. So at the moment I will go to bed just thinking about how I’m not making enough money right now – Respondent R (20yo, female, retail worker)
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As casual workers are not entitled to paid sick days, this group of workers also discussed how they frequently went to work sick because they could not afford to take time off. This finding is similar to those of Clarke et al. (2007):

I think it was about three weeks ago that I just woke up and I started vomiting everywhere. I still went into work because I knew that otherwise I wouldn’t get paid – Respondent T (24yo, male, manufacturing worker)

A smaller group of respondents did not feel financially vulnerable, and explained how casual employment had made them good savers, and well prepared for when work may die down:

Not seeing my name on the roster at all for a week, would’ve impacted me if I was not an avid saver, but I’ve got money put away. Because I’ve only ever worked casual, I know the necessity of being a good saver and always having money to fall back onto – Respondent G (21yo, female, retail worker)

Another issue raised by those interviewed was the fact that casual employment made it difficult for them to secure a loan. Although casual employment is common in Australia, financial institutions often don’t recognise it as being a stable form of employment. The irregular hours and income of casual employees makes them perceived as risky to lend money to:

I don’t think I’d earn enough to get a loan. I don’t think they’d be comfortable with me earning enough to live, as well as giving them back a set amount per week – Respondent N (19yo, male, personal trainer)

Respondents felt as though securing expensive things, such as a house mortgage was impossible when in a casual position. Respondent J (23yo, male, lighting effects/stage worker) explained that he had tried to secure a house loan but was rejected and told he
needed permanent status, or at least a 50% deposit. He stated that he couldn’t save for a deposit given his low and irregular income:

‘They love me’: The relationship with management is everything

The relationship between casual workers and their managers was discussed by respondents as being especially important given their lack of legal protection, and many respondents openly acknowledged that they could be legally terminated at any time without notice. Many respondents felt that their income security, as well as their employment security more generally, was heavily contingent on how well they got along with management and these findings reinforce similar observations made in previous years by other commentators (Australian Council of Trade Unions, 2012a; Malenfant et al., 2007; Underhill & Quinlan, 2011).

Just under half of those interviewed felt that the number of work hours given to each employee was strongly determined by their relationship with management; a good relationship led to higher work hours, whilst a bad relationship led to lower work hours. Seven of those interviewed felt that management used work hours in a punitive fashion; an employee’s hours would be cut if they did something wrong or that the management didn’t like. This left worker’s feeling as though their workplace was a political playing field, where they had to be constantly nice to their managers even if they did things that they felt was unfair:

When your hours drop then you instantly think ‘what have I done’? And it might be that you haven’t done anything and that they just don’t have the hours to give you but because in the past it’s been ‘what have you done’, you still think that. And so yeah it’s a mental game and so even though you don’t want to, you start sucking up to people, and you start becoming buddy, buddy with people because you are so confused – Respondent G (21yo, female, retail worker)
Although Respondent G, who is quoted above, explained in her interview that being on the wrong side of the manager could result from things as simple as being friends with another staff member who the manager didn’t like, most explained that doing the ‘wrong thing’ predominantly related to taking time off, or calling in sick for a shift. This left management under staffed, or faced with the hassle of trying to find a replacement, and would often result in fewer shifts for that employee on the next roster: 

There’s always the sort of threat that oh, if you’re going to get sick and can’t come to work then I’ll just not give you shifts because I think I’m guaranteed four hours a week, that’s the guarantee, and so if he [the manager] really wanted to get me back for taking sick leave he would just cut me down – Respondent C (22yo, male, warehouse worker)

One worker explained how this made him feel as though the flexibility that is meant to be offered to casual employees was just an illusion:

I was saying to a mate the other day that they put so much pressure on us to be flexible and to do over-time, like doing two hours over-time in the morning. But if I want to start two hours later because I have a doctor’s appointment, I’m in the bad books. Like even if you have one day off they just treat you like crap. I don’t know why, but they treat you like you had it off to party. You definitely feel like they want flexibility but there is none for you – Respondent T (24yo, male, manufacturing worker)

Several respondents also discussed the concept of feeling ‘replaceable’, and as if there existed heaps of other people just waiting to take their position if they made a mistake or did the wrong thing by management. This made them feel as though management held all the power and could request whatever they wanted, whenever they wanted from their workers, without any argument:

He [the manager] knows I’m replaceable, and he knows that I know I’m replaceable – Respondent P (24yo, male, cook)
At times, this made it difficult to express concerns about working conditions, or poor health, for fear that the management would just dispose of them, and bring in somebody fitter, or healthier, or willing to work in the conditions required. Respondent C, who worked full-time hours in a casual position, discussed how he would like to take some time off to let his body rest from the hard physical labour of his job; however he felt unable to tell this to his manager:

I don’t want to end up like having a back injury. But if I was to turn around say ‘oh like I need some time off my back’s hurting’, there’d be trouble, you know, because they (management) would be afraid that I’m going to claim and they’d cut my hours to minimum. So I couldn’t just say, you know, I need to take some time off for physical reasons – Respondent C (22yo, male, warehouse worker)

Another respondent explained how he felt as though his working conditions were unsafe, particularly because he kept getting moved around to different departments and expected to understand how to do dangerous jobs with little training. He discussed an incident that had happened to him only several weeks before the interview, where he had almost been seriously injured by molten aluminium. However, despite this, he felt that disclosure of unsafe working conditions would only lead his manager to terminate his employment and replace him with someone willing:

I know if I said something to my boss, you know, like this is unsafe, this is bullcrap, he would say ‘okay, no worries’, and he would do something that day, but then at the end of that day he would say ‘okay, see you later mate’. Because there are so many people out there that are happy to work in unsafe conditions and whatever, they’re not bothered by it– Respondent T (24yo, male, manufacturing worker)

‘It’s the kind of lifestyle that a young person doesn’t mind putting up with’ Being younger makes it easier.
The young age of respondents was unbiasedly prompted for discussion in the interview questions, and the general consensus amongst respondents was that casual employment was more suited to a young person and the stage-of-life that they were in. While a few of the respondents felt that this was because casual employment had positive aspects that were especially desired by young people, such as greater flexibility, the majority explained that it was because their young age allowed them to cope more easily with aspects of casual work that may be negative for older workers. Common responses discussed the fact that young people often have fewer responsibilities than older people and are happy to make less money in order to gain experience:

> It’s okay to be poor when you’re younger, you know that’s the time to experiment and try things and going around as a casual worker it’s more about the experience than actually surviving – Respondent A (24yo, female, horse trainer)

In particular, living at home and having the financial backup from parents (or for Respondent F, her husband), was identified as the most important means by which young casuals were able to deal effectively with the financial hardships that may be incurred from inconsistent hours and underemployment. Respondent G, who has managed to save a lot of money despite never working full-time, and who is now still managing to survive despite receiving only three hours a week at her job, explained that this was only achievable through living at home:

> We pay for our healthcare, but we don’t pay rent unless we have a full-time job. So compared to someone who has a mortgage or dependants, or has bills, I am much more privileged than that. Like if I do have more hours, then that just goes straight into my bank account and stays there, which is why I can afford to save and that’s what has made that achievable is that I don’t have those things hanging over my head or those things coming out of my bank every month – Respondent G (21yo, female, retail worker)
Other interviewees explained how their parents would not charge rent during weeks where they were not getting many hours, or when they were financially precarious:

If my Mum knew I was low on money she wouldn’t expect me to pay. She would go out of her way to say don’t pay, and she would probably even give me a few hundred dollars to get me by. So definitely my Mum is very liberal in how generous she is and making sure that I’m okay financially – Respondent I (23yo, male, retail worker)

This safety net of living at home with parental support, abetted by the fact that the majority of respondents had no dependants or major financial obligations (such as a mortgage), made many of them feel less stressed about their circumstances, but despondent at the thought of surviving as a casual when they were older:

I believe that if you were forty and were casual and had that instability and had a family, you could be let go within a couple of days, and then you’d be stuck with nothing and couldn’t provide for your family. I’m looking for full-time work myself, I don’t want to continue doing it in my adult life I think it would be very difficult – Respondent N (19yo, male, personal trainer)

‘I have bigger and better dreams’: Casual employment is short term

Not only did the large majority of respondents express the fact that they did not want to work casually as an ‘older person’, they were also open in explaining that they saw their current casual position as being short-term only. There was a small minority who discussed their satisfaction in their current role, and a willingness to remain there for the foreseeable future. However, the majority were clear in their desires to move on eventually, with several of them expressing the fact that they were already actively seeking permanent, full-time work. One reason attributed to this, stemmed from the low job satisfaction felt by some of interviewees. These respondents felt that their casual work was unstimulating, boring and required only lowly skills:
I find the work quite boring and repetitive, just with the cleaning and talking to people, constantly I find myself with nothing to do – *Respondent N* (19yo, male, personal trainer)

The feeling of dissatisfaction in their current role was common amongst respondents, and indeed five of them disclosed the fact that they would not want their current role to turn into a permanent, full-time position because of the fact that they didn’t enjoy their work at all. Two respondents even suggested that their mental wellbeing may only be compromised should they have to work longer hours in their current position:

> It’s better being casual, yeah I think so, that it’s definitely more beneficial for me, just to keep sane. I don’t like repetition too much; it gets to a point where I can’t take it anymore
> – *Respondent E* (22yo, female, retail worker)

Others felt that their casual position would never result in any career progression, not only to a permanent full-time position, but also in terms of hierarchical promotion. A common complaint amongst respondents was that their organisation showed no interest in training or development, a finding that is confirmed by other studies (Aronsson, 1999; Lewchuk et al., 2003; Quinlan et al., 2001a). This made some workers feel unmotivated to work hard as they didn’t see a future in the organisation:

> The only managers we see are managers that are hired in. It’s never internal recruitment it’s always from outside. So there’s no inspiration, there’s no ladder to climb. There’s nothing to really strive for. Once you go casual, you’re always casual – *Respondent G* (21yo, female, retail worker)

In comparison, several respondents explained that they liked their casual position, and that it was teaching them good skills, but that they only saw it as a stepping stone to better and more permanent work. A common response was that like *Respondent A*:
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It’s definitely been a really good short term advancement – get a lot of experience, get a lot of exposure – but not something that would like long time build you up to the career. It’s more like a quick little type boot camp for a year. Where you kind of go and get lots of exposure, you try this and you try that and all sorts of things and then I can go to another job, a full-time permanent position, and say you know I’ve got all of this experience, I know how to work with this, this, this and this and feel comfortable doing it – *Respondent A* (24yo, female, horse trainer)

Then there were the young casuals who saw their casual position as a source of income only, explaining that their true aspirations lay in another industry altogether. For example, two of the retail trade workers had been to university, and were only in this casual position to earn money until they found a job in their area of training. For these workers, finding permanent employment was less important than finding a job (casual or permanent) in their industry of choice. Some casual workers had realised that they couldn’t get work in their industry of choice without returning to study. Four of those interviewed discussed courses that they wanted to do, ranging from natural medicine to veterinary nursing. In this situation, casual employment was seen as a positive way to help them save to return to study:

It’s not very rewarding [current casual position] at all to be honest with you. It’s not challenging. I like to be challenged and learning and whatever else but at the moment it’s saving me up for my studies so it keeps me going you know – *Respondent M* (21yo, female, retail worker)

Indeed, common and pervasive amongst almost all the respondents interviewed, was that they had established some clear life goals and felt confident, or at least hopeful, of achieving them with their more stable ‘future’ employment:

I want to have a steady financial position. Have money saved, put away and stuff. Obviously own a house, it’s definitely what I want. And I think I will get there, I will get
there. I will definitely have a set and steady career – Respondent R (20yo, female, retail worker)

7.8 Discussion

This study analysed interviews with 20 young non-students in order to understand their experiences in casual employment and the extent to which they felt that it had affected their physical and mental health. More specifically, this study aimed to ascertain if their experiences accorded with a narrative which positioned them as vulnerable young workers whose health is only further jeopardised by casual employment, or as workers who flourish in casual employment and actively seek the flexibility it provides. The results indicated that neither narrative is entirely correct, and that combining aspects of both narratives is needed to understand health outcomes; while some young people were more vulnerable in casual employment in relation to work instability and unsafe working conditions, their young age, and stage-of-life, also made them more resilient to some of these negative pressures. These findings did support the core-periphery model in terms of its suggestions that peripheral workers suffer from the limited legal protection of their employment arrangement (Aronsson et al., 2000; Aronsson et al., 2002). However this study also highlights the over-simplicity of the core-periphery model in terms of its inability to account for specific protective factors which may be important in understanding health differences between the core and periphery.

The responses were generally inconsistent with the notion that young people desired flexible employment. Instead it highlighted young, non-students’ desires to secure permanent and meaningful work and the degree to which they found themselves confined to underemployment and less skilled positions, often characterised by job insecurity and financial instability. These findings are not isolated, and have been well documented in studies that have looked at temporary employment in older age groups in Canada. In one study by Lewchuk et al. (2003), health was framed as being negatively affected by temporary
employment because of a culmination of pressures associated with this form of work, including job insecurity, roster uncertainty and income uncertainty. Many of the young workers in this study experienced similar pressures and in terms of wellbeing it was evident that stress, exhaustion, sleeplessness and social isolation were just some of the negative outcomes for their health.

The absence of statutory regulation, in relation to minimum hours or employment termination for casual workers in Australia, also left many of the respondents feeling powerless. For example, some of the respondents claimed that their manager would readily cut back their hours based, not on rostering requirements, but rather as punishment for things like taking a sick day. Although this held negative implications for the respondents’ finances, legally they knew that there was nothing they could do about this given that casual employees are not required to receive set hours in Australia. Other workers felt that their position was too insecure and replaceable to discuss unsafe working conditions with their manager, fearing that it would in turn jeopardise their employment, especially given that termination could be on-the-spot and required no justification. Such findings are consistent with research based on older populations, which have found that peripheral employees find it harder to stand up for their rights and working conditions. For example, Aronsson (1999) found that it was more difficult for Swedish temporary employees to acquire knowledge about safe work environments and to raise concerns about working conditions. Moreover, other research has highlighted the issue of workforce fragmentation and lack of unionisation underpinning peripheral forms of employment (Quinlan & Bohle, 2004). Casual workers have less ability than permanent workers, to mobilise and collectively voice their requirements for better working conditions.

Despite the above, the results of this study found that most of the respondents interviewed still felt confident in their ability to manage their stress, with particular claim to
the concept of young people being more adept at coping with the less desirable aspects of casual employment. With a lot of the ‘stress’ pertaining particularly to irregular income and the subsequent financial pressures it caused, this was often alleviated by the fact that respondents still lived at home and / or had parents who were willing to absorb the precariousness of their child’s income.

Further, some of the respondents drew attention to a paradox; namely, that the very cause of their stress – low hours and financial hardship – was also beneficial in that it prevented them from having to work full-time hours in a job that they found mundane and intrinsically dissatisfying. Indeed, two respondents suggested that full-time work in their current position would only reduce their mental wellbeing by forcing them to engage in a job that they disliked and which they felt had no future. This is an interesting point to note when trying to interpret the results of studies that have compared the health of casual employees to permanent ones, as it suggests that permanent employees in dissatisfying work may be more susceptible to poor health than their casual counterparts in satisfying employment, predominantly due to their increased exposure (Benavides et al., 2000; Bohle et al., 2004; Winefield et al., 1991).

It has been suggested that young people, who have grown up in a more globalised and competitive economy, where deregulation, downsizing and mass redundancies have eroded the notion of a ‘job for life’ (so prevalent in their parent’s era), may be disillusioned with the concept of having to secure ‘permanent’ employment and more willing to work with fewer attachments (Matthews et al., 2015). The findings of this study do not support these suggestions given that most respondents actively discussed their desire to work in permanent employment. However, despite not being in their employment arrangement of choice, it was clear that most of the respondents felt certain that their casual position would not be forever, that their life ambitions would be fulfilled. In many ways, this acted as a buffer to their
current employment stressors and positioned these difficulties as being of only a short term duration, and likely to improve in the future. Consequently, this study further suggests that the stage-of-life that young people are in may help them to cope, not only with logistical aspects of casual employment, but also the emotional ones. Older people, who have been in casual employment for longer, may feel apathetic and less hopeful of ever securing permanent employment in their industry of choice; for younger respondents such hope has not yet faded.

These findings indicate that understanding the health outcomes of young non-students, requires a hybrid of both narratives; young, non-students are more vulnerable in casual employment due to the lack of legal protection they receive and yet their young life stage simultaneously allows them to remain hopeful that this is employment is only of a short-term nature and that better opportunities lie ahead. Some of the young people interviewed in this study may go on to secure permanent employment, for some even in the industry of their choice. However, what this study highlights are the possible dangers of what may happen to those who do not; something that is highly likely given the increase in casual employment more generally. With the large majority of respondents confident that their future would not entail such inconsistent and insecure casual employment, it is unlikely that the ambitions of all respondents will be realised.

Limitations

The relatively small sample size of 20 respondents makes it possible that not all viewpoints were represented. This reduces the generalisability of the findings to the broader population of young, Australian casuals. The fact that interviews took on a structured format with such targeted questions, also means that some aspects of casual employment may have been emphasised by respondents as being more prevalent or perturbing than they were in reality.
Future research

Future research, especially of a longitudinal nature, should be directed at casual employees who are transitioning between young adulthood, to mid-adulthood, where one’s stage-of-life often progresses to include added complexities such as children, marriage and house mortgages. In particular, it is important to understand what happens to those whose employment futures do not turn out as expected and how they manage financially and emotionally. Do they become unable to effectively cope with the negative aspects of casual employment, and become more susceptible to physical and mental health problems? Or do they re-evaluate their ambitions to more accurately fit in with the reality of their situation? This area would benefit from longitudinal research that is able to track respondents from young to later adulthood, and monitor changes in their employment and health status over time.

7.9 Conclusion

Young casual workers, who are not studying, are no different from their older counterparts when it comes to the pressures incurred from casual employment, such as underemployment, powerlessness, and financial strain. However, their young stage-of-life, characterised by low familial and financial responsibility, support from their parents, and hope that their future will be different, does act as a buffer in helping them to cope and with these pressures, to an extent. Understanding how their health progresses if they remain casually employed for longer periods, in later adulthood, requires ongoing attention.

7.10 Final Remarks

Study Four highlights a number of the hardships experienced by young non-student casuals (underemployment, low control, powerlessness and financial strain), and how these translate into negative health outcomes (stress, sleeplessness and social isolation). Although
Study Four did not interview young, permanent workers, and therefore could not directly support/disprove the overarching hypothesis of the thesis, it provides some challenges to the findings reported in the three previous studies, which suggested that young people remain healthy in casual employment and positively appraise such work. Although some young people did highlight the advantages of casual employment, most interviewees discussed the disadvantages of casual work and their desire to secure more permanent employment.
CHAPTER 8: GENERAL CONCLUSIONS

8.1 Thesis Overview

This thesis tested the broad hypothesis that young, non-student casual employees would experience poorer health than young, non-student permanent employees. This hypothesis was underpinned by the theoretical framework of the core-periphery model which explains how employment differs between the core (where arrangements are permanent / full-time and where legal protection is high) and the periphery (where arrangements are not permanent / full-time and where legal protection is low; Aronsson et al., 2000; Aronsson et al., 2002). This model suggests that core workers will experience better health outcomes than peripheral workers due to their more favourable working arrangements.

A review of the broader literature on peripheral employment, as contained in Chapter 1, indicated that findings in this area are inconsistent. Some studies have found a relationship between peripheral employment and negative health outcomes (Kim et al., 2008; Sirviö et al., 2012) whereas others have found no association (Gracia et al., 2011; Richardson et al., 2012) or indicated that on some facets, core employment was more likely to be associated with poorer health (particularly stress and burn out; Benavides et al., 2000; Bohle et al., 2011). These inconsistencies were attributed to the fact that previous research had examined different forms of peripheral employment, often characterised by considerable heterogeneity in the characteristics of the workforce (e.g., studies had included samples with wide age ranges).

This thesis built upon this review by adopting a narrow focus of investigation in which only one specific type of peripheral employment, relating to one particular demographic population of workers, was examined within the context of Australia’s
industrial regulation framework. Casual employment was chosen because it is one of the most prevalent and least regulated types of peripheral employment in Australia, but one that has received far less research scrutiny than other forms of peripheral employment. Young, non-student workers were chosen given young people’s over-representation in casual employment and the need to obtain a greater a greater understanding of how it affects those who are not simultaneously engaged in study.

Overall, the hypothesis was only partially supported. The quantitative studies (Studies One, Two and Three), which were based on data from the SASLS, indicated that the health of young, non-student casuals was not significantly different to the health of their peers in permanent employment. However, the qualitative study (Study Four), found that some young, casual workers felt stressed due to underemployment and financial strain and that they also perceived their position as powerless and replaceable. In turn, some young workers felt unable to speak out about unsafe working conditions, or to take time off work when they were sick.

This final chapter reviews the aims and findings of each study and considers the theoretical and practical implications they hold. It moves on to discuss limitations of the research program and provides directions for future research. It concludes with final remarks on the thesis findings.

8.2 Overview of Research Aims and Studies

This thesis was comprised of five smaller research aims which examined the relationship between casual employment and health outcomes from different analytical or methodological perspectives. The findings from these analyses were disseminated in four separate manuscripts which are summarised below.
Study One. Casual catastrophe or contentment: Is casual employment related to poor health in young South Australians?

Study One focused on two aims: Aim 1: To replicate cross-sectional findings by examining if casual employment is related to health outcomes when compared to permanent or full-time student status; and Aim 2: To understand if the relationship between casual employment and health is moderated by job insecurity, job dissatisfaction, financial strain or low social support.

Study One examined a cross-sectional sample of 453 recent school leavers aged 19 to 20 (time 6 of the SASLS). The health of non-student casual workers was compared to the health of non-student permanent workers and full-time students to examine whether there were any significant differences between these employment groups. The study was conducted in the context of previous findings which had suggested that the relationship between peripheral employment and health may be moderated by economic and lifestyle factors (Clarke et al., 2007; Sirviö et al., 2012; Waenerlund, Virtanen, et al., 2011; Wagenaar et al., 2012). To this end, four moderator variables - job insecurity, job dissatisfaction, low social support and financial strain - were examined in the analysis. Employment type was regressed onto health outcomes both independently and in interaction with each moderator variable.

The analyses in Study One revealed no significant association between the employment categories and health outcomes. Instead, the findings of Study One indicated that three of the moderator variables (job dissatisfaction, low social support and financial strain) alone were significant predictors of poor health, particularly non-optimal mental health. Of particular interest was the finding that job insecurity had no relationship with poor health outcomes, either directly or in interaction with employment type. Job insecurity has been a conceptual feature of the core-periphery model, which suggests that the health of peripheral workers is compromised because of their exposure to short-term and less secure
employment (Aronsson et al., 2000). The findings of Study One did not issue support for this idea.

The discussion of Study One was centred on the idea that young people are more tolerant of less secure employment than are other demographic groups, possibly because they have grown up in an era where such arrangements are the ‘new norm’, and where even permanent employment is less secure. Moreover, it was argued that casual employment could potentially provide some benefits to young, non-students; including greater flexibility, higher pay (due to casual loading) and the opportunity to gain skills free of a permanent commitment. For this reason, the practical implications of the findings were discussed in terms of ways to enhance services that would support young people financially or socially, or assist in helping young people secure more satisfying employment.

**Study Two. Young, non-student workers in casual employment: A longitudinal analysis of health outcomes.**

Study Two addressed *Aim 3: To examine whether different periods of exposure to casual employment are associated with health changes over time.* This study examined the relationship between casual employment and health outcomes using a longitudinal research design that was based on a three year study period. This was done in an attempt to reduce the domination of cross-sectional studies in this research area, as well as to better understand the effects that ‘long-term’ casual arrangements have on young workers’ health (Australian Bureau of Statistics, 2010b).

Study Two involved the analysis of data drawn over a successive three year period (time 4, 5 and 6 of the SASLS), and measured four employment paths based on different lengths of exposure to casual and permanent employment. Based on the core-periphery model, it was hypothesised that health was more likely to deteriorate in paths characterised
by longer exposure to casual employment. More specifically, the CCC-Path (casual three years in a row) was surmised to result in the greatest health deterioration, whilst the PPP-Path (permanent three years in a row) was expected to result in the least.

Overall, the principal hypothesis offset in Study Two was not supported. The results showed that none of the three employment paths could significantly predict changes in physical or mental health over time, meaning that different periods of exposure to casual employment or permanent employment were unrelated to health outcomes. Similar to Study One, the results were indicative of young people being well adapted to casual employment – in this case, even over longer time periods. Young people were considered as being less likely than older adults to have dependents or large financial pressures (such as a mortgage), which had been cited in studies using older cohorts of casual workers, as contributing to stress and poor health (Clarke et al., 2007; Lewchuk et al., 2011). The results were also interpreted with consideration that longer term casual employment may actually off-set some of the negative attributes of such employment. For example, long-term casual employment may reduce feelings of job insecurity, which many commentators have suggested is responsible for poor health in peripheral workers (Australian Council of Trade Unions, 2012a; Wagenaar et al., 2012).

**Study Three. Is volition they key? Comparing the health of young, non-student casual workers based on voluntary or involuntary engagement.**

Study Three explored **Aim 4: To understand if volition (preference for or against casual employment) can significantly predict health outcomes.** Study Three hypothesised that those who had ‘involuntarily’ engaged in casual employment would be more likely to feel ‘relatively deprived’ according the theory of relative deprivation (Crosby, 1984), and experience poor health when compared to those who had ‘voluntarily’ engaged in casual
employment, or were permanently employed. A sample of 804 respondents from the SASLS was used over a consecutive five year study period (time 4, 5, 6, 7 and 8).

The results did not support the hypothesis, and again indicated that young non-student Australians appeared to be maintaining satisfactory health levels whilst casually employed. In light of the ‘relative deprivation’ framework used in this study, it was suggested that involuntary casuals may be buffered from feelings of relative deprivation and poor health because many of their peers are engaged in such employment, and because they possibly viewed it as a way to gain the work experience needed to secure more desired employment in the future.

**Study Four: A thematic analysis of young, non-student workers’ experiences in casual employment in Australia.**

The final study in this thesis examined *Aim 5: To understand how young non-student casuals appraise their work and health using qualitative data*. Qualitative data was collected through interviews with 20 young, non-student workers on their experiences in casual employment. The null findings of Study One, Two and Three had been interpreted as suggesting that young, non-students fared well in casual employment. It was considered especially important that further analysis be conducted to examine these assumptions using information directly obtained from young people. More specifically, Study Four examined what these workers identified as negative and positive aspects of their work, how they felt their young age influenced such appraisals, and if they felt that their employment had any effect on their health and wellbeing.

The data was analysed using thematic analysis and five themes were discussed in the results; ‘irregular roster’, ‘the financial aspects of casual employment’, ‘the relationship with management is everything’, ‘being younger makes it easier’ and ‘casual employment is short
term’. Several of the themes (and sub-themes) contradicted the interpretations made in Studies One, Two and Three and suggested that many young workers experienced negative pressures as a result of irregular hours, underemployment and financial strain, and also felt powerless in their employment due to the lack of legal protection afforded to casuals in Australia. However, it also emerged that young workers were partly buffered from these pressures because of the social and financial support they received from their family; the absence of large financial commitments or dependents in their lives; and, their perceptions that things would change for the better in the future (meaning that they saw their current situation as being for a shorter-term period, possibly making casual work more manageable).

**Table of findings**

Table 15 summarises all the studies contained in this thesis.

Table 15

**Aims and findings of each study**

<table>
<thead>
<tr>
<th>Study</th>
<th>Aim 1: To replicate cross-sectional findings. Is casual employment status related to health outcomes when compared to permanent or full-time student status?</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Casual catastrophe or contentment: Is casual employment related to ill health in young South Australians?</td>
<td>No significant differences were found between the health status of casual, permanent or full-time students.</td>
<td>No significant differences were found between the health status of casual, permanent or full-time students.</td>
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<td></td>
<td>Aim 2: To understand if the relationship between casual employment and health is moderated by job insecurity, job dissatisfaction, financial strain or low social support.</td>
<td>There were no significant interactions between casual employment status and any of the moderator variables. Instead, job dissatisfaction, financial strain and low social support independently predicted negative health outcomes.</td>
</tr>
<tr>
<td>2. Young, non-student workers in casual employment: A longitudinal analysis of</td>
<td>Aim 3: To identify how different periods of exposure to casual employment are associated with health changes</td>
<td>Different periods of exposure to casual employment, ranging from no-exposure to three years exposure, were not significantly</td>
</tr>
</tbody>
</table>
CHAPTER 8: CONCLUSION

<table>
<thead>
<tr>
<th>health outcomes.</th>
<th>over time.</th>
<th>associated with any health changes over a three year study period.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Is volition they key? Comparing the health of young, non-student casual workers based on voluntary or involuntary engagement. <strong>Aim 4:</strong> To understand if involuntary engagement in casual employment leads to worse health than voluntary engagement in casual employment.</td>
<td>There were no significant health changes between involuntary casuals, voluntary casuals or permanent workers over a five year study period.</td>
<td></td>
</tr>
<tr>
<td>4. A thematic analysis of young, non-student workers’ experiences in casual employment in Australia. <strong>Aim 5:</strong> To understand how young non-student casuals appraise their work and health using qualitative data.</td>
<td>Thematic analysis identified five themes that explained young workers’ experiences in casual employment. Some negative aspects of casual employment were discussed including underemployment, financial strain and feelings of powerlessness. This was partly alleviated by buffering factors such as parental support, no major financial or familial responsibilities and their aspirations of securing permanent employment in the future.</td>
<td></td>
</tr>
</tbody>
</table>

**8.3 Overall Significance of Main Findings**

The findings of Studies One, Two and Three suggest that the health of casual employees is not significantly different from those of their peers in permanent employment. However, the fourth study indicates that the nature of casual employment, namely its unpredictable / intermittent hours and inherent insecurity, is still a source of stress for some young workers. A broader discussion and application of the research findings will now be considered.
The discrepancy between the quantitative and qualitative findings

It is important to consider why the findings of Studies One, Two and Three, which suggest that the health of young casuals is not compromised by their employment, do not align with the findings of Study Four, which suggests that the health of young casuals is compromised. Several explanations will now be advanced.

Economic context

It is well documented that employment opportunities for young people in Australia declined following the Global Financial Crises (GFC) in 2008 (Foundation for Young Australians, 2013). One significant difference between the quantitative data (which Studies One, Two and Three are based on) and the qualitative data (which Study Four is based on) was that they were collected from different groups of respondents, during periods of different economic prosperity. Most of the quantitative data interpreted in this thesis was collected by the SASLS pre GFC; a time of strong economic growth and low unemployment (which may have been a reason why the numbers of unemployed were so low). In comparison, the qualitative data was collected post GFC, between April to June 2014. At this time youth unemployment in South Australia was at 18.6%, the highest it had been in 12 years, and above the national average (Business SA, 2014).

It is possible that young people responding to the SASLS experienced more positive employment experiences in casual employment than the young people recruited for interviews in Study Four. Given that the economy was at peak cycle, the SASLS respondents are likely to have received more hours in their casual position. This may have reduced the likelihood of underemployment and financial strain, which were identified as negatively impeding on the well-being of respondents in Study Four. Further, they may have found it easier to secure permanent employment if that is what they desired, thus leaving behind
casual employees that were satisfied in their position and less likely to be unhealthy. Indeed, whilst Study Three (based on the SASLS) found that more than half of the sample was voluntarily engaged in casual employment, Study Four (based on respondents from 2014) found that the overwhelming majority of respondents wanted increased hours and more permanent employment. Using the findings of Study Four, (which highlighted some negative aspects of casual employment) to inform the null findings of Study One, Two and Three may be invalid given the different economic contexts from which participants were recruited. Future studies should consider the economic climate as an important contextual factor when interpreting health outcomes.

Permanent workers also experience negative health pressures

Another explanation for the differences in the quantitative and qualitative findings may lie with the fact that permanent employees also face negative health pressures. As discussed in Study Four, permanent employees in dissatisfying work may be more likely to experience poorer health than casual workers in dissatisfying work, simply because exposure to employment is higher when working full-time hours. Indeed, there are studies which have found that permanent workers are more likely to experience higher work intensity and burn-out than temporary or casual workers (Benavides et al., 2000; Bohle et al., 2011).

Furthermore, some research exists to suggest that the presence of peripheral workers may stand not only to reduce their health of the periphery but also that of the core. Peripheral workers may stand to make core workers feel insecure in their employment (as though they are replaceable and costly) and can also work to undermine the safety of a work site given their low knowledge of procedures and safety behaviours (Rousseau & Libuser, 1997). Comparing the health of peripheral to core workers may overlook the importance of the fact they are often employed simultaneously to work side-by-side in an organisation.
Despite the above, this thesis only compared the health of casual workers to permanent workers in Studies One, Two and Three, whereas Study Four involved interviews with casual workers only (no comparison interviews with permanent workers were conducted). This means that although casual respondents in Studies One, Two and Three may have experienced similar negative health pressures as those identified in Study Four, these may have balanced out when compared to the health scores of permanent workers (who were facing their own unique negative health pressures), making statistically different health outcomes between casual and permanent workers unlikely to be detected.

Problems with comparing quantitative and qualitative results

Ideally, when measuring the same phenomenon, both quantitative and qualitative analyses should converge on the same findings; however, the sensitivity of each analysis is different and as such, comparing the results of quantitative and qualitative analysis must always be done with caution and reservation (Bryman, 2006).

In relation to this thesis, it is likely that the qualitative analysis was more sensitive to detecting poor health outcomes, even though these may not have been severe enough to translate into the classification of ‘poor health’ using quantitative instruments. For example, someone reporting trouble sleeping and stress in an interview, may still score as mentally well on the GHQ-12 (which explores a wider range of mental health symptoms), or may still consider themselves to be physically healthy. Accordingly, the SASLS participants could have also experienced some of the negative health pressures discussed by interview respondents, but these may not have been detected using the quantitative measures of the SALS, thus explaining the different findings between the studies.
The core-periphery model: Is this the best way to understand worker health?

The core-periphery model is currently one of the most used theoretical frameworks to describe health differences between core and peripheral workers (Bernhard-Oettel et al., 2008; Gracia et al., 2011; Virtanen et al., 2003; Waenerlund, Gustafsson, et al., 2011). According to this model, the best health should be experienced the closer one is to the core of an organisation’s operations (such as permanent and full-time employees), and the worst health should be experienced the further one is from the core (e.g. unemployment; Aronsson et al., 2000; Aronsson et al., 2002). As the findings of this research programme only partially supported the hypothesis that casual (peripheral) workers would experience poorer health than permanent (core) workers, the findings of this thesis do not issue strong support for the core-periphery model. These results support other studies which have arrived at similar conclusions (Bernhard-Oettel et al., 2005; Gracia et al., 2011). This finding is especially compelling given that casual employment is theoretically positioned on the outer edges of the core-periphery axis as it entitles workers to no rights beyond one hours work for one hours pay. This makes it more likely that health differences would be overstated and that statistical significance would be found, given the larger positional difference between the core and peripheral workers measured in this thesis.

The findings of this thesis align with the discussion in Chapter 1 (See ‘limitations of the core-periphery model’) and support the view that the core-periphery model is too simplistic as it relies wholly on employment status to predict health outcomes. In reality, the relationship between employment and health is likely to be more complex than one’s taxonomic status alone, as is highlighted by the protective factors identified in Study Four, which assisted casual workers in coping with some of the negative aspects of their employment arrangement.
The core-periphery model does not account for the heterogeneity of the peripheral (and core) workforce and different mitigating or protective factors which may make them more or less susceptible to poor health. Further, it fails to identify how the increased presence of peripheral workers may stand to undermine the health (and safety) of core workers as well. Clearly research should aim to move beyond examining health from only the core-periphery perspective as it is unlikely that all core employment is healthy and all peripheral employment is unhealthy (this has also been suggested by other authors; see Louie et al., 2006; McNamara et al., 2011). This may be the reason that current findings using this approach are so inconsistent.

It is therefore important that consideration be given to other theoretical frameworks, which are more sensitive to some of the differences within the peripheral and core workforces. Two models in particular stand out as offering promising frameworks in which to better explore worker health. One is Lewchuk’s (2003) Employment Strain model (an extension of Karasek’s Job Strain Model; 1979) and the other is Quinlan and Bohle’s Pressure, Disorganisation and Regulatory Framework model (PDR model; 2001b). These models conceptualise the relationship between peripheral employment and health as contingent on a variety of different important variables that extend beyond one’s position on the core-periphery axis. This includes economic and social support, multiple job holding or the ability to collectively organise. The null findings of the quantitative studies in this thesis, in line with the inconsistent findings on the area of peripheral employment and health more broadly, indicates that these theoretical frameworks may be more valid ways of assessing worker health in the future.
CHAPTER 8: CONCLUSION

Policy implications

This section will provide brief suggestions on how policy changes may help to reduce, or at least mitigate, some of the less favourable aspects of casual employment.

Minimising long-term casual employment

The findings of this thesis, in support with government statistics (Australian Bureau of Statistics, 2010b), indicates that there is a substantial proportion of casual workers who are not ‘true casuals’ and instead work in ‘long-term’ (as defined by the Fair Work Ombudsman, 2014a) casual employment for periods exceeding 12 months. These long-term positions are problematic in that they are essentially permanent positions that deny workers of appropriate benefits (Campbell & Burgess, 2001). Although these positions may sometimes give workers a higher sense of security, they are essentially still jobs that can be terminated without notice or reason.

One way to reduce this would be to adopt the approach taken in Sweden, where temporary workers are required by law, to be placed onto a permanent contract after they have engaged in temporary work for one year and two months (Lewchuk et al., 2011). In Australia this would mean that a casual employee is legally entitled to convert to a permanent contract (that is either permanent full-time or permanent part-time, contingent on the average hours worked in the casual position) after 12 months, and once casual employment had started to become a long-term engagement (Fair Work Ombudsman, 2014a). Considering that some casual workers may prefer their casual loading over paid benefits, this transition to permanent employment could be done at the discretion of the employee, meaning that they would be able to continue on with their casual arrangement, if it was more desirable (although given that the casual loading in Australia is now increasingly being targeted as a barrier to productivity, the desirability of casual employment stands only to decrease if it is
reduced or abolished in the future; Australian Council of Trade Unions, 2015; Shop Distribution & Allied Employers Association, 2010). This would prevent organisations from exploiting the existence of casual employment to reduce labour costs by denying workers of important paid benefits, such as the ability to take time off work when they are sick, or to enjoy a holiday (as some authors claim is being done; see Campbell, 2000). It should be noted that, in 2004, Unions in New South Wales did try and challenge long-term casual employment by trying for a ‘Secure Employment Test Case’ that would give “an opportunity for casual employees to convert to permanent employment after six months continuous employment” (Australian Industry Group, 2006, p. 1). This move was accepted as a test case by the Industrial Relations Commission on the basis that employers had the right to deny a transfer to permanency under ‘reasonable circumstances’. Unfortunately, this was all overruled in 2006 when the Workplace Relations Act came into place and state industrial systems were replaced by the federal one (FairWork Ombudsmen, 2009).

Improving young workers’ knowledge on their employment rights

Under most awards, casual employees are entitled to a higher rate of pay per hour (of 25%) than a permanent employee (Fair Work Ombudsman, 2014a). The findings of Study Four indicated that some young people either weren’t receiving a casual loading, or didn’t know if they were receiving it. This is supported by other Australian research which indicates that many employers do not pay their staff their entitled casual loading (Campbell, 2000). Given that the casual loading is one of the ways that workers are compensated for their lack of paid benefits, it is important that this is policed more strictly, with stronger repercussions for employers who are underpaying workers. This could include a harsh fine on top of the repayment of money owed to workers.
CHAPTER 8: CONCLUSION

A concern is that identifying employers who are underpaying staff is mostly contingent on workers themselves recognising underpayments, and this requires workers to be knowledgeable of their employment rights and entitlements in the first place. Indeed policing underpayments has become even more difficult since the replacement of awards with agreements (FairWork Ombudsmen, 2009). Research indicates that young workers’ new status in the labour market means that they are less likely to know their employment rights (McDonald et al., 2007; SA Unions, 2005; SafeWork SA, 2014b). In turn, this reduces their ability to identify if they are being paid correctly (NSW Childrens’ Commission, 2005).

Although incentives to improve young workers’ education have increased over the past decade (and includes websites and phone lines targeted specifically for these cohorts, see; FairWork Ombudsmen, 2015), it is clear that more needs to be done to assist them (SafeWork SA, 2014a; Youth Action & Policy Association, 2013). One suggestion is that basic education on employment rights, such as information on the National Employment Standards, Fair Work Act and Modern Awards, should be introduced into High School education. Currently young people receive education on other important topics, such as sexual, drug & alcohol, and road safety education; however, there is no formal system in place for educating young people on their employment rights despite the fact that almost every school-leaver is likely to engage in employment at some stage of their lives (Australian Curriculum Assessment & Reporting Authority, 2013).

Reducing job insecurity by increasing flexicurity

In Study One and Four, casual employment was found to be associated with job insecurity. In light of this, Australia may benefit from adopting policies which further promote flexicurity. Flexicurity is a European concept, originating in Denmark, which aims to “provide the right balance between flexibility and security [to] support the competitiveness of firms, increase quality and productivity at work, and help firms and workers to adapt to
economic change” (Tros, 2004, p. 2). According to the ‘golden triangle of flexicurity’, a strong economy will have a flexible labour market, a generous welfare system and active labour market policies which help to support the unemployed and return them to work as soon as possible (the flexicurity model acknowledges that unemployment is likely given the job insecurity that is derived from a flexible labour market; Tros, 2004).

Currently Australia has a weak version of this model. Its unemployment benefits are generous (although not as generous as Denmark where workers can be paid up to 90% of their original employment wage in unemployment benefits; Department of Human Services, 2015b; Tros, 2004) and while the Australian system does offer some training and support to assist the unemployed to secure work, there is scope to advance given that long-term unemployment is still common (Barringer & Sturman, 1998; Isaksson & Bellagh, 2002).

One way to make Australia more ‘flexicure’ would be to have government programs that more intensively assisted the unemployed in securing new employment, and also extended these same services to those who were casually employed (especially, for example, those feeling insecure or underemployed). It is very likely that the new labour market will be one where workers are employed for shorter periods of time, but are equipped with greater functional flexibility (or transferable skill sets), than what was seen in the labour market of previous decades (Gracia et al., 2011). Part of the governments ‘active labour market policies’ could be to improve the training of casual workers and invest in their future marketability. This may help to reduce the burden of job insecurity, as workers are less likely to experience poor health if they feel skilled enough to easily secure another position when faced with employment termination (Bidwell, 2009).

The suggestions outlined in this section have been considered very briefly and would require far more deliberation that what has been provided. However, they do inform some of
the actions that may be required to assist in making casual employment more favourable employment for workers (young and old), which is vitally important given its high prevalence in Australia.

8.4 Research Limitations

This research programme has a number of notable limitations that must be considered in relation to the reported findings. Three out of the four studies in this thesis analysed data from the SASLS. Although the use of this study was fundamental in allowing for longitudinal analysis, there are a number of limitations to the data that should be acknowledged.

Attrition and low numbers

The longitudinal nature of the study meant that attrition occurred at each annual survey time. Although an attrition analysis was conducted which indicated that drop-outs did not significantly differ on important variables such as health or employment status, there is still the possibility that the results may be biased in favour of those who are better adjusted and more responsive to surveys (Delfabbro et al., 2015).

As attrition occurred at approximately 10% each year, it also reduced the numbers of respondents that were available for analysis, especially when using later times of the dataset. Unfortunately, because this thesis assessed employment in non-students (thus requiring respondents to have finished High School) it relied on the middle and higher times of the SASLS when there was already a noticeable drop in respondents. Some of the employment groups in the studies were low, and although they were not too low to run the analysis, it is not unlikely that these small samples made it harder to detect an association between the variables, even if one did exist. The findings of this thesis should therefore be generalised with caution to the broader population of young, non-student casuals in Australia.
Another limitation to emerge from this was that the core-periphery model could not be tested to the fullest extent. The numbers were too low to establish an unemployment group, which would have been beneficial to benchmark the health of casual workers against, given that unemployment is now well established to be correlated with poor health (Wanberg, 2012). Furthermore, initial decisions to subdivide casual and permanent workers into either full-time or part-time groupings, which would have allowed for a better examination of the core-periphery health gradient, were abandoned due to small numbers. Given that underemployment was identified as a stressor by respondents in Study Four, it is likely that further classifying casual workers according to the number of hours worked would have allowed for a more sensitive examination of their health outcomes.

The use of pre-existing data

The SASLS is pre-existing data. This meant that despite a review of the literature on the topic of peripheral employment and health, and the identification of several research gaps that could be pursued, the research aims were largely restricted by what questions had been asked in the SASLS questionnaire. For example, one of the most notable weaknesses of this thesis is that it was not possible to explain why some of the associations existed. In other words, although it advances knowledge on if casual employment is related to health outcomes, it does not explain how this relationship may be conceptualised.

Despite identifying more complex theoretical models (such as the PDR model and Employment Strain model as discussed in Chapter 1; Quinlan et al., 2001a), this thesis was unable to contribute to their validation because the SASLS was not designed to include questions that addressed all the relevant components of these theoretical frameworks. Further, by making the choice to use only SASLS data for the first three studies, Study Two and Three could not be tailored to assist in the interpretation of existing studies (only Study Four could
do this). This prevented the studies from building on top of one another, which may have resulted in more comprehensive findings.

**Generalisability**

The findings of this thesis should be generalised with discretion in light of the aforementioned limitations of this study. It is also important that the findings are not generalised to older workers or to young workers in countries outside of Australia, which operate under different labour and welfare systems. Although casual employment is unique to Australia and highly unregulated, Australia has a strong safety welfare net for the unemployed and low income earners (such as the underemployed). Medical access is free and drugs are heavily subsidised for these groups, meaning that unlike other countries (such as the United States), not having employment in Australia, or working casually, does not limit accessibility to vital services (Department of Human Services, 2015b). As mentioned previously in this Chapter (see: reducing job insecurity by increasing flexicurity) Australia could be seen as operating with a weak level of ‘flexicurity’, where the negative impact of increased employment flexibility is absorbed by the security provided in welfare benefits. This in itself may act as a buffer to prevent poorer health outcomes being associated with casual workers, including young, non-students. However, it must be noted that as the Australian Government, and other Western nations continue to adopt more intense neo-liberal practices, this has also worked to erode the availability of social benefits. It is likely that future welfare practices are liable to change, and the impact that this may have on the health of all casual workers, should be closely monitored (Campbell & Brosnan, 1999).

**Exclusion of safety outcomes as a measure of health**

In comparison to the health domain, research on the safety of peripheral workers is far more consistent in its condemnation of such employment (Aronsson, 1999; Rousseau &
CHAPTER 8: CONCLUSION

Libuser, 1997; Underhill & Quinlan, 2011; Virtanen, Kivimäki, et al., 2005). This is because there is strong evidence linking peripheral workers to higher levels of workplace injury, commonly attributed to their limited knowledge of worksite practices and the difficulty of developing a strong safety culture in transient workforces, a lack of adequate training and limited ability to raise concerns about working conditions. Indeed, research by SafeWork SA indicates that in the business year of 2005-2006, casual workers - especially males - were more likely to experience a workplace fatality than were permanent workers (SafeWork SA, 2009). In light of this evidence, the findings of this thesis are limited in exploring health outcomes in their entirety given that they have focused only on self-reported health whilst excluding safety outcomes. This limitation is one that is important to note when considering the findings of this thesis. Of concern is that injured workers, such as those on Work Cover or those that are deceased, are less likely to be at work to complete surveys thus overinflating self-reports of good health.

8.5 Future Directions

Future research would be well directed at further validating some of the more complex models, which may better explain health differences between workers, without automatically assuming that all peripheral workers will be unhealthier. These models are the Employment Strain (Lewchuk et al., 2003) and PDR model (Quinlan et al., 2001b). To date, both have good evidence to support the validity of their main constructs; however, this evidence is still limited to a small number of papers and so any further investigations will only aid the understanding of their application, as well as functioning to identify potential areas of weakness, including measures that could be improved.

The findings of Study Four are suggestive of the idea that the health of casual workers will deteriorate as workers move beyond the age of 24, and when they are likely to start facing more financially intensive pressures such as buying a house or raising a family. An
important progression from this thesis is research that systematically examines other age groups to see if, and how, health in peripheral employment changes in relation to age and stage-of-life. Of particular benefit would be longitudinal research designs that are able to track young workers into later adulthood and examine how different trajectories that either keep them in casual employment, or allow them to transition into permanent employment, are associated with health outcomes. Although the analyses in this thesis did not find any significant interactions between casual employment and several moderator variables, or a relationship between long-term or involuntary casual employment and health outcomes, these avenues of research should continue to be pursued in older worker populations.

Beyond age, there is also scope to divide casual workers according to their gender (some research has been done on this but the relevant body of literature still requires further development; see Menéndez et al., 2007; Vosko, 2000), education-level, immigrant status or even psychological variables such as one’s attitudes or expectations of the future. Considering that this thesis also made the assumption that non-students differ from students engaged in casual employment, it would be interesting to examine the health of student casuals and to compare this to the current findings given that a large proportion of students in Australia simultaneously engage in casual work. Although this thesis aimed to exclusively focus only on only non-student casuals, the assumption that they are not ‘true casuals’ given their path to more skilled employment in the future, is one that is likely to be challenged and is therefore important to explore further.

Given that the findings from the quantitative and qualitative studies were somewhat contradictive, there is space to further explore the suggestions provided to explain these differences (see section titled ‘The discrepancy between the quantitative and qualitative findings’ p.158). For example, future research could examine if the economic context moderates the health of casual workers in Australia; do periods of high economic prosperity
result in casual workers who are less likely to experience poor health (namely because they are also less likely to be underemployed or to feel insecure in their casual position)? Research could also quantitatively examine some of the protective factors identified in Study Four (such as living at home with parents and positive attitudes for the future) to see if these variables were associated with health status, in interaction with employment status. Finally, given that only casual workers were interviewed in this thesis, an interesting study would be to interview casual and permanent workers from the same organisation to compare and contrast how each employment group appraised their health.

It is also clear that more longitudinal research is needed on the health effects of casual employment, and peripheral employment more generally. A lot of research has been dedicated to identifying transitions in and out of casual employment, and research has confirmed that casual employees are more likely to transition into unemployment than are permanent employees - which is unsurprising given its insecure nature (Benach et al., 2002). However, less is known about how these transitions affect workers mental and physical health and this is another space that future research could occupy.

8.6 Concluding Statement

The series of studies presented in this thesis contribute to understandings of casual employment and its relationship with health in young Australians aged 18-24 who are not-studying. The quantitative results indicated that casual employment does not result in significantly different health outcomes in young, non-students when compared to their peers in permanent employment. However, the qualitative analysis did not align with these findings and highlighted some negative health outcomes experienced by young casuals, including stress, sleeplessness, social isolation and a reduced ability to speak out over unsafe working conditions. These were partly buffered by protective factors that are likely to be age-specific
to young people, such as living at home with parents and the belief that casual employment is only short–term.

The null findings of the quantitative studies mean that the core-periphery model, which suggests that core workers should experience better health outcomes than peripheral workers, and which provided the theoretical framework for this thesis, was not strongly supported. Instead, this research programme indicates that health outcomes are likely to be more complex than taxonomic employment position only, and that a range of other factors, including ones stage-of-life, and access to protective factors, are likely to converge to influence health outcomes. The Employment Strain model (Lewchuk et al., 2003) and the PDR model (Quinlan et al., 2001b), which show promise for being more sensitive to these differences, may offer better theoretical frameworks in which to study worker health. Future research is encouraged to assist in further validating and refining these models.


REFERENCES


APPENDIX A: SOUTH AUSTRALIA SCHOOL LEAVERS STUDY
COMPLETE QUESTIONNAIRE

INFORMATION SHEET

The University of South Australia’s longitudinal investigation of school-leavers.

Dear Respondent,

In Year 10 you completed a questionnaire at your school for the School of Psychology at the University of South Australia. The research team responsible for this investigation would like to take this opportunity to thank you again for the valuable information we gained from your participation in the study.

It has now come to that time of the year that we would like to invite you to participate once again in this very important study. The research project is aimed at producing an understanding of work experiences and well-being, including an investigation of what predicts successful employment, and how people cope with unfavourable working conditions.

Similar to the questionnaire you completed previously, this questionnaire asks questions about your health and well-being, and any experiences you may have had with employment. The questionnaire should again take approximately 30 – 40 minutes to complete.

Once you have completed the survey, please post it back to us in the envelope that has been supplied. As the envelope is “reply-paid”, you do not need to buy a stamp, just place it straight into a letterbox.

PRIZE CHANGE: Now EVERYONE WILL RECEIVE $10.00 when they complete the survey and return it to us in the envelope supplied. The money will be sent to your home address

You do not have to answer any questions you do not want to and are free to withdraw from the study at any time. All information collected as part of the study will remain confidential and will be retained for seven years at the School of Psychology at the University of South Australia. If you have any concerns or wish to discuss the study further you may contact Professor Tony Winefield on (08) 8302 2156; or Sarah Anderson on (08) 8302 1077.

If you wish to discuss aspects of the study with someone not directly involved, you may contact the UniSA Ethics Officer, Ms Vicki Allen on 8302 3118; email: vicki.allen@unisa.edu.au
The University of South Australia’s longitudinal investigation of school-leavers.

This is a questionnaire to find out about your views on what is happening to you now, and what you expect from the future, especially with regard to employment.

Please read the instructions given for each question, and try and answer them as best you can. There are no right or wrong answers to any of the questions. The questionnaire should take approximately 30 minutes to complete.

All replies will be treated in the strictest confidence.

All prizes will be mailed to the address given on the consent form.

NOW EVERYBODY RECEIVES $10 WHEN THEY SENDBACK THEIR COMPLETED SURVEY. THIS IS PAYMENT FOR THE TIME TAKEN TO COMPLETE THE SURVEY AND RECOGNITION OF YOUR CONTRIBUTION TO THIS IMPORTANT STUDY

If you have a new address or expect to be moving soon, please write your new address below:

If you have an email address - write it below:

Email Address: ________________________________
*I give my consent to complete the following survey

(Please sign here) ........................................

**A: Demographics**

1. Are you still at school?
   - Yes □ No □ (if no go to Q4)

2. If yes, name of school .........................
   Year at school......................

3. If you are still at school, are you intending to finish school at the end of Year 12/13?
   - Yes □ (go to Q6)
   - No □ (go to Q6)

4. Since leaving school have you been?
   a) mostly employed □
   b) mostly unemployed □
   c) in and out of employment □

5. Which of the following best describes your present situation? (Please tick one)
   a) employed full-time ......................
   b) employed part-time ......................
   c) unemployed .............................
   d) full-time student ......................
   e) home duties ..............................
   f) other (please say) ......................

6. Father’s occupation ..........................................................

7. Mother’s occupation ..........................................................

8. Do you live with both parents in the same house?
   - Yes □ (go to Q9) No □

   a. Are you living independently (have you moved out of home) from your parents/guardians?
   - Yes □ No □

9. The rate of unemployment is high at the moment. Are any of your immediate family (e.g., brother, sister, parents) unemployed at present? (do not include members of your family who are studying or are at school)
   - Yes □ No □

   If yes, who? ...........................................

**B: Health and Well-being**

10. During the last 12 months would you say you were (circle one number only)?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Very healthy most of the time</td>
<td>1</td>
</tr>
<tr>
<td>Quite healthy most of the time</td>
<td>2</td>
</tr>
<tr>
<td>Sometimes well, sometimes not</td>
<td>3</td>
</tr>
<tr>
<td>Often not very well</td>
<td>4</td>
</tr>
<tr>
<td>Nearly always ill</td>
<td>5</td>
</tr>
</tbody>
</table>

11. How would you rate your physical health in general? (circle one number only)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>1</td>
</tr>
<tr>
<td>Good</td>
<td>2</td>
</tr>
<tr>
<td>Medium</td>
<td>3</td>
</tr>
<tr>
<td>Poor</td>
<td>4</td>
</tr>
</tbody>
</table>

12. Do you consider yourself to be? (circle one number only)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Very underweight</td>
<td>1</td>
</tr>
<tr>
<td>Somewhat underweight</td>
<td>2</td>
</tr>
<tr>
<td>Normal weight</td>
<td>3</td>
</tr>
<tr>
<td>Somewhat overweight</td>
<td>4</td>
</tr>
<tr>
<td>Very overweight</td>
<td>5</td>
</tr>
</tbody>
</table>
13. During the last week how often have you undertaken any vigorous physical exercise (e.g., running, swimming, sport, etc.), lasting for 20 minutes or longer?

Number of times

14. How often do health problems keep you from doing the kinds of things people of your age do? (circle one number only)

<table>
<thead>
<tr>
<th>All the time</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite a lot of the time</td>
<td>2</td>
</tr>
<tr>
<td>Some of the time</td>
<td>3</td>
</tr>
<tr>
<td>None of the time</td>
<td>4</td>
</tr>
</tbody>
</table>

15. Do you have any physical health problems?

Yes ☐ No ☐

If YES, could you please specify what they are?

16. How often do you usually drink alcohol? (circle one number only)

| Don’t drink alcohol (go to Q 18) | 0 |
| Less than once per week | 1 |
| 1-2 days per week | 2 |
| 3-4 days per week | 3 |
| 5-6 days per week | 4 |
| Every day | 5 |

17. A Standard drink is equivalent to a schooner of full-strength beer, a small glass of wine, or a shot of spirits. On days when you drink alcohol, how many standard drinks do you usually have?

Number of drinks

18. Do you smoke cigarettes?

No ☐ (go to Q 19)
Yes ☐

If YES: how many cigarettes would you smoke a day?

Number of cigarettes

19. Do you regularly use any drugs, tablets or medicines prescribed by a doctor?

No ☐ (go to Q 20)
Yes ☐

If YES, what are they for? Can you name any of them? (tick as many as you like)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Name of tablet or medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention problems</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td></td>
</tr>
<tr>
<td>Epilepsy</td>
<td></td>
</tr>
<tr>
<td>Asthma or allergies</td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
</tr>
</tbody>
</table>

20. Do you regularly use any over-the-counter drugs, tablets or medicines NOT prescribed by a doctor?

No ☐ (go to Q 21)
Yes ☐

If YES, what type of drug? (tick as many apply)

| Pain-killers | |
| Anti-depressants | |
| Tranquillisers or sleeping tablets | |
| Ritalin, speed, etc. | |
| Other (please specify) | |

21. Do you smoke/use marijuana?

No ☐ (go to Q 22)
Yes ☐

If YES: how many joints, cones, bongs would you smoke in a day?

Number
APPENDIX A: SASLS

22. Do you use any other drugs?

No [ ] (go to Q 23)

Yes [ ]

**IF YES, what type of drug? (tick as many as apply)**

<table>
<thead>
<tr>
<th>Drug</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecstasy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cocaine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

23. By placing a tick in one box for each description, show how often you feel:

<table>
<thead>
<tr>
<th></th>
<th>Almost never</th>
<th>Sometimes</th>
<th>Quite often</th>
<th>Almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bored</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Lonely</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Angry with self</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Angry with society</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Happy</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Helpless</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Depressed</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

24. By placing a number in the box for each of the following sentences, show how much you agree or disagree with each one.

<table>
<thead>
<tr>
<th>Number</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Agree</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Disagree</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Number (1–4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that I'm a person of worth, at least on an equal basis with others</td>
<td>[ ]</td>
</tr>
<tr>
<td>I feel that I have a number of good qualities.</td>
<td>[ ]</td>
</tr>
<tr>
<td>All in all, I'm inclined to feel that I am a failure.</td>
<td>[ ]</td>
</tr>
<tr>
<td>I am able to do things as well as other people.</td>
<td>[ ]</td>
</tr>
<tr>
<td>I feel I do not have too much to be proud of.</td>
<td>[ ]</td>
</tr>
<tr>
<td>I take a positive attitude towards myself.</td>
<td>[ ]</td>
</tr>
<tr>
<td>On the whole, I am satisfied with myself.</td>
<td>[ ]</td>
</tr>
<tr>
<td>I wish I could have more respect for myself.</td>
<td>[ ]</td>
</tr>
<tr>
<td>I certainly feel useless at times.</td>
<td>[ ]</td>
</tr>
<tr>
<td>At times, I think I'm no good at all.</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

25. Have any important events occurred in your life during the last 3 months that have significantly increased how happy you feel? (e.g., sporting triumph, good grades, getting a girl-friend/boy-friend).

Yes [ ] No [ ]

**If YES: please describe in words the most important one.**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26. Have any important events occurred in your life during the last 3 months that have caused you significant unhappiness or worry? e.g., bad grades, being bullied, losing a friend, fight with parents, etc.

Yes [ ] No [ ]

**If YES: please describe in words the most important one.**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27. We would like to know how your general health has been in general over the past few weeks. In the items that follow, please tick the answer that you think most applies to you. Remember that we want to know about present and recent complaints, not those you have had in the past. Please tick one response category only for each item.

**a. Been able to concentrate on whatever you’re doing.**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Better than usual.</td>
<td>[ ]</td>
</tr>
<tr>
<td>2. Same as usual.</td>
<td>[ ]</td>
</tr>
<tr>
<td>3. Less than usual.</td>
<td>[ ]</td>
</tr>
<tr>
<td>4. Much less than usual</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
### APPENDIX A: SASLS

#### b. Lost much sleep over worry?
- 1. Not at all.
- 2. No more than usual.
- 3. Rather more than usual.
- 4. Much more than usual.

#### i. Been feeling unhappy and depressed?
- 1. Not at all.
- 2. No more than usual.
- 3. Rather more than usual.
- 4. Much more than usual.

#### c. Felt you were playing a useful part in things?
- 1. More so than usual.
- 2. Same as usual.
- 3. Less than usual.
- 4. Much less than usual.

#### j. Been losing confidence in yourself?
- 1. Not at all.
- 2. No more than usual.
- 3. Rather more than usual.
- 4. Much more than usual.

#### d. Felt capable of making decisions about things?
- 1. More so than usual.
- 2. Same as usual.
- 3. Less than usual.
- 4. Much less capable.

#### k. Been thinking of yourself as a worthless person?
- 1. Not at all.
- 2. No more than usual.
- 3. Rather more than usual.
- 4. Much more than usual.

#### e. Felt constantly under strain?
- 1. Much less than usual.
- 2. Less than usual.
- 3. Same as usual.
- 4. More so than usual.

#### l. Been feeling reasonably happy, all things considered?
- 1. More so than usual.
- 2. About same as usual.
- 3. Less so than usual.
- 4. Much less than usual.

#### f. Felt you couldn’t overcome your difficulties?
- 1. Not at all.
- 2. No more than usual.
- 3. Rather more than usual.
- 4. Much more than usual.

#### g. Been able to enjoy your normal day-to-day activities?
- 1. Much more than usual.
- 2. Rather more than usual.
- 3. No more than usual.
- 4. Not at all.
28. Do you agree or disagree with the following sentences? (tick only one box)

<table>
<thead>
<tr>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next to health, money is the most important thing in life.</td>
<td></td>
</tr>
<tr>
<td>You sometimes can’t help wondering whether anything is worthwhile anymore.</td>
<td></td>
</tr>
<tr>
<td>To make money, there are no right and wrong way anymore, only easy ways and hard ways.</td>
<td></td>
</tr>
<tr>
<td>Nowadays, a person has to live pretty much for today and let tomorrow take care of itself.</td>
<td></td>
</tr>
<tr>
<td>In spite of what some people say, the lot of the average person is getting worse, not better.</td>
<td></td>
</tr>
<tr>
<td>It’s hardly fair to bring a child into the world with the way things are for the future.</td>
<td></td>
</tr>
<tr>
<td>Most public officials are not really interested in the problems of the average person.</td>
<td></td>
</tr>
<tr>
<td>These days a person doesn’t really know who she or he can count on.</td>
<td></td>
</tr>
<tr>
<td>Most people don’t really care what happens to the next (person).</td>
<td></td>
</tr>
</tbody>
</table>

29. Please answer yes or no (tick for both EVER + in the last 6 months)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you EVER had thoughts of killing yourself?</td>
<td></td>
</tr>
<tr>
<td>➞ In the last 6 months?</td>
<td></td>
</tr>
<tr>
<td>Have you EVER had persistent thoughts of killing yourself?</td>
<td></td>
</tr>
<tr>
<td>➞ In the last 6 months?</td>
<td></td>
</tr>
<tr>
<td>Have you EVER made plans to kill yourself?</td>
<td></td>
</tr>
<tr>
<td>➞ In the last 6 months?</td>
<td></td>
</tr>
<tr>
<td>Have you EVER attempted suicide?</td>
<td></td>
</tr>
<tr>
<td>➞ In the last 6 months?</td>
<td></td>
</tr>
</tbody>
</table>

30. Since you completed the last survey, have you known anyone who has attempted suicide?

Yes [ ] No [ ]

If YES: was it? (tick as many as apply)

| Parent |  |
| Other relative |  |
| Friend |  |
| Acquaintance |  |

31. Since you completed the last survey, have you known anyone who has committed suicide?

Yes [ ] No [ ]

If YES: was it? (tick as many as apply)

| Parent |  |
| Other relative |  |
| Friend |  |
| Acquaintance |  |

32. For each of the following, please rate how satisfied you feel right now.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely dissatisfied</td>
<td>Moderately dissatisfied</td>
<td>Not sure</td>
<td>Moderately satisfied</td>
<td>Extremely satisfied</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The education you have received</td>
<td></td>
</tr>
<tr>
<td>How other students treat you (only answer if you are still at school)</td>
<td></td>
</tr>
<tr>
<td>How you get on with your friends, Your family life</td>
<td></td>
</tr>
<tr>
<td>How you get on with your teachers (only answer if you are still at school)</td>
<td></td>
</tr>
<tr>
<td>The present Government</td>
<td></td>
</tr>
<tr>
<td>Your life as a whole</td>
<td></td>
</tr>
</tbody>
</table>
C: Leisure activities
33. How much of your spare time do you spend doing each of the following?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>None or very little</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A lot of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doing nothing in particular</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching TV programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities by yourself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities with other people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some specific activities with other people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Going to clubs, parties, movies, visiting friends, eating out, cooking, watching videos</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing sport or training, ride-bikes, hike, go walking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skating, bowling, using a scooter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing video or computer games</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singing, playing music</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some specific activities that you might do alone.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read, write, or keep a diary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artistic hobbies or collecting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play an instrument</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listen to music</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watch TV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surf the net</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play video games, computer games</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

34. Gambling. How often have you gambled on any of the following during the last 12 months?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 times per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/year up to monthly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3 times per month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly or more often</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Card games, e.g., poker, blackjack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poker-machines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racing (horses, dogs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sporting events</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lottery games (e.g., Keno, Crosslotto, Powerball, Pools)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bingo or scratch tickets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet gambling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

35. If you gambled once per week on any type of gambling in Q34, could you please tick a box for each question that follows (yes/no)?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you been pre-occupied with gambling, e.g., with reliving previous gambling experiences, thinking about gambling?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you needed to gamble with increasing amounts of money to achieve the desired excitement?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you been restless or irritable when you have tried to cut down or stop gambling?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you gambled as a way of escaping from problems or relieving anxiety or depression?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you returned another day to win back money you lost while gambling?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you often spent more money on gambling than you intended?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you spent your lunch or fare money, or stolen money, to gamble?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you fallen out with your family or disrupted your studies, e.g., wagged school, because of gambling?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you lied to family members or people close to you about how much you gamble?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

36a. Does anyone close to you have a problem with gambling?

Yes [ ] No [ ]

If YES: was it? (tick as many as apply)

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Friend</td>
</tr>
<tr>
<td>Parent</td>
</tr>
<tr>
<td>Acquaintance</td>
</tr>
<tr>
<td>Other relative</td>
</tr>
</tbody>
</table>

8
36b. Have you ever done any of the following? If so, how did you do it by yourself or with the help of other adults? Circle as appropriate

<table>
<thead>
<tr>
<th>By Yourself</th>
<th>With the help of other adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gambled at the Casino before you turned 18</td>
<td>No / yes</td>
</tr>
<tr>
<td>Gambled on TAB racing before you turned 18</td>
<td>No / yes</td>
</tr>
<tr>
<td>Played the lotteries or keno before 16</td>
<td>No / yes</td>
</tr>
<tr>
<td>Played poker machines at a hotel or club</td>
<td>No / yes</td>
</tr>
</tbody>
</table>

36c. Where do you personally buy keno, lottery or scratch tickets when you gamble? (Tick)

<table>
<thead>
<tr>
<th>Lottery</th>
<th>Keno</th>
<th>Scratch Tickets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lottery outlet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newsagent (not in a shopping centre)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At a hotel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

36d. Show how much you agree or disagree with the following sentences by placing a number in the box for each of the following:

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- You can lose all your money gambling
- Gamblers usually lose in the long-run
- You can make a living from gambling
- Gambling is a good way to get rich quickly
- Most of my friends gamble
- Most people in my family gamble
- I can’t wait to turn 18 so I can go to adult gambling venues (if not 18 already)

D: Work

37. During the last year, did you engage in any type of work?

- No [ ] (go to Q 38)
- Yes [ ]

a. If ‘Yes’ what was your status of employment? (tick one):

- Casual / Temporary
- Part-time
- Full-time

b. How often did you work? (tick one):

- Weekly or more often
- 1-3 times per month
- Less often

c. How stressful did you find your employment? (please circle one number only)

- Not at all stressful: 1
- Slightly stressful: 2
- Moderately stressful: 3
- Quite stressful: 4
- Extremely stressful: 5

d. How do you feel about your work overall?

- Extremely dissatisfied: 1
- Slightly dissatisfied: 2
- Neither satisfied nor dissatisfied: 3
- Quite satisfied: 4
- Extremely satisfied: 5

38. In the year ahead do you expect to engage in casual, part-time or full-time paid work?

- Yes [ ]
- No [ ]
APPENDIX A: SASLS

39. Was your work temporary/casual or permanent? (Please tick one)
   - Temporary/Casual
   - Permanent
      (go to question 39b)

39a. Would you prefer a permanent job if there was one available?
   - Yes
   - No

39b. Was you work full-time hours (over 35 hours per week) or part-time hours (less than 35 hours per week)?
   - Full-time
   - Part-time

39c. Would you prefer full-time hours if you were employed part-time?
   - Yes
   - No

40. What is your job?

40a. Why did you get into this area of work?

41. How long have you had this job?
   ……………………………………………………………(months)

42. Roughly how long did it take you to get this job after leaving school?
   ……………………………………………………………(months)

43. Approximately how many jobs did you apply for before you obtained this job? (please write a number in the box)

44. What is the reason you were able to get this job? (please circle one number only)
   - Your abilities or intelligence
   - You tried hard
   - The situation you are in
   - Good luck

45. The following items deal with various aspects of your job. Please show how satisfied or dissatisfied you feel with each of these features of your present job, by placing an appropriate number after each statement.

   1=extremely dissatisfied
   2=very dissatisfied
   3=moderately dissatisfied
   4=not sure
   5=moderately satisfied
   6=very satisfied
   7=extremely satisfied

<table>
<thead>
<tr>
<th>Number (1-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The physical work conditions</td>
</tr>
<tr>
<td>The freedom to choose your own method of working</td>
</tr>
<tr>
<td>Your fellow workers</td>
</tr>
<tr>
<td>The recognition you get for good work</td>
</tr>
<tr>
<td>Your immediate boss</td>
</tr>
<tr>
<td>The amount of responsibility you are given</td>
</tr>
<tr>
<td>Your rate of pay</td>
</tr>
<tr>
<td>Your opportunity to use your abilities</td>
</tr>
<tr>
<td>Industrial relations between management and workers in your firm</td>
</tr>
<tr>
<td>Your chance of promotion</td>
</tr>
<tr>
<td>The way your firm is managed</td>
</tr>
<tr>
<td>The attention paid to suggestions you make</td>
</tr>
<tr>
<td>Your hours of work</td>
</tr>
<tr>
<td>The amount of variety in your job</td>
</tr>
<tr>
<td>Your job security</td>
</tr>
<tr>
<td>Taking everything into consideration, how do you feel about your job as a whole?</td>
</tr>
</tbody>
</table>
46. Bullying at work means that you feel upset/bad as a result of being picked on.

To what extent does this definition describe your current work situation? (Please circle one)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>To a very small extent</td>
<td>2</td>
</tr>
<tr>
<td>Not very much</td>
<td>3</td>
</tr>
<tr>
<td>Some-what</td>
<td>4</td>
</tr>
<tr>
<td>To some extent</td>
<td>5</td>
</tr>
<tr>
<td>To a large extent</td>
<td>6</td>
</tr>
</tbody>
</table>

47. Formal volunteering work consists of unpaid work carried out for an organisation (e.g., Welfare, church, social and sports clubs, councils, schools, CFS, etc.).

During the last year have you engaged in any volunteer work?

- No [ ] (go to Q 52)
- Yes [ ]

a. If ‘Yes’ how often was it (tick one):

<table>
<thead>
<tr>
<th>Weekly or more often</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 times per month</td>
<td></td>
</tr>
<tr>
<td>Less often</td>
<td></td>
</tr>
</tbody>
</table>

48. How long have you been doing volunteer work (in years)? .......... Years

49. On average, how many hours per week did you spend on the volunteer work? .......... Hrs/week

50. How do you feel about your volunteer work overall?

| Extremely dissatisfied | 1 |
| Slightly dissatisfied | 2 |
| Neither satisfied nor dissatisfied | 3 |
| Quite satisfied | 4 |
| Extremely satisfied | 5 |

51. How stressful do you find the volunteer work?

| Not at all stressful | 1 |
| Slightly stressful | 2 |
| Moderately stressful | 3 |
| Quite stressful | 4 |
| Extremely stressful | 5 |

52. The following items refer to your attitudes towards paid work. Please indicate by numbering each one, to what extent you agree or disagree.

<table>
<thead>
<tr>
<th>Agree a lot</th>
<th>Agree a little</th>
<th>not sure</th>
<th>Disagree a little</th>
<th>Disagree a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>If I was out of work, I wouldn’t feel right.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Having a job is important to me.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Work will make me feel I’m doing something with my life.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>If I could get more money on social security than by working, I would still want to work.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>I wouldn’t like being out of work.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>I would soon get bored if I had no work to do.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

53. Friends

<table>
<thead>
<tr>
<th>How many close friends do you have? (write in box a number 0-30)</th>
<th>Number Up to 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many people in your class/workplace don’t you like? (write a number 0-30)</td>
<td></td>
</tr>
<tr>
<td>How many people in your class/workplace don’t like you? (write a number 0-30)</td>
<td></td>
</tr>
</tbody>
</table>

54. Have you had a girl-friend or boy-friend during the last 12 months?

- Yes [ ]
- No [ ]

If ‘No’, how confident do you feel that you will have some one in your life in the near future? (tick one)

| Not confident at all | |
| Somewhat confident  | |
| Quite confident | |
| Very confident | |
55. How satisfied are you with your physical appearance? (tick one)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very dissatisfied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissatisfied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neither dissatisfied nor satisfied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very satisfied</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

56. How strongly do you agree or disagree with the following statements? Please insert a number 1-5 next to each based upon the following categories.

1= Strongly disagree/ definitely false
2= Disagree/ mostly false
3= Neutral about the statement, you cannot decide, or the statement is equally true or false
4= Agree/mostly true
5= Strongly agree/definitely true

<table>
<thead>
<tr>
<th>Statement</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often feel inferior to others.</td>
<td></td>
</tr>
<tr>
<td>I laugh easily.</td>
<td></td>
</tr>
<tr>
<td>When I’m under a lot of stress, sometimes I feel like I’m going to pieces.</td>
<td></td>
</tr>
<tr>
<td>I often feel tense and jittery.</td>
<td></td>
</tr>
<tr>
<td>I like to be where the action is.</td>
<td></td>
</tr>
<tr>
<td>Sometimes I feel completely worthless.</td>
<td></td>
</tr>
<tr>
<td>I often feel as if I’m bursting with energy.</td>
<td></td>
</tr>
<tr>
<td>I often get angry at the way people treat me.</td>
<td></td>
</tr>
<tr>
<td>Too often, when things go wrong, I get discouraged and feel like giving up.</td>
<td></td>
</tr>
<tr>
<td>My life is fast-paced.</td>
<td></td>
</tr>
<tr>
<td>I often feel helpless and want some one else to solve my problems.</td>
<td></td>
</tr>
<tr>
<td>At times I have been so ashamed I just wanted to hide.</td>
<td></td>
</tr>
</tbody>
</table>

57. Please answer the following questions (tick either YES or NO)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you often get into a jam because you do things without thinking?</td>
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<tr>
<td>Do you usually think carefully before doing things?</td>
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<tr>
<td>Do you get so carried with new exciting ideas that you never think of the possible snags?</td>
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<tr>
<td>Do you prefer to ‘sleep on it’ before making decisions?</td>
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<tr>
<td>Do you usually make you mind up quickly?</td>
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</table>

58. The following are ways people react to various difficult, stressful, or upsetting situations.

Please write in a number 1, 2, 3, 4 or 5 for each item to indicate how much you engage in these activities when you in this type of situation.

<table>
<thead>
<tr>
<th>Number</th>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Very much</th>
</tr>
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<tbody>
<tr>
<td>Feel anxious about not being able to cope.</td>
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<tr>
<td>Become very tense.</td>
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<td>Blame myself for being too emotional about the situation.</td>
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<tr>
<td>Become very upset.</td>
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<td>Determine a course of action and follow it.</td>
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<tr>
<td>Blame myself for not knowing what to do.</td>
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<tr>
<td>Work to understand the situation.</td>
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<td>Take corrective action immediately.</td>
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<tr>
<td>Think about the event and learn from my mistakes.</td>
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<tr>
<td>Worry about what I’m going to do.</td>
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<tr>
<td>Analyse my problem before reacting.</td>
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<td>Get control of the situation.</td>
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<tr>
<td>Make an extra effort to get things done.</td>
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<tr>
<td>Try to be organised so I can be on top of the situation.</td>
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59. For each of the statements below, please write in a number corresponding to how closely this describes your immediate family?

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<tr>
<th></th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>Strongly agree</td>
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<td></td>
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<tr>
<td>Agree</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td></td>
<td></td>
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</table>

- In times of crisis we can turn to each other.
- We can talk to each other when we feel sad.
- People in our family are accepted for who they are.
- In our family we show our feelings for each other.
- In our family we feel accepted for what we are.
- In our family we can tell each other secrets.
- In our family we don’t get along well together.

60. Listed below are some statements that people may make about themselves. Please read the list carefully and indicate how much you agree with each statement. Please insert a number next to each one based upon the categories below. Please answer every item. If you are not sure, respond according to whichever is most true in your case.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>Strongly agree</td>
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<tr>
<td>Agree</td>
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<tr>
<td>Disagree</td>
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</tr>
<tr>
<td>Strongly disagree</td>
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</table>

- I have enough money to meet my personal needs.
- I can cope with financial emergencies.
- I can replace things which are worn out.
- I am quite well off financially compared to others in a similar position.
- I am under strain as far as money is concerned.
- My income restricts my choice of housing/living arrangements.
- The cost of local travel keeps me at home.
- I can afford to have a night out.
- I cannot enjoy my social life because I am not able to pay entrance fees or membership fees.
- I do not like to go out because I do not have enough decent clothes.
- I would like to be able to afford more outings.
- I worry about being able to afford occasions like holidays, birthdays, and Christmas.

P.T.O
61. Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number after each statement.

1=strongly disagree  
2=disagree  
3=slightly disagree  
4=neither agree nor disagree  
5=slightly agree  
6=agree  
7=strongly agree

<table>
<thead>
<tr>
<th>Item</th>
<th>Number 1-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>In most ways my life is close to my ideal.</td>
<td></td>
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<tr>
<td>The conditions of my life are excellent</td>
<td></td>
</tr>
<tr>
<td>I am satisfied with my life.</td>
<td></td>
</tr>
<tr>
<td>So far I have gotten the important things I want in life.</td>
<td></td>
</tr>
<tr>
<td>If I could live my life over, I would change almost nothing.</td>
<td></td>
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Thank you very much for taking part in the study – remember to post this back to us in the reply-paid envelope supplied (no stamp needed)

62. Have you any further comment to make about what the future holds for you with respect to employment?

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Dear Respondent,

My name is Natalie Matthews and I am a PhD student at the School of Psychology, University of Adelaide. My PhD topic aims to examine the health of young, non-student casual employees in South Australia. Having undertaken some initial studies using surveys, I now want to understand this topic in more depth by conducting interviews with young, casual workers who aren’t engaged in any form of study.

Thank you for agreeing to participate in this interview. Your participation is not only vital for the completion of my study, but it will also help to provide important information on casual employees that may be used in conjunction with other information to inform future policy decisions.

The main purpose of this interview is to establish a realistic appreciation of what it is like to work as a casual employee. You may have heard stories about friends or relatives in this form of work, or even heard arguments for or against casual employment in the news (which you are free to discuss). However, this study is mainly about your own personal experiences, both positive and negative, as a casual worker. We encourage you to be as detailed and open as possible so that we can get the most accurate understanding of your experiences. There are no right or wrong answers to the questions that you will be asked. Sometimes I may ask additional questions to what is listed on this sheet, and this doesn’t mean you have answered a question incorrectly, but rather that I want to pursue more information on the point that you are making.

If at any time you feel uncomfortable when answering a question, you can simply ask me to move to the next question. You are also free to request to terminate the interview at any time, if you decide that you no longer wish to participate in this study. As I understand that for some people, this interview may cause feelings of stress or sadness, included in this information sheet is the number for services (such as LifeLine) that you can contact to assist you in coping with some of these emotions.

Everything that you say in this interview will remain totally confidential, and in any future research publications that arise from this data both you, and the organisation that you work for, will remain anonymous. My findings from this study will also be sent to you for your viewing.

Do you have any questions before we begin?

Interview Questions
1. **General questions about your background**

   a. *How old are you? ________________ years*

   b. *Where were you born? __________________________*

   c. *What are your current living arrangements?*

   - [ ] At home with parents / caregiver
   - [ ] With partner
   - [ ] With friends
   - [ ] On my own
   - [ ] Share accommodation / boarding house
   - [ ] Other (please specify)

   d. *What is the ownership status of your residence?*

   - [ ] Family owned
   - [ ] Personally owned
   - [ ] Housing trust
   - [ ] Private rental
   - [ ] Public rental
   - [ ] Other (please specify)

   e. *How many adults live in your house? ____________________________*

   f. *How many children (<18) live your house? ____________________________*

   g. *What is your current relationship status?*

   - [ ] Single / Never married
   - [ ] In a relationship / De facto
   - [ ] Engaged/Married
   - [ ] Divorced / Widowed
   - [ ] Other (please specify)

   h. *What is your principal source of income?*

   - [ ] My wages / salary
   - [ ] My partners wages / salary
   - [ ] My parents/ relatives wages / salary
   - [ ] Government payments
   - [ ] Other (please specify)

   i. *How many adults are dependent on your income? ____________________________*
APPENDIX B: INTERVIEW SCHEDULE

j. How many children are dependent on your income? ______________________________

k. What is your highest level of education?

☐ Yr.10 or 11
☐ TAFE qualification
☐ Bachelor’s degree
☐ Other (please specify)

☐ Yr. 12
☐ Trade certificate
☐ Post graduate qualification

____________________________________

2. General questions about your employment

a. In what industry are you currently employed?

☐ Agriculture, forestry and fishing
☐ Manufacturing
☐ Construction
☐ Retail trade
☐ Transport, postal and warehousing
☐ Information media and telecommunications
☐ Financial and insurance services
☐ Rental, hiring and real estate services
☐ Health care and social assistance
☐ Other (please specify)

____________________________________

b. How many jobs do you currently hold? ______________________________

c. What is the official classification of your current employment (If you hold more than one job please discuss the position that you have held for a longer period of time)?

☐ Casual full-time
☐ Casual part-time
☐ Other (please specify)

____________________________________

d. How long have you been working in this position?
APPENDIX B: INTERVIEW SCHEDULE

Years ________ Months________

e. On average, how many hours do you work per week?

- 40+
- 20 and under
- 20-40
- It varies (please specify)

f. On average, how many hours a week do you work after 5pm, or on weekends (please specify)

g. Do you have a fixed or variable roster?

- Fixed
- Variable

h. What was your employment status prior to your current position?

- Employed previously
- Studying at High School
- Studying at TAFE
- Studying at University
- Unemployed previously
- Other (please specify)

i. If you were employed previously was it in a casual or permanent position?

- Casual
- Permanent

j. What factors led to you accepting your current position?

- It was either this job or unemployment
- Don’t want permanent work / only looking for a short term position
- Suits my lifestyle
- Like the people
- Flexible roster / hours
- Need the money
- Believe it will lead to permanent employment
- Want to gain skills / experience in this industry
- Offers better pay than other jobs
- Like the organisation
- Other (please specify)

k. Approximately what % of the workforce in your organisation is employed casually?
APPENDIX B: INTERVIEW SCHEDULE

| □ Below 20% | □ 20% - 50% |
| □ 50% - 80% | □ Over 80% |
| □ I don’t know | □ Other (please specify) |

1. Do you feel that your current role aligns with your level of education / skills?
   □ Yes           □ No

3. Questions relating to your perceptions of casual employment and permanent employment

   a. What do you understand about the difference between casual and permanent employment?

   b. Would you prefer to be employed permanently in your current position? Why / Why not?

   c. In your opinion what are the perceived advantages of working casually compared to permanently?

   d. In your opinion what are the perceived disadvantages of working casually compared to permanently?

4. Questions relating to your experiences in casual employment

   a. Does casual employment fit in with your desired lifestyle? Why / Why not?

   b. Are you satisfied with your current hours and roster? Why / Why not? (Prompt for discussion of flexibility)
APPENDIX B: INTERVIEW SCHEDULE

c. Do you feel secure in your current position? Why / Why not?

d. Do you feel satisfied in your current position? Why / Why not?

e. Do you know what a casual loading is? Do you receive one? If NO: Do you know why you are not receiving a casual loading? If YES: do you feel that the casual loading you receive helps you to better deal with unpaid sick days / holidays? Why / Why not?

f. How does your personal situation affect your ability to engage in casual employment?

E.g. how do factors such as your living arrangements, financial commitments etc affect your ability to do casual work?

g. Does being younger affect your ability to engage in casual employment (e.g. harder or easier than if you were older)? Why / Why not?

h. What opportunities do you get for training and development in your current role?

5. Questions relating to your current health

a. How would you describe your physical and mental health at the present time?

b. Do you think that casual employment has an effect on your physical health? Why / Why not?

c. Do you think that casual employment has an effect on your mental health? Why / Why not?

d. Do you think that your health would be any different if you were employed permanently? Why / Why not?
6. **Questions relating to future aspirations**

   a. *Where would you like to be in 10 years time in relation to your career?*
      
      *E.g. Be a manager, have more / less hours, be in a different industry, be employed part-time or permanently etc.*

   b. *Where would you like to be in 10 years time in relation to your family life?*
      
      *E.g. Be married, have children, live overseas etc*

   c. *Where would you like to be in 10 years time in relation to your financial position?*
      
      *E.g. Own a house, be debt free, have a car etc*

   d. *How well do you feel your current position puts you on the right path to achieving these goals? Please explain.*

**Is there anything else on this topic that you would like to add that will help me to understand better your experience as a casual employee?**