Self Determination Theory and Employed Job Search

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Abstract: Self Determination Theory (SDT) predicts that employees who use extrinsic motivation to search for work are less successful and subsequently experience lower psychological wellbeing than their counterparts who use intrinsic motivation. Using Australian labour market data, we find strong support for SDT. We find that workers who hold casual employment or who are underemployed (i.e. who have extrinsic motives to search for work) are less likely to find alternate (better) work. Our findings suggest that labour market policies trending towards 'labour market flexibility / deregulation' — which provide workers with extrinsic motives to search for work — will not contribute to psychological wellbeing of workers. Since there is no evidence that such policies reduce aggregate unemployment levels, there are no microeconomic or macroeconomic reasons to justify them.

1. Introduction

In 1994, the Organisation for Economic Co-ordination and Development (OECD) made various recommendations to "increase wage and labour cost flexibility" and "reform employment security provision" in an attempt to reduce unemployment. OECD (1994) claimed that a more flexible, deregulated labour market would entice employers to create more employment and hence lead to lower unemployment.

This induced most OECD member countries to promote labour market policies which reduced (among others) job security of employees. We will use this climate of reduced job security to test the validity of Self Determination Theory (SDT). When applied to the labour market, SDT claims that there are two broad motives why workers may search for alternative employment: (a) intrinsic motivation which refers to activities that individual engage in freely; and (b) extrinsic motivation which refers to externally regulated motivation. SDT argues that intrinsic motivation is more likely to lead to a successful outcome (find alternative better employment) than extrinsic motivation and therefore more likely to promote psychological wellbeing.

Clearly, reduced job security provides workers with extrinsic job search motivation because their job security is at stake. This lack of security provides an incentive to find alternative employment to prevent unemployment.

The OECD (2001: 14) concludes that in terms of labour market policies Australia "has been among the OECD countries complying best" with the OECD Jobs Strategy. In this context we use data from the Australian labour market to test the validity of SDT. Though SDT has been tested in the labour market before (see Vansteenkiste et al., 2004, 2005 and 2007), that research focuses on the unemployed. Instead, this paper focuses on employees searching for work and their motivations. If the SDT has explanatory power then we should see that reduced job security stimulating more extrinsically motivated job search. We should also observe that such job search will be less successful and associated with lower psychological well-being. If this conjecture is

supported by the data, then it will suggest that the labour market reforms imposed by the supply-side OECD agenda have had adverse effects on individual welfare. These negative impacts at the micro level would be in addition to the failure of the reform agenda to produce any sustainable improvements at the macro level, as the OECD had to concede in 2006. OECD (2006) acknowledges that its policies to reduce job security do not reduce unemployment. Mitchell and Muysken (2008) provide a comprehensive critique of the OECD Jobs Study reforms at the macroeconomic level and conclude it has been a failure.

The paper is organised as follows. Section 2 describes SDT and its application to job search by those already in employment. Section 3 outlines the Australia's labour market reforms which were motivated by the OECD recommendations and provides a snapshot of the current state of job security. Section 4 describes the data to be used in this study and presents the hypotheses to be examined. Section 5 is devoted to the data analysis. Section 6 provides conclusions.

2. Self Determination Theory

Self Determination Theory posits that to achieve psychological well-being, people have to fulfil several needs (for an extensive overview of SDT see Deci and Ryan, 2000). Three broad categories of such needs are identified: the need for competence, relatedness and autonomy. Paid employment contributes to the satisfaction of all three needs simultaneously. That is, workers can show their competence in a job; develop relations and networks at work to address the relatedness need; and employment is a means to generate income which provides the worker a route towards autonomy. Once employed, climbing the job ladder addresses the needs for competence and autonomy.

Consequently, SDT argues that people work towards goals that enable them to achieve needs satisfaction, which – if successful – leads to positive psychological outcomes. There is ample evidence that employment or career advancement indeed contributes to psychological wellbeing (see for example Winfield *et al.*, 1991; Warr *et al.*, 1988).

However, SDT claims that the type of motivation used to work towards goal achievement crucially impacts on the likelihood that goal achievement is accomplished. Consequently, SDT may provide insights into why some job seekers are more successful than others, which – as we will see – need not necessarily be related to personal motivation of job seekers, but may as well be related to the institutional setting in which job search takes place.

SDT distinguishes intrinsic and extrinsic motivation. Intrinsic motivation refers to activities people freely engage in. For example, the employed job seeker searches for other jobs because she enjoys attempting to find out the value of her skills in an alternative work setting. Crucial here is that the motivation and subsequently the decision to search for alternative employment is an autonomous decision. In contrast, extrinsic motivation to search for alternative employment refers to motivation controlled by non-autonomous, external sources. SDT distinguishes various modes and graduations of extrinsic motivation. Employees may for example start looking for alternative employment because:

Their current employment position is at risk. Subsequent job loss will have tangible financial repercussions, which can be mitigated by finding alternative employment. Here, a *tangible* threat is the motivation to search for alternate employment, which is an externally regulated control:

- Their current employment position is at risk. Subsequent job loss will have non-tangible repercussion, like loss of pride/dignity associated with being out of employment. This can be avoided by finding alternative employment. Now, a *non-tangible* threat is the motivation to search for alternative employment, which is an external though introjected control;
- Their current employment position does not fully exploit the skill set of the employee, though she likes her job. The employee understands why she should search for alternative employment and subsequently *identifies* with the argument to search but need not fully embrace it;
- Their current employment position does not fully exploit the skill set of the employee. The employee understands and appreciates why she should search for alternative employment and subsequently *integrates* the argumentation in her own reasoning, though it remains an external motivation.

Externally regulated control is a more extreme form of extrinsic motivation than introjected control followed by identification and subsequently integration, since the degree of autonomy increases along these four categories of extrinsic motivation.

The vast body of empirical literature in this area of psychology provides ample evidence that (a) both intrinsic and extrinsic motivation drive people to set and strive for goals in order to satisfy needs, but (b) that people with intrinsic motivation are more successful in achieving these goals than people led by extrinsic motives and hence more successful in satisfying needs with better psychological wellbeing as a consequence.

Empirical studies have tested SDT in various settings, including education, sport and health care (see Vallerand and Bissonnette, 1992; Sarrazin et al., 2002; and Williams et al., 1998 as representative examples). Though job search has been widely researched in both psychological and economic literature (see Kanfer et al., 2001 for a meta-analysis), studies linking job search to SDT are surprisingly rare. Vansteenkiste et al. (2004) study the long-term unemployed and their motivation to search or not search for employment. They argue that the unemployed develop autonomous motivation to remain unemployed (that is, develop appreciation for being unemployed) during the unemployment spell, explaining why they stop searching. In a later paper, Vansteenkiste et al. (2005) also study job search behaviour of the unemployed and find that autonomous motivation leads to more - and presumably more persistent - job search than controlled motivation. However, they do not find a positive relationship between psychological well-being and type of motivation (either autonomous or controlled). The authors suggest this may be explained by the outcome of the job search process, which is beyond their analysis. That is, the autonomously motivated unemployed may derive more satisfaction from search for employment than the unemployed having controlled motivation. However, not succeeding in finding employment will lead to more dissatisfaction for the autonomously motivated unemployed (see Vansteenkiste et al., 2007), leaving the overall effect of type of motivation on well being ambiguous.

Our analysis will build on Vansteenkiste et al. (2005). We extend their analysis in two ways.

First, to solve the ambiguity, we will not only relate the job search decision to type of motivation but also – once a positive decision has been detected – to the outcome of job search. SDT states that job seekers who are intrinsically motivated to search for employment are more likely to be successful than extrinsically motivated job seekers. We will test that hypothesis.

Second and related to the first extension, we require both job seekers who are subject to controlled motivation and job seekers who are subject to autonomous motivation in our analysis, to be able to determine which type of motivation yields better job search outcomes. We note that Vansteenkiste *et al.* (2005) found that the unemployed who were subject to controlled motivation were less likely to search for work than the intrinsically motivated unemployed. Consequently, the pool of unemployed job seekers may not be the appropriate sample pool for our analysis. That is, since the unemployed are at the bottom of the job ladder, they have little to lose by not searching for employment, especially in countries with relatively strong social security systems (like Belgium – the study area of Vansteenkiste *et al.*, 2005). Controlled motivations may therefore not provide a strong enough incentive to search. Therefore we move one step up the job ladder and focus on job seekers who do face significant potential losses from not searching: the employed job seekers who are potentially at risk of losing their current job.

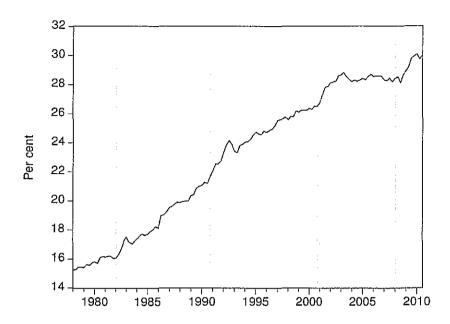
To our knowledge, no studies have looked at job search behaviour of workers, while that becomes increasingly more relevant in a labour market where worker's rights tend to erode and hence where workers are progressively more subject to regulated controls – as we will outline in Section 3.

3. Trends towards increased labour market precariousness

A recent study by Abhayaratna *et al.* (2008) provides an up-to-date analysis of the trends in precarious work. They show that Australia ranks second across the OECD in terms of the proportion of part-time workers in total employment (around 30 per cent in September 2010). The Netherlands has the highest incidence of part-time work (48 per cent). The OECD average in 2006 was just over 20 per cent.

Figure 1 shows the ratio of part-time employment to total employment for Australia from 1978 to 2010. While the trend has clearly been upwards with some slowdown in the last years of the most recent growth cycle, there is also clear indication that the recessions pushed the trend growth upwards. The ratio has doubled over the sample period.

Figure 1 Part-time employment as a percent of total employment, Australia, 1978-2010

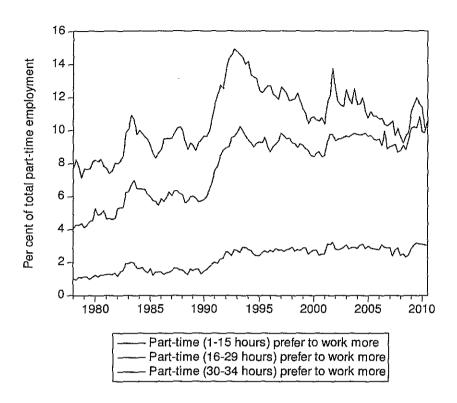


Source: ABS Labour Force Survey. The peak-trough periods are defined in Mitchell (2001).

Abhayaratna et al. (2008: 18) note that "Almost half of Australia's part time workforce works fewer than 20 hours per week, and less than one quarter works 30 –35 hours per week. The distribution in Australia appears to be similar to that of the Netherlands, Switzerland, the United Kingdom, New Zealand and Norway. It appears to be more likely for countries with higher part time work rates to have more part time workers working less than 20 hours per week. Countries such as Japan and the United States have almost half of their part time workforces working 20–29 hours, and close to one quarter working less than 20 hours."

Figure 2 shows the number of part-time workers who preferred more hours of work per week as a percentage of total part-time workers by three hours bands: 1-15, 16-29 and 30-34. It is clear the that the problem of underemployment is usually dominated by the workers who are in the 1-15 hours per week band, although workers in the 16-29 hours per week band are now approaching the level of the 1-15 hours per week group. We cannot tell if these were new jobs created as full-time work collapsed or through the imposition of further hours rationing over existing jobs. The cyclical nature of these series is very striking. As growth collapsed in early 1991, underemployment rose sharply (see Figure 3) and this was spread over all the hour-bands shown but concentrated at the lower end (1-15 hours). Once growth resumed the proportion of part-time workers in the higher hour bands (16-29 and 30-34) barely altered but underemployed in the 1-15 fell.

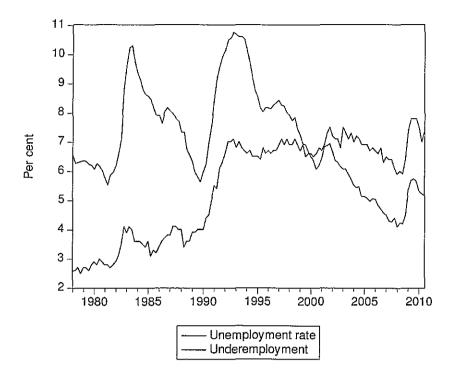
Figure 2 Underemployed part-time workers as a percent of total part-time work by hour bands, Australia, 1978-2010, per cent



Source: ABS Labour Force Survey. The time series are for part-time workers who preferred more hours of work per week as a percentage of total part-time workers.

The Australian labour market thus increasingly fails to provide enough hours of work to satisfy the preferences of the labour force. Figure 3 shows the evolution of unemployment and underemployment in Australia from 1978. The impact of the three major downturns in that sample period (1982, 1991, and 2009) is clearly evident.

Figure 3 Unemployment and underemployment, Australia, 1978-2010, per cent



Source: ABS Labour Force Survey. Note: The peak-trough periods are defined in Mitchell (2001).

While underemployment rose in the 1982 recession, it was the 1991 recession that led to a sharp increase and a new attractor level. The growth period after the 1991 recession led to reductions in the unemployment rate but only very modest reductions in the rate of underemployment. In the current economic downturn, the rise in both measures of labour underutilisation was sharp but smaller than the 1991 recession.

As a result it is unlikely that a persistent new level will be established in these series. But the striking trend since the 1991 recession has been that underemployment is now a significant issue and that as jobs have been created and absorbing the unemployed, a strong percentage of those jobs have not been providing enough working hours to satisfy the preferences of the labour force.

The rising part-time to total employment ratio and the increased incidence of underemployment has also been accompanied by a rise in the importance of casual employment. This trend has been well documented in the Australian context (see for example, Campbell, 1996, 2001; Junor *et al.*, 2001; Pocock, Buchanan and Campbell, 2004).

The Australian Bureau of Statistics (ABS) define casual employment as all employees that do not enjoy access to paid holiday and sick leave. Casual workers tend to be part-time and dominated by female workers in retail trade and in accommodation, cafes and restaurants. The jobs tend to be low-skilled and low-paid. Campbell (2001: 68) found the proportion of workers who were considered to be casual in 1982 was 13.3 percent.

This proportion had increased to 28 per cent by 2003 (Kryger, 2004). The proportion has remained relatively constant since that time.

Not only do casual workers miss access to paid leave and sick leave they are also excluded from some of the other legislative protections (including unfair dismissal). Pocock *et al.*, (2004) found that a large proportion of casual jobs were precarious with respect to the predictability of earnings, the hours offered, the opportunities for skill development, low union representation, and an increased vulnerability to occupational health and safety hazards. Contemporary institutional settings in the Australian labour market can therefore be used to test SDT.

4. Data sources and hypotheses development

If SDT is correct, workers who face extrinsic pressure will indeed follow up on such pressures to search for employment, but are less likely to be successful in gaining alternate (better) employment than workers who apply intrinsic motivation to search for alternative employment.

Consequently, we need comprehensive data on the Australian labour market to verify job search effectiveness according to SDT. We draw on data from the first eight waves of the Household, Income and Labour Dynamics Australia (HILDA) data set. The HILDA survey is funded by the Australian government and followed up on an annual basis. The first survey was conducted in 2001. The survey consists of three parts: a household questionnaire, a personal questionnaire and a self-completion questionnaire. We use the personal questionnaire which details the labour market status of respondents – job satisfaction; expectations about future labour market status; job search behaviour, and – since we use several waves – transition rates to different labour market positions in subsequent years.

4.1 Intrinsic motivation

To capture intrinsic job search motivation, we use two questions from the survey which bear on autonomy in job search behaviour. First, respondents are asked to indicate their confidence in being able to find alternative employment (if need be) which is at least as good as the current job (rated on a scale from 0-100). Respondents who indicate strong confidence suggest that they have some control in their labour market interactions, that is, they decide when they will make the next career decision. This sense of control is consistent with the SDT concept of intrinsic motivation.

Our first hypothesis subsequently is:

Hypothesis 1: Workers who express confidence to find alternative employment (if need be) which is at least as good as the current job, are (1) *more* likely to search for alternate employment, (2) *more* likely to succeed in finding alternative employment, and (3) *more* likely to succeed in finding better alternative employment.

Second, respondents are asked to indicate the chance that they will voluntarily leave their current job in the next 12 months. Again, a respondent who indicates that she will voluntarily leave her current job provides an indication that she is in control of her next career move. That is, she will only quit her current job if she has found a new one. Since she quits voluntarily, the job search process which precedes resignation is voluntarily as well. Our second hypothesis subsequently is:

Hypothesis 2: Workers who expect to leave their current job voluntary in the next 12 months are (1) *more* likely to search for alternate employment, (2) *more* likely to succeed in finding alternative employment, and (3) *more* likely to succeed in finding better alternative employment.

4.2 Extrinsic motivation

To capture extrinsic job search motivation, we use variables from our dataset which indicate external constraints on job search behaviour which arise from the institutional settings of the Australian labour market.

First, we identify workers who involuntary hold a part-time job. These workers would like to work more hours, but cannot find more employment. Their search behaviour is likely to be driven by budgetary constraints, which is an external motivation. Workers who voluntarily hold part-time employment or full-time workers do not face such constraints. Our third hypothesis therefore is:

Hypothesis 3: Workers who hold an involuntary part time job are (1) *more* likely to search for alternate employment, (2) *less* likely to succeed in finding alternative employment, and (3) *less* likely to succeed in finding better alternative employment than their counterparts in fulltime or voluntary part time employment.

Second, we identify workers on casual contracts from workers on fixed-term and permanent contracts. A casual worker may lose her current job at any time, while a worker on a fixed term contract knows that her contract will come up at a fixed date. Both workers therefore need to be wary of job loss and consequently need to search for employment to avert potential job loss, with subsequent financial repercussions. That pressure is an externally regulated control on the behaviour of the worker, which the worker on a permanent job contract does not face. Our fourth hypothesis therefore is:

Hypothesis 4: Workers who hold a casual job – and to a lesser degree a fixed term job – are (1) *more* likely to search for alternate employment, (2) *less* likely to succeed in finding alternative employment, and (3) *less* likely to succeed in finding better alternative employment than their counterparts in permanent employment.

5. Hypotheses testing

All four hypotheses relate to the same three stage process of behaviour:

- Stage 1 relates to job search motivation;
- Stage 2 relates to successful job change (if searching), and;
- Stage 3 refers to the quality discrepancy between the old and new job (if search is successful).

Consequently, we estimate three separate regression models to examine each of these stages individually.

Model 1 focuses on the job search decision of respondents. The dependent variable is thus constructed as a binary variable (search or not) within a logistical regression specification. Model 2 focuses on respondents that have indicated to search for employment and interrogates the outcome of that job search (successful or not). Successful job search is defined as having changed jobs between periods t and t-l while indicating to search for alternative employment in period t. The dependent variable is binary; the regression subsequently a logistical specification. Model 3 focuses on respondents who successfully completed job search and compares job satisfaction in period t (the new job) to job satisfaction in period t-l (the previous job). Job satisfaction is measured on a 0 to 10 scale, where 10 is maximum satisfaction. Since we are interested in the difference between job satisfaction in periods t and t-l, we end up with a dependent variable

ranging from -10 to 10. We have further narrowed Model 3's dependent variable to a five category ordinal construct (< -2; -2 to -1; 0; 1-2; > 2); the regression is subsequently an ordinal logistical specification.

Apart from the four dependent variables related to the four hypotheses, we include various control variables related to the respondent or her environment. We control for personal characteristics (age, gender, ethnicity, residence and educational attainment) and job characteristics of the job held in period t-I (job tenure, occupation and industry sector).

In this paper we look at instantaneous success. That is, if a worker searches for a job in year t-I, we measure the outcome of that search process in year t and do not include possible outcomes in year t+I. Consequently, we focus on annual transition rates and also treat the data as such. That is, we will use pooled regression analysis, clustering on the respondent identifier in the data to obtain robust standard errors. The regression coefficients will be reported as odd ratios. The odds ratio is defined as the ratio of the odds of an event occurring in one group to the odds of it occurring in the control group. The odds ratio can be computed taking the natural exponent of coefficients of a logistical regression. We will discuss the three models separately.

5.1 Job search decision

The decision to search for alternate employment should have a positive relation to both intrinsic and extrinsic motivation, according to SDT and subsequently all four hypotheses. The odds ratios in the second column of Table 1 are consistent with this conjecture. The confidence to find alternative (better) employment and an increased likelihood to leave the current job voluntarily are indicators of intrinsic motivation and indeed lead to increased job search behaviour. The same holds for extrinsic motivation. Fixed term and casual contracts induce workers to search for alternative employment, as do involuntary part time work arrangements. Consequently, we confirm the first stage of SDT predictions in the context of job search behaviour of workers.

5.2 Job search success

Differences between intrinsic and extrinsic motivation are predicted in Stage 2: job search success. Intrinsic motivation is predicted to elevate the chance of job search success, whereas extrinsic motivation is not. The second column of odd ratios in Table 1 contains the results. We observe that both confidence to find a (better) job and likelihood to voluntarily leave current job elevate the chance of a successful completion of job search one year after the respondent indicates to search for employment. Extrinsically regulated motivators arising from contractual arrangements do not significantly increase the chance to successfully complete a job search process and in the case of involuntary part time employment reduce the chance to successfully complete a job search process. Consequently, we confirm the second stage of SDT predictions in the context of job search behaviour of workers.

5.3 Job satisfaction improvement

Finally, we test the third part of our hypotheses: when does successful job search lead to increased job satisfaction? SDT predicts that intrinsic motivation will lead to improvements in job satisfaction (following successful job search completion) as opposed to extrinsic motivation. The third column with odd ratios in Table 1 provides the answers. We find that the higher the confidence that employed job seekers have in finding a better job the better the chance of finding such a job. In addition, employed job seekers who expect to leave their job voluntarily are more likely to achieve career advancement. In other words, we find empirical support for the final part

of Hypotheses 1 and 2: intrinsic motivation spurs job search, increases the likelihood of finding alternate employment, which is more likely to be superior to the previous job in terms of job satisfaction.

These findings are in sharp contrast to extrinsic motivation, which – as predicted by SDT – does not increase the chance of attaining a job which yields higher job satisfaction than the previous job (if a job is found at all). On the contrary, initiating job search from a casual position or an involuntary part time job reduces the chance of finding better employment. Consequently, we also confirm Hypotheses 3 and 4.

6. Conclusion

We have applied SDT to the field of employed job search. As predicted, workers who search for a job without any external pressures are more likely to find alternative, better employment than workers who search because their current job is at stake or because they work involuntary part time.

The applicability of SDT to labour market analysis provides important new ways of appraising the current policy framework which has emphasised activism and deregulation. The implementation of the OECD Job Study agenda has increased the degree of job insecurity in labour markets. There has been a marked increase in the degree of precariousness and job instability over the last two decades in most economies. The application of SDT to this phenomenon tells us that the supply-side labour market policy framework has contributed to workers cycling through spells of insecure employment and possibly intermittent spells of unemployment with no realistic prospect of career development. In other words, the stated goals of the OECD activist strategy have not been fulfilled in practice when we consider the fortunes of the vulnerable workers in the labour market. This cohort was thought to be beneficiaries of the new approach to training and job placement. Our study suggests that they have not gained better jobs through increased (forced) search activity and instead have experienced adverse impacts on their psychological well-being.

Since this labour market policy approach has also not delivered benefits at the macroeconomic level (in terms of employment generation and lower underemployment), we consider that policy makers should reconsider their options and reject the supply-side approach.

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Table 1 Determinants of employed job search and its success (odd ratios), 2001-2008

	Dependent variables	Job search	Job found	Job improvemer
Independent variables a			(once searching)	(once searching a job found)
Intrinsic moti	ivation to find a (new) job:			
Confidence to find a (better) job		1.004*** (0.00)	1.003*** (0.00)	1.003* (0.00)
Likelihood lo leave job voluntarily		1.03*** (0.00)	1.01*** (0.00)	1.01*** (0.00)
Extrinsic mot	ivation to find a (new) job:			
Permanent contract		reference	reference	reference
Fixed term contract		1.18*** (0.06)	1.10 (0.10)	0.82 (0.10)
Casual contract		1.30*** (0.06)	1.04 (0.07)	0.75*** (0.07)
Full time		reference	reference	reference
Voluntary part-time		0.78*** (0.04)	0.86* (0.07)	0.87 (0.10)
Involuntary part-time		3.23*** (0.25)	0.81* (0.09)	0.76* (0.13)
Personal char	racteristics:			
Age cohort:	16-30 years	0.90 (0.04)	0.90 (0.06)	0.79*** (0.07)
	31-40 years	reference	reference	reference
	41-50 years	1.08 (0.05)	0.94 (0.07)	1.12 (0.12)
	51–65 years	0.75*** (0.05)	0.89 (0.10)	1.15 (0.18)
Female		reference	reference	reference
Male		1.15*** (0.05)	0.97 (0.06)	1.02 (0.09)
Non-Indigenous Australian		reference	reference	reference
Indigenous		1.35*** (0.16)	0.74 (0.16)	1.23 (0.42)
Living outside major statistical region		reference	reference	reference
Living in major statistical region		1.06 . (0.04)	0.94 (0.05)	0.93 (0.07)
(Pre-)primary/secondary school		reference	reference	reference
Certificate		1.29*** (0.06)	1.07 (0.08)	1.06 (0.11)

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Advanced diploma and diploma	1.33*** (0.09)	1.01 (0.10)	1.18 (0.15)
(Post) Graduate, Bachelor degree	1.59 ^{4×l×l×l} (0.08)	1.09 (0.09)	1.14 (0.13)
(Previous) Job characteristics:			
Tenure	0.96*** (0.00)	0.97*** (0.01)	0.997 (0.01)
R-squared	0.19	0.05	0.03
N	46,850	6,811	2,386

^{* 10%} significance, ** 5% significance, ** 1% significance. Standard errors in parentheses.

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^a Sector and occupation controls are included in the regression models; not shown.

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