# BARRIERS TO MATURE AGE LABOUR FORCE ENGAGEMENT IN AUSTRALIA: REPORT ON THE 2011-12 NATIONAL SURVEY ON THE BARRIERS TO EMPLOYMENT FOR MATURE AGE PEOPLE 

Productive National Seniors Ageing Centre Australia

# BARRIERS TO MATURE AGE LABOUR FORCE ENGAGEMENT IN AUSTRALIA: REPORT ON THE 2011-12 NATIONAL SURVEY ON THE BARRIERS TO EMPLOYMENT FOR MATURE AGE PEOPLE 

Prepared on behalf of the Australian Government Department of Education, Employment and Workplace Relations by:<br>Timothy Adair, Ph.D<br>Senior Research Fellow

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A literature review prepared by the Social Policy Research Centre at the University of New South Wales for National Seniors Productive Ageing Centre (NSPAC) and DEEWR provided important background information on the barriers presented herein.

## EXECUTIVE SUMMARY

Australia faces significant challenges in coming years from an ageing population as the large cohort of 'baby boomers' approach retirement. Increasing the relatively low employment participation of mature age people (aged 45 years and over in this report) in Australia is an effective means of meeting the economic challenges presented by this significant demographic change. This will help these workers fund their retirement, broaden the tax base and, most importantly, fully utilise the skills, experience and mentoring abilities of the mature age population. In response to these challenges, successive federal governments have introduced a number of policies and programs to increase the mature age employment rate, in areas such as re-training and re-skilling, Age Pension and superannuation reform, and Age Discrimination legislation. However, significant barriers to improving mature age employment still exist.

The first report for the Consultative Forum on Mature Age Participation prepared on behalf of the Forum by National Seniors Productive Ageing Centre (NSPAC) identified 14 barriers preventing mature age people participating in the workforce. The barriers cover diverse issues, including illness and injury, re-training, the tax transfer system, superannuation, and age discrimination. This report seeks to measure the prevalence of these barriers using results from the first nationally representative Survey of Barriers to Employment for Mature Age Australians of 3007 Australians aged 45-74 years. This report also analyses how the prevalence of these barriers differ by demographic and economic characteristics, examines the degree to which individual barriers interact, assesses the impact of barriers on hours lost to the Australian labour market and economy, and contrasts the findings of the survey with the views of employers in the 2010 DEEWR Survey of Employers.

Some key findings of the Survey include that illness, injury and disability (including physical and mental health) was reported as preventing one-fifth of the total population aged 45-74 from working or looking for work in the last 5 years, and flexible working arrangements would help 59\% of non-employed ill people to be able to work.

Age discrimination during job search appears to be particularly prevalent, with $36 \%$ of job seekers reporting having experienced exclusion while looking for a job in the last 5 years and attributing it to their age, while 83\% believe it to be an issue in Australia.

Care-giving responsibilities are reported as preventing around one-third of care-givers from working or working more hours; flexible work patterns would help 61\% of non-employed carers and half of employed carers work or work more.
There appears to be significant unmet demand for workplace training, with over one-third of workers being unable to attend some form of training that they wanted to in the past 5 years.

Declines in superannuation balances in recent years have impacted on workforce participation, $40 \%$ of those not retired report that they will delay their retirement by an average six years. The availability of tax-free superannuation after age 60 appears to be influencing around one-sixth of non-retired people to delay retirement. The attractiveness of leisure time is reported as the third most important reason for people deciding when to retire, with five-sixths stating it as a 'very important' or 'somewhat important' reason.
The report uses different methods of ranking the barriers. Measures of raw and adjusted prevalence rank superannuation, illness, injury and disability, and age discrimination highly, while tax transfer system and re-entry issues for very long term unemployed (VLTU) rank lower. Rankings based on the impact of the barriers on hours worked demonstrate that illness, injury and disability and flexible work arrangements for the ill and care-givers are also significant barriers.

The prevalence of the barriers varies significantly by socio-economic and demographic groups within the population. People with low income and low education appear to be particularly vulnerable to experiencing certain barriers. The older people within the surveyed cohort are more likely to be affected by illness, injury and disability, while the younger people within the cohort are more likely to experience care-giving responsibilities as a barrier while being more responsive to flexible work arrangements.

Experience of multiple barriers is also an issue among mature age people. Illness and age discrimination in particular appear to interact significantly with other barriers. For example, reported job search exclusion attributed to age is highest for the unemployed or very long-term unemployed and those experiencing a mismatch of skills and experience with industry or employer demands.

Projections of the impact of certain barriers on labour supply over time show that introducing greater flexibility for a person with an illness or care-giving responsibilities could lead to almost 450000 potential employees by 2031, or just under 12.5 million hours per week. There is also significant potential unmet demand for hours worked by those not in the labour force (NILF) and, for women in particular, part-time workers. For males, for some barriers, the effects are stronger for the unemployed.

The results from the DEEWR Survey of Employers suggest that those organisations that currently employ mature age workers have more positive attitudes towards mature age workers themselves. However, although the sizeable majority of employers state there are minimal challenges of employing mature workers, a minority tended to agree with statements presenting a potentially negative view of mature age workers.

The first nationally representative survey of its kind has provided evidence of the prevalence and impact of barriers to mature age employment participation in Australia. The findings can be used to develop policies and programs to fully utilise from the skills and experience of older workers. Future research could seek to reconcile findings from mature age people and employers by directly comparing self-reported data from employees and employers, attempt to explore some barriers in greater detail and contrast the findings with those of younger Australians.

## CONTENTS

1. INTRODUCTION ..... 1
2. BACKGROUND AND CONTEXT ..... 3
3. RESEARCH OBJECTIVES ..... 9
4. METHODOLOGY ..... 11
4.1 2011-12 Survey of Barriers to Employment for Mature Age Australians ..... 11
4.2 Weighting, measure of barrier prevalence, analyses by socioeconomic and demographic characteristics and barrier interactions ..... 13
4.3 Projections of hours worked: with and without barriers ..... 14
4.4 Measurement and ranking of the barriers ..... 16
5. RESULTS ..... 19
5.1 Overview of sample and benchmarking ..... 19
5.2 Barrier analysis ..... 24
5.3 Interaction of barriers ..... 55
5.4 Projections of barriers ..... 59
5.5 Final ranking of barriers ..... 76
5.6 Employers' perspective: DEEWR Survey of Employers ..... 79
6. DISCUSSION ..... 85
6.1 Key findings ..... 85
6.2 Limitations ..... 91
7. CONCLUDING COMMENTS ..... 95
APPENDIX A: DETAILED TABLES ..... 97
APPENDIX B: MEASURES OF THE BACKGROUND CHARACTERISTICS AND THE PREVALENCE OF EACH BARRIER ..... 257
APPENDIX C: MEMBERSHIP OF THE CONSULTATIVE FORUM ON MATURE AGE PARTICIPATION ..... 269
REFERENCES ..... 271

## LIST OF FIGURES

Figure 1: Call structure, 2011-12 Barriers to Employment for Mature Age Australians Survey. 12
Figure 2: Decomposition of labour force status, not employed and not retired, 2011-12 Barriers to Employment for Mature Age Australians Survey ..... 22
Figure 3: Have current illness, and if it prevents from working or looking for work, by education (\%), 2011-12 ..... 25
Figure 4: Reported experiencing workplace exclusion, and if attributed to age, by age, education and personal income (\%), 2011-12 ..... 25
Figure 5: Factors workplace exclusion attributed to (\%) (Note: diagram ignores any overlap between race, gender, health/disability and other), 2011-12 ..... 26
Figure 6: Reported experiencing job search exclusion, and if attributed to age, by age, employment status and personal income (\%), 2011-12 ..... 27
Figure 7: Factors job search exclusion attributed to (\%) (Note: diagram ignores any overlap between race, gender, health/disability and other), 2011-12 ..... 27
Figure 8: Reported directly, indirectly and either directly or indirectly told too old for job, by sex, employment status and personal income (\%), 2011-12 ..... 28
Figure 9: Age discrimination stated to be an issue in the workplace and an issue looking for a job in Australia, by employment status and personal income (\%), 2011-12 ..... 29
Figure 10: Number of age discriminations reported to have experienced or perceived, by employment status and personal income (\%), 2011-12 ..... 30
Figure 11: Reported lack of effort by private recruitment firm attributed to age, by education and personal income (\%), 2011-12 ..... 32
Figure 12: No jobs in their line of work in local area, by sex, age and personal income (\%), 2011-12 ..... 33
Figure 13: No jobs at all in their local area, by age and personal income (\%), 2011-12 ..... 34
Figure 14: Work-related training (\%) would help do job better, gain promotion, find more hours, find a job (\%), 2011-12 ..... 35
Figure 15: Attended work-related training in last 5 years, if found useful and if training wanted to attend but couldn't (\%) ..... 36
Figure 16: Average hours per week provide care, by sex and age (\%), 2011-12 ..... 37
Figure 17: Care-giving prevents from working or working more hours, by sex and age (\% of employed population), 2011-12. ..... 38
Figure 18: Flexible work arrangements would help work (not employed) or work more hours (currently employed) (\%), 2011-12 ..... 39
Figure 19: Average years contributed to superannuation, by sex and retirement status (\%), 2011-12 ..... 41
Figure 20: Superannuation a planned or current income source at retirement, by sex, income and retirement status (\%), 2011-12 ..... 42
Figure 21: Impact of decrease in superannuation on retirement plans, retirement status and working hours (\%), 2011-12 ..... 43
Figure 22: Impact of tax-free superannuation after age 60 on retirement status (retired), by age and awareness of tax-free super (\%), 2011-12 ..... 45
Figure 23: Impact of tax-free superannuation after age 60 on retirement plans (not retired), by age and awareness of tax-free super (\%), 2011-12 ..... 46
Figure 24: Impact of tax-free superannuation after age 60 on hours worked (currently working), by age and awareness of tax-free super (\%), 2011-12 ..... 46
Figure 25: Type of Government income support receive (\%), 2011-12 ..... 47
Figure 26: Prevalence of VLTU (\% of not retired) among other measures of barrier prevalence, 2011-12 ..... 51
Figure 27: Reasons Australian Government employment service provider not helpful (\%), 2011-12 ..... 52
Figure 28: Reasons for when intend to retire (not retired) or when did retire (retired) (\%), 2011-12 ..... 53
Figure 29: Changed working condition would help work (not employed) or work more hours (currently employed) (\%), 2011-12 ..... 54
Figure 30: Prevalence of current illness preventing for working (\%) among other barrier measures, 2011-12 ..... 56
Figure 31: Number of discriminations reported to be experienced or perceived (\%) among other barrier measures, 2011-12 ..... 57
Figure 32: Caring for a person with a long-term illness or disability (\%) among other barrier measures, 2011-12 ..... 58
Figure 33: Reducing hours would help delay retirement (\%) among other barrier measures, 2011-12 ..... 59

## LIST OF TABLES

Table 1: Ranking of the percentage of Consultative Forum Members who rated the importance of each barrier as high or very high, 2011 ..... 7
Table 2: Overview of barriers and measures of prevalence used for rankings ..... 18
Table 3: Summary characteristics, 2011-12 Barriers to Employment for Mature Age Australians Survey. ..... 19
Table 4: Summary labour force parameters, 2011-12 Barriers to Employment for Mature Age Australians Survey ..... 20
Table 5: Occupation and industry composition, 2011-12 Barriers To Employment for Mature Age Australians Survey ..... 22
Table 6: Comparison of estimates from the 2011-12 Barriers to Employment Survey, the 2008-09 ABS Multipurpose Household Survey and June 2011 ABS Labour Force Survey ..... 23
Table 7: Summary measures of physical illness, injury and disability, and mental health (\%), 2011-12 ..... 24
Table 8: Summary measures of discrimination in employment on the basis of age, 2011-12.. 3
Table 9: Summary Measures of Issues Around Private Recruitment Firm Practices, 2011-12.33
Table 10: Summary measures of mismatch of skills and experience with industry demands, 2011-12 ..... 34
Table 11: Summary measures of re-training and up-skilling barriers, 2011-12 ..... 36
Table 12: Summary measures of care-giving responsibilities, 2011-12 ..... 39
Table 13: Summary measures of flexibility of employment arrangements, 2011-12 ..... 40
Table 14: Summary measures of superannuation, 2011-12 ..... 44
Table 15: Summary measures of tax-transfer system, 2011-12 ..... 48
Table 16: Summary measures of re-entry of the very long-term unemployed, 2011-12 ..... 51
Table 17: Summary measures of job search assistance, 2011-12 ..... 52
Table 18: Summary measures of leisure time trade-off, 2011-12 ..... 54
Table 19: Summary measures of workplace barriers, 2011-12 ..... 55
Table 20: Population projection inputs and results, 2011 ..... 61
Table 21: Baseline labour market assumptions, June 2011 ..... 62
Table 22: PAC estimates benchmarked against ABS estimates, June 2011 ('000). ..... 62
Table 23: Underlying barrier prevalence and additional hours preference, 2011 ..... 64
Table 24: Workers and hours foregone due to flexibility barrier, 2011 ..... 65
Table 25: Actual and adjusted labour force parameters, flexibility barrier, 2011 ..... 66
Table 26: Projection of workers and hours (labour inputs), with and without the flexibility barrier in place, 2011-2031 ..... 66
Table 27: Underlying barrier prevalence (up-skilling) and additional hours preference, 2011 ..... 67
Table 28: Workers and hours foregone due to re-training barrier, 2011 ..... 68
Table 29: Actual and adjusted labour force parameters, retraining barrier, 2011 ..... 68
Table 30: Projection of workers and hours (labour inputs), with and without the retraining barrier in place, 2011-2031 ..... 69
Table 31: Underlying barrier prevalence (care-giving) and additional hours preference, 2011 ..... 69
Table 32: Workers and hours foregone due to care-giving barrier, 2011 ..... 70
Table 33: Actual and adjusted labour force parameters, care-giving barrier, 2011 ..... 70
Table 34: Projection of workers and hours (labour inputs), with and without the care-giving barrier in place, 2011-2031 ..... 71
Table 35: Underlying barrier prevalence (workplace) and additional hours preference, 2011 ..... 72
Table 36: Workers and hours foregone due to workplace barrier, 2011 ..... 72
Table 37: Actual and adjusted labour force parameters, workforce barrier, 2011 ..... 73
Table 38: Projection of workers and hours (labour inputs), with and without the workplace barrier in place, 2011-2031 ..... 73
Table 39: Baseline calculations for elasticity calculation, age discrimination barrier, 2011 ..... 74
Table 40: Workers foregone due to each barrier (from NILF and unemployed population), 2011-2031 ..... 75
Table 41: Hours foregone due to each barrier, 2011-2031 ..... 75
Table 42: Ranking of barriers: prevalence, 2011-12 ..... 77
Table 43: Ranking of barriers: prevalence and economic outcome, 2011 ..... 78
Table 44: Survey of employers strata ..... 79
Table 45: Percentage of workplaces that have taken any steps to retain employees who might otherwise retire, 2010 ..... 80
Table 46: Percentage of workplaces reporting actions taken to retain retiring workers, by policy type, 2010 ..... 81
Table 47: Percentage of workplaces reporting actions taken to retain retiring workers, by employment of mature age workers, 2010 ..... 81
Table 48: Percentage of workplaces reporting challenges to employing mature age employees, 2010 ..... 82
Table 49: Percentage of employers ranking the benefits and challenges of mature age workers, by policy type, 2010 ..... 83
Table 50: Percentage of employer rankings the benefits and challenges of mature age workers, by current employment of mature age workers, 2010 ..... 84
Table A.1: Current employment status (\% of total population) by socio-economic and demographic characteristics, 2011-12 ..... 97
Table A.2: Employment status - full-time (35+ hours per week) or part-time (less than 35 hours per week) - (\% of currently employed population) by socio-economic and demographic characteristics, 2011-12 ..... 98
Table A.3: Unemployed (\% of labour force, i.e., currently employed plus unemployed) and discouraged workers (\% of people not employed and not retired) by socio-economic and demographic characteristics, 2011-12 ..... 99
Table A.4: Occupation (\% of people who have ever worked) by socio-economic and demographic characteristics, 2011-12 ..... 100
Table A.7: Had illness, injury or disability for at least 2 months in last 5 years (\% of total population) by socio-economic and demographic characteristics, and average length of time unable to work because of illness, injury or disability, 2011-12.... 104
Table A.7.1: Logistic regression results of had illness, injury or disability for at least 2 months in last 5 years, 2011-12 ..... 105
Table A.8: Illness in last 5 years prevented from working or looking for work (\% of ill for 2 months in last 5 years, \% of total population) by socio-economic and demographic characteristics, 2011-12 ..... 106
Table A.8.1: Logistic regression results of Illness in last 5 years prevented from working or looking for work (\% of ill for 2 months in last 5 years, \% of total population), 2011-12 ..... 107
Table A.9: Currently have illness, injury or disability (\% of total population) by socio-economic and demographic characteristics, 2011-12 ..... 108
Table A.9.1: Logistic regression results for currently have illness, injury or disability, 2011-12109
Table A.10: Current illness, injury or disability prevents from working or looking for work (\% of currently ill and not working, \% of total population) by socio-economic and demographic characteristics, 2011-12 ..... 110
Table A.10.1: Logistic regression results for current illness, injury or disability prevents from working or looking for work (\% of currently ill and not working, \% of total population), 2011-12 ..... 111
Table A.11: Leading types of reported workplace exclusion in last 5 years, and reported experiencing that exclusion and attributed any exclusion to age (\% of people who have worked last 5 years but not self-employed), 2011-12 ..... 112
Table A.12: Factors that reported workplace exclusion attributed to (\% of people who have reported experiencing workplace exclusion in last 5 years), 2011-12 ..... 112
Table A.13: Reported experiencing any workplace exclusion in last 5 years, and reported workplace exclusion attributed to age (\% of people who have worked last 5 years excluding self-employed) by socio-economic and demographic characteristics, 2011-12 ..... 113
Table A.14.1: Logistic regression results for reported workplace exclusion attributed to age influenced desire to work or work more hours, 2011-12 ..... 117
Table A.15: Leading types of reported job search exclusion in last 5 years, and reported experiencing that exclusion and attributed any exclusion to age (\% of people who have looked for job in last 5 years), 2011-12 ..... 117
Table A.16: Factors that reported job search exclusion attributed to (\% of people who have reported experiencing job search exclusion in last 5 years), 2011-12 ..... 118
Table A.17.1: Logistic regression results for reported experiencing any job search exclusion in last 5 years, and reported job search exclusion attributed to age, 2011-12. ..... 120
Table A.18: Reported job search exclusion attributed to age and influenced desire to work or work more hours (\% of people who reported experiencing job search exclusion in last 5 years and attributed to age, and 1. Not employed 2. Currently employed) by socio-economic and demographic characteristics, 2011-12 ..... 121
Table A.18.1: Logistic regression results for reported job search exclusion attributed to age influenced desire to work or work more hours, 2011-12 ..... 122
Table A.19: Person who reported being directly told respondent too old for job in last 5 years, 2011-12 ..... 122
Table A.20: Reported being directly told too old for job by any source in last 5 years, reported being indirectly indicated too old for job in last 5 years, and reported either directly or indirectly told too old for job in last 5 years (\% of people who have worked or looked for job in last 5 years) by socio-economic and demographic characteristics, 2011-12 ..... 123
Table A.20.1: Logistic regression results for reported being directly told too old for job by any source in last 5 years, reported being indirectly indicated too old for job in last 5 years, and reported either directly or indirectly told too old for job in last 5 years, 2011-12 ..... 125
Table A.21: Person reported being told too old by in last 5 years: employer (\% of people who have worked in last 5 years \& not self-employed), work colleague (\% of people who have worked in last 5 years), potential employer (\% of people who have looked for work in last 5 years) by occupation and industry, 2011-12 ..... 126
Table A.22: Agreement (state strongly agree or agree) that age discrimination is an issue in workplace in Australia (\% of people who have worked in past 5 years) or looking for job in Australia (\% of people who have looked for job in past 5 years), by socio-economic and demographic characteristics, 2011-12 ..... 127
Table A.22.1: Logistic regression results for agreement (state strongly agree or agree) that age discrimination is an issue in workplace in Australia or looking for job in Australia, 2011-12 ..... 129
Table A.23.1: Logistic regression results for importance (extremely or somewhat important) of employers thinking respondent is too old reason for being retired or not looking for work, 2011-12 ..... 132
Table A.24: Number of age discriminations (1: reported either exclusion in workplace or job search attributed to age, 2: reported being told directly or indirectly too old for job, 3: think age discrimination is an issue in Australia in the workplace or looking for job, \% of people who have worked last 5 years excluding self-employed, or looked for job in last 5 years) by socio-economic and demographic characteristics, 2011-12 ..... 133
Table A.24.1: Multinomial logistic regression results for number of age discriminations, 2011-12 ..... 135
Table A.25: Used private recruitment firm in job search in last 5 years (\% of people who looked for a job in last 5 years) by socio-economic and demographic characteristics, 2011-12 ..... 136
Table A.25.1: Logistic regression results for used private recruitment firm in job search in last 5 years, 2011-12 ..... 137
Table A.26: Rating of support (\% stating very good or good) and rating of effort (\% stating good or great deal) of private recruitment firm in helping find job (\% who used private recruitment firm) by socio-economic and demographic characteristics, 2011-12 ..... 138
Table A.26.1: Logistic regression results of rating of support (stating very good or good) and rating of effort (stating good or great deal) of private recruitment firm in helping find job, 2011-12 ..... 139
Table A.27: Reported lack of effort of private recruitment firm attributed to own age or any reason, and if influenced desire to work or work more hours, 2011-12 ..... 139
Table A.28: Reported lack of effort of private recruitment firm attributed to age (\% of people using private recruitment firm) by socio-economic and demographic characteristics, 2011-12 ..... 140
Table A.28.1: Logistic regression results of reported lack of effort of private recruitment firm attributed to age, 2011-12 ..... 141
Table A.29: $\quad$ No jobs available in line of work in local area and no jobs available at all in local area (\% of people who have worked in last 5 years or looked for job in last 5 years) by socio-economic and demographic characteristics, 2011-1 ..... 142
Table A.29.1: Logistic regression results for no jobs available in line of work in local area and no jobs available at all in local area, 2011-12 ..... 143
Table A.30: Training or up-skilling options would help do job better (\% of currently employed) by socio-economic and demographic characteristics, 2011-12 ..... 144
Table A.30.1: Logistic regression results for training or up-skilling options would help do job better, 2011-12 ..... 145
Table A.31: Training or up-skilling options would help gain promotion/get better job elsewhere/get better paid job (\% of currently employed) by socio-economic and demographic characteristics, 2011-12 ..... 146
Table A.31.1: Logistic regression results for training or up-skilling options would help gain promotion/get better job elsewhere/get better paid job, 2011-12 ..... 147
Table A.32: Training or up-skilling options would help find more hours (\% of part-time workers) by socio-economic and demographic characteristics, 2011-12 ..... 148
Table A.32.1: Logistic regression results of training or up-skilling options would help find more hours, 2011-12 ..... 149
Table A.33: Respondent perception of whether training or up-skilling options would help find a job (\% of people not working and not fully retired and have worked or looked for job in last 5 years) by socio-economic and demographic characteristics, 2011-12 ..... 150
Table A.33.1: Logistic regression results for respondent perception of whether training or up- skilling options would help find a job, 2011-12 ..... 151
Table A.34: Type of workplace training attended in past 5 years (\% of people who have worked in last 5 years), 2011-12 ..... 151
Table A.35: Attended any work-related training in last 5 years (\% of people who have worked in last 5 years), if rated any training very or somewhat useful (\% of people who have attended any work-related training in last 5 years) and any training wanted to attend in last 5 years but unable to (\% of people who have worked in last 5 years) by socio-economic and demographic characteristics, 2011-12 152
Table A.35.1: Logistic regression results for attended any work-related training in last 5 years, if rated any training very or somewhat useful and any training wanted to attend in last 5 years but unable to, 2011-12 ..... 154
Table A.36: Reasons for not being able to attend training (\% of those where there was training unable to attend in last 5 years) by socio-economic and demographic characteristics, 2011-12 ..... 155
Table A.36.1: Logistic regression results for reasons for not being able to attend training, 2011-12 ..... 157
Table A.37: Care-givers (\% of total population) by socio-economic and demographic characteristics, 2011-12 ..... 158
Table A.37.1: Logistic regression results for care-givers, 2011-12 ..... 159
Table A.39: Care for person with long-term illness or disability (\% of total population), and average hours per week provide care (all care-givers) by socio-economic and demographic characteristics, 2011-12 ..... 160
Table A.39.1: Logistic regression results for care for person with long-term illness or disability, and linear regression results for average hours per week provide care, 2011-12. ..... 161
Table A.40: Care-giving prevents from working (\% of all not employed care-givers, \% of all not employed population) by socio-economic and demographic characteristics, 2011-12 ..... 162
Table A.40.1: Logistic regression results for care-giving prevents from working (\% of all not employed care-givers, \% of all not employed population), 2011-12 ..... 163
Table A.41: Care-giving prevents from working more hours (\% of employed care-givers, \% of all employed population) by socio-economic and demographic characteristics, 2011-12 ..... 164
Table A.41.1: Logistic regression results for care-giving prevents from working more hours (\% of employed care-givers, \% of all employed population), 2011-12 ..... 165
Table A.42: Suitable external care would help care-givers work (\% of people where care-giving prevents from working) or work more hours (\% of people where care-giving prevents from working more hours) by socio-economic and demographic characteristics, and average (more) hours per week able to work if suitable external care available, 2011-12 ..... 166
Table A.42.1: Logistic regression results for suitable external care would help care-givers work or work more hours, 2011-12 ..... 167
Table A.43: Care-giving responsibilities have impacted upon ability to accumulate superannuation (\% of people where care-giving prevents from working or working more hours) by socio-economic and demographic characteristics, 2011-12 ..... 168
Table A.43.1: Logistic regression results for care-giving responsibilities have impacted upon ability to accumulate superannuation, 2011-12 ..... 169
Table A.44: More flexible work arrangement would help care-givers work or work more hours (\% of care-givers whose care-giving responsibilities prevent from working or working more hours), average (more) hours per week work, 2011-12 ..... 169
Table A.45: Used flexible work arrangement if had illness, injury or disability in last 5 years (\% of people ill in last 5 years and worked in last 5 years but not self-employed) by socio-economic and demographic characteristics, 2011-12 ..... 170
Table A.45.1: Logistic regression results for used flexible work arrangement if had illness, injury or disability in last 5 years, 2011-12 ..... 171
Table A.46: Flexible work arrangement would help people currently with illness, injury of disability work or work more hours (\% of currently ill who have not used flexible work arrangement but not self-employed and 1. Not employed, or 2. Employed) by socio-economic and demographic characteristics, and average number (more) hours per week could work if flexible work available, 2011-12172
Table A.46.1: Logistic regression results for flexible work arrangement would help people currently with illness, injury of disability work or work more hours, 2011-12 ..... 173
Table A.47: Reducing hours in transition to retirement would persuade workers to put off retirement (\% of people currently working but not self-employed) and mentoring younger workers would put off retirement (\% of people currently working) by socio-economic and demographic characteristics, and average additional years of work if could reduce hours/mentor, and average hours work in additional years of work, 2011-12 ..... 174
Table A.47.1: Logistic regression results for reducing hours in transition to retirement would persuade workers to put off retirement and mentoring younger workers would put off retirement, 2011-12 ..... 175
Table A.48: Employer of yourself ever made superannuation contributions (\% of people who have worked in last 20 years or looked for job in last 5 years), and average number of years contributed to superannuation, by socio-economic and demographic characteristics, 2011-12 ..... 176
Table A.48.1: Logistic regression results for employer of yourself ever made superannuation, and linear regression results for average number of years contributed to superannuation, 2011-12 ..... 177
Table A.49: Income intend to receive at retirement (\% of not retired) or presently receive in retirement (\% of retired), 2011-12 ..... 177
Table A.50: Superannuation is an intended income source at retirement and is a current income source at retirement (\% of people who have worked in last 20 years or looked for job in last 5 years and 1. not retired, 2. retired) by socio-economic and demographic characteristics, 2011-12 ..... 178
Table A.50.1: Logistic regression results for superannuation is an intended income source at retirement and is a current income source at retirement, 2011-12 ..... 179
Table A.51: Confidence (\% extremely or somewhat confident) that have enough superannuation for retirement (\% of people who have had contributions made to superannuation or (intend to) receive superannuation income in retirement, and 1. Not retired, 2. Retired) by socio-economic and demographic characteristics, 2011-12 ..... 180
Table A.51.1: Regression results for confidence that have enough superannuation for retirement, 2011-12 ..... 181
Table A.53: Superannuation decreased due to financial events in recent years (\% of people who have had contributions made to superannuation) by socio-economic and demographic characteristics, 2011-12 ..... 182
Table A.53.1: Logistic regression results for superannuation decreased due to financial events in recent years, 2011-12 ..... 183

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\begin{array}{ll}
\text { Table A.54: } & \text { Impact of superannuation decrease due to financial events in recent years on } \\
\text { retirement plans (\% of people whose superannuation decreased due to financial } \\
\text { events in recent years and not retired) by socio-economic and demographic } \\
\text { characteristics, and average more/less years work, 2011-12 ......................... } 184
\end{array}
$$

Table A.55: Impact of superannuation decrease due to financial events in recent years on
retirement (\% of people whose superannuation decreased due to financial
events in recent years and retired) by socio-economic and demographic
characteristics, and average more/less years worked, 2011-12. ..... 187

Table A.55.1: Multinomial logistic regression results for impact of superannuation
decrease due to financial events in recent years on retirement, 2011-12 ..... 189

Table A.56: Impact of superannuation decrease due to financial events in recent years on working hours (\% of people whose superannuation decreased due to financial events in recent years and currently working) by socio-economic and demographic characteristics, and average more/less hours per week, 2011-12190
Table A.56.1: Multinomial logistic regression results for impact of superannuation decrease due to financial events in recent years on working hours, 2011-12.... 191
Table A.57: Knowledge (great deal/fair amount) of superannuation rules (\% of people who have had contributions made to superannuation, or intend to receive/currently receive superannuation income in retirement) and agreement (strongly agree of agree) that superannuation rules change too frequently to adequately plan for retirement (\% of these people who know at least something about superannuation rules), 2011-12
Table A.57.1: Logistic regression results for knowledge (great deal/fair amount) of superannuation rules and agreement (strongly agree of agree) that superannuation rules change too frequently to adequately plan for retirement, 2011-12
Table A.58: Lack of certainty of superannuation rules affects retirement plans or retirement (\% of people who agree or strongly agree that superannuation rules change too frequently and 1. Not retired, 2. Retired), 2011-12194
Table A.58.1: Logistic regression results for lack of certainty of superannuation rules affects retirement plans or retirement, 2011-12. ..... 195

Table A.59: Aware of tax-free superannuation after age 60 (\% of people who have had
contributions made to superannuation, or intend to receive/currently receive
superannuation income in retirement) by age, socio-economic and
demographic characteristics, 2011-12 ..... 196

Table A.59.1: Logistic regression results for aware of tax-free superannuation after age 60
(age 45-59 and 60-74), 2011-12 ..... 197

Table A.60: How tax-free superannuation after age 60 would affect retirement (\% of people unaware of tax-free super after 60, age 60-74 and retired) by socio-economic and demographic characteristics, and average additional years work, 2011-12198
Table A.60.1: Regression results for how tax-free superannuation after age 60 would affect retirement (people unaware of tax-free super after 60, age 60-74 and retired), 2011-12
Table A.61: How tax-free superannuation after age 60 has affected retirement (\% of people aware of tax-free super after 60, age 60-74 and retired) by socio-economic and demographic characteristics, and average more/less years work, 2011-12...... 200
Table A.62: How tax-free superannuation after age 60 would affect retirement (\% of people aged 45-59 and retired) by socio-economic and demographic characteristics, and average additional years work, 2011-12 ..... 202
Table A.63: How tax-free superannuation after age 60 would affect retirement plans (\% of people unaware of tax-free super after 60, age 60-74 and not retired) by socio-economic and demographic characteristics, 2011-12 ..... 203
Table A.63.1: Multinomial logistic regression results for how tax-free superannuation after age 60 would affect retirement plans (people unaware of tax-free super after 60, age 60-74 and not retired), 2011-12 ..... 204
Table A.64: How tax-free superannuation after 60 would affect hours worked (\% of people unaware of tax-free super after 60, age 60-74 and currently working) by socio-economic and demographic characteristics, and average more/less hours per week work, 2011-12 ..... 205
Table A.64.1: How tax-free superannuation after 60 would affect hours worked (people unaware of tax-free super after 60, age 60-74 and currently working) ..... 206
Table A.65: How tax-free superannuation after age 60 has affected retirement plans (\% of people aware of tax-free super after 60, age 60-74 and not retired) by socio-economic and demographic characteristics, and average additional years work, 2011-12 ..... 207
Table A.66: How tax-free superannuation after age 60 has affected hours worked (\% of people aware of tax-free super after 60, age 60-74 and currently working) by socio-economic and demographic characteristics, average more/less hours per week work, 2011-12 ..... 209
Table A.66.1: How tax-free superannuation after age 60 has affected hours worked (people aware of tax-free super after 60, age 60-74 and currently working), 2011-12 ..... 210
Table A.67: How tax-free superannuation after age 60 would affect retirement plans (\% of not retired people age 45-59) by socio-economic and demographic characteristics, and average more/less years work, 2011-12 ..... 211
Table A.67.1: Multinomial logistic regression results for how tax-free superannuation after age 60 would affect retirement plans (not retired people age 45-59), 2011-12 ..... 212
Table A.68: How tax-free superannuation after age 60 would affect hours worked after age 60 (\% of people age 45-59, currently working) by socio-economic and demographic characteristics, and average hours per week would work, 2011-12 ..... 213
Table A.69: Receive any Government income support (\% of total population) by socio-economic and demographic characteristics, 2011-12 ..... 215
Table A.70.1: Logistic regression results for receive any Government income support, 2011-12 ..... 216
Table A.71: Type of Government income support receive (\% of all population) by socio-economic and demographic characteristics, 2011-12 ..... 217
Table A.71.1: Logistic regression results of type of Government income support receive, 2011-12 ..... 218
Table A.72: $\quad$ Type of activities of Newstart Allowance and Parenting Payment recipients (\% of Newstart Allowance recipients, \% of Parenting Payment recipients), 2011-12 ..... 219
Table A.73: Reasons for Newstart Allowance or Parenting Payment recipients choosing voluntary work (\% of Newstart Allowance or Parenting Payment recipients working voluntarily for 30 hours per week), 2011-12 ..... 219
Table A.75: Withdrawal rate on Age Pension impacts desire to work or look for work (\% of people receiving Age Pension) and the maximum percentage of Age Pension people willing to lose to work as much as they want, by socio-economic and demographic characteristics, age 65-74, 2011-12 ..... 220
Table A.75.1: Logistic regression results for withdrawal rate on Age Pension impacts desire to work or look for work, and linear regression results for the maximum percentage of Age Pension people willing to lose to work as much as they want, 2011-12 ..... 220
Table A.76: Very long-term unemployed (\% of people not working and not retired, \% of people not retired), and average length of time since last worked and median length of time since last worked, 2011-12 ..... 221
Table A.76.1: Logistic regression results for very long-term unemployed (\% of people not working and not retired, \% of people not retired), 2011-12 ..... 222
Table A.77: Very long-term unemployed (\% of people not retired) by other characteristics, 2011-12 ..... 222
Table A.78: Used Australian Government employment service provider to help job search (\% of people who looked for a job in last 5 years) and if found service helpful (\% of people who used Australian Government employment service provider to help job search in last 5 years) by socio-economic and demographic characteristics, 2011-12 ..... 224
Table A.78.1: Logistic regression results for used Australian Government employment service provider to help job search and if found service helpful, 2011-12 ..... 225
Table A.79: Reasons Australian Government employment service provider not helpful (\% of people who found Australian Government employment service not helpful) by socio-economic and demographic characteristics, 2011-12 ..... 226
Table A.81: More helpful assistance would help discouraged worker look for job (\% of discouraged workers), 2011-12 ..... 228
Table A.82: Average age intend to retire (not retired who have worked in past 20 years or looked for work in past 5 years) and average age did retire (retired who have worked in past 20 years or looked for work in past 5 years) by socio-economic and demographic characteristics, 2011-12 ..... 228
Table A.83: Reasons stated (\% stating very or somewhat important) for when intend to retire and when did retire (\% of not retired or retired population who have worked in past 20 years or looked for work in past 5 years), 2011-12 ..... 229
Table A.84: Reasons for decision about when intend to retire (\% stating very or somewhat important) (\% of not retired population who have worked in past 20 years or looked for work in past 5 years) by socio-economic and demographic characteristics, 2011-12 ..... 230
Table A.85: Reasons for decision about when did retire (\% stating very or somewhat important) (\% of not retired population who have worked in past 20 years or looked for work in past 5 years) by socio-economic and demographic characteristics, 2011-12 ..... 232
Table A.85.1: Logistic regression results for reasons for decision about when did retire (stating very or somewhat important), 2011-12 ..... 233
Table A.86: Changed working condition to accommodate illness, injury or disability in last 5 years (\% of ill in last 5 years who worked in last 5 years but are not self-employed) by socio-economic and demographic characteristics, 2011-12 234
Table A.86.1: Logistic regression results for changed working condition to accommodate illness, injury or disability in last 5 years, 2011-12 ..... 235
Table A.87: Changed working condition would help work or work more hours (\% of currently ill, injured or with disability who have not changed working condition, and 1. not employed, or 2. employed) by socio-economic and demographic characteristics, and average (more) hours could work if changed working condition, 2011-12 ..... 236
Table A.87.1: Logistic regression results for changed working condition would help work or work more hours, 2011-12 ..... 237
Table A.88: III for 2 months in last 5 years and if prevented from working (\% of total population): interaction with other factors, 2011-12 ..... 238
Table A.89: Currently ill and if prevents from working (\% of total population): interaction with other factors, 2011-12 ..... 240
Table A.90: Reported workplace exclusion in last 5 years attributed to age (\% of people who have worked in last 5 years excluding self-employed): interaction with other factors, 2011-12 ..... 242
Table A.93: Care for person with long-term illness or disability (total population) and care-giving prevents from working (\% of not employed population): interaction with other factors, 2011-12 ..... 246
Table A.94: Reducing hours would help delay retirement (\% of currently employed): interaction with other factors, 2011-12 ..... 249
Table A.97: Marginal effect calculation: care-giving (2011-12) ..... 251
Table A.98: Marginal effect calculation: flexibility (2011-12) ..... 252
Table A.99: Marginal effect calculation: retraining (2011-12) ..... 253
Table A.100: Marginal effect calculation: care-giving (M1) (2011-12) ..... 254
Table A.101: Marginal effect calculation: workplace barriers (2011-12) ..... 255

## LIST OF BOXES

Box 1: Measurement of Barrier for the Marginal Effect Projection

## 1. INTRODUCTION

The ageing of the Australian population presents numerous challenges for the Australian economy and community. Importantly, it also presents great opportunities. Mature age people have a wealth of skills and experience to bring to the economy and their communities, and to share with younger generations.

The large cohort of 'baby boomers' are approaching the eligibility age for the Age Pension, and so in coming years will begin retiring from employment. This will increase pressure on Government expenditure on pensions and health care, while also reducing the tax revenue from employed workers

Increasing the employment participation of mature age people (aged 45 years and over ${ }^{1}$ ) is a clear means of overcoming the economic challenges of an ageing population. It will increase the ability of people to fund their own retirement and lessen reliance on Government payments. Further, a higher proportion of mature age people in employment will increase the Government's revenue base, as well as potentially lowering the costs associated with ill health. Increasing mature age employment participation has been stated as a key public policy priority in the Intergenerational Report 2010.
However, Australia has relatively low levels of mature age employment compared to many other OECD countries, including the USA, UK, Canada and New Zealand.i' In addition to the fiscal challenges this presents, Australian employers also suffer a cost by not fully utilising the skills, experience and mentoring abilities of the mature age population. Encouragingly, however, the employment participation rate of mature age Australians had been increased in the past decade, especially among women, offsetting the declines in male participation in preceding years.ií

In response to these challenges, the Federal Government has introduced a number of policies and programs to increase the mature age employment rate, including re-training and re-skilling, job search support programs and programs designed to change employer attitudes to employing mature age workers. Other initiatives to raise employment participation include a raise in the Age Pension eligibility age from 65 to 67 years beginning in 2017, increasing the earliest age people can access their superannuation, and legislating the Age Discrimination Act 2004 (Commonwealth).

Despite these efforts, there remains further scope for Australia to engage economically inactive people aged over 45. An understanding of the barriers preventing more mature age people from seeking work is necessary to develop appropriate policy and programmatic responses.

Older workers and job seekers are not a homogeneous group and many factors may influence their ability to obtain/retain suitable work, particularly in the last 20-30 years of working life. The barriers people face can be grouped into:

- personal barriers (that will be specific to each individual)
- structural barriers (that affect whole groups).

Structural barriers may exist at:

- the systemic level (e.g. age discrimination, legislative impediments (e.g. workers compensation, superannuation), work design and structures)
- the industry level (industries undergoing major structural changes)

[^0]- the enterprise level (individual organisation or work units facing structural changes).

An individual may, of course, be affected by both personal barriers and structural barriers. There are a number of structural barriers to mature age employment and labour force participation more generally, based on research from both Australia and internationally.iv
These barriers are:

- discrimination in employment on the basis of age
- care-giving responsibilities
- flexibility of employment arrangements
- issues around private recruitment firm practices
- job search assistance
- leisure time trade-off
- mental health barriers
- mismatch of skills and experience with industry demands
- physical illness, injury and disability
- re-entry issues barriers of the Very Long-Term Unemployed
- re-training and up-skilling barriers
- superannuation
- tax transfer system
- workplace barriers.


## 2. BACKGROUND AND CONTEXT

The first report for the Consultative Forum on Mature Age Participation prepared on behalf of the Forum by National Seniors Productive Ageing Centre, sought to document:

1. the importance of mature age employment participation in the context of population ageing in Australia
2. the fourteen barriers to mature age employment participation, as ranked by the Forum
3. existing evidence for the presence of each barrier from academic literature, published data sources and current Government responses.

This report builds upon the previous by providing evidence from the Survey of Barriers to Employment for Mature Age Australians. Specifically, this report utilises the results from this first nationally representative survey of 3007 mature age Australians aged 45-74 to elicit: (1.) the prevalence across the barriers to mature age participation, (2.) potential interaction of the barriers, and (3.) the role of demographic and economic factors in explaining differences in experiencing the barriers.

Before turning to the analysis of these new data, in this section we overview previous research addressing each barrier. For a more detailed account, please refer to the Forum's first report . In summary, the first report identified the following barriers to the access and continued participation of mature age Australians in the labour market:

## Discrimination in employment on the basis of age

Australian and international research has identified that discrimination against older workers is one of the least acknowledged barriers to workforce participation. ${ }^{\text {vivii }}$ It can manifest both directly and indirectly in both the recruitment and retention of staff. For example, euphemisms such as being unable to fit into the current work team, being overqualified, or lacking up-to-date skills, being inflexible, slow or unwilling to learn, or concerns about health and fitness are often used. vii Age discrimination, real or perceived, can cause mature age people to 'self-select' out of the labour market. Often age discrimination interacts with other barriers, especially issues with private recruitment agencies, re-training and job search assistance.

## Care-giving responsibilities

Australian studies show that living arrangements and care-giving responsibilities significantly impact mature age people's ability to secure and retain employment.' Many women have to disrupt their careers due to child care and other caring responsibilities, and as a result have lower income and superannuation savings in retirement. Overall, the labour force participation rate of primary carers is substantially lower than those without caring responsibilities; this is especially the case for full-time employment. ${ }^{\text {x }}$

## Flexibility of employment arrangements

The ability to work part-time or flexible hours has been found to be an important facilitator, after good health, for older people to work beyond retirement age. ${ }^{\text {x-xi }}$ Flexible employment arrangements can also increase the employment participation of older Australians who face other barriers to working, such as physical illness, injury or care-giving responsibilities. xii

## Issues around private recruitment firm practices

The greater role of private recruitment agencies as intermediaries between job seekers and employers means that age-based discrimination is increasingly likely to be experienced at the recruitment stage. ${ }^{\text {xi }}$ Studies have found that recruitment agencies are reluctant to accept older workers as clients or recommend them to employers. ${ }^{\text {xv }}$ This is particularly prevalent within the Information and Communications Technology (ICT) industry, which is seen as having a youth focused culture. ${ }^{\text {xi }}$

## Job search assistance

The availability of appropriate job search assistance is important in determining whether mature age Australians can find employment. Mature age job seekers can have trouble finding employment because of out-dated job search skills, having skills and knowledge that are not in demand in the present labour market and facing age discrimination. xvi This can discourage mature age workers from seeking employment, or to settle for 'any job' rather than appropriate work. Programs providing job search assistance that are tailored to older workers and linked to local labour markets are especially important in helping job seekers. xvii

## Leisure time trade-off

Efforts to increase employment participation of mature age Australians are challenged by a tendency for many to retire early because of the attractiveness of leisure activities such as travel or spending more time with family and friends. Attitudes within the community have been broadly supportive of early retirement for many years and, along with Government policy, have reinforced the trend to early retirement. ${ }^{\text {xix }}$ Early retirement has a detrimental effect on the Australian economy because the skills and knowledge of mature age people can make a substantial contribution to productivity, as well as mentoring younger workers. ${ }^{\times x}$ As Australians are living longer, healthier lives, there is also an increased likelihood that those that retire early will use their superannuation and therefore become more reliant on the public purse.

## Mental health barriers

The connections between mental illness and early retirement, job loss, unemployment, or difficulties re-entering employment have been identified in several Australian studies. ${ }^{\text {xxi-xxi }}$ It has been estimated that the annual costs in Australia of depression in the workforce costs are $\$ 12.6$ billion, with much due to lost productivity and job turnover.xxii One study found that mental illness had a larger impact on labour force participation than heart disease and diabetes. ${ }^{\text {xxiv }}$ Further, in 2003 about half of all Australians aged 45-64 who were not in labour force were reported having a form of long-term mental or behavioural disorders. ${ }^{x \times v}$

## Mismatch of skills and experience with industry demands

The transformation in the Australian economy in recent decades, with a decline in manufacturing jobs and an increase in occupations in the services and information technology sectors, means that some mature age people have skills and experience that suited industry needs in previous decades, but less so in the modern economy. Internationally, an OECD survey of 21 countries found a major barrier faced by mature workers was insufficient skills relative to technological requirements, and this was exacerbated by a lack of assistance and/or motivation to upgrade skills. ${ }^{\text {xxvi }}$ The mismatch of skills and experience with industry's demand for labour is felt most acutely by older people with low education.

## Physical illness, injury and disability

Physical health, injury or disability have been found from a number of studies to have a major impact on early retirement, job loss, unemployment, or difficulties re-entering employment. Research from Australia found that the probability of employment for men with poor health is significantly lower than those who reported their health was in good condition. xxvii Further, long-term illness or disability is a major reason reported for not wanting to work, accounting for over two-thirds of males aged 50-54 years (68\%) and over half aged 55-59 (54\%).. .xviii In the UK, recent research found that the most common reason given for leaving a job was health problems (31\%)..xix

## Re-entry issues barriers of the Very Long-Term Unemployed

Very long term unemployment (VLTU) is defined as unemployment of 24 months or more in duration. Structural changes to the economy in recent decades have led to significant changes in the kinds of skills in demand, such as up-to-date computer-based skills. Many low-skilled mature age workers either have been displaced or were forced to undertake voluntary retirement, while many unemployed mature age job seekers have experienced long term difficulties in reentering the workforce. Around 26\% of very long-term unemployed job seekers registered with Job Services Australia are 50 years and over, while mature age job seekers aged 55 years and over experience an average duration of unemployment since last full-time job of 71 weeks compared to 37 weeks for job seekers aged 25-44 years. ${ }^{\text {xxx-xxxi }}$

## Re-training and up-skilling barriers

The Intergenerational Report 2010 states that a key public policy priority in Australia is to support mature age participation through practical measures such as re-training and re-skilling programs. ${ }^{\times x x i}$ The ability of mature age people lacking prior qualifications to find employment is reliant upon the availability of appropriate training opportunities, as well as their aspirations to upgrade their skills. However, research in Australia has found that existing programs are not suitable for many mature age people, especially those with low levels of prior qualifications and low formal education. ${ }^{\text {xxxii--xxxiv }}$ Furthermore, mature age people can face a significant cost in undertaking training.

## Superannuation

The OECD has stated that Australia's superannuation system has helped it to be better placed than many other Western countries to manage the fiscal challenges of population ageing. ${ }^{\times x \times v}$ However, the availability of superannuation can be a disincentive for mature age Australians participating in the labour force. To help remove this disincentive to working longer, the Government has made changes to superannuation rules in recent years, including increasing the preservation age and allowing people who continue to work to access their superannuation. Many superannuation balances have been adversely affected by financial events in recent years, which may also have impacted on employment participation.

## Tax transfer system

There are a number of payments available to mature age Australians both above and below the Age Pension qualifying age. In Australia there is evidence that the tax transfer system is complex and acts as a disincentive for mature age people to work. In particular, the income support system also makes it difficult for people to engage in both paid work and caring responsibilities.

Research has found that one in five pensioners who wanted to work declined part-time employment opportunities because it would cause a reduction in pension entitlements. ${ }^{\text {xxxi }}$ In the 2009/10 Budget the Government announced an increase in the Age Pension qualifying age to 67 years, at a rate of six months every two years, beginning in 2017, to encourage greater employment participation. Incentives such as the Mature Age Worker's Tax Offset are also available. A further reform to encourage employment participation has been has been making superannuation income from a taxed source tax-free for people over 60 years. Furthermore, the Work Bonus scheme has sought to encourage Age Pensioners to maintain links with the workforce by disregarding an amount of earned income when calculating assessable income for Age Pension purposes. Recent tax reforms have also increased the tax-free threshold, with the aim of encouraging more people into the workforce.

## Workplace barriers

Physically demanding occupations or those with difficult conditions are major barriers for many mature age people joining the workforce, and contribute to early retirement. Improving the quality of the working environment can not only attract mature age people into the workforce, but also it can increase longevity in employment. The creation of roles and workplace practices specific to mature age workers, such as the creation of ergonomically sound working conditions, has been suggested as a means to recruit and retain such employees. ${ }^{\text {xxxvii }}$

## The importance of the barriers according to the Consultative Forum on Mature Age Participation

Informing the first Consultative Forum report, each Forum member completed 14 short questionnaires covering the importance of each barrier, as well as the feasibility of employer, government or worker interventions to ameliorate the position of mature age workers. Table 1 shows the relative importance of these barriers according to these responses by the Consultative Forum. Physical illness, injury and disability were rated by $100 \%$ of Forum members as being of either 'high' or 'very high' importance. The next highest rated barriers in terms of importance were age discrimination and issues around private recruitment firm practices (rated by $87.5 \%$ of Forum Members as of 'high' or 'very high' importance). These were followed by mismatch of skills and experience with industry demands, re-training and up-skilling barriers and care-giving responsibilities (85.7\%).The two barriers with the lowest ranking are workplace barriers (16.7\%) and leisure time trade-off (37.5\%).

Table 1: Ranking of the percentage of Consultative Forum Members who rated the importance of each barrier as high or very high, 2011.

| Barrier | \% high/very high |
| :--- | :---: |
| Physical illness, injury and disability | 100.0 |
| Age discrimination | 87.5 |
| Issues around private recruitment firm practices | 87.5 |
| Mismatch of skills and experience with industry demands | 85.7 |
| Re-training and up-skilling barriers | 85.7 |
| Care-giving responsibilities | 85.7 |
| Flexibility of employment arrangements | 75.0 |
| Re-entry issues barriers of Very Long-Term Unemployed | 71.4 |
| Superannuation | 71.4 |
| Tax transfer system | 71.4 |
| Mental health barriers | 66.7 |
| Job search assistance | 62.5 |
| Leisure time trade-off | 37.5 |
| Workplace barriers | 16.7 |

Source: National Seniors Productive Ageing Centre, 2011.

## 3. RESEARCH OBJECTIVES

The objectives of this report are to:

1. Measure the prevalence of each of the barriers to employment, as discussed in the first Consultative Forum report;

- The prevalence of each of the barriers to mature age employment is measured using the appropriate questions in the survey. Because there are multiple questions for some barriers, we present prevalence for each relevant question for a barrier.
- Many barriers are likely to be present for both employed people, job seekers and the retired. In this case we measure the barrier separately for these sub-groups.
- For each barrier, we will present a summary measure that best represents the overall prevalence of the barrier among the mature age population, with a view to creating an ad hoc ranking among the barriers.

2. Understanding the differences in the prevalence of each of the barriers as they differ by demographic, economic and social characteristics;

- The relationship of the barriers with the demographic and socio-economic factors will be analysed using modern econometric models. These characteristics include age, sex, place of residence, as well as measures of economic and human capital. Measures of include household income, education and training, country of birth, marital status, place of residence and labour force status.
- The prevalence of each barrier will be presented for each measure of the demographic and socio-economic factors. Multivariate analysis of how these factors interact with the barriers will also be conducted. This will provide evidence about which population sub-groups are most likely to face each barrier to employment participation, which can support targeted policy and programmatic responses.

3. Examine the degree to which individual barriers interact, creating multiple obstacles for many older Australians attempting to enter the workforce or increase their hours worked;

- The literature suggests that many of these barriers overlap and are related with each other. We will examine the interaction of these barriers though numerous analyses using the survey data. For example, we use questions exploring perceptions and experiences of age discrimination among mature age workers to construct a summary measure of age discrimination. We then analyse how the summary measure of age discrimination interacts with other barriers. This provides evidences of how age discrimination is manifested.

4. Undertake a simulation exercise to isolate the proportion of hours lost to the Australian labour market and economy due to the stated barriers to entry, and;

- We will analyse the data further to project the number of hours worked by mature age people. This projection will be conducted by combining standard demographic and labour force projection methods. We will project the number of hours worked by age and sex to 2031 from population projections combined with propensities of mature age Australians to change employment status and the number of hours worked assuming each barrier is not a problem. This information will provide evidence of the contribution that reductions in the extent of each of these barriers will make to employment and productive contribution of mature age people in Australia.

5. Contrast the perceptions of mature age workers and job seekers, with the views of employers as collected in the 2010 DEEWR Survey of Employers.

- The 2010 DEEWR Survey of Employers collected data from employers about their experiences with and attitudes towards the employment of mature age people. These data are used to contrast the employers' experiences and attitudes employing mature age people with the experiences and perceptions of mature age people. The information in the Survey of Employers about the steps taken to retain those who might retire will also be of use in contrasting the reported information on the experience of mature age people in transitioning to retirement.


## 4. METHODOLOGY

This section details the data and methodology used for the measurement of prevalence for each of the barriers, data analysis techniques adopted and also a statement of methodology for the projection of population, labour supply and hours worked.

### 4.1 2011-12 Survey of Barriers to Employment for Mature Age Australians

### 4.1.1 Overview of Survey Instrument

The Survey of Barriers to Employment for Mature Age Australians comprised a questionnaire of Australians aged 45-74 years. The questionnaire collected information on employment status, experiences, attitudes and perceptions of the barriers to employment for mature age people, as well as demographic and socio-economic information. The lower limit of 45 years was used for our sample to examine the experiences, attitudes and intentions of people approaching mature age (50 years and above), while the upper limit of 74 was used because of the low proportion of those aged 75+ years still employed.
ORC International conducted the Survey of Barriers to Employment for Mature Age Australians on behalf of the National Seniors Productive Ageing Centre. A total of 3007 respondents aged 45-74 were interviewed between November 2011 and January 2012. Prior to fieldwork, a pilot test of 20 respondents was conducted in October 2011. The questionnaire was refined based on these pilot test results.

The interviews were conducted using Computer Assisted Telephone Interviewing (CATI) from the ORC International CATI facility in Melbourne. Each interview took an average of 20 minutes to complete. ORC International is bound by the Australian Market and Social Research Society's Code of Professional Behaviour and Privacy legislation. All data collected are strictly confidential, and names and answers of respondents are not disclosed.

The sample frame used for the survey was Sample Pages, which comprises six million up-todate landline phone numbers in Australia. Sample Pages is well-renowned and endorsed by the Association of Market and Social Research Organisations (AMSRO).
The sample was stratified based on part of state (i.e. capital city and rest of state). This resulted in 15 strata, with only one stratum for the ACT. The number of interviews conducted within each stratum was determined approximately according to that stratum's share of the population aged 45-74 in Australia. An equal number of males and females were interviewed within each stratum.

Figure 1 displays the breakdown of calls made for calculation of response rates. Of the 41517 phone calls made by ORC International, eligibility for the survey was established for 8880 households. With 3007 interviews conducted, this equates to a response rate of about 34\%.

Figure 1: Call structure, 2011-12 Barriers to Employment for Mature Age Australians Survey.


Source: 2011-12 Barriers to Employment for Mature Age Australians Survey.

### 4.1.2 Measurement of age discrimination

The measurement of age discrimination is difficult given that a person's responses in the survey represent their perceptions and experiences alone. Without validated employer reports, it is very difficult to measure actual incidence of age discrimination.

Our approach, following that of Professor Philip Taylor, is to include a series of measure on exclusion; as they occur in both the workplace and in job search. Furthermore, the survey collects data of reports by respondents of their experiences of age discrimination, and their perceptions of age discrimination as an issue in the workplace and in looking for a job in Australia.

More specifically, the measurement of age discrimination experienced by respondents uses three approaches:

- Respondents are asked to report any exclusion they have experienced in the workplace or while looking for work in the previous 5 years. Exclusions in the workplace include being unfairly excluded from work-related training ort education opportunities, being denied a job promotion and being given lesser responsibilities. Job search exclusions include being passed over for a job interview when you were qualifies for that job, being told you are "too qualified" for that job, and being asked your age in the job application process. If a person reported having experienced at least one exclusion - they are asked if any exclusion can be attributed to age (as well as race, gender, health/disability or something else). This approach is adapted from the Australian WorkAbility Surveyxxxvii, which asked respondents to report on exclusion they had experienced at work. An advantage of this approach is that it allows for more subtle forms of age discrimination to be identified, and allows for more understanding of how age discrimination is operationalized in the workplace and in looking for a job. However, it is based on respondents' perception, so may be subject to some bias.
- Respondents are asked to report if they have been told whether they are too old for a job an employer, a colleague, a potential employer, an Australian Government service provider, a private recruitment agency, or a family friend or member.
- They are also asked to state if they have been indirectly told they are too old for a job, by being asked, for example, when they graduated or how old their kids are.


### 4.2 Weighting, measure of barrier prevalence, analyses by socioeconomic and demographic characteristics and barrier interactions

Data for the barriers survey were weighted to be representative of the Australian estimated resident population (ERP) as at June 2011, according to age, sex and strata. ${ }^{\text {xxxix }}$ In Tasmania, ACT and the Northern Territory the total state/territory population was used for weighting. Weighting was applied to the data to correct for possible sampling bias resulting from sample source and/or set quotas (see Section 4.1 for further details).

The prevalence of the barriers and the analyses by socioeconomic and demographic characteristics and barrier interactions are presented as:

- weighted descriptive statistics (i.e. univariate and bivariate analyses) as well as
- results from regression models (multivariate analyses)

The descriptive statistics show the univariate and bivariate (i.e. cross-tabulated with socioeconomic and demographic characteristics) results for each measure. The univariate results are presented in tables in the main section of the report, with the bivariate results shown in the Appendix but described in the text of the main section. The base population is clearly defined in the tables. The cross-tabulations present the measure, as a percentage or an average, for each socio-economic and demographic characteristic. The 95\% confidence interval of the measure is also presented. An asterisk is used to signify whether there is a significant difference at $\mathrm{p}<0.05$ (or $\mathrm{p}<0.10$ where signified) in the measure between that particular category of the socio-economic or demographic characteristic and the reference category, (i.e. the top category within that category - for personal income, 'Up to \$20,000'). The interactions of barriers are presented as a cross-tabulation showing the prevalence of the primary variable for each category of the other variables (i.e. variables that are being interacted with). In the tables, we do not show the proportion of responses "can't say", "refused" or "don't know, however these are included in the base population. Weighted ('N W') and unweighted numbers ('N Unw') of the base population within each category are also presented.
For most variables where prevalence rates and differences in average hours or years exist between different population groups, and where sample sizes are sufficient, regression models were fitted to examine if the differences persist once extensive controls are included. The specification of the models is dependent upon the underlying distributional characteristics of the dependent variable. Specifically, multivariate analysis is conducted using a logit regression for dichotomous dependent variables, a multinomial logit regression where there are three or more categories in the dependent variable, and linear regression for where the dependent variable is continuous. In the logit regression, the coefficient shows the likelihood of each category experiencing that measure compared with the reference category, controlling for all other characteristics.

In the multinomial logit regression, the coefficient shows the likelihood of each category experiencing the outcome versus the reference outcome when compared with the reference category, again controlling for all other characteristics. In the linear regression, the coefficient shows the change in the outcome measure for that category when compared with the reference category and controlling for all other characteristics. The coefficients of the results are presented in the tables. An asterisk is used to signify if there is a significant difference in the coefficient of
that category compared with the reference category. The multivariate results are shown in the Appendix and described in the text of the main section.

### 4.3 Projections of hours worked: with and without barriers

We analyse the data further to project the number of hours worked by mature age people. This projection is conducted by combining standard demographic projection methods with labour force projection techniques. We project the number of hours worked by age, sex and employment status to 2031 from population projections combined with propensities of mature age Australians to change employment status and the number of hours worked assuming each barrier is not faced. This information will provide evidence of the contribution that reductions in the extent of each of these barriers will make to employment and productive contribution of mature age people in Australia.

### 4.3.1 Population projections

The methodology that we propose follows the constrained cohort component projection technique. The necessary inputs to the model include hazard rates of births (fertility), deaths (mortality) and mobility (net migration). With estimates of projected fertility, mortality and migration and base population estimates by single years of age and sex, the population of each state can be projected over a 20 year period using the standard cohort-component method as follows²:

$$
\begin{aligned}
& A(r, g, x+1, y+1)=[A(r, g, x, y)][s(r, g, x, y)][1+m(r, g, x, y)], x^{3} 0, \\
& A(r, g, 0, y+1) \\
& =\frac{S R(g)}{2}\left\{\sum_{x=15}^{49}[b(r, x, y) A(r, f, x, y)]+\sum_{x=15}^{49}[b(r, x, y+1) A(r, f, x, y+1)]\right\}[s(r, g,-1, y)][m(r, g,-1, y)]
\end{aligned}
$$

where $A(r, g, x, y)$ is the population in state $r$ of sex $g$ aged $x$ in year $y$,
$A(r, f, x, y)$ is the female population in state $r$ aged $x$ in year $y$,
$b(r, x, y)$ is the fertility rate at age $x$ in year $y$,
$m(r, g, x, y)$ is the migration ratio in state $r$ for sex $g$; that is, the factor by which a cohort changes through migration in its transition from age $x$ in year $y$ to age $x+1$ in year $y+1$,
$s(r, g, x, y)$ is the mortality survival ratio in state $r$ for sex $g$; that is, the probability that a person aged $x$ in year $y$ will survive to age $x+1$ in year $y+1$, and
$S R(g)$ is the proportion of births that are of sex $g$.

The first input into the model is estimates of hazard rates of births. Counts of births in 2006 for each state, grouped by age of mother $15-19, \ldots, 45-49$, and estimates of the resident female population by age are used to calculate fertility rates for each five-year age group of women.

The next input to the model is Annual age- and sex-specific mortality data for Australia as a whole to calculate survival ratios. These ratios are projected over the projection to be consistent with ABS projections.

Finally, age-sex distributions and counts used by the ABS are included for assumptions about Net Overseas Migration (NOM). A full account of assumptions is included in the projections section of this report.

[^1]
### 4.3.2 Baseline projections of hours worked by mature age people

With estimates of the population projected by age and sex as the baseline, we can conduct projections of the number of mature age people in employment, as well as in full-time and parttime work, and the total number of hours they worked.

Using detailed information from the ABS Labour Force Survey, we obtain labour force participation rates by age and sex. ${ }^{\times 1}$ The proportion in the labour force employed, either in fulltime or part-time work, and unemployed, average number of hours worked by those in full-time and part-time employed are also obtained from these data. These proportions are estimated and applied across the projection period as follows:

The projected labour supply by age and sex $\left(L S_{i, j+1}^{y+1}\right)$ is calculated using the age-sex specific participation rate $\left(P R_{i, j+1}^{y+1}\right)$ :
$L S_{i, j+1}^{y+1}=P_{i, j+1}^{y+1} \times P R_{i, j+1}^{y+1} \quad j \geq 15$
The projected number of employees $\left(E m p_{i, j+1}^{y+1}\right)$ and unemployed people (Unemp ${ }_{i, j+1}^{y+1}$ ), given the age, sex, state specific unemployment rate $\left(U R_{i, j+1}^{y+1}\right)$ is then simply:

$$
\begin{array}{ll}
\text { Emp }_{i, j+1}^{y+1}=L S_{i, j+1}^{y+1} \times\left(1-U R_{i, j+1}^{y+1}\right) & j \geq 15 \\
\text { Unemp }_{i, j+1}^{y+1}=L S_{i, j+1}^{y+1} \times U R_{i, j+1}^{y+1} & j \geq 15
\end{array}
$$

The projected number of full-time $\left(F T_{i, j+1}^{y+1}\right)$ and part-time $\left(P T_{i, j+1}^{y+1}\right)$ workers is derived using the proportion of employed people in full-time $\left(F T R_{i, j+1}^{y+1}\right)$ or part-time $\left(P T R_{i, j+1}^{y+1}\right)$ work.

$$
\begin{array}{ll}
F T_{i, j+1}^{y+1}=F R_{i, j+1}^{y+1} \times E m p_{i, j+1}^{y+1} & j \geq 15 \\
P T_{i, j+1}^{y+1}=\text { PTR }_{i, j+1}^{y+1} \times E m p_{i, j+1}^{y+1} & j \geq 15
\end{array}
$$

The total hours worked by employed people (TotalHrs ${ }_{i, j+1}^{y+1}$ ) is computed based on the average hours worked by full-time (AvgHrsFT ${ }_{i, j+1}^{y+1}$ ) and part-time (AvgHrsPT $T_{i, j+1}^{y+1}$ ) workers:
TotalHrs ${ }_{i, j+1}^{y+1}=\left(\right.$ FT $_{i, j+1}^{y+1} \times$ AvgHrsFT $\left._{i, j+1}^{y+1}\right)+\left(\right.$ PT $_{i, j+1}^{y+1} \times$ AvgHrsPT $\left._{i, j+1}^{y+1}\right) \quad j \geq 15$

The unemployment rate, proportion of employed people in full-time and part-time work, and average hours of full-time and part-time workers can be varied.

### 4.3.3 Projections of hours worked by mature age people adjusted for reductions in barrier prevalence

The baseline projections of total hours worked by mature age workers will be adjusted according to results from the Survey of Barriers to Employment for Mature Age Australians.
In the survey, for selected barriers we ask respondents to report on the change in their working hours or their change in employment status (i.e. transitioning from not working to working parttime or full-time) if that barrier was not faced. This data are analysed to assess the likely change in working hours if from the reduction in the prevalence of the barriers.

The results from these analyses will be used to:

- adjust the average number of hours worked by both full-time and part-time workers, and
- compute the number of people
- transitioning from part-time to full-time work (or vice versa), and
- from not working (i.e. outside the labour force or unemployment) to either full-time or parttime work.

These adjustments to the average number of hours worked and the number of people in full-time and part-time work will be used to compute the total number of hours worked by mature age Australians, by age, sex and state.

The method of projecting labour supply is similar to that used by the Productivity Commission in the report 'Economic Implications of Population Ageing'. .xi This method, developed independent of the Productivity Commission, has also passed rigorous peer review in Australia's leading demography journal, Journal of Population Research. xii In 2006, this method was also used to inform the Department of Defence's 2025 Personnel Scan.rilii

### 4.4 Measurement and ranking of the barriers

### 4.4.1 Prevalence analysis

We attempt to use the data from the National Survey to construct an overall measure of the prevalence of each barrier among mature age Australians. The selection of the measure(s) for each barrier is based on what best determines the impact of the barrier on workforce participation. There are some issues to consider as part of this exercise. As the review in Section 2 shows, some barriers cover a broad range of issues related to mature age workforce participation, so it is difficult to construct just one measure of prevalence of these barriers. Therefore, for some barriers more than one measure is provided, to provide evidence of the likely range of the number of people that experience this barrier.
Further, the National Survey had time and cost constraints which prevented collecting detailed data specifically showing the impact of each barrier on workforce participation, as well as hours and/or years worked. Barrier prevalence for the ranking is therefore measured as either:

- attributable prevalence: specifically measuring the impact of the barrier on workforce participation, as well as on hours and/or years worked, according to the presence of the barrier or hypothetical removal of the barrier, and
- general prevalence: measuring the prevalence of people experiencing each barrier without data specific to the impact workforce participation, hours and/or years worked.
The measures for the ranking the barriers to mature age workforce participation are presented using four methods:
- The number of people who experience the barrier: Table 2 presents the measures of the barriers, including the definition.
- A risk-adjusted prevalence of the number of people who experience the barrier, expressed as a percentage. Some barriers potentially impact a large number of people, while others may only affect a smaller number of people because they relate to a specific population sub-group (e.g. job seekers). The risk-adjusted prevalence is the number of people who experience the barrier as a percentage of number of people at risk of experiencing the barrier. The population at risk of experiencing the barrier is shown in brackets in the definition of each measure. For example, for private recruitment firm, the population at risk is those who have sued a private recruitment firm in the last 5 years when looking for a job. Table 2 presents the population at risk for each barrier in brackets.
- The marginal effect, in terms of total hours worked in the economy, is presented assuming just one hour is lost per mature age person who has stated that the barrier influences their desire to work or work more hours (see also Section 5.4.3).
- The total number of self-reported hours lost to the Australian economy due to selected combinations of barriers (see also Section 5.4.2).


### 4.4.2 Limitations

The rankings of the barriers is not a straightforward exercise because of the challenges involved in measuring some barriers, the multiple measures are needed to properly represent some barriers, some measures being for either attributable or general prevalence, and the four methods used for each measure. Therefore, we present two tables of the rankings:

- One table measuring, for all barrier measures, the number of people experiencing each barrier, the risk-adjusted prevalence, and the rating of the importance of each barrier by the Consultative Forum (\% rated high or very high importance) as shown in Table 1. Due to both attributable and general measures of prevalence being presented, the ranking of the measures are divided in to three categories: high, medium and low.
- Another table showing the ranking of the attributable prevalence measures, for the number of people experiencing each barrier, the risk-adjusted prevalence, the marginal effect, and the number of self-reported hours lost.

Table 2: Overview of barriers and measures of prevalence used for rankings

| Barrier | Definition of measure |
| :---: | :---: |
| Age discrimination | (1) Experience or perceive 2 or more discriminations (1: either experience exclusion in workplace or job search in last 5 years that is attributed to age, 2: experienced being told directly or indirectly too old for job in last 5 years, 3: agree discrimination is an issue in Australia in the workplace or looking for job, \% of people who have worked last 5 years excluding self-employed, or looked for job in last 5 years) |
|  | (2) Experienced workplace or job search exclusion in last 5 years that is attributed to age and influenced desire to work/ work more hours (\% of people who have worked last 5 years excluding self-employed, or looked for job in last 5 years) |
| Superannuation | Number of people planning to delay retirement or come out of retirement minus planning to retire early because of decrease in super balance in recent years (\% of people whose superannuation decreased due to financial events in recent years and not retired) |
| Physical illness, injury and disability | (1) Current illness prevents from working or looking for work (\% of not employed) |
|  | (2) Currently ill or ill for 2 months in last 5 years prevents/ prevented from working or looking for work (\% of total population) |
| Mismatch of skills with industry demands | Strongly agree that there are no jobs in their line of work in local area (\% of people who have worked in last 5 years or looked for job in last 5 years) |
| Tax transfer system | (1) Number of people planning to delay retirement or come out of retirement minus planning to retire early because of being able to receive tax-free super after age 60 |
|  | (2) Withdrawal rate on Age Pension impacts desire to work or look for work (\% of people receiving Age Pension) |
| Flexibility of employment arrangements | More flexible work arrangement would help care-givers or currently ill work/ work more hours (\% of those currently ill or care-givers) |
| Re-training and upskilling barriers | Training/up-skilling would help find work/more hours and there was training wanted to attend in last 5 years but couldn't (\% of part-time workers, or people not working and not fully retired and have worked or looked for job in last 5 years) |
| Care-giving responsibilities | (1) Suitable external care would help care-givers work/ work more hours (\% of care-givers) |
|  | (2) Care-giving prevents working/ working more hours (\% of care-givers) |
| Workplace barriers | Changed working condition would help currently ill work/ work more hours (\% of currently ill and have not used working condition) |

Table 2 continues

| Barrier | Definition of measure |
| :--- | :--- |
| Private recruitment firm <br> practices | Used private recruitment firm in last 5 years and cited lack of effort (\% of people who <br> used private recruitment firm in last 5 years) |
| Re-entry issues for VLTU | Very long-term unemployed (have not worked for 24 months but have worked before <br> and have looked for work in the last 5 years), and either experienced age attributed <br> workplace or job search exclusion, or agree/strongly agree no jobs in line of work in <br> local area, or current illness prevents from working/looking for work (\% of not working <br> and not retired) |
| Job search assistance | In job search in past 5 years, used Australian Government employment service and <br> did not find helpful (\% of those who have used Australian Government employment <br> service) |
| Leisure time trade-off | See physical illness, injury and disability. <br> Leisure time with family and friends a very important reason for when intend to retire/ <br> when did retire (\% of those who have worked in last 20 years or looked for job in last <br> 5 years) |

## 5. RESULTS

This section of the report outlines the key results as follows:

1. An overview of the sample and benchmarking statistics (section 5.1)
2. An overview of results, barrier by barrier (section 5.2)
3. An analysis of the interaction of barriers (section 5.3)
4. The projections of hours lost to the Australian economy due to each barrier (section 5.4)
5. Final ranking of barriers (based on both prevalence and projections-section 5.5)
6. An analysis of employers' perceptions using the 2010 Employers survey (section 5.6).

### 5.1 Overview of sample and benchmarking

In this section, we give a brief overview of both our sample and the degree to which it is representative of the Australian population. As noted in the methodology section, unless otherwise stated, the parameters presented are weighted.

### 5.1.1 Overview of sample

The demographic characteristics of our weighted surveyed population appear to be highly representative of the Australian population. For example, among our survey population, the 45-54 (42\%) age group accounts for a relatively higher proportion of the population when compared with the 55-64 (35\%) and the 65-74 (23\%) age groups (Table 3). Almost half of the population have not finished high school, three-quarters were born in Australia and 61\% reside in a capital city.The survey asks respondents to report which of the following categories best describes their employment situation: currently employed in paid work (including on leave from work), not employed in paid work but not fully retired, and fully retired (i.e. stopped working permanently). Based on these categories, $58 \%$ of Australians aged 45-74 are currently employed, $11 \%$ not employed and not retired, and 31\% fully retired (Table 4). Those not employed and not retired are more likely to be female, aged 45-54 and not married. The currently employed comprise 81\% of people aged $45-54,57 \%$ of those aged $55-64$ and $18 \%$ of people aged $65-74$ (Table A.1). There are no significant differences in employment status by country of birth or place of residence.
Table 3: Summary characteristics, 2011-12 Barriers to Employment for Mature Age Australians Survey

|  | $\%$ | $95 \% \mathrm{Cl}$ |
| :--- | :--- | ---: |
| Sex |  |  |
| Male | 49.4 | $47.3-51.5$ |
| Female | 50.6 | $48.5-52.7$ |
| Age |  | 39.7 |
| $45-54$ | 35.4 | $33.5-37.2$ |
| $55-64$ | 22.9 | $21.5-24.3$ |
| $65-74$ |  | $67.9-71.6$ |
| Marital status | 69.8 | $28.4-32.1$ |
| Married | 30.2 |  |
| Not married |  | $44.3-48.4$ |
| Education | 46.4 | $26.7-30.5$ |
| Not finished HS | 28.6 |  |
| Finished HS |  |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table 3 continues

|  | $\%$ | $95 \% \mathrm{Cl}$ |
| :--- | ---: | ---: |
| Bachelor's + | 25.0 | $23.2-26.7$ |
| Country of birth |  | $73.6-77.2$ |
| Australia | 75.4 | $14.8-17.8$ |
| Other Engl. spk. | 16.3 | $7.1-9.5$ |
| Non-Engl. spk. | 8.3 |  |
| Residence |  | $59.2-63.3$ |
| Capital city | 61.3 | $36.7-40.8$ |
| Other | 38.7 | $21.0-24.8$ |
| Personal income |  | $19.5-23.6$ |
| Up to \$20,000 | 22.9 | $24.2-28.5$ |
| $\$ 20,001-\$ 36,400$ | 21.5 | $26.8-31.5$ |
| $\$ 36,401-\$ 65,000$ | 26.4 |  |
| $\$ 65,001+$ | 29.2 |  |
| Total | 100.0 |  |
| N Unw | 3,007 |  |
| $\mathbf{N}$ W | $7,345,037$ |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table 4: Summary labour force parameters, 2011-12 Barriers to Employment for Mature Age Australians Survey

| Employment status | (\% of population) |
| :--- | ---: |
| Currently employed | $58.1 \%$ |
| Not employed and not retired | $11.4 \%$ |
| Retired | $30.5 \%$ |
| Currently employed status (\% of currently employed) |  |
| Full-time (35+ hours/week) | $63.3 \%$ |
| Part-time (Less than 35 hours/week) | $36.7 \%$ |
| Not employed and not retired status |  |
| Unemployed (\% labour force-employed plus unemployed) | $5.8 \%$ |
| Unemployed-average years since last worked | 0.8 years |
| Discouraged workers (\% of not employed and not retired) | $22.5 \%$ |
| Discouraged-average years since last worked | 6.7 years |

[^2]Almost two-thirds (63\%) of people aged 45-74 that are currently employed, work full-time (i.e. at least 35 hours per week). Those working full-time are most likely to be male ( $80 \%$ of employed males work full-time versus 45\% of females) and younger (57\% of employed 65-74 year olds work part-time) (Table A.2). Full-time employment does not vary by the other factors, except income.

The not employed and not retired population comprises 835421 people aged 45-74. One-third of this population has looked for work in the past four weeks. Of these, the vast majority ( $31 \%$ of the not employed and not retired population, $4 \%$ of the total population) stated they are available to work. These are defined as the unemployed. The unemployed comprise $5.8 \%$ of the labour force of those aged 45-74. The average length of time since they last worked is 1.6 years and the median is 0.8 years. The unemployed are more likely to be aged $45-64$ and not married (Table A.3). Unemployment does not vary significantly by the other factors.

Of those who have not looked for work in the past four weeks, 300249 state they want to work and 237999 say they do not want to work (Figure 2). There are 187691 discouraged workers ( $23 \%$ of the not employed and not retired population, $3 \%$ of the total population), who want to work and are available but are not looking for work. A further 100112 people want to work but are not available to work. Discouraged workers are 23\% of the not employed and not retired population, and have not worked for an average of 6.7 years and a median of 1.5 years. The discouraged workers are most likely to be aged 65-74 (43\% of the not employed and not retired population), but there is no significant variation across other factors (Table A.3).

The most common occupational group of those who have ever worked is manager/professional (42\%) followed by clerical/administrative/sales worker (23\%) - see Table 5. Those with a Bachelor's degree or higher (78\%) and those earning more than \$65,000 (64\%) are most likely to work as a manager or professional. Female workers are far more likely to be a clerical/ administrative/sales worker than males (Table A.4).

Thirty per cent of people who have ever worked had been a public servant while $27 \%$ of those currently working are public servants. Those with a higher education, higher income and females are more likely to be a public servant (Table A.5).

The group of industries where the highest proportion of people aged 45-74 have worked in is the Government, Education, Communication, Finance and Insurance Services (41\%). This is followed by Construction, Manufacturing, Mining (15\%) and Wholesale/ retail trade, Hospitality/ Tourism/ Accommodation, Property and business services (15\%). A high proportion of those who have finished a Bachelor's degree have worked in Government, Education, Communication, Finance and Insurance Services (62\%) (Table A.6).

Figure 2: Decomposition of labour force status, not employed and not retired, 2011-12 Barriers to Employment for Mature Age Australians Survey


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Table 5: Occupation and industry composition, 2011-12 Barriers To Employment for Mature Age Australians Survey

| Occupation (\% of people who have ever worked) | $\%$ |
| :--- | ---: |
| Machinery operator/driver, labourer | 13.1 |
| Technician/trades, community/personal services worker | 20.2 |
| Manager/ professional | 42.4 |
| Clerical/ administrative/ sales worker | 22.9 |
| Student/ Other | 1.4 |
| Industry of employment (\% of people who have ever worked) |  |
| Construction, Manufacturing, Mining | 14.8 |
| Agriculture, Forestry and Fishing, Transport and Storage, Electricity/Gas/ Water Supply | 10.2 |
| Government, Education, Communication, Finance and Insurance Services | 41.1 |
| Wholesale/ retail trade, Hospitality/ Tourism/ Accommodation, Property and business services | 14.7 |
| Cultural/ recreational/ personal/ health \& community services | 13.2 |
| Other | 6.0 |

## Public servant

Ever been public servant (\% of people who have ever worked) 29.5
Currently public servant (\% of people currently working) 27.3
Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

### 5.1.2 Benchmark estimates

Table 6 displays the key sample characteristics from the 2011 Barriers Survey compared with weighted estimates from the 2008/09 ABS Multipurpose Household Survey. ${ }^{44}$ As shown, the sample is very representative, with high levels of concordance between the two surveys.
Although the purpose of this survey was not to directly benchmark to ABS estimates of labour force participation and unemployment rates, the strength of the sampling strategy is clear from these comparisons. The distributions by age and sex for the employed groups are highly comparable. For example, of the employed group, we estimate 30.1 \% to be male, aged 45-54 compared with $30.6 \%$ as estimated in the MPHS. Distributions for the not employed (including retired), are also highly comparable. For the 'looked for work in the last 4 weeks and available for work' estimates, the raw counts are a different, due to the measures used:

- The ABS ask 'Have you actively looked for work in the past 4 weeks'; a respondent is classified as having actively looked for work in the past 4 weeks by answering at least one of seven job search activities ${ }^{3}$. We only asked whether a respondent 'has looked for paid work in the past 4 weeks'.

Table 6: Comparison of estimates from the 2011-12 Barriers to Employment Survey, the 2008-09 ABS Multipurpose Household Survey and June 2011 ABS Labour Force Survey

|  | Barriers 2011 |  | MPHS 2008-09* |  | LFS Nov 2011** |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N |
| Employed |  |  |  |  |  |
| Male 45-54 | 1,284,763 | 30.1 | 1,287,238 | 30.6 | 1,297,800 |
| Male 55-64 | 787,643 | 18.5 | 832,928 | 19.8 | 885,600 |
| Male 65-74 | 175,345 | 4.1 | 194,045 | 4.6 | - |
| Female 45-54 | 1,191,418 | 27.9 | 1,168,257 | 27.8 | 1,170,700 |
| Female 55-64 | 699,121 | 16.4 | 615,131 | 14.6 | 705,000 |
| Female 65-74 | 129,748 | 3.0 | 102,317 | 2.4 | - |
| Total | 4,268,038 | 100.0 | 4,199,915 | 100.0 | - |
| Not employed (incl. retired) |  |  |  |  |  |
| Male 45-54 | 231,283 | 7.5 | 158,975 | 6.0 | 218,100 |
| Male 55-64 | 498,419 | 16.2 | 362,267 | 13.6 | 404,000 |
| Male 65-74 | 650,939 | 21.2 | 537,824 | 20.2 | - |
| Female 45-54 | 356,904 | 11.6 | 321,095 | 12.1 | 380,300 |
| Female 55-64 | 611,826 | 19.9 | 598,602 | 22.5 | 611,700 |
| Female 65-74 | 727,628 | 23.6 | 683,801 | 25.7 | - |
| Total | 3,076,999 | 100.0 | 2,662,564 | 100.0 | - |
| - Looked for work in last 4 weeks | 277,152 |  | 95,828 |  | - |
| - Available to work (Unemployed) | 261,361 |  | 82,119 (start in reference week) |  | 135,700 |

Sources: ABS 2010, 2011; Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Notes: * MPHS Multipurpose Household Survey ** ABS Labour Force Survey

[^3]- In both our survey and the MPHS, the availability question was only asked of those who looked for work in last 4 weeks.
As our survey seeks to uncover a wide range of issue for job seekers, we sought to maximise this population rather than screening as in the official ABS estimates.


### 5.2 Barrier analysis

Herein, the barriers are reported in the order in which they appear in the initial report. For each barrier, we detail (1.) the measures of prevalence, (2.) differences as they occur by demographic and socio-economic characteristics and (3.) results of multivariate analyses. A summary table of prevalence measures is presented at the end of each barrier section.

### 5.2.1 Physical illness, injury and disability, and mental health

The Survey suggests that just over one-third (35\%) of the population age 45-74 have had an illness, injury or disability (either physical or mental) for 2 months in the last 5 years, with an average length of being unable to work of 5.3 years (Table 7). Injury, illness or disability in the last 5 years was most common among those age 65-74, females (only in regression), not married, who did not finish high school, and with low income (Tables A.7, A.7.1).

Table 7: Summary measures of physical illness, injury and disability, and mental health (\%), 2011-12

| Measure | Sub-population | Prevalence |
| :--- | :---: | ---: |
| Had illness, injury or disability for at least 2 months in last 5 years | $\%$ of total population | $35.4 \%$ |
| Average length of time unable to work (years) from illness in last 5 years |  | 5.3 years |
| Illness in last 5 years prevented from working or looking for work | \% of total population | $20.4 \%$ |
| Currently have illness, injury or disability | $\%$ of total population | $30.8 \%$ |
| Current illness, injury or disability prevents from working or looking for work | $\%$ of total population | $11.6 \%$ |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
The illness, injury or disability prevented $58 \%$ of people who had been ill, injured or had a disability in the last 5 years from working or looking for work, which is $20 \%$ of the total population, or approximately 1.5 million people. This had the greatest impact on preventing those aged 65-74, females (only in regression), not married, lowest educated, and low income groups from working or looking for work, and the least impact on those born in other English speaking countries and who live outside capital cities (only in regression) (Tables A.8, A.8.1).

Almost one-third (31\%) of the Australian age 45-74 presently have an illness, injury or disability (Figure 3). Similar to illness in the last 5 years, current illness is most common among the older, non-married (43\%), not presently employed, lower educated, those earning lower income and residents outside a capital city (Table A.9). The regression results confirm most of these findings, although females have significantly lower likelihood of current illness than males while education is not significant (Table A.9.1).
A present illness, injury or disability prevents $61 \%$ of them from working or looking for work, which is $12 \%$ of the population or approximately 850000 mature age people. This is most common, as a percentage of the whole population, for those aged 55+, not married (18\%), who have not finished high school (16\%), who live outside a capital city and with a personal income below $\$ 20,000(30 \%)$ (Table A.10). The regression reveals that females are less likely to have a current illness that prevent them from working or looking for work, while for the non-married, lower educated, and low income population, it is more likely to have an impact (Table A.10.1).

Figure 3: Have current illness, and if it prevents from working or looking for work, by education (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

### 5.2.2 Discrimination in Employment on the Basis of Age

## Workplace exclusion

Almost half (45\%) of people who have worked in the past 5 years have reported they experienced some form of workplace exclusion, with the most common types of exclusion being insulting jokes or comments and having felt as though you were being either forced out, forced to retire or targeted in restructures (Table 8, Figure 4).

Figure 4: Reported experiencing workplace exclusion, and if attributed to age, by age, education and personal income (\%), 2011-12


[^4]Of people who have reported an experience(s) of workplace exclusion, $30 \%$ attributed any of the exclusions to age, which is $13 \%$ of all who have worked in the past 5 years (Tables A.11, A.12). Seventeen per cent of those who reported an experience of any exclusion attributed it solely to age (see Figure 5). Age is most commonly jointly attributed with the 'other' category and gender.

Figure 5: Factors workplace exclusion attributed to (\%) (Note: diagram ignores any overlap between race, gender, health/disability and other), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Reported experience of any workplace exclusion in the last 5 years is most likely among those age 45-54+ years, not employed and not retired, earning below \$65 000 (but not in regression modelling) and born in a non-English speaking country (Tables A.13, A.13.1). The regression results also found that technician/trades or community/personal services workers are more likely to report workplace exclusion than machinery operators/drivers and labourers.

Workplace exclusion attributed to age is most likely among those aged 55-74, those earning up to $\$ 20000$ (19\% - but not in regression results) and those not employed and not retired (19\%), although there is no difference by sex (Tables A.13, A.13.1). Again, the regression results found that technician/trades or community/personal services workers are more likely to experience exclusion attributed to age than machinery operators/drivers and labourers.

Sixty per cent of people those not employed who have reported experiencing workplace exclusion that they attributed to age said it influenced their desire to work, which is $3.1 \%$ of all those aged 45-74 who are not employed (Table A.14). This influenced the desire to work of 71\% of non-employed females, although the regression did not confirm this likelihood to be higher than for males (Table A.14.1). The regression results however showed that those who have finished high school are more likely than those with lower education to report that workplace exclusion attributed to age influenced their desire to work. Of those currently employed who reported experiencing workplace exclusion attributed to age, $29 \%$ said it influenced their desire to work more hours, which is $2.8 \%$ of all those employed (Table A.14). This impact however does not vary significantly by socio-economic and demographic group.

Job search exclusion
Seventy per cent of people who have looked for a job in the past 5 years reported experiencing exclusion during job search (Figure 6, Table 8, Table A.16). Fifty-two per cent of those who reported experiencing job search exclusion attributed it to age, which is $36 \%$ of job seekers - a higher prevalence than for workplace exclusion. Thirty-seven per cent who reported experiencing job search exclusion attributed it solely to age (Figure 7). The most common cause that age is jointly attributed with is the 'other' category.

Figure 6: Reported experiencing job search exclusion, and if attributed to age, by age, employment status and personal income (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Figure 7: Factors job search exclusion attributed to (\%) (Note: diagram ignores any overlap between race, gender, health/disability and other), 2011-12


[^5]Reported experience of any job search exclusion in the last 5 years is lower among females, those aged 65-74, those earning more than \$65 000 and those working in the 'other' industries (Tables A.17, A.17.1). Job search exclusion attributed to age is negatively related to income (53\% of those earning less than $\$ 20000$ ) and higher for those not employed and not retired ( $51 \%$ ) and people aged 55-64 (46\%) although there is no difference by sex. The descriptive statistics show it is lowest for managers/professionals while the regression results shows it is less likely to be experienced by those in the government, education and related industry category, and wholesale/ retail trade and related industry category.
Just over half (53\%) of people not employed said that reported job search exclusion attributed to age influenced their desire to work, which is $6 \%$ of the total population of non-employed people aged 45-74 (Table A.18). It has the greatest influence on the desire to work for those not married (65\% of those who reported experience of job search exclusion that was attributed to age), those born in another English speaking country (68\% - descriptive statistics only) and those in the lowest education group (regression results only) (Table A.18.1).
Over one-fifth (22\%) of employed people said reported job search exclusion attributed to age influenced their desire to work more hours, which is 3\% of the employed population. It has a higher likelihood of influencing the desire to work more hours of males (regression results only), those aged 55-64 (34\%), those not married (42\%) and those in the lowest income group (42\% for those earning up to $\$ 20000,11 \%$ for those earning more than $\$ 65000$ ).

## Directly or indirectly told too old

Direct age discrimination in the form of being told you are too old is less common. Sixteen per cent of people who have worked or looked for job in the last 5 years report being directly told they are too old for a job by someone, most commonly by a family or friend (9\%) (Table 8, Table A.19); $14 \%$ of this same population report being indirectly indicated to by someone they were too old for a job (e.g. asked what year they graduated), resulting in $23 \%$ having been directly or indirectly told too old (Figure 8).

Figure 8: Reported directly, indirectly and either directly or indirectly told too old for job, by sex, employment status and personal income (\%), 2011-12


[^6]Reporting being told directly you are too old for a job is most likely experienced by those not employed and not retired (29\%), those aged 65-74 (only in regression results), males (only in descriptive statistics), those in the lowest income group (only in descriptive statistics), those born in a non-English speaking country, clerical/administrative/sales workers, and those working in cultural/recreational and related industries (regression results only) (Tables A.20, A.20.1).

People most likely to report being indirectly told they are too old are also the not employed or retired (28\%). The regression results show that it is also more likely to be experienced by those of high education but less likely by those on high incomes.
Reporting being told either directly or indirectly is most likely for the low income and not employed and not retired groups (44\%), as well as those born in in a non-English speaking country (regression results only).

Those who work as a manager/professional are least likely to be told by an employer or potential employer they are too old (Table A.21). Clerical/ administrative/ sales workers are relatively less likely to be told they are too old by an employer. In contrast, being told you are too old by a work colleague is relatively high for those in the machinery operator/driver and labourer occupations. There is no significant difference in these measures by industry of employment.

## Age discrimination as an issue in Australia

A high proportion of people aged 45-74 believe age discrimination is an issue in Australia. 67\% of those who have worked in the past 5 years agree or strongly agree that age discrimination is an issue in the workplace in Australia (Table 8, Figure 9). Those with the highest likelihood are people not employed and not retired (83\%), who reside in a capital city (not in regression results), who earn less than \$20 000 (73\%) and who have completed tertiary education (in the regression results only) (Tables A.22, A.22.1).

Figure 9: Age discrimination stated to be an issue in the workplace and an issue looking for a job in Australia, by employment status and personal income (\%), 2011-12


[^7]Perception of age discrimination in job search is even higher; 83\% of those who have looked for a job in the past 5 years agree or strongly agree that age discrimination is an issue while looking for a job in Australia. Those with the highest likelihood are the not employed and not retired (91\%) and those who have finished high school (regression results only). Those earning more than $\$ 65$ $000(77 \%)$ and those working in the Wholesale/retail trade and related industries are least likely to agree this is an issue.

Almost one-third (31\%) of retired people cite being considered too old by employers as either a somewhat or very important reason for being retired (Table A.23). Respondents who are least likely to report this are earning a high income and are female (regression results only) (Table A.23.1).

Just under one half (49\%) of discouraged workers (i.e. who are not employed and not retired, who want to work but are not looking) state that being considered too old by employers as either a somewhat or very important reason for not looking for work. Those least likely to report this are married and have a Bachelor's degree or higher.

## Number of age discriminations experienced and perceived

Examination of multiple experience and perception of age discrimination reveals that $14 \%$ of the population who have worked or looked for job in last 5 years report experiencing either exclusion in the workplace or job search that they attributed to age, report being told directly or indirectly that they are too old for a job, and believe age discrimination is an issue in Australia in either the workplace of job search (Figure 10, Table 8). Almost one-quarter (24\%) have none of these experiences or perceptions of age discrimination (Table A.24).

Figure 10: Number of age discriminations reported to have experienced or perceived, by employment status and personal income (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
The total number of discriminations reported to be experienced or perceived primarily varies by income and employment status (Tables A.24, A.24.1). Those most likely to report they experience or perceive all three discriminations are those not employed and not retired (29\%) and who earn up to \$20 000 (23\%). In the regression results, females are less likely than males to report at least one discrimination, when controlling for all other variables. Also, technician, trades and other related workers are more likely than machinery operator/driver and labourers to report three discriminations.

Table 8: Summary measures of discrimination in employment on the basis of age, 2011-12

| Measure | Sub-population | Prevalence |
| :---: | :---: | :---: |
| Report experiencing any workplace exclusion in last 5 years | \% of people who worked in last 5 years | 45.0\% |
| Reported workplace exclusion in last 5 years attributed to age | \% of people who worked in last 5 years | 13.3\% |
| Reported workplace exclusion attributed to age influenced desire to work | \% of people who reported experiencing workplace exclusion attributed to age in last 5 years and not employed | 59.5\% |
| Reported workplace exclusion attributed to age influenced desire to work more hours | \% of people who reported experiencing workplace exclusion attributed to age in last 5 years and employed | 29.0\% |
| Report experiencing any job search exclusion in last 5 years | \% of people who worked in last 5 years | 70.4\% |
| Reported job search exclusion in last 5 years attributed to age | \% of people who worked in last 5 years | 36.3\% |
| Reported job search exclusion attributed to age influenced desire to work | \% of people who reported experiencing job search exclusion attributed to age in last 5 years and not employed | 52.6\% |
| Reported job search exclusion attributed to age influenced desire to work more hours | \% of people who reported experiencing job search exclusion attributed to age in last 5 years and employed | 21.8\% |
| Reported being directly told too old for job by any source in last 5 years | \% of people who have worked or looked for job in last 5 years | 15.8\% |
| Reported indirectly told too old for job in last 5 years | \% of people who have worked or looked for job in last 5 years | 14.1\% |
| Reported either directly or indirectly told too old for job in last 5 years | \% of people who have worked or looked for job in last 5 years | 23.0\% |
| State age discrimination is an issue in workplace in Australia (agree/strongly agree) | \% of people who have worked in past 5 years | 66.5\% |
| State age discrimination is an issue in looking for job in Australia (agree/strongly agree) | \% of people who have looked for job in past 5 years | 83.3\% |
| Report employers thinking respondent is too old reason for being retired (extremely /somewhat important) | \% of retired | 31.2\% |
| Report employers thinking respondent is too old reason for not working (extremely /somewhat important) | \% of discouraged workers | 48.5\% |
| Number of age discriminations reported to have experienced or perceived | \% of people who have worked last 5 years excluding self-employed, or looked for job in last 5 years |  |
|  | 0 | 24.0\% |
|  | 1-2 | 61.8\% |
|  | 3 | 14.1\% |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

### 5.2.3 Issues around private recruitment firm practices

One-quarter of people aged 45-74 who have looked for a job in the last 5 years reported that they have used the services of a private recruitment firm (Table 9, Table A.25). Usage of a private recruitment firm among job seekers is most common among males, those aged 45-54 and those of a higher level of education (not significant in regression results) (Table A.25.1).

Of those who used a private recruitment firm, 35\% found their support 'good' or 'very good', and $20 \%$ found they made a 'good' or 'great deal' of effort in looking for a job (Table A.26). Females and those in the highest income level (only in regression results) are most likely to rate the support 'good' or 'very good'. In the rating of the effort of private recruitment firms, the descriptive statistics reveal no significant differences by demographic and socio-economic group (Table A.26.1). However, in the regression results those with a high education level are least likely to say a good or great deal of effort was provided, while those with the highest income are most likely to say this.

Almost one-quarter of people (24\%) who used a private recruitment firm attributed this reported lack of effort to age (Figure 11, Table A.27). Sixty-two per cent of these people who are not employed said it influenced their desire to work while $27 \%$ of these people who are employed said it influenced their desire to work more hours.

Figure 11: Reported lack of effort by private recruitment firm attributed to age, by education and personal income (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Just under one-half (48\%) of those who used a private recruitment firm attributed a lack of effort to either age, gender, race, health/disability or another reason. $46 \%$ of these people who are not employed said it influenced their desire to work while $24 \%$ of these people who are employed said it influenced their desire to work more hours.

Those who use a private recruitment firm are most likely to attribute a lack of effort to their age if they have a lower level of completed education and lower income (Figure 11). In the regression analysis, people born in another English speaking country are also more likely to have attributed a lack of effort of the private recruitment firm to their age (Tables A.28, A.28.1).

Also, $9 \%$ of people who used a private recruitment firm were told directly by the agency they are too old for a job (see Table A.19).

Table 9: Summary Measures of Issues Around Private Recruitment Firm Practices, 2011-12

| Measure | Sub-population | Prevalence |
| :--- | :--- | :--- |
| Used private recruitment firm in job search in <br> last 5 years | \% of people who looked for a job in last 5 years | $24.5 \%$ |
| Rating of support of private recruitment firm <br> (very good/good) | \% who used private recruitment firm | $35.0 \%$ |
| Rating of effort of private recruitment firm in <br> looking for job (great/good deal) | \% who used private recruitment firm | $20.1 \%$ |
| Reported lack of effort attributed to age | \% who used private recruitment firm | $24.0 \%$ |
| If reported lack of effort attributed to age <br> influenced desire to work (\% of people <br> attributing to age \& not employed) | \% of people attributing to age \& not employed | $62.4 \%$ |
| If reported lack of effort attributed to age <br> influenced desire to work more hours <br> (\% of people attributing to age \& employed) | \% of people attributing to age \& employed | $26.7 \%$ |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

### 5.2.4 Mismatch of skills and experience with industry demands

Almost one-third (32\%) of those who have worked or looked for a job in the past 5 years either 'agree' or 'strongly agree' that there are no jobs in their line of work in their local area (Figure 12, Table 10); these are most likely to be male, aged 65-74 and earning an income up to \$20 000 (Tables A.29, A.29.1).

Figure 12: No jobs in their line of work in local area, by sex, age and personal income (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
A smaller proportion (7\%) of this population either 'agree' or 'strongly agree' that there are no jobs at all in their local area (Figure 13). Those most likely to state this are those who have not finished high school (9\%) and again with an income up to \$20 000 (15\%).

Figure 13: No jobs at all in their local area, by age and personal income (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Table 10: Summary measures of mismatch of skills and experience with industry demands, 2011-12.

| Measure | Sub-population | Prevalence |
| :--- | :--- | ---: |
| No jobs available in line of work in local area <br> (Strongly agree/agree) | \% of people who have worked in last 5 years <br> or looked for job in last 5 years | $31.7 \%$ |
| No jobs available at all in local area (Strongly <br> agree/agree) | \% of people who have worked in last 5 years <br> or looked for job in last 5 years | $7.1 \%$ |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

### 5.2.5 Re-training and up-skilling barriers

Of currently employed people, 32\% state that IT or computer training would help do their job better, while $49 \%$ state that other training or up-skilling would help, and 28\% believe none of these would help (Figure 14, Table 11). IT or computer training is favoured by public servants but not so by those from other English speaking countries (Tables A.30, A.30.1). Other training or up-skilling is favoured by those aged 45-54 years. Older respondents, males (only in regression results), low income earners and non-public servants (not in regression results) are most likely to say no training would help them do their job better.

Figure 14: Work-related training (\%) would help do job better, gain promotion, find more hours, find a job (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
One-quarter of currently employed people state that to gain a promotion, get a better job elsewhere or get a better paid job, IT or computer training would help, while 54\% believe that other training or up-skilling would help, and $31 \%$ that neither would help. The higher educated are least likely to need training for IT and computers, while older age groups and non-public servants are least likely to believe other training or up-skilling would help (Tables A.31, A.31.1). Older age groups (53\% of 65-74) and the highest educated (only in regression) have a higher likelihood than their counterparts to say no training would help.

Of people currently working part-time, 19\% state that to find more hours, IT or computer training would help (they would like to work an average 26 hours per week), $35 \%$ said that other training or up-skilling would help (average 27 hours per week), and 49\% said neither would help. Again the highest educated are less likely than their counterparts to think IT and computer training would help find more hours, while other training is most popular among females (only in descriptive statistics), those aged 45-54, the lower educated (only in descriptive statistics) and lower income groups (Tables A.32, A.32.1).

Almost one-third (32\%) of mature age people not working but not fully retired state that to find a job, IT or computer training would help, while $50 \%$ stated that other training or up-skilling would help, and $30 \%$ said neither would help. For help finding a job, IT or computer training is most likely required by those with the lowest education (Tables A.33, A.33.1). Regression results reveal that the oldest, non-married and highest educated state they are least in need of other training. Males, those aged 55-74 (both not in regression results) and the highest educated; are most likely to say that no training would help them find a job.

Seventy-two per cent of people who have worked in the past 5 years have attended work-related training in that time, of which $90 \%$ found the training very or somewhat useful (Figure 15, Tables A.34, A.35). Attendance at any work-related training in the past 5 years is highest among females (only in regression results), those aged 45-54, public servants, and those with higher education and income (Table A.35.1). There is a minor difference by group in the rating of training, with females and the highly educated and high income earners rating training the highest.

Figure 15: Attended work-related training in last 5 years, if found useful and if training wanted to attend but couldn't (\%)


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table 11: Summary measures of re-training and up-skilling barriers, 2011-12

| Measure | Sub-population | Prevalence |
| :--- | :--- | :--- | :--- |
| No training or up-skilling options would help do job better | $\%$ of currently employed | $28.4 \%$ |
| No training or up-skilling options would help gain promotion/ <br> get better job elsewhere/get better paid job | $\%$ of currently employed | $30.8 \%$ |
| No training or up-skilling options would help find more hours | $\%$ of part-time workers | $48.7 \%$ |
| No training or up-skilling options would help find a job | $\%$ of people not working and not <br> fully retired and have worked or <br> looked for job in last 5 years | $30.2 \%$ |
| Attended any workplace training in last 5 years | \% of people who have worked in <br> last 5 years | $31.6 \%$ |
| Training rated very or somewhat useful | \% of people who have attended <br> any workplace training in last 5 <br> years | $30.2 \%$ |
| Any training wanted to attend in last 5 years but unable to | \% of people who have worked in <br> last 5 years | $37.1 \%$ |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Thirty-seven per cent of people who have worked in the past 5 years said that there was training in the past 5 years they wanted to attend but unable to. Those most likely to experience this are female, aged 55-64, and with those higher education and income.
The reasons for not being able to attend training were that they could not fit in with other work commitments (64\%), could not afford it (44\%), the employer wouldn't fund or allow attendance (33\%), the training was inappropriate for their skills or experience (7\%) and the training was inappropriate for language ability (1\%) (Table A.36). Those earning a higher income are most likely to cite the employer not allowing attendance and not being able to fit in with work commitments as a reason for not attending training, but less likely affordability issues (Table A.36.1). People born in a non-English speaking country are more likely than their counterparts to state affordability
issues and language problems as reasons for not being able to attend training (in regression results only). The highest educated have the lowest likelihood of saying that the training was inappropriate for their skills and experience.

### 5.2.6 Care-giving responsibilities

Twenty-eight per cent of the population are care-givers (Table 12). Results from the descriptive statistics and regression results show that care-givers are most likely to be female, aged 45-54, married, not employed and not retired, to have at least a Bachelor's degree education and to reside in a capital city (Tables A.37, A.37.1). The most common person that a care-giver provides care to is, for those age 45-59, their own child (18\% of population aged 45-49), and parent (8\%) (Table A.38). For those aged 60-74, it is a spouse/parent (7\%), grandchild (7\%) and parent (5\%).
Care-givers provide an average of 33.5 hours per week of care (Figure 16, Table A.39). The average hours of care provided per week is highest for females, people not employed and not retired, aged 45-54, on lower incomes and caring for people with a long-term illness or disability. The regression results also reveal that the highest educated care for a lower number of hours per week than those who have not finished high school (Table A.39.1).

Figure 16: Average hours per week provide care, by sex and age (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Fourteen per cent of the total population care for a person with long-term illness or disability. Caring for those with a long-term illness or disability follows similar demographic and socioeconomic patterns as for all care-givers. Females (18\%), those aged 45-54 (16\%), those not employed and not retired (24\%) are most likely to be caring for someone with a long-term illness or disability, while it is least likely for those on high incomes (although not in regression results) and from another English speaking country (10\%).
Care-giving prevents $36 \%$ of care-givers who are not presently employed from working, which is $10 \%$ of the total not employed population. Those who have not finished high school and who care for someone with a long-term illness or disability are the most likely to state that care-giving prevents them from working) (Tables A.40, A.40.1). Care-giving, when examined as a percentage of the not employed population, is most likely to also prevent females (14\%) and those 45-54 (19\%) from working, while it has least impact on the most educated.

Care-giving prevents $31 \%$ of employed care-givers from working more hours ( $9 \%$ of the employed population) (Figure 17). For employed carers, care-giving prevents a lower proportion of those aged 65-74 and those on high incomes (only significant in regression results) from working more hours compared with their counterparts, while it prevents a higher proportion of those who have completed at least a Bachelor's degree (only significant in regression results) from working more hours (Tables A.41, A.41.1). When examined with the base population as all employed people, a higher proportion of females (12\%), those with a Bachelor's degree education, who care for someone with a long-term illness or disability (34\%) and aged 45-54 (11\%) say that care-giving prevents them from working more hours compared with their counterparts (although not confirmed in the regression results).

Figure 17: Care-giving prevents from working or working more hours, by sex and age (\% of employed population), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
The Survey suggests that suitable external care would help 49\% of employed care-givers to work more hours (an average 15 more hours per week), and help 46\% of not employed care-givers to work (an average of 24 hours per week). Suitable external care could help a lower proportion of those with a Bachelor's degree to work, although this is not confirmed in the regression analysis (Tables A.42, A.42.1).
$60 \%$ of care-givers for whom care-giving prevents from working or working more hours cite that it affects their ability to accumulate superannuation. This is most felt by those aged 45-54 (70\%) and with the highest level of education (73\%) (Table A.43). In the regression results, those not married and earning the lowest income are also more likely than their counterparts to report that their care-giving affects superannuation accumulation (Table A.43.1).

Table 12: Summary measures of care-giving responsibilities, 2011-12

| Measure | Sub-population | Prevalence |
| :--- | :--- | ---: |
| Care-givers | \% of total population | $28.3 \%$ |
| Average hours per week provide care |  | 33.5 hours |
| Care for person with long-term illness or disability | \% of total population | $13.8 \%$ |
| Care-giving prevents from working | \% of not employed population | $10.3 \%$ |
| Care-giving prevents from working more hours | \% of employed population | $8.9 \%$ |
| Suitable external care would help care-givers work | \% of people where care-giving prevents from <br> working | $45.8 \%$ |
| Average hours per week able to work if suitable <br> external care available |  | 23.9 hours |
| Suitable external care would help care-givers work <br> more hours | \% of people where care-giving prevents from |  |
| working more hours | $49.0 \%$ |  |
| Average more hours per week able to work if <br> Cuitable external care available |  | 15.2 hours |
| ability to accumulate superannuation |  |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

### 5.2.7 Flexibility of employment arrangements

The Survey suggests that more flexible work arrangements could help 61\% of non-employed care-givers, whose responsibilities prevent them working to be able, to work (Figure 18, Table 13); they would work an average of 18.2 hours per week. Such flexible work arrangements could help 49\% of employed care-givers, whose responsibilities prevent them from working more hours, to work more hours, at an average of 12.7 hours per week (Table A.44).

Figure 18: Flexible work arrangements would help work (not employed) or work more hours (currently employed) (\%), 2011-12


[^8]Table 13: Summary measures of flexibility of employment arrangements, 2011-12

| Measure | Sub-population | Prevalence |
| :---: | :---: | :---: |
| More flexible work arrangement would help care-givers work | \% of care-givers whose care-giving responsibilities prevent from working | 61.0\% |
| Average hours work per week |  | 18.2 hours |
| More flexible work arrangement would help care-givers work more hours | \% of care-givers whose care-giving responsibilities prevent from working more hours | 48.0\% |
| Average more hours work per week |  | 12.7 hours |
| Used flexible work arrangement if had illness, injury or disability in last 5 years | \% of people ill in last 5 years and worked in last 5 years but not self-employed | 23.7\% |
| Flexible work arrangement would help people currently with illness, injury or disability work | \% of currently ill who are not working and who have not used flexible work arrangement but not self-employed | 58.5\% |
| Average number hours per week could work |  | 28.1 hours |
| Flexible work arrangement would help people currently with illness, injury of disability work more hours | \% of currently ill who are working and who have not used flexible work arrangement but not self-employed | 23.2\% |
| Average number more hours per week could work |  | 11.0 hours |
| Reducing hours would persuade workers to put off retirement | \% of people currently working but not selfemployed | 62.5\% |
| Average additional years of work |  | 0.6 years |
| Average hours work in additional years of work |  | 21.2 hours |
| Mentoring would put off retirement | \% of people currently working | 49.2\% |
| Average additional years of work |  | 2.5 years |
| Average hours work in additional years of work |  | 20.7 hours |
| Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |

Flexible work arrangements can also be helpful for the ill. Almost one-quarter (24\%) of those who have been ill in last 5 years and worked in last 5 years; report that they have used a flexible work arrangement. This is fairly similar across demographic and socio-economic groups, with the exception that the descriptive statistics reveal they were most used by those who had completed at least a Bachelor's degree (30\%) and, in the regression results, those who have not married (Tables A.45, A.45.1).
Of mature age people who are currently ill and who have never used a flexible work arrangement, $59 \%$ of those not employed state that a flexible work arrangement would help them work; at an average of 28 hours per week. Also, 23\% of the employed said a flexible work arrangement of would help them work more hours, at an average of 11 hours per week. The descriptive statistics and regression results reveal that those aged 45-54 and those from a non-English speaking background are significantly more likely to state that a flexible work arrangement would help them find work, compared with their counterparts (Table A.46). For those currently ill and working, the only significant finding is that those from a non-English speaking background are less likely than the Australian-born to work more hours because of a flexible working arrangement. This result is not confirmed by the regression analysis (Table A.46.1).
Almost two-third (63\%) of those currently working say that reducing work hours would help them put off retirement; of these, they would work an average 0.6 years and 21 hours per week in these additional years. Reducing hours to put off retirement is most attractive to younger respondents, those with at least a Bachelor's degree (70\%), although not in regression, and those who earn at least \$65 001 per year (70\%) (Tables A.47, A.47.1).

Of people currently working, 49\% say that mentoring would help them put off retirement; of these, they would work an average 2.5 years and 21 hours per week in these additional years. Mentoring is most likely to lead to those aged 45-54 to delay their retirement.

### 5.2.8 Superannuation

Ninety-four per cent of mature age people who have worked in the last 20 years or looked for a job in the past 5 years report that they have had contributions made to their superannuation, with an average length of contributions of 20 years (Table 14). All population sub-groups have a high proportion of the population with superannuation, with 98-99\% of the highest educated and income earners having superannuation (Table A.48). The average number of years contributed to superannuation varies significantly by population sub-groups (Figure 19). Those who contributed the longest to superannuation are males, retired (retired males 27 years), older people, the higher educated, the Australian-born, capital city residents and higher income earners (Table A.48.1).

Figure 19: Average years contributed to superannuation, by sex and retirement status (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Over four-fifths (81\%) of those yet to retire report that they intend to receive superannuation when they retire (most common income source), while $47 \%$ of those already retired receive superannuation as an income source (2 $2^{\text {nd }}$ most common income source after Age Pension) (Figure 20, Table A.49). Of people not yet retired, superannuation is most likely a planned source of income for higher income earners ( $91 \%$ of those earning at least $\$ 65000$ versus $58 \%$ of those earning up to $\$ 20000$ ) and higher educated people, as well as those married and capital city residents (Tables A.50, A.50.1). Those already retired, females and those aged 45-54 are least likely to receive superannuation income.

Figure 20: Superannuation a planned or current income source at retirement, by sex, income and retirement status (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
The confidence of having enough superannuation for retirement is higher among those already retired ( $57 \%$ somewhat or very confident) versus those yet to retire ( $41 \%$ ). For the non-retired, confidence about having enough superannuation for retirement is highest among males (48\% versus $35 \%$ for females), married, aged 65-74, capital city residents and the highly educated and high income earners (59\% of those earning at least $\$ 65000$ versus $25 \%$ of those earning up to $\$ 20,000$ ) (Tables A.51, A.51.1). Similar findings by sex (only in descriptive statistics), income, education and marital status are found for those already retired.

Two-thirds (67\%) of people with superannuation reported that their superannuation decreased due to financial events in recent years; such as the Global Financial Crisis (Table A.52). Frequency distribution and regression results show that decreases in superannuation most likely to have occurred among married, higher educated and higher income people (Tables A.53, A.53.1).
Of those not retired who experienced a decrease in their superannuation in recent years, 40\% state they will delay their retirement (an average of 6 years), and only $0.5 \%$ will retire earlier, while for $54 \%$ there is no impact on retirement (Figure 21). The impact of a decline in superannuation most likely led to a delay in retirement for women and those aged 55-64 (Table A.54). The multinomial regression results, which assess delaying retirement versus no impact, find women, those aged 55-64, people with low education and those earning over $\$ 20000$ more likely to delay retirement (Table A.54.1). There was most likely no impact for males, people age 45-54 and the highest educated.

Figure 21: Impact of decrease in superannuation on retirement plans, retirement status and working hours (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
The superannuation decrease had no impact on retirement status for $83 \%$ of those already retired, with 8\% having retired early (retirement brought forward an average of 7 years) and 2.2\% either having come out of retirement of planning to come out of retirement. There is no significant relationship of any of the factors with retiring early, when compared with there being no impact (Tables A.55, A.55.1). Only those who finished high school and who are at the highest income level are more likely than their counterparts to have not had their retirement status affected by a decrease in superannuation.
Following the superannuation decrease, $11 \%$ of people who are currently working; report that they are working more, $2 \%$ working less, while $87 \%$ have not changed their working hours. People who are working more report doing an extra 12 hours per week. Those who are now working more because of a decrease in their superannuation balance are most likely to be age 55-74 and, when compared to there being no impact, are those born in a non-English speaking country (Tables A.56, A.56.1). Those who are most likely to be working less are those on a low income and, in descriptive statistics, most likely aged 65-74. The highest likelihood of there being no impact for those born in a non-English speaking country and people aged 65-74.

Almost half (47\%) of people with superannuation state they have a 'fair amount' or 'great deal' of knowledge of superannuation rules. Just over half (52\%) of those who know something about superannuation rules either 'agree' or 'strongly agree' the rules change too frequently. Knowledge of superannuation rules is highest for males, married and those with a high education and high income. (Tables A.57, A.57.1) Those who state that superannuation rules change too frequently are most likely married and with a lower level of completed education.
Of these people who are retired, $25 \%$ say that this lack of certainty affects their retirement, while $39 \%$ of the non-retired say that it affects their retirement plans. There is no significant variation by socio-economic and demographic characteristics in the likelihood of the not retired to report that lack of certainty of superannuation rules affects retirement plans (Tables A.58, A.58.1). For the already retired, the only significant difference is that those not married are less likely than the married to report that lack of certainty of superannuation rules affects their retirement.

Table 14: Summary measures of superannuation, 2011-12

| Measure | Sub-population | Prevalence |
| :---: | :---: | :---: |
| Had contributions made to superannuation | \% of people who have worked in last 20 years or looked for job in last 5 years | 94.2\% |
| Average length of time contributions made |  | 19.8 years |
| Intend to receive superannuation at retirement | \% of not retired | 81.4\% |
| Receive superannuation in retirement | \% of retired | 47.0\% |
| Extremely/somewhat confident have enough super for retirement | \% of not retired people with superannuation | 41.4\% |
| Extremely/somewhat confident have enough super to retire on | \% of retired people with superannuation | 56.9\% |
| Superannuation balance decreased due to financial events in recent years | \% of people with superannuation | 66.8\% |
| Impact of superannuation decrease on retirement plans | \% of not retired people with superannuation |  |
| Delaying retirement |  | 40.3\% |
| Average additional years work |  | 5.7 years |
| Will retire earlier |  | 0.5\% |
| Average less years work |  | 4.7 years |
| Have come out of retirement and are working |  | 1.7\% |
| Came out of $r$ /ment but could not find job |  | 0.9\% |
| No impact |  | 53.7\% |
| Impact of superannuation decrease on retirement status | \% of retired people with superannuation |  |
| Came out of r/ment but could not find job |  | 2.2\% |
| Will come out of retirement |  | 1.6\% |
| Retired early |  | 8.2\% |
| Average less years work |  | 6.7 years |
| No impact |  | 82.9\% |
| Impact of superannuation decrease on working hours | \% of currently employed people with superannuation |  |
| Working more |  | 10.7\% |
| Average more hours per week |  | 11.9 hours |
| Working less |  | 2.0\% |
| Average less hours per week |  | 10.6 hours |
| No impact |  | 86.9\% |
| Knowledge (great deal/fair amount) of superannuation rules | \% of people with superannuation | 47.0\% |
| Superannuation rules change too frequently (agree/ strongly agree) | \% of these people who know at least something about superannuation rules | 52.2\% |
| Lack of certainty of superannuation rules affects retirement plans | \% of not retired people agreeing that superannuation rules change too frequently | 38.7\% |
| Lack of certainty of superannuation rules affects retirement status | \% of retired people agreeing that superannuation rules change too frequently | 24.9\% |

[^9]
### 5.2.9 Tax transfer system

Sixty per cent of people aged 45-49 and 79\% aged 60-74 with superannuation said that they are aware they can receive superannuation as a tax-free income source from age 60 (Table 15). In the 45-59 age group, the highest income and highest educated population are most likely to be aware of this tax-free status, while the married and males are found to have significantly higher awareness in the descriptive statistics only (Tables A.59, A.59.1). Those with at least a Bachelor's degree are the most likely within the 60-74 age group to have awareness of the tax-free status of super over age 60, while the regression results show that males are more likely to have awareness than females.

For those aged 60-74 who report that they are unaware of this tax-free status and are retired, 5\% say that knowing this would make them come out of retirement while for $89 \%$ it would have no impact (Figure 22). The descriptive statistics show that a higher proportion of males than females would come out of retirement, but this is not confirmed in the regression modelling (Tables A.60, A.60.1).

Figure 22: Impact of tax-free superannuation after age 60 on retirement status (retired), by age and awareness of tax-free super (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Of those aged 60-74, who are aware of the tax-free status and are retired, $10 \%$ report that they retired early because of tax-free superannuation (brought forward retirement average 6 years), while for $87 \%$ there was no impact. There is no significant difference across socio-economic and demographic groups in the impact of tax-free superannuation after age 60 on those already aware of it (Tables A.61, A.61.1). The only finding is there being slightly more people born in other English speaking countries for whom there would be no impact.
Of those aged 45-49 who are retired, the tax-free status after age 60 could make $4 \%$ come out of retirement from age 60 (for an average 8 additional years of work) and could have no impact for 95\%. There are no significant differences in how tax-free super would affect the retirement of those aged 45-59 and already retired by socio-economic and demographic characteristics (Tables A.62, A.62.1).

Fifteen per cent of people aged 60-74 who are unaware of the tax-free status and not retired say this would delay their retirement (average 5 years), while 5\% state it would bring their retirement
forward (an average 3 years) and 70\% say it would have no impact (Figure 23). The regression model reveals that females and the most educated are the least likely to delay their retirement versus having no impact (Tables A.63, A.63.1). Those with a Bachelor's degree are the least likely to delay retirement when compared with it having no impact, while those born in a non-English speaking country are the most likely. Of those who are currently working, $2 \%$ state they would work more, $14 \%$ work less (average 15.3 hours) and 81\% cite no impact (Figure 24). There is no significant difference in the impact on hours worked by socio-economic and demographic factors (Tables A.64, A.64.1).

Figure 23: Impact of tax-free superannuation after age 60 on retirement plans (not retired), by age and awareness of tax-free super (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Figure 24: Impact of tax-free superannuation after age 60 on hours worked (currently working), by age and awareness of tax-free super (\%), 2011-12


[^10]For those aged 60-74, who are not retired but aware of the tax-free status, $18 \%$ say they are delaying retirement (average 5 years), $2 \%$ will retire earlier, $6 \%$ have come out of retirement, while for $72 \%$ no impact. There is no significant difference in retirement plans across socio-economic and demographic groupings (Tables A.65, A.65.1). For the currently working, $4 \%$ are working more (average 16.1 hours), 6\% working less (average 16.5 hours) and for $89 \%$ there is no impact. The only difference in the impact on hours worked is that those who finished high school are more likely than those who did not finish high school to work more rather than it have no impact (Tables A.66, A.66.1).
The Survey suggests that for people aged 45-59 and not retired, the tax-free status could make $17 \%$ put off retirement (average 6 years), make 6\% retire early (average 5 years) and have no impact for $70 \%$ (Tables A.67, A.67.1). For this groups that are currently working, $2 \%$ report that they will seek to work more from age 60 (average 14.3 hours), $34 \%$ will seek to work less (average 17.1 hours) and for $58 \%$ will have no impact. There is little variation in the impact on hours worked; in the regression results there is a positive association between personal income and working less versus no impact (Tables A.68, A.68.1).
Over one-third (35\%) of the population age 45-74 receive at least one source of Government income support. Government income support is highest among those aged 65-74 (75\%), people who haven't finished high school (45\%), not married (51\%), and those who reside outside capital cities (Tables A.69, A.69.1).
The most common type of Government income support is the Age Pension (16\% of 45-74, 66\% of 65-74), and the Disability Support Pension (7\%) (Figure 25, Tables A.71). Of those receiving Newstart Allowance, 18\% are not working part-time or voluntarily, or doing a range of activities such as looking for work and reporting job searches. $52 \%$ of people receiving the Parenting Payment are not working part-time or voluntarily, or doing a range of activities such as looking for work and reporting job searches (Table A.72).

Figure 25: Type of Government income support receive (\%), 2011-12


[^11]The Age Pension is most likely to be received by females, people with lower completed education, the non-married, people born in another English speaking country and those living outside a capital city (not in regression results) (Tables A.71, A.71.1). The Disability Support Pension is most likely received by people with lower completed education and not married. The Newstart Allowance is most likely received by people residing outside a capital city and not married, while the carer and parenting payments are received by more females than males.

Twenty-four per cent of people receiving Newstart Allowance are working part-time, 11\% are working voluntarily, $40 \%$ are doing a range of activities and $18 \%$ are not doing any activities (Table A.72). Twenty-eight per cent of people receiving the Parenting Payment are working part-time, with $16 \%$ doing a range of activities and $52 \%$ not doing any activities. Almost one-third (32\%) of people working part-time are doing so for financial reasons (although with wide confidence intervals) (Table A.74).
Seventeen per cent of Age Pensioners state that the withdrawal rate on the Age Pension (i.e. the amount that the pension payment is reduced for each additional dollar earned from working) influences their desire to work or look for work. The withdrawal rate has the greatest effect on increasing the desire of males (only in regression results) and the highest educated to work or look for work.

The maximum average percentage of the Age Pension they would be willing to lose to work as much as they want is $36 \%$, and they would be willing to work an average of 23 hours of work for an average additional 5 years of work under these conditions. People who have finished high school have a lower maximum percentage of the Age Pension that they are willing to lose compared with those who did not finish high school (Tables A.75, A.75.1). Those from a nonEnglish speaking background have the highest average percentage they are willing to lose of all population sub-groups.

Table 15: Summary measures of tax-transfer system, 2011-12

| Measure | Sub-population | Prevalence |
| :---: | :---: | :---: |
| Aware of tax-free superannuation after age 60 (45-49) | \% of people aged 45-49 with superannuation | 59.5\% |
| Aware of tax-free superannuation after age 60 (60-74) | \% of people aged 60-74 with superannuation | 78.8\% |
| Retired |  |  |
| How tax-free superannuation after age 60 would affect retirement (60-74) | \% of retired people aged 60-74 unaware of tax-free superannuation after age 60 |  |
| Would come out of retirement |  | 5.0\% |
| Average additional years work |  | 10.0 years |
| No impact |  | 88.8\% |
| How tax-free superannuation after age 60 has affected retirement (60-74) | \% of retired people aged 60-74 aware of tax-free superannuation after age 60 |  |
| Came out of $\mathrm{r} /$ ment but could not find job |  | 0.9\% |
| Will come out of retirement |  | 0.8\% |
| Retired early |  | 9.5\% |
| Average less years work |  | 6.2 years |
| No impact |  | 86.7\% |
| How tax-free superannuation after age 60 would affect retirement (45-59) | \% of retired people aged 45-59 |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

Table 15 continues

| Measure | Sub-population | Prevalence |
| :---: | :---: | :---: |
| Would come out of retirement |  | 3.6\% |
| Average additional years work |  | 7.9 years |
| No impact |  | 94.9\% |
| Not retired |  |  |
| How tax-free superannuation after age 60 would affect retirement plans (60-74) | \% of not retired people aged 60-74 unaware of tax-free superannuation after age 60 |  |
| Would delay retirement |  | 15.1\% |
| Average additional years work |  | 4.7 years |
| Would retire early |  | 5.3\% |
| Average less years work |  | 3.3 years |
| No impact |  | 70.4\% |
| How tax-free superannuation after 60 would affect hours worked (60-74) | \% of people unaware of tax-free super after 60, age 60-74 and currently working |  |
| Seek to work more |  | 2.1\% |
| Seek to work less |  | 13.6\% |
| Average less hours per week |  | 15.3 hours |
| No impact |  | 80.9\% |
| How tax-free superannuation after age 60 has affected retirement plans (60-74) | \% of not retired people aged 60-74 aware of tax-free super after 60 |  |
| Delaying retirement |  | 17.7\% |
| Average additional years work |  | 5.1 years |
| Will retire earlier |  | 1.8\% |
| Average less years work |  | 4.2 Years |
| Have come out of retirement and are working |  | 3.3\% |
| Average additional years work |  | 4.2 years |
| Came out of $r$ /ment but could not find job |  | 1.7\% |
| No impact |  | 72.3\% |
| How tax-free superannuation after 60 has affected hours worked (60-74) | \% of people aware of tax-free super after 60, age 60-74 and currently working |  |
| Working more |  | 3.7\% |
| Average more hours per week |  | 16.1 hours |
| Working less |  | 6.0\% |
| Average less hours per week |  | 16.5 hours |
| No impact |  | 89.1\% |
| How tax-free superannuation after age 60 would affect retirement plans (45-59) | \% of not retired people aged 45-59 |  |
| Would delay retirement |  | 17.4\% |
| Average additional years work |  | 6.1 years |
| Would retire early |  | 6.0\% |
| Average less years work |  | 4.9 years |
| No impact |  | 69.8\% |
| How tax-free superannuation after age 60 would affect hours worked after age 60 | \% of people age 45-59, currently working |  |

[^12]Table 15 continues

| Measure | Sub-population | Prevalence |
| :--- | :--- | :--- |
| Seek to work more |  | $2.1 \%$ |
| Average more hours per week |  | 14.3 hours |
| Seek to work less | $33.6 \%$ |  |
| Average less hours per week | \% of total population | 17.1 hours |
| No impact | \% of people receiving Age Pension | $57.5 \%$ |
| Plan to be retired by then | $2.5 \%$ |  |
| Receive any Government income support | $35.1 \%$ |  |
| Withdrawal rate on Age Pension impacts desire <br> to work or look for work | $17.4 \%$ |  |
| Average maximum \% of Age Pension willing to <br> lose to work as much as you want | People receiving Age Pension | $35.6 \%$ |
| Average extra years work |  | 5.0 years |
| Average hours work per week in extra years |  | 23.2 hours |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

### 5.2.10 Re-entry of the very long-term unemployed (VLTU)

According to the Survey, the very long-term unemployed comprise 23\% of mature age people who are not working and not retired (i.e. have not worked for 24 months but have worked before and have looked for work in the last 5 years) (Table 16). This is $4 \%$ of all mature age people who have not retired. The average length of time since the very long-term unemployed last worked is 6.4 years, with a median of 4.0 years (Table A.79).

Of those not working and not retired, the least likely to be very long-term unemployed are aged 65-74 and, from the regression results, born in a non-English speaking country (Tables A.76, A.76.1).

Some of the barriers the VLTU face when attempting to re-enter the labour market are shown in Figure 26. This includes interactions of VLTU with other barriers that are specifically related to labour force re-entry. A more detailed account of interaction effects is provided in section 5.3. Very long-term unemployment as a proportion of those not retired is highest among those who experienced age-attributed job search exclusion ( $13 \%$, also $53 \%$ of VLTU experienced age attributed job search exclusion) and those who think age discrimination is an issue while looking for a job in Australia (10\%) (Table A.77).

VLTU is also high for those non-retired that have been ill in the last 5 years or currently, and where this prevents from working or looking for work (22\% of the currently ill who do not work), for people who have used an Australian Government employment service provider (but not use of a private recruitment firm), and if they state that there are no jobs in their line of work or at all in their local area (11\%).

Figure 26: Prevalence of VLTU (\% of not retired) among other measures of barrier prevalence, 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Table 16: Summary measures of re-entry of the very long-term unemployed, 2011-12

| Measure | Sub-population | Prevalence |
| :--- | :--- | ---: |
| Very long-term unemployed | \% of people not working and not retired | $22.5 \%$ |
| Very long-term unemployed | \% of people not retired | $3.6 \%$ |
| Average length of time since last worked |  | 6.4 years |
| Median length of time since last worked |  | 4.0 years |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

### 5.2.11 Job search assistance

Fifteen per cent of people who have looked for a job in the last 5 years reported that they used an Australian Government employment service provider (Table 17) ${ }^{4}$. Use of an Australian Government employment service provider is highest among job seekers who are not married (30\%), male (only significant in regression results), with lower completed education (not significant in regression results), born in a non-English speaking country, and earning a low income (Tables A.78, A.78.1).
Of those who used such a provider, 63\% found an Australian Government employment service provider helpful. Those least likely to find it helpful are aged 55-64, those with higher education, and those living in a capital city (not significant in regression results).

Among people who did not find the provider helpful, $60 \%$ said because it did not match to an appropriate job, $41 \%$ said they did not get enough help preparing job applications, 36\% stated the provider did not assist enough with the job interview, and 63\% cited some other reason (Figure 27). A small sample size of prevented there being significant variations by socio-economic and demographic factors in the reasons for job seekers not finding the Australian Government employment service provider helpful (Tables A.79, A.79.1). The only significant factor in both descriptive statistics and regression results is that those who finished high school are more likely to state they didn't have enough help preparing job applications when compared with those who didn't finish high school.

4 It should be noted that some private recruitment firms also operate as Australian Government employment service providers, and respondents may not always be aware if/when they are using a Government provider.

Figure 27: Reasons Australian Government employment service provider not helpful (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Almost half (46\%) of those who used an Australian Government employment service provider said that they were successful in their most recent job search. Of those successful, $78 \%$ were 'satisfied' or 'very satisfied' with their job, with $35 \%$ saying that more helpful assistance would help find a job faster and $24 \%$ saying more helpful assistance would help find a better paid job (Table A.80). Among people unsuccessful in their most recent job search, $41 \%$ say that more helpful assistance would have helped them find a job.
Of discouraged job seekers (those who have not looked for job in last 4 weeks), $66 \%$ say that if more helpful assistance were available it would help them look for a job (Table A.81).

Table 17: Summary measures of job search assistance, 2011-12

| Measure | Sub-population | Prevalence |
| :--- | :--- | :--- |
| Used Australian Government employment <br> service provider to help job search | \% of people who looked for a job in last 5 years | $15.4 \%$ |
| Found Australian Government employment <br> service provider helpful | \% of people who used Australian Government <br> employment service provider to help job search <br> in last 5 years | $62.8 \%$ |
| Reasons Australian Government employment <br> service provider not helpful | \% of people who found Australian Government <br> employment service not helpful |  |
| Did not match to appropriate job |  | $59.8 \%$ |
| Not enough help preparing job applications |  | $41.0 \%$ |
| Did not assist enough for job interview |  | $36.3 \%$ |
| Other reason | \% of people who received help from Australian |  |
| Guccessful in most recent job search | $63.0 \%$ |  |

[^13]
### 5.2.12 Leisure time trade-off

According to the Survey, the average intended age of retirement of mature age people yet to retire is 65.4 years (Table 18). This is higher for males, those not married, and people on lower incomes. While for those already retired, the average age people did retire is 58.5 years, and is also higher for males, those with a higher level of education and people born in another English speaking country (not in regression results) (Tables A.82, A.82.1).
Five-sixths (83\%) of people yet to retire cite more leisure time with family and friends as very or somewhat important in their decision when to retire (Figure 28). This is the $3^{\text {rd }}$ most cited reason, behind financial security (93\%) and personal illness, injury or disability (88\%) (Table A.83). The reasons for when mature age people intend to retire do not vary substantially across socioeconomic and demographic groups. Leisure time is most likely stated as an important reason by females, those aged 45-64, those married, public servants and, in the regression results, those earning the highest income (Tables A.84, A.84.1). Notable findings for other reasons are that financial security and access to superannuation are most likely given as a reason by those on a high income, while care for family or other people is most commonly provided as a reason by females, the married and those aged 45-54.

Figure 28: Reasons for when intend to retire (not retired) or when did retire (retired) (\%), 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Sixty-one per cent of people who have retired attributed their decision when they retired to wanting more leisure time with family and friends. This is the second most cited reason behind financial security (70\%). For those already retired, leisure time is most likely stated as an important reason for deciding when to retire by women (regression results only), those married, those with a Bachelor's degree, capital city residents and those on higher incomes (not significant in regression for two highest income groups) (Tables A.85, A.85.1). Other notable findings are that personal illness, injury or disability is more likely cited as important by males (regression results only), the lower educated, those on lower incomes and those residing outside capital cities. As with retirement intentions, access to super is more important for those on higher incomes. Compared with the Australian-born, caring for family or other people is more important for those born in non-English speaking countries, but less important for those born in other English speaking countries.

Table 18: Summary measures of leisure time trade-off, 2011-12

| Measure | Sub-population | Prevalence |
| :--- | :--- | :--- |
| Average age intend to retire | Not retired who have worked in past 20 years <br> or looked for work in past 5 years | 65.4 years |
| Leisure time a very or somewhat important <br> reason for when intend to retire | \% of not retired who have worked in past 20 <br> years or looked for work in past 5 years | $83.3 \%$ |
| Average age did retire | Retired who have worked in past 20 years or <br> looked for work in past 5 years | 58.5 years |
| Leisure time a very or somewhat important <br> reason for when did retire | \% of retired who have worked in past 20 years <br> or looked for work in past 5 years | $61.3 \%$ |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

### 5.2.13 Workplace barriers

Changing a working condition refers to moving to a role that is less physically demanding, enables the employee to sit down or allows more breaks. Over one-quarter (28\%) of mature age people who have been ill, injured or disabled in the last 5 years and have worked in last 5 years report that they have changed their working conditions to accommodate the illness, injury or disability (Table 19). This proportion is lowest for those aged 65-74 (Table A.86). There are no other significant socio-economic or demographic differences in this indicator (Table A.86.1).

Among people who have not changed their working conditions, are currently ill, injured or disabled and not working, $64 \%$ state that such changed conditions would help them work, and of these they would work on average 25 hours per week (Figure 29). These are similar figures to that of the question about flexible work arrangements for the currently ill (Table A.87). People aged 65-74 are less likely than those aged 45-54 to state that changing a working condition would help them work. In the regression analysis, people born in another English speaking country are more likely than the Australian born to say that changing a working condition would help them work (Table A.87.1).

Figure 29: Changed working condition would help work (not employed) or work more hours (currently employed) (\%), 2011-12


[^14]One-quarter of the employed who are currently ill state that changing their working conditions would help them work more hours, and they would work an average 10 more hours per week. The descriptive statistics reveal that changing a working condition would have least impact on those aged 65-74 and who were born in a non-English speaking country. The regression results also confirm the same finding for those aged 65-74.

Table 19: Summary measures of workplace barriers, 2011-12

| Measure | Sub-population | Prevalence |
| :--- | :--- | :--- |
| Changed working condition to accommodate <br> illness, injury or disability in last 5 years | \% of ill in last 5 years who worked in last 5 years <br> but are not self-employed | $27.7 \%$ |
| Changed working condition would help work | \% of currently ill, injured or with disability who have <br> not changed working condition, and not employed | $63.7 \%$ |
| Average hours could work per week |  | 26.4 hours |
| Changed working condition would help work <br> more hours | \% of currently ill, injured or with disability who have <br> not changed working condition, and employed | $25.2 \%$ |
| Average more hours could work per week |  | 10.4 hours |
| Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey |  |  |

### 5.2.14 Section overview

This section has provided numerous measures of the prevalence of these barriers to mature age employment participation from the National Survey. These findings offer insight into the direct experiences, as well as perceptions, of mature age employees, job seekers and the retired. In particular, we are provided with their hypothetical responses should certain barriers be removed.

The findings show some overall patterns in how the barriers vary across socio-economic and demographic variables. People with low income and low education appear to be particularly vulnerable to experiencing certain barriers. Age is also related to many barriers, with older people more likely impacted by illness and younger people more likely to have care-giving responsibilities and to be influenced by flexible working arrangements.

From the above analysis, it is apparent that many barriers are likely to be interrelated, given that they many are related to similar socio-economic and demographic characteristics. The interaction of certain barriers is explored in the next section.

### 5.3 Interaction of barriers

In this section, we detail specific interactions of key barriers for which the descriptive analysis shows to be important. Detailed tables for the interaction effects are provided in the Appendix (specific tables referred to in text). In each of the Appendix tables, the base population of the variable being interacted with is shown in brackets in the left hand column of the table.

### 5.3.1 Physical illness, injury and disability, and mental health

Being ill, injured or having a disability for two months in the past five years is highest for those who are caring for someone else with a long-term illness or disability (44\%), who do not report leisure time as an important reason for when intend to retire or when have retired (57\%), who do not intend to receive or currently receive superannuation at retirement (61\%), who have contributed to superannuation, who are not confident they have enough super to retire on, and who have had their superannuation balance decrease in recent years (Table A.88). It is also most prevalent for those who agree that there are no jobs in their line of work or at all in their local area (50\%), who have not attended training, who have not found training useful, who couldn't attend training they wanted to and who receive Government income.

Having had an illness that prevented working is most likely for those who do not report leisure time as a reason of when intend to retire or when have retired (40\%), to not intend to receive superannuation at retirement (41\%), and have had their superannuation balance decrease in recent years. It is also most prevalent for those who state that they are not jobs at all in their local area, to not have attended training, to not find training useful, to have had training they were not able to attend, to receive Government income support (34\%), and to have used an Australian Government employment service (37\%) (Table A.88).
The results for the currently ill are similar to those with illness in the past five years (Table A.89). Presently having an illness is most likely among people caring for someone else with a long-term illness or disability, who do not state that leisure time is a reason for when intend to retire and when did retire (54\%), who do not intend to receive or currently receive superannuation in retirement (55\%), who are not confident of having enough superannuation for retirement, and whose superannuation balance to have decreased in recent years. It is also highest for those who agree that there are no jobs in their line of work or at all in their local area, who have not attended training in the last 5 years, who receive Government income support and who have used an Australian Government employment service (45\%).

Currently having an illness that prevents mature age workers from working is most prevalent for those who state leisure time as being a reason for when they decided to retire (8\%), to not intend to receive superannuation in retirement (11\%), to have contributed to superannuation for less years, and to not be confident that they have enough superannuation to retire on (13\%) (see Figure 30). It is also highest for those who agree there are no jobs at all in their local area (14\%), to receive Government income support (27\%) and to have used an Australian Government employment service.

Figure 30: Prevalence of current illness preventing for working (\%) among other barrier measures, 2011-12


[^15]
### 5.3.2 Discrimination in employment on the basis of age

Reported workplace exclusion that is attributed to age is highest among those who are presently ill, injured or disabled, or had an illness for two months in the past 5 years (Table A.90). It is also most prevalent for those that agree or strongly agree that here are no jobs in their line of work (20\% of those who worked in last 5 years) or at all in their local area (32\%), as well as those who had wanted to attend any training in the past 5 years but couldn't.

Reported experience of job search exclusion that is attributed to age is highest among the unemployed (61\%) and very long-term unemployed (53\%), those who are currently ill and where illness prevents working or looking for work (Table A.91). It is also highest for people saying there are no jobs in their line of work (46\%) or at all in their local area (51\%), who found training not to be useful, as well as those who used either a private recruitment form or an Australian Government employment service. The average intended age of retirement of those who have report experiencing job search exclusion attributed to age is higher than for those who did not experience it.

The number of discriminations experienced and perceived that are reported by respondents is highest among the unemployed ( $39 \%$ report three) and VLTU ( $36 \%$ report three), as well as those caring for a person with a long-term illness or disability (Figure 31,Table A.92). Three discriminations are also most likely reported by those who have been ill in the past five years and the illness prevented them from working or looking for work (22\%), and those who are currently ill.

Figure 31: Number of discriminations reported to be experienced or perceived (\%) among other barrier measures, 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
The number of discriminations reported to be experienced or perceived is also highest for those agreeing that there are no jobs in their line of work or at all in their local area (36\%), and who didn't find training useful or wanted to attend training in the last 5 years but unable to. It is also highest for those who used an Australian Government employment service and who did not find it helpful, as well as those who used a private recruitment firm. The average intended age of retirement of those who have experienced all three discriminations is higher than for those who did not experience any discrimination.

### 5.3.3 Care-giving responsibilities

The proportion of the population that care for a person with a long-term illness or disability is highest among discouraged workers, people with low confidence that they have enough super to retire on (15\%), those reporting there are no jobs in their line of work in their local area (17\%) or at all ( $21 \%$ ), as well as those receiving Government income support and those who found Australian Government employment service support helpful (Figure 32, Table A.93).

The proportion of those not employed for whom care-giving prevents working is most prevalent among those who do not state leisure time as an important reason for when they intend to retire, people who receive Government income support and have not used a private recruitment firm (12\%). The average years contributed to superannuation is lower for care-givers of hose with a long-term illness (17 v 21 years).

Figure 32: Caring for a person with a long-term illness or disability (\%) among other barrier measures, 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

### 5.3.4 Flexibility of employment arrangements

For those currently working, reducing hours could help delay retirement the most for people who state that leisure time is an important reason for when they intend to retire (64\%), people who are not confident they have enough superannuation to retire on (66\%), and those whose superannuation balance decreased during the GFC (66\%) (Figure 33, Table A.94).

Figure 33: Reducing hours would help delay retirement (\%) among other barrier measures, 2011-12


Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

### 5.3.5 Section overview

The interaction of the barriers presented in this section helps in understanding how some mature age people mature age people are at risk of experiencing multiple obstacles to find employment of work more hours. In particular, illness and reported age discrimination interact significantly with other barriers.

Although the prevalence rates for each barrier and their interaction presented above describe the significant impact of many barriers on the labour force behaviour of mature age Australians, an alternative method of estimating the impact is by examining the workers and hours lost in the Australian labour market due to the barriers. This is presented in the next section.

### 5.4 Projections of barriers

In this section, we present projections of the foregone workers and foregone hours due to the existence of certain barriers. Foregone workers are those who are currently (or projected to be) unemployed or NILF and who cite the barrier as a reason for them not working. It is calculated as the difference between the workforce projection with the barrier in place and the workforce projection without the barrier in place.

Similarly, foregone hours are herein defined as the hours lost to the economy because of the existence of a barrier. Foregone hours occur to those not working (the unemployed and NILF), but also to those working. That is, the preference for many part and full time workers is to work more than their current level of hours-and specifically attribute their inability to work their preferred hours due to the existence of barriers.

Following these full set of projections, marginal effects of hours worked are estimated and projected. The marginal effects of hours worked measure the effect of the first hour not worked due to the existence of a barrier. That is, keeping the prevalence rates of the relevant barriers constant, how many hours are lost to the economy if just one hour is lost due to the barrier. This calculation enables (1.) a standardisation across the barriers, and (2.) an analysis of those barriers for which hours worked preference data is not available.

The projections of hours foregone and workers foregone are presented for the following barriers, for which we have the data on whether a person attributes not working and not working additional hours to a barrier.

- flexibility of workplace arrangements, care-giving and illness
- re-training and up-skilling barriers
- care-giving responsibilities
- workplace barriers

Following the full set of projections for the above barriers, projections of foregone workers and the marginal effects of hours are produced for the following barriers, for which we have the data on whether a person attributes not working due to a barrier.

- age discrimination
- physical illness, injury and disability (2 measures)
- flexibility of workplace arrangements / care-giving / illness
- retraining and up-skilling barriers
- care-giving responsibilities (2 measures)
- workplace barriers

In interpreting the following results, it is important to keep the following limitations in mind:

- As well as assuming the continuation of existing trends in fertility, mortality and migration, the projections assume a fixed relationship between a population at risk of the barrier and the population itself. For example, when looking at care-giving responsibilities, the propensities assume there is a constant propensity for a person of age $x$, sex $y$ and workforce status $z$ to be at 'risk' of having a care-giving responsibility. With important age and cohort shifts occurring in the older Australian population, in conjunction with future exogenous policy shocks, this assumption is highly suspect.
- The projections assume there is sufficient demand to subsume the additional supply of labour. Indeed, the projections are simply from a supply perspective and take no account of labour demand.
- The projections for each barrier stand alone and cannot be combined to produce the total estimate of hours and workers lost to the economy due to the existence of a barrier. The main reason for this, is as shown earlier in this report, there is significant interaction effects among the barriers to labour force participation, particularly as they relate to age discrimination. Thus, simply adding across the estimated of foregone hours and workers will give a significant overestimate of the culminated effect of the barriers;
- The projections are based on people's responses to hypothetical scenarios in the survey instrument. In reality, peoples' actions may differ from these responses and will be influenced by many unknown factors which cannot be analysed here.
- The projections are calculations based on many assumptions, and should not be considered as forecasts. For the purpose of this exercise, the age-sex specific rates of labour force participation, unemployment and average hours worked, have been kept constant throughout the projection period.

Despite these limitations, the projections: (1.) provide an alternative way of viewing the economic impact of barriers to mature age participation, (2.) indicate the section of the population to which the barrier is most prevalent and has the largest workforce wide effect. That is, it distinguishes the hours lost and workers lost across the NILF group, unemployed, part-time and full-time workers,
(3.) and importantly, they enable an analysis of the role of cohort flow through population ageing and population growth on workers and hours foregone due to barriers to mature age participation.

### 5.4.1 Input parameters and benchmarking

As noted in the methodology section, the first step in producing the projections of workers and hours foregone due to barriers is to produce a baseline population projection. Table 20 below compares the underlying assumptions and results as at June 2056 between the PAC projections and the latest series A, B and C from the Australian Bureau of Statistics. ${ }^{45}$ The PAC series projections is closest in assumptions and results to ABS series B, with a Total Fertility Rate of 1.8 (the latest data available at time of publishing), Net Overseas Migration of 180,000 per annum and a life expectancy at birth of 85 and 88 for males and females respectively (for those born in 2056). The PAC series projection produces a 2056 population of around 35.3 million, of which about 8.3 million are aged 65 and over. Both these results are highly comparable to the ABS series B result.

Table 20: Population projection inputs and results, 2011

|  | NOM |  |  |  |  |  |  |
| :--- | ---: | :--- | :---: | ---: | ---: | ---: | ---: | ---: |
|  | TFR(1) | (2) | e0m | e0f | 2056 Pop. | 2056 Pop. Aged 65+ | 2056 \% Pop Aged 65+ |
| ABS-A | 2.0 | 220,000 | 93.9 | 96.1 | 42.5 | $10,393.40$ | 24.4 |
| ABS-B | 1.8 | 180,000 | 85.0 | 88.0 | 35.5 | $8,131.90$ | 22.9 |
| ABS-C | 1.6 | 140,000 | 85.0 | 88.0 | 30.9 | $7,820.70$ | 25.3 |
| PAC | 1.9 | 180,000 | 84.9 | 88.0 | 35.3 | $8,336.30$ | 23.6 |

Source: ABS, 2008. Authors calculations.
Notes: 1 from 2021 in ABS series, 2 from 2010-11 in ABS series, TFR Total Fertility Rate, NOM Net Overseas Migration, eOm Life Expectancy at age 0 for males, eOf Life Expectancy at age 0 for females.
With the population projection in place, the next step is to calculate the underlying populations in the labour force, outside of the labour force, in part-time or full-time employment, the unemployed and the total amount of hours input into the economy. It is important to note that the hours estimate represents labour inputs, and thus do not account for any productivity improvements.

Table 21 displays the underlying ABS age and sex specific assumptions for labour force participation, unemployment, part-time/full-time share and average hours worked. These assumptions are included in the model to produce projections of population, labour force, unemployed persons, NILF and hours worked.

As shown in Table 22, our benchmarked results of the unemployed population and labour force size for 2011 match those produced by the ABS reasonably well. The differences that exist are likely due to the high level of age aggregation for which the labour market statistics, as input parameters, are published. For example, the labour force participation rate is only available as $65+$ - forcing the implicit assumption that a person aged 75 has the same probabilities of employment, unemployment and hours worked preferences as a 65 year old. The likely result of this aggregation, is an upward bias to the estimated hours worked and labour force size, as shown below.

Table 21: Baseline labour market assumptions, June 2011

|  | $\mathbf{1 5 - 1 9}$ | 20-24 | 25-34 | $35-44$ | $45-54$ | $55-59$ | $60-64$ | $65+$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Males |  |  |  |  |  |  |  |  |
| Participation Rate (\%) | 51.7 | 82 | 91.6 | 91 | 88.7 | 80.8 | 61.9 | 16 |
| Unemployment Rate (\%) | 14.6 | 9.4 | 4.4 | 2.5 | 3.2 | 3 | 3.3 | 0.8 |
| \% employed full-time/part-time | $38.0 \%$ | $73.3 \%$ | $89.1 \%$ | $92.1 \%$ | $89.9 \%$ | $87.3 \%$ | $78.9 \%$ | $55.4 \%$ |
| Average usual hours worked - full-time | 41.4 | 42.3 | 43.9 | 45.6 | 46.3 | 45.3 | 46.2 | 46.3 |
| Average usual hours worked - part-time | 11.7 | 18 | 20.6 | 22.5 | 22.3 | 20.6 | 18.9 | 16.2 |
| Average usual hours worked - all workers | 23 | 35.8 | 41.4 | 43.8 | 43.8 | 42.2 | 40.4 | 32.8 |
| Females |  |  |  |  |  |  |  |  |
| Participation Rate (\%) | 56.6 | 75.3 | 73.8 | 75.8 | 78.5 | 65.7 | 45.1 | 7.1 |
| Unemployment Rate (\%) | 15.3 | 6.1 | 4.9 | 4.5 | 3.7 | 2.9 | 2.6 | 0.2 |
| \% employed full-time/part-time | $19.6 \%$ | $57.0 \%$ | $65.9 \%$ | $51.2 \%$ | $58.1 \%$ | $53.2 \%$ | $45.8 \%$ | $34.1 \%$ |
| Average usual hours worked - full-time | 38.9 | 40.1 | 40.9 | 41.2 | 41.5 | 41.6 | 41.7 | 43.3 |
| Average usual hours worked - part-time | 11.8 | 18 | 19.4 | 19.9 | 20.8 | 20.8 | 17.8 | 15.4 |
| Average usual hours worked - all workers | 17.2 | 30.6 | 33.6 | 30.8 | 32.8 | 31.8 | 28.7 | 24.9 |

Source: ABS, 2011

Table 22: PAC estimates benchmarked against ABS estimates, June 2011 ('000).

|  | ABS | PAC |
| :--- | ---: | ---: |
| Males |  |  |
| Unemployed | 299.9 | 299.5 |
| Labour Force | 6521.1 | 6535.9 |
| Total Hours | $252,438.2$ | $253,045.1$ |
| Females |  | 278.4 |
| Unemployed | 279.3 | 5489.5 |
| Labour Force | 5504.1 | $160,351.6$ |
| Total Hours | $160,746.3$ |  |

Sources: ABS 2011; Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
With the underlying projection of the labour force, unemployed and employed persons, as well as those NILF, it is possible to produce estimates of changes to the hours of work lost to the Australian labour market across time due to the existence of selected barriers.

### 5.4.2 Estimates of foregone hours and foregone workers

Box 1 presents the measure used for each barrier-for several barriers there are multiple measures. This table presents barriers for which we have measures of the impact of the removal of each barrier on employment and hours worked.

Box 1: Measurement of barrier for the marginal effect projection

| Barrier | Definition of measure |
| :--- | :--- |
| Age discrimination | Reported workplace or job search exclusion that is attributed to age and influenced <br> desire to work/ work more hours |
| Physical illness, injury and <br> disability | (1) Current illness prevents from working or looking for work <br> (2) Currently ill or ill for 2 months in last 5 years prevents/ prevented from working or <br> looking for work |
| Flexibility of employment <br> arrangements | More flexible work arrangement would help care-givers or currently ill work/ work <br> more hours |
| Re-training and up-skilling <br> barriers | Training/up-skilling would help find work/more hours and there was training wanted <br> to attend but couldn't |
| Care-giving responsibilities | (1) Suitable external care would help care-givers work/ work more hours |
| (2) Care-giving prevents working/ working more hours |  |

## Flexibility of workplace arrangements for caregivers and the ill

The first barrier examined is the flexibility of workplace arrangements for care-givers and the ill. The measure used to estimate the effect of this barrier on (1.) the propensity to be working either full or part time, and (2.) the preference for hours worked was whether: 'More flexible work arrangements would help care-givers or currently ill work more hours'. Currently employed respondents were then asked to nominate the additional hours worked if this barrier did not exist, while non-employed respondents were asked to state whether they would work if this barrier was removed and for many hours per week.
Table 23 below displays the age and sex specific prevalence rates for this combined barrier along, with the hours preference - for full-time workers, part-time workers, the unemployed and persons currently NILF. For example, about 31.9\% of unemployed males aged 45-49 state that this barrier has hindered them from working. In this case, the average preference for hours worked for this group is 39 hours.
Not surprisingly, the highest prevalence rates are for the unemployed and NILF groups, particularly in the younger age groups. However, prevalence rates for part-time female workers are also significant. For example, just under $12 \%$ of females aged $45-54$ stated this barrier is affecting their labour supply behaviour, for an average of 12 hours or work per week

Table 23: Underlying barrier prevalence and additional hours preference, 2011

|  | FT Workers |  | PT Workers |  | Unemployed |  | NILF |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prev (\%) | Hours | Prev (\%) | Hours | Prev (\%) | Hours | Prev (\%) | Hours |
| Males |  |  |  |  |  |  |  |  |
| 45-49 | 0.0392 | 11.1 | 0.0372 | 10 | 0.3189 | 39.2 | 0.1772 | 38 |
| 50-54 | 0.0392 | 11.1 | 0.0372 | 10 | 0.3189 | 39.2 | 0.1772 | 38 |
| 55-59 | 0.0302 | 11.5 | 0.0626 | 15.2 | 0.1917 | 28 | 0.0632 | 25.8 |
| 60-64 | 0.0302 | 11.5 | 0.0626 | 15.2 | 0.1917 | 28 | 0.0632 | 25.8 |
| 65-69 | 0.0168 | 11 | 0.0325 | 7.3 | 0.0000 | 0 | 0.0470 | 18.5 |
| 70-74 | 0.0168 | 11 | 0.0325 | 7.3 | 0.0000 | 0 | 0.0470 | 18.5 |
| Females |  |  |  |  |  |  |  |  |
| 45-49 | 0.0552 | 7.1 | 0.1146 | 12.2 | 0.1999 | 30.4 | 0.3390 | 16.3 |
| 50-54 | 0.0552 | 7.1 | 0.1146 | 12.2 | 0.1999 | 30.4 | 0.3390 | 16.3 |
| 55-59 | 0.0421 | 6.2 | 0.1013 | 10.3 | 0.1433 | 27.1 | 0.1048 | 17.3 |
| 60-64 | 0.0421 | 6.2 | 0.1013 | 10.3 | 0.1433 | 27.1 | 0.1048 | 17.3 |
| 65-69 | 0.0000 | 0 | 0.0160 | 10 | 0.0000 | 0 | 0.0480 | 17 |
| 70-74 | 0.0000 | 0 | 0.0160 | 10 | 0.0000 | 0 | 0.0480 | 17 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Using these prevalence rates and hours worked preference data, we then estimate the number of workers and hours foregone due to the existence of the barrier. That is, the number of workers currently not working (of the NILF and unemployed populations) due to the barrier, and the number of hours not worked per week in the economy due to the barrier-for both those working and not working.
Results in table 24 below, decompose the workers and hours foregone by labour force status, age and gender. Overall, in 2011, about 297000 NILF and 31000 persons who are currently not employed, state this barrier is preventing them from being employed. The largest portion of this group is female NILF, accounting for 211855 of the foregone workers. In total, in 2011 about 9.3 million hours are estimated to have been lost to the economy - again with a significant portion of this due to persons currently NILF. Importantly, over 1 million hours are lost due to currently part time female workers who are unable to work their desired hours due to the barrier.

Table 24: Workers and hours foregone due to flexibility barrier, 2011

|  | Workers Foregone |  | Hours Foregone (Per Week) |  |  | FT | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | UNEMP | NILF | UNEMP | PT |  |  |
| Males |  |  |  |  |  |  |  |
| 45-49 | 15,553 | 7,033 | 591,010 | 275,696 | 25,026 | 260,816 | 1,152,549 |
| 50-54 | 14,803 | 6,694 | 562,502 | 262,398 | 23,819 | 248,236 | 1,096,955 |
| 55-59 | 8,095 | 3,102 | 208,859 | 86,856 | 63,144 | 158,556 | 517,414 |
| 60-64 | 14,885 | 2,422 | 384,038 | 67,822 | 74,525 | 101,328 | 627,713 |
| 65-69 | 18,624 | 0 | 344,548 | 0 | 7,919 | 7,662 | 360,129 |
| 70-74 | 13,963 | 0 | 258,322 | 0 | 5,937 | 5,745 | 270,004 |
| Total | 85,924 | 19,251 | 2,349,279 | 692,772 | 200,370 | 782,342 | 4,024,763 |
| Females |  |  |  |  |  |  |  |
| 45-49 | 57,562 | 4,585 | 938,266 | 139,396 | 349,334 | 136,138 | 1,563,134 |
| 50-54 | 55,373 | 4,411 | 902,580 | 134,095 | 336,048 | 130,960 | 1,503,682 |
| 55-59 | 24,551 | 1,864 | 424,731 | 50,524 | 212,822 | 60,494 | 748,570 |
| 60-64 | 36,164 | 1,056 | 625,642 | 28,617 | 156,015 | 33,042 | 843,317 |
| 65-69 | 21,411 | 0 | 363,985 | 0 | 3,596 | 0 | 367,581 |
| 70-74 | 16,794 | 0 | 285,491 | 0 | 2,820 | 0 | 288,311 |
| Total | 211,855 | 11,917 | 3,540,694 | 352,632 | 1,060,635 | 360,635 | 5,314,596 |
|  |  |  |  |  |  |  |  |
| Total | 297,779 | 31,168 | 5,889,973 | 1,045,404 | 1,261,005 | 1,142,977 | 9,339,359 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Using the counts of foregone workers and hours worked, the underlying labour force parameters are adjusted in the projections. That is, what would the underlying labour force participation rate, unemployment rate and average hours worked be without the barrier in place. For example, in 2011 the ABS estimates that the labour force participation rate for males aged 45-49 is 88.7\% (Table 25). Without the flexibility barrier in place, we estimate a labour force participation rate of $90.7 \%$. Similarly, the ABS estimates an unemployment rate of $3.7 \%$ for females aged 45-49. We estimate that without the flexibility barrier in place, the unemployment rate would fall by a full percentage point (to $2.7 \%$ ). It is also of note that our estimates of average hours worked for many age groups actually drops. This is due to the preference for many people NILF, to work lower than the current average amount of weekly hours.

Table 25: Actual and adjusted labour force parameters, flexibility barrier, 2011

|  | LFP | LFP- Adj | Unemp | Unemp Adj | Av. Hours | Av. Hours Adj |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Males |  |  |  |  |  |  |
| $45-49$ | 0.887 | 0.907 | 0.032 | 0.021 | 43.880 | 44.114 |
| $50-54$ | 0.887 | 0.907 | 0.032 | 0.021 | 43.880 | 44.114 |
| $55-59$ | 0.808 | 0.820 | 0.030 | 0.024 | 42.169 | 42.253 |
| $60-64$ | 0.619 | 0.643 | 0.033 | 0.026 | 40.428 | 40.242 |
| $65-69$ | 0.160 | 0.199 | 0.008 | 0.006 | 32.876 | 30.181 |
| $70-74$ | 0.160 | 0.199 | 0.008 | 0.006 | 32.876 | 30.181 |
| Females |  |  |  |  |  |  |
| $45-49$ | 0.785 | 0.858 | 0.037 | 0.027 | 32.837 | 32.112 |
| $50-54$ | 0.785 | 0.858 | 0.037 | 0.027 | 32.837 | 32.112 |
| $55-59$ | 0.657 | 0.693 | 0.029 | 0.024 | 31.861 | 31.660 |
| $60-64$ | 0.451 | 0.509 | 0.026 | 0.020 | 28.755 | 28.031 |
| $65-69$ | 0.071 | 0.116 | 0.002 | 0.001 | 24.927 | 21.932 |
| $70-74$ | 0.071 | 0.116 | 0.002 | 0.001 | 24.927 | 21.932 |

Sources: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey; ABS, 2008.
Notes: LFP Labour Force Participation Rate, Adj-rate adjusted for barrier effect; UNEMP unemployment rate; Av. Hours Average Hours worked per week.

Finally, with all of these preliminary estimates, it is possible to project the total number of workers and hours lost to the economy due to the flexibility barrier. We project off a baseline of just under 329000 workers foregone due to this barrier in 2011, rising to just under 400000 workers in 2021 and almost 450000 workers in 20 years time (Table 26). This represents a loss of about $3 \%$ of hours (as labour inputs) utilised in the economy over the 20 year time frame of projectionsrising from a loss of over 9 million hours per week in 2011 to over 12 million in 2031.

Table 26: Projection of workers and hours (labour inputs), with and without the flexibility barrier in place, 2011-2031

|  | 2011 | 2016 | 2021 | 2026 | 2031 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Barrier in Place |  |  |  |  |  |
| Workers | $11,447,507$ | $12,116,155$ | $12,716,888$ | $13,304,048$ | $13,899,621$ |
| Hours | $413,396,709$ | $438,832,011$ | $460,885,693$ | $481,451,047$ | $502,639,310$ |
| Barrier Removed |  |  |  |  |  |
| Workers | $11,776,454$ | $12,479,199$ | $13,110,606$ | $13,721,547$ | $14,349,387$ |
| Hours | $422,736,068$ | $449,004,566$ | $471,824,417$ | $493,016,324$ | $515,109,377$ |
| Difference (Numerical) |  |  |  |  |  |
| Workers | 328,946 | 363,043 | 393,718 | 417,499 | 449,767 |
| Hours | $9,339,359$ | $10,172,554$ | $10,938,723$ | $11,565,277$ | $12,470,066$ |
| Difference (\%) |  |  |  |  |  |
| Workers | 2.87 | 3.00 | 3.10 | 3.14 | 3.24 |
| Hours | 2.26 | 2.32 | 2.37 | 2.40 | 2.48 |

[^16]
## Re-Training and up-skilling barriers

The next barrier for which estimates of hours and workers foregone can be projected is the retraining and up-skilling barrier. The measure used in the projection for this barrier is 'Training/ up-skilling would help find more hours, and there was training that the respondent wanted to attend but couldn't'.

Tables 27-29 replicate the baseline adjustments for the projections. Information for this barrier was not collected from full-time employees. The re-training barrier is shown to be particularly prevalent for females when compared to males. Indicative of mature age females' demand for part-time work, the average hours desired to be work without the barrier in place is significantly higher for men (Table 27). Younger male unemployed and NILF have a preference for working close to 40 hours per week, whereas for females it is between 18-30 hours per week.

Table 27: Underlying barrier prevalence (up-skilling) and additional hours preference, 2011

|  | FT Workers |  | PT Workers |  | Unemployed |  | NILF |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prev (\%) | Hours | Prev (\%) | Hours | Prev (\%) | Hours | Prev (\%) | Hours |
| Males |  |  |  |  |  |  |  |  |
| 45-49 | 0 | 0 | 0.1031 | 15.4 | 0.3772 | 39.3 | 0.0815 | 38.3 |
| 50-54 | 0 | 0 | 0.1031 | 15.4 | 0.3772 | 39.3 | 0.0815 | 38.3 |
| 55-59 | 0 | 0 | 0.1668 | 15.4 | 0.2931 | 34.2 | 0.0155 | 27.9 |
| 60-64 | 0 | 0 | 0.1668 | 15.4 | 0.2931 | 34.2 | 0.0155 | 27.9 |
| 65-69 | 0 | 0 | 0.1274 | 21.4 | 0.0000 | 0 | 0.0110 | 10.4 |
| 70-74 | 0 | 0 | 0.1274 | 21.4 | 0.0000 | 0 | 0.0110 | 10.4 |
| Females |  |  |  |  |  |  |  |  |
| 45-49 | 0 | 0 | 0.2203 | 13.3 | 0.5449 | 30.4 | 0.1798 | 17.6 |
| 50-54 | 0 | 0 | 0.2203 | 13.3 | 0.5449 | 30.4 | 0.1798 | 17.6 |
| 55-59 | 0 | 0 | 0.2103 | 9.8 | 0.1775 | 26.4 | 0.0243 | 20.6 |
| 60-64 | 0 | 0 | 0.2103 | 9.8 | 0.1775 | 26.4 | 0.0243 | 20.6 |
| 65-69 | 0 | 0 | 0.2368 | 14.2 | 1.0000 | 20 | 0.0064 | 16.5 |
| 70-74 | 0 | 0 | 0.2368 | 14.2 | 1.0000 | 20 | 0.0064 | 16.5 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Again, the number or workers foregone due to this barrier is greatest among the NILF population, when compared to the unemployed-with about 160000 NILF foregone workers and about 53000 foregone unemployed persons. We estimate a net loss of about 7 million hours due to the re-training barrier in 2011-again, with a significant number of hours lost due to NILF and part-time workers.

Table 28: Workers and hours foregone due to re-training barrier, 2011

|  | Workers foregone Hours foregone (per week) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | Unemp. | NILF | Unemp. | PT | FT | Total |
| Males |  |  |  |  |  |  |  |
| 45-49 | 7,153 | 8,317 | 273,960 | 326,874 | 106,778 | 0 | 707,612 |
| 50-54 | 6,808 | 7,916 | 260,745 | 311,108 | 101,627 | 0 | 673,480 |
| 55-59 | 1,985 | 4,742 | 55,369 | 162,191 | 170,374 | 0 | 387,934 |
| 60-64 | 3,649 | 3,703 | 101,810 | 126,647 | 201,083 | 0 | 429,540 |
| 65-69 | 4,353 | 0 | 45,274 | 0 | 91,139 | 0 | 136,413 |
| 70-74 | 3,264 | 0 | 33,944 | 0 | 68,331 | 0 | 102,275 |
| Total | 27,212 | 24,679 | 771,102 | 926,820 | 739,331 | 0 | 2,437,253 |
| Females |  |  |  |  |  |  |  |
| 45-49 | 30,528 | 12,499 | 537,289 | 379,968 | 731,973 | 0 | 1,649,231 |
| 50-54 | 29,367 | 12,024 | 516,854 | 365,517 | 704,134 | 0 | 1,586,504 |
| 55-59 | 5,685 | 2,310 | 117,118 | 60,978 | 420,351 | 0 | 598,447 |
| 60-64 | 8,375 | 1,308 | 172,519 | 34,538 | 308,151 | 0 | 515,208 |
| 65-69 | 2,854 | 68 | 47,096 | 1,365 | 75,414 | 0 | 123,875 |
| 70-74 | 2,239 | 54 | 36,939 | 1,071 | 59,151 | 0 | 97,161 |
| Total | 79,048 | 28,262 | 1,427,816 | 843,436 | 2,299,174 | 0 | 4,570,426 |
|  |  |  |  |  |  |  |  |
| Total | 106,259 | 52,942 | 2,198,918 | 1,770,256 | 3,038,505 | 0 | 7,007,679 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Using the above results, the baseline labour force parameters are readjusted to calculate the impact of the barrier on hours worked and the number of workers (Table 29).

Table 29: Actual and adjusted labour force parameters, retraining barrier, 2011

|  | LFP | LFP- Adj | Unemp. | Unemp. Adj | Av. Hours | Av. Hours Adj |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Males |  |  |  |  |  |  |
| $45-49$ | 0.887 | 0.896 | 0.032 | 0.020 | 43.880 | 43.922 |
| $50-54$ | 0.887 | 0.896 | 0.032 | 0.020 | 43.880 | 43.922 |
| $55-59$ | 0.808 | 0.811 | 0.030 | 0.021 | 42.169 | 42.366 |
| $60-64$ | 0.619 | 0.625 | 0.033 | 0.023 | 40.428 | 40.779 |
| $65-69$ | 0.160 | 0.169 | 0.008 | 0.008 | 32.876 | 32.792 |
| $70-74$ | 0.160 | 0.169 | 0.008 | 0.008 | 32.876 | 32.792 |
| Females |  |  |  |  |  | 32 |
| $45-49$ | 0.785 | 0.824 | 0.037 | 0.016 | 32.837 | 33.206 |
| $50-54$ | 0.785 | 0.824 | 0.037 | 0.016 | 32.837 | 33.206 |
| $55-59$ | 0.657 | 0.665 | 0.029 | 0.024 | 31.861 | 32.636 |
| $60-64$ | 0.451 | 0.464 | 0.026 | 0.021 | 28.755 | 29.584 |
| $65-69$ | 0.071 | 0.077 | 0.002 | 0.000 | 24.927 | 26.307 |
| $70-74$ | 0.071 | 0.077 | 0.002 | 0.000 | 24.927 | 26.307 |

[^17]Feeding these inputs into the model, about 160000 workers are foregone in the economy in 2011 due to the re-training barrier preventing mature age people from working (Table 30). This is approximately half the figure of the combined flexibility/care-giving barrier. The number of workers foregone is projected to increase by about 50000 over the 20 year projection period. Similarly, the number of foregone hours is projected to increase from about 7 million in 2011 to over 9 million in 2031.

Table 30: Projection of workers and hours (labour inputs), with and without the retraining barrier in place, 2011-2031

|  | 2011 | 2016 | 2021 | 2026 | 2031 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Barrier in Place |  |  |  |  |  |
| Workers | $11,447,507$ | $12,116,155$ | $12,716,888$ | $13,304,048$ | $13,899,621$ |
| Hours | $413,396,709$ | $438,832,011$ | $460,885,693$ | $481,451,047$ | $502,639,310$ |
| Barrier Removed |  |  |  |  |  |
| Workers | $11,606,708$ | $12,286,879$ | $12,898,381$ | $13,495,039$ | $14,106,336$ |
| Hours | $420,404,388$ | $446,354,330$ | $468,887,717$ | $489,868,089$ | $511,720,985$ |
| Difference (Numerical) |  |  |  |  |  |
| Workers | 159,201 | 170,723 | 181,493 | 190,991 | 206,716 |
| Hours | $7,007,679$ | $7,522,318$ | $8,002,024$ | $8,417,042$ | $9,081,675$ |

## Difference (\%)

| Workers | 1.39 | 1.41 | 1.43 | 1.44 | 1.49 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Hours | 1.70 | 1.71 | 1.74 | 1.75 | 1.81 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

## Care-giving barriers

The measure used for this barrier is whether 'suitable external care would help care givers work more hours'. Again, Tables 31-33 present the input parameters used for the projections. Generally, the prevalence of care-giving barriers is higher for women, but once more, the hours desired to be worked is higher among men facing the barrier.

Table 31: Underlying barrier prevalence (care-giving) and additional hours preference, 2011

|  | FT Workers |  | PT Workers |  | Unemployed |  | NILF |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Prev (\%) | Hours | Prev (\%) | Hours | Prev (\%) | Hours | Prev (\%) | Hours |
| Males |  |  |  |  |  |  |  |  |
| $45-49$ | 0.0500 | 14.8 | 0.0575 | 8.1 | 0.0000 | 0 | 0.1299 | 27.3 |
| $50-54$ | 0.0500 | 14.8 | 0.0575 | 8.1 | 0.0000 | 0 | 0.1299 | 27.3 |
| $55-59$ | 0.0268 | 13.1 | 0.0508 | 23.1 | 0.0359 | 35 | 0.0207 | 32.4 |
| $60-64$ | 0.0268 | 13.1 | 0.0508 | 23.1 | 0.0359 | 35 | 0.0207 | 32.4 |
| $65-69$ | 0.0000 | 0 | 0.0150 | 10 | 0.0000 | 0 | 0.0174 | 21.4 |
| $70-74$ | 0.0000 | 0 | 0.0150 | 10 | 0.0000 | 0 | 0.0174 | 21.4 |
| Females |  |  |  |  |  |  |  |  |
| $45-49$ | 0.0114 | 12 | 0.0837 | 19.5 | 0.0000 | 0 | 0.1221 | 22.2 |
| $50-54$ | 0.0114 | 12 | 0.0837 | 19.5 | 0.0000 | 0 | 0.1221 | 22.2 |
| $55-59$ | 0.0343 | 7.5 | 0.0642 | 10.8 | 0.0728 | 30 | 0.0696 | 22.2 |
| $60-64$ | 0.0343 | 7.5 | 0.0642 | 10.8 | 0.0728 | 30 | 0.0696 | 22.2 |
| $65-69$ | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0356 | 22 |
| $70-74$ | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0356 | 22 |

[^18]Using these prevalence rates, and hours worked preferences, this translates into about 150000 foregone workers from the NILF population-the majority being women (Table 32). A further 2500 workers are being foregone from the unemployed population. Across all groups, this translated to over 6 million hours lost per week. Interestingly, the foregone hours are very similar among the part-time and full-time current employees.

Table 32: Workers and hours foregone due to care-giving barrier, 2011

|  | Workers foregone |  |  | Hours foregone (per week) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | Unemp. | NILF | Unemp. | PT | FT | Total |
| Males |  |  |  |  |  |  |  |
| 45-49 | 11,401 | 0 | 311,235 | 0 | 31,340 | 443,857 | 786,431 |
| 50-54 | 10,851 | 0 | 296,222 | 0 | 29,828 | 422,447 | 748,497 |
| 55-59 | 2,659 | 581 | 86,150 | 20,334 | 77,778 | 160,447 | 344,708 |
| 60-64 | 4,889 | 454 | 158,408 | 15,878 | 91,797 | 102,536 | 368,619 |
| 65-69 | 6,895 | 0 | 147,547 | 0 | 4,999 | 0 | 152,546 |
| 70-74 | 5,169 | 0 | 110,622 | 0 | 3,748 | 0 | 114,370 |
| Total | 41,863 | 1,035 | 1,110,184 | 36,212 | 239,490 | 1,129,286 | 2,515,172 |
| Females |  |  |  |  |  |  |  |
| 45-49 | 20,723 | 0 | 460,053 | 0 | 407,580 | 47,377 | 915,010 |
| 50-54 | 19,935 | 0 | 442,555 | 0 | 392,078 | 45,575 | 880,209 |
| 55-59 | 16,301 | 948 | 361,887 | 28,433 | 141,333 | 59,643 | 591,295 |
| 60-64 | 24,012 | 537 | 533,072 | 16,104 | 103,608 | 32,577 | 685,362 |
| 65-69 | 15,884 | 0 | 349,444 | 0 | 0 | 0 | 349,444 |
| 70-74 | 12,458 | 0 | 274,086 | 0 | 0 | 0 | 274,086 |
| Total | 109,314 | 1,485 | 2,421,097 | 44,537 | 1,044,599 | 185,173 | 3,695,406 |
| Total | 151,177 | 2,519 | 3,531,281 | 80,749 | 1,284,088 | 1,314,459 | 6,210,578 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Table 33: Actual and adjusted labour force parameters, care-giving barrier, 2011

|  | LFP | LFP- Adj | Unemp. | Unemp. Adj | Av. Hours | Av. Hours Adj |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: |
| Males |  |  |  |  |  |  |
| $45-49$ | 0.887 | 0.902 | 0.032 | 0.031 | 43.880 | 44.302 |
| $50-54$ | 0.887 | 0.902 | 0.032 | 0.031 | 43.880 | 44.302 |
| $55-59$ | 0.808 | 0.812 | 0.030 | 0.029 | 42.169 | 42.564 |
| $60-64$ | 0.619 | 0.627 | 0.033 | 0.031 | 40.428 | 40.835 |
| $65-69$ | 0.160 | 0.175 | 0.008 | 0.007 | 32.876 | 31.971 |
| $70-74$ | 0.160 | 0.175 | 0.008 | 0.007 | 32.876 | 31.971 |
| Females |  |  |  |  |  |  |
| $45-49$ | 0.785 | 0.811 | 0.037 | 0.036 | 32.837 | 33.216 |
| $50-54$ | 0.657 | 0.811 | 0.037 | 0.036 | 32.837 | 33.216 |
| $55-59$ | 0.451 | 0.681 | 0.029 | 0.026 | 31.861 | 31.954 |
| $60-64$ | 0.071 | 0.104 | 0.002 | 0.001 | 24.927 | 23.996 |
| $65-69$ | 0.071 | 0.104 | 0.002 | 0.001 | 24.927 | 23.996 |
| $70-74$ |  |  |  |  | 0.026 | 0.022 |

[^19]Viewing the adjustments made to the input labour force parameters, consistent with previous barriers, we see an upward adjustment to labour force participation and downward adjustment to unemployment rates and average hours worked for some age-sex categories (Table 33).

Over time, this translates to foregone workers of over 150000 in 2011 growing to just under 215000 in 2031 (Table 34). Likewise, hours lost increases from over 6 million in 2011 to over 8 million in 20 years time.

Table 34: Projection of workers and hours (labour inputs), with and without the care-giving barrier in place, 2011-2031

|  | 2011 | 2016 | 2021 | 2026 | 2031 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Barrier in Place |  |  |  |  |  |  |
| Workers | $11,447,507$ | $12,116,155$ | $12,716,888$ | $13,304,048$ | $13,899,621$ |  |
| Hours | $413,396,709$ | $438,832,011$ | $460,885,693$ | $481,451,047$ | $502,639,310$ |  |
| Barrier Removed |  |  |  |  |  |  |
| Workers | $11,601,203$ | $12,287,855$ | $12,904,668$ | $13,503,757$ | $14,114,168$ |  |
| Hours | $419,607,286$ | $445,617,079$ | $468,198,791$ | $489,187,750$ | $510,968,798$ |  |
| Difference (Numerical) |  |  |  |  | 199,709 | 214,547 |
| Workers | 153,696 | 171,700 | 187,780 |  |  |  |
| Hours | $6,210,578$ | $6,785,067$ | $7,313,098$ | $7,736,703$ | $8,329,488$ |  |
| Difference (\%) |  |  |  |  |  |  |
| Workers | 1.34 | 1.42 | 1.48 | 1.50 | 1.54 |  |
| Hours | 1.50 | 1.55 | 1.59 | 1.61 | 1.66 |  |
| Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey |  |  |  |  |  |  |

Workplace and illness barriers
The final barrier for which we have full prevalence data, as well as hours worked preference data, is for workplace and illness barriers. The measure used is 'Changed working condition would help currently ill work/ work more hours'. Thus, this projection composes a composite measure of both a workplace barrier and an illness barrier.

Similar to previous barriers, the prevalence rates appear to be higher among the younger age groups (Table 35). Compared to the other sub groups, the prevalence rates appear to be higher for the unemployed-in this case, particularly for males.

Table 35: Underlying barrier prevalence (workplace) and additional hours preference, 2011

|  | FT Workers |  | PT Workers |  | Unemployed |  | NILF |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Prev (\%) | Hours | Prev (\%) | Hours | Prev (\%) | Hours | Prev (\%) | Hours |
| Males |  |  |  |  |  |  |  |  |
| $45-49$ | 0.0248 | 11 | 0.0372 | 15 | 0.2105 | 38.7 | 0.0883 | 25.6 |
| $50-54$ | 0.0248 | 11 | 0.0372 | 15 | 0.2105 | 38.7 | 0.0883 | 25.6 |
| $55-59$ | 0.0171 | 7.7 | 0.0236 | 10 | 0.1959 | 33.9 | 0.0532 | 28 |
| $60-64$ | 0.0171 | 7.7 | 0.0236 | 10 | 0.1959 | 33.9 | 0.0532 | 28 |
| $65-69$ | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0377 | 24.2 |
| $70-74$ | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0377 | 24.2 |

## Females

| $45-49$ | 0.0350 | 10 | 0.0354 | 9.8 | 0.1537 | 35 | 0.1256 | 24 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $50-54$ | 0.0350 | 10 | 0.0354 | 9.8 | 0.1537 | 35 | 0.1256 | 24 |
| $55-59$ | 0.0075 | 10 | 0.0557 | 10.7 | 0.1081 | 29.1 | 0.0529 | 19.6 |
| $60-64$ | 0.0075 | 10 | 0.0557 | 10.7 | 0.1081 | 29.1 | 0.0529 | 19.6 |
| $65-69$ | 0.0000 | 0 | 0.0166 | 5 | 0.0000 | 0 | 0.0162 | 17 |
| $70-74$ | 0.0000 | 0 | 0.0166 | 5 | 0.0000 | 0 | 0.0162 | 17 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
In terms of economic outputs, this barrier has a very close effect to that of the re-training barrier with just under 170000 workers foregone to this barrier-and about 5.5 million hours (Table 36). The hours foregone due to this barrier from the employed, however, is relatively high at about 850000 hours.

Table 36: Workers and hours foregone due to workplace barrier, 2011

|  | Workers foregone |  |  | Hours foregone (per week) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | Unemp. | NILF | Unemp. | PT | FT | Total |
| Males |  |  |  |  |  |  |  |
| 45-49 | 7,753 | 4,641 | 198,485 | 179,614 | 37,539 | 163,852 | 579,490 |
| 50-54 | 7,379 | 4,417 | 188,911 | 170,951 | 35,728 | 155,948 | 551,538 |
| 55-59 | 6,814 | 3,170 | 190,798 | 107,467 | 15,627 | 60,181 | 374,074 |
| 60-64 | 12,530 | 2,475 | 350,829 | 83,916 | 18,444 | 38,460 | 491,649 |
| 65-69 | 14,939 | 0 | 361,533 | 0 | 0 | 0 | 361,533 |
| 70-74 | 11,201 | 0 | 271,057 | 0 | 0 | 0 | 271,057 |
| Total | 60,617 | 14,704 | 1,561,613 | 541,948 | 107,339 | 418,440 | 2,629,340 |
| Females |  |  |  |  |  |  |  |
| 45-49 | 21,325 | 3,524 | 511,797 | 123,357 | 86,800 | 121,331 | 843,285 |
| 50-54 | 20,514 | 3,390 | 492,332 | 118,665 | 83,499 | 116,716 | 811,212 |
| 55-59 | 12,381 | 1,406 | 242,659 | 40,926 | 121,471 | 17,485 | 422,541 |
| 60-64 | 18,237 | 797 | 357,444 | 23,181 | 89,048 | 9,550 | 479,223 |
| 65-69 | 7,220 | 0 | 122,745 | 0 | 1,863 | 0 | 124,609 |
| 70-74 | 5,663 | 0 | 96,275 | 0 | 1,462 | 0 | 97,737 |
| Total | 85,340 | 9,118 | 1,823,252 | 306,129 | 384,143 | 265,082 | 2,778,606 |
|  |  |  |  |  |  |  |  |
| Total | 145,956 | 23,822 | 3,384,865 | 848,078 | 491,482 | 683,522 | 5,407,947 |

[^20]Indeed, the stronger effect of this barrier on the unemployed can be seen in the adjusted unemployed rates (Table 37). For males aged under 55, the unemployment rate is estimated to fall from 3.2\% to 2.5\% for males, and 3.7\% to 3\% for females.

Table 37: Actual and adjusted labour force parameters, workforce barrier, 2011

|  | LFP | LFP- Adj | Unemp. | Unemp. Adj | Av. Hours | Av. Hours Adj |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Males |  |  |  |  |  |  |
| $45-49$ | 0.887 | 0.897 | 0.032 | 0.025 | 43.880 | 43.932 |
| $50-54$ | 0.887 | 0.897 | 0.032 | 0.025 | 43.880 | 43.932 |
| $55-59$ | 0.808 | 0.818 | 0.030 | 0.024 | 42.169 | 42.081 |
| $60-64$ | 0.619 | 0.639 | 0.033 | 0.026 | 40.428 | 40.130 |
| $65-69$ | 0.160 | 0.192 | 0.008 | 0.007 | 32.876 | 31.434 |
| $70-74$ | 0.160 | 0.192 | 0.008 | 0.007 | 32.876 | 31.434 |
| Females |  |  |  |  |  |  |
| $45-49$ | 0.785 | 0.812 | 0.037 | 0.030 | 32.837 | 32.880 |
| $50-54$ | 0.785 | 0.812 | 0.037 | 0.030 | 32.837 | 32.880 |
| $55-59$ | 0.657 | 0.675 | 0.029 | 0.025 | 31.861 | 31.824 |
| $60-64$ | 0.451 | 0.480 | 0.026 | 0.022 | 28.755 | 28.525 |
| $65-69$ | 0.071 | 0.086 | 0.002 | 0.002 | 24.927 | 23.586 |
| $70-74$ | 0.071 | 0.086 | 0.002 | 0.002 | 24.927 | 23.586 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Finally, the projections indicate foregone workers rising from just under 170000 in 2011 to just under 234,000 in 2031 (Table 38). The relative figures for hours being 5.4 million and 7.3 million foregone for 2011 and 2031, respectively.

Table 38: Projection of workers and hours (labour inputs), with and without the workplace barrier in place, 2011-2031

|  | 2011 | 2016 | 2021 | 2026 | 2031 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Barrier in Place |  |  |  |  |  |
| Workers | $11,447,507$ | $12,116,155$ | $12,716,888$ | $13,304,048$ | $13,899,621$ |
| Hours | $413,396,709$ | $438,832,011$ | $460,885,693$ | $481,451,047$ | $502,639,310$ |
| Barrier Removed |  |  |  |  |  |
| Workers | $11,617,286$ | $12,304,319$ | $12,921,593$ | $13,521,361$ | $14,133,371$ |
| Hours | $418,804,655$ | $444,746,428$ | $467,263,057$ | $488,199,371$ | $509,908,090$ |
| Difference (Numerical) |  |  |  |  |  |
| Workers | 169,778 | 188,164 | 204,705 | 217,314 | 233,750 |
| Hours | $5,407,947$ | $5,914,416$ | $6,377,364$ | $6,748,325$ | $7,268,779$ |
| Difference (\%) |  |  |  |  |  |
| Workers | 1.48 | 1.55 | 1.61 | 1.63 | 1.68 |
| Hours | 1.31 | 1.35 | 1.38 | 1.40 | 1.45 |

[^21]
### 5.4.3 Marginal effects of 1 hour lost and workers foregone

In this section, we present the marginal effects for each barrier. Specifically, we define a marginal effect as the outcome, in terms of total hours worked in the economy, if just one hour is lost per mature age person who has stated that the barrier influences their desire to work or work more hours. That is, the implication of every hour lost due to a barrier on total labour inputs. We also present estimates of those who are currently unemployed or NILF who would otherwise be working if the barrier did not exist.
For the 8 measures of barriers, the relevant baseline files are created to produce the projections. A full set of input tables is provided in the Appendix tables A. 95 to A.101. Using the age discrimination barrier as an example, Table 39 displays these calculations. Just under 36000 unemployed persons, and about 151000 persons who are NILF are not working because of age discrimination. Across the population, this accounts for 375,000 hours of weekly work lost due to just one hour of work not undertaken because of age discrimination. Viewing the prevalence rates, they are particularly high for the unemployed group. About 44\% of males 45-54 cite age discrimination as the main reason they are not working.

Table 39: Baseline calculations for elasticity calculation, age discrimination barrier, 2011

|  | Workers foregone (2011) |  | Hours foregone (per week 2011) |  |  |  |  | Prevalence (\%) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | Unemp. | NILF | Unemp. | PT | FT | Total | NILF | Unemp. | PT | FT |
| Males |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 4,023 | 9,703 | 4,023 | 9,703 | 7,430 | 15,609 | 36,765 | 0.0458 | 0.4400 | 0.1105 | 0.0260 |
| 50-54 | 3,829 | 9,235 | 3,829 | 9,235 | 7,072 | 14,856 | 34,992 | 0.0458 | 0.4400 | 0.1105 | 0.0260 |
| 55-59 | 11,389 | 3,148 | 11,389 | 3,148 | 6,294 | 21,426 | 42,257 | 0.0889 | 0.1946 | 0.0949 | 0.0469 |
| 60-64 | 20,942 | 2,458 | 20,942 | 2,458 | 7,429 | 13,692 | 44,521 | 0.0889 | 0.1946 | 0.0949 | 0.0469 |
| 65-69 | 14,622 | 0 | 14,622 | 0 | 986 | 2,779 | 18,388 | 0.0369 | 0.0000 | 0.0295 | 0.0669 |
| 70-74 | 10,963 | 0 | 10,963 | 0 | 739 | 2,084 | 13,786 | 0.0369 | 0.0000 | 0.0295 | 0.0669 |
| Total | 65,767 | 24,544 | 65,767 | 24,544 | 29,951 | 70,446 | 190,709 |  |  |  |  |
| Females |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 7,508 | 4,490 | 7,508 | 4,490 | 9,038 | 7,127 | 28,162 | 0.0442 | 0.1957 | 0.0362 | 0.0205 |
| 50-54 | 7,222 | 4,319 | 7,222 | 4,319 | 8,694 | 6,856 | 27,091 | 0.0442 | 0.1957 | 0.0362 | 0.0205 |
| 55-59 | 19,932 | 1,658 | 19,932 | 1,658 | 24,544 | 7,306 | 53,439 | 0.0851 | 0.1274 | 0.1203 | 0.0315 |
| 60-64 | 29,361 | 939 | 29,361 | 939 | 17,993 | 3,991 | 52,283 | 0.0851 | 0.1274 | 0.1203 | 0.0315 |
| 65-69 | 11,969 | 0 | 11,969 | 0 | 1,157 | 0 | 13,126 | 0.0268 | 0.0000 | 0.0516 | 0.0000 |
| 70-74 | 9,388 | 0 | 9,388 | 0 | 907 | 0 | 10,295 | 0.0268 | 0.0000 | 0.0516 | 0.0000 |
| Total | 85,380 | 11,405 | 85,380 | 11,405 | 62,333 | 25,279 | 184,397 |  |  |  |  |
| Total | 151,147 | 35,949 | 151,147 | 35,949 | 92,284 | 95,726 | 375,106 |  |  |  |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

## Foregone workers from NILF and unemployed population

Table 40 displays the estimated number of foregone workers due to each barrier, from both the NILF and unemployed populations. Again, as shown earlier in the report, there is a significant number of interaction effects occurring across the barriers-thus it is not possible to add the total economy effect across the barriers.
Regardless of this limitation, the key point remains-regardless of the measure used for each barrier-there is a significant loss to the Australian workforce and economy more generally due to
the barriers to labour force participation faced by many mature age Australians. These estimates (Table 39) suggest a loss of about 150000 workers at the lower end (for the lower care-giving measure), to over 1 million workers (for the upper estimate of the physical illness barrier). Indeed, regardless of the barrier examined, the number of workers foregone increases significantly over time as the combined effects of population ageing and population growth take effect.

Table 40: Workers foregone due to each barrier (from NILF and unemployed population), 2011-2031

|  | 2011 | 2016 | 2021 | 2026 | 2031 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Age Discrimination | 187,096 | 209,379 | 229,781 | 244,486 | 261,486 |
| Physical IIIness (M1) | 855,466 | 965,141 | $1,063,282$ | $1,134,626$ | $1,217,399$ |
| Physical IIIness (M2) | $1,144,415$ | $1,301,247$ | $1,439,329$ | $1,539,259$ | $1,653,124$ |
| Flex. Workplace / Care / III | 328,946 | 363,043 | 393,718 | 417,499 | 449,767 |
| Re-Training / Up-Skilling | 159,201 | 170,723 | 181,493 | 190,991 | 206,716 |
| Care-Giving (M1) | 153,696 | 171,700 | 187,780 | 199,709 | 214,547 |
| Care-Giving (M2) | 338,692 | 379,426 | 415,812 | 442,504 | 475,097 |
| Workplace | 169,778 | 188,164 | 204,705 | 217,314 | 233,750 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Foregone hours from NILF, unemployed population and employed population
Finally, marginal effects are also calculated for the total amount of hours lost over the projection period (Table 41). Again, the interpretation for the marginal effect, is the impact of the first hour not worked on total hours, due to each barrier. So, for the workplace barrier, 284000 hours per week are estimated to be lost for the first hour not worked by those whose employment or hours worked is affected by the barrier. Supporting the results earlier in the report, among the strongest effects on hours foregone are physical illness barriers, care-giving and the combined flexibility/ workplace/caring/illness barrier.

Table 41: Hours foregone due to each barrier, 2011-2031

|  | 2011 | 2016 | 2021 | 2026 | 2031 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Age Discrimination | 375,106 | 413,128 | 447,863 | 474,002 | 506,671 |
| Physical Illness (M1) | 855,466 | 965,141 | $1,063,282$ | $1,134,626$ | $1,217,399$ |
| Physical Illness (M2) | $1,603,262$ | $1,795,291$ | $1,965,707$ | $2,093,784$ | $2,250,458$ |
| Flex. Workplace / Care / III | 559,800 | 609,722 | 654,983 | 691,532 | 744,528 |
| Re-Training / Up-Skilling | 396,097 | 426,972 | 455,054 | 478,302 | 514,358 |
| Care-Giving (M1) | 331,802 | 361,751 | 389,072 | 411,150 | 442,362 |
| Care-Giving (M2) | 707,807 | 772,093 | 830,591 | 877,522 | 944,347 |
| Workplace | 284,178 | 310,115 | 333,755 | 352,737 | 379,638 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

### 5.4.4 Section overview

This section has provided insight into the likely loss to mature age employment over time due to the barriers. These findings offer a different perspective about the interpretation of the workers or hours lost to the economy due to the existence of barrier. In particular, the hours lost due to barriers reported by part-time workers is significant along with that of those unemployed and NILF.

The previous sections have detailed a range of approaches of measuring how the barriers to mature age employment in Australia operate, and their overall impact on the economy. The next section seeks to rank the relative importance of these barriers using data from the Survey.

### 5.5 Final ranking of barriers

In this section, we attempt to make a ranking on the importance of each barrier to labour force participation and hours worked from the Survey data in terms of:

1. Prevalence Rates: This is calculated from the relevant questions in the survey instrument. This is relevant for all barrier measures.
2. Economic Outcome: This is calculated from the basis of the hours lost to the economy based on the existence of the barrier. This is only relevant for barrier measures of attributable prevalence.
The measures of prevalence, including sub-populations, are shown earlier in Table 2. As mentioned in section 4.4, the measures of the barriers to mature age workforce participation are presented using four methods:

- Prevalence: the number of people who experience the barrier.
- Prevalence: a risk-adjusted prevalence of the number of people who experience the barrier, expressed as a percentage.
- Economic outcome: the marginal effect, in terms of total hours worked in the economy, is presented assuming just one hour is lost per mature age person who has stated that the barrier influences their desire to work or work more hours.
- Economic outcome: the total number of self-reported hours lost to the Australian economy due to selected combinations of barriers.

The results in Table 41 present rankings based on a classification of high, medium and low (i.e., approximately three equal ranking categories). The results are firstly presented separately for the number of people experiencing each barrier and risk-adjusted prevalence. When viewing results in Table 42, the small sample size of the Forum rating should be kept in mind-although a final response rate of $80 \%$ was achieved, it was off a baseline of 8 completed questionnaires (10 possible Forum responses at the time).

The barriers that are experienced by the highest number of people are leisure time trade-off, illness, injury and disability, age discrimination and superannuation. Barriers experienced by the lowest number of people are job search assistance, re-entry issues for VLTU, the second tax transfer measure and private recruitment firm practices.

For some of the barriers experienced by relatively few people, for example job search assistance and private recruitment firm practices which are only relevant to job seekers, a smaller number people are at risk of experiencing the barrier compared with other barriers. To account for this, a more appropriate measure is to express the barrier measure as a risk-adjusted prevalence, or percentage of people at risk of experiencing the barrier. Table 41 shows that job search assistance and private recruitment firm practices are classified as 'high' for risk-adjusted prevalence, along with leisure time trade-off, superannuation, workplace barriers, and the second care-giving responsibilities measure. A barrier with low risk-adjusted prevalence, but a high number of experiencing the barrier, is mismatch of skills with industry demands. This is because it has a denominator encompassing all who have worked in last 5 years or looked for job in last 5 years.

Table 42: Ranking of barriers: prevalence, 2011-12

| Barrier | Number of people experiencing barrier |  | Risk-adjusted prevalence |  | Forum rating* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rank | N | Rank | \% | Rank | \% |
| Age discrimination (1) (G) | High | 1,514,551 | Med | 31.4\% | High | 87.5 |
| Age discrimination (2) (A) | Med | 412,034 | Low | 8.5\% |  |  |
| Superannuation (G) | High | 1,314,734 | High | 39.8\% | Med | 71.4 |
| Physical illness, injury and disability, and mental health (1) (A) | High | 1,621,139 | Med | 22.1\% | High (Low*) | $\begin{array}{r} 100.0 \\ \left(66.7^{* *}\right) \end{array}$ |
| Physical illness, injury and disability, and mental health (2) (A) | High | 849,820 | Med | 27.6\% |  |  |
| Mismatch of skills with industry demands (G) | High | 739,908 | Low | 13.0\% | High | 85.7 |
| Tax transfer system (1) (G) | Med | 629,734 | Low | 13.0\% | Med | 71.4 |
| Tax transfer system (2) (G) | Low | 193,406 | Med | 17.4\% |  |  |
| Flexibility of employment arrangements (A) | Med | 573,164 | Low | 15.5\% | Med | 75.0 |
| Re-training and up-skilling barriers (A) | Med | 498,898 | Med | 22.8\% | High | 85.7 |
| Care-giving responsibilities (1) (A) | Med | 330,054 | Low | 15.9\% | High | 85.7 |
| Care-giving responsibilities (2) (A) | Med | 639,841 | High | 33.4\% |  |  |
| Workplace barriers (A) | Low | 298,015 | High | 40.0\% | Low | 16.7 |
| Private recruitment firm practices (G) | Low | 283,520 | High | 51.3\% | High | 87.5 |
| Re-entry issues for VLTU (A) | Low | 157,170 | Med | 19.3\% | Med | 71.4 |
| Job search assistance (A) | Low | 125,173 | High | 35.9\% | Low | 62.5 |
| Leisure time trade-off (A) | High | 3,236,627 | High | 46.7\% | Low | 37.5 |

Sources: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Note:

* See Table 1
** Mental Illness
Assessment of the ranking of barriers for both the number of people and risk-adjusted experience show that barriers with fairly consistently high rankings for the number of people experiencing the barrier and the risk-adjusted prevalence include superannuation, leisure time trade-off, and illness, injury and disability. A number of barriers have overall medium rankings (i.e. some include both high and low measures). These include age discrimination, mismatch of skills with industry demands, re-training and up-skilling barriers, job search assistance and care-giving responsibilities. Those barriers with lower overall rankings include flexibility of employment arrangements, tax transfer system and re-entry issues for VLTU.
Rankings of the barriers by the Consultative Forum are sufficiently similar to those estimated from the Survey. The most significant exception is the Leisure time trade-off barrier. Leisure time trade-off is ranked as 'low' by the Forum, in contrast to it being 'high' for both number of people experiencing the barrier and risk-adjusted prevalence. The barrier of private recruitment firm practices is rated as 'high' by the Forum, 'high' also in terms of the risk adjusted prevalence, but overall has a relatively low ranking from the Survey.
The ranking of the barriers in Table 43 shows very similar figures for the number of people experiencing each barrier and the marginal effects in terms of total hours worked in the economy. The measures for illness, injury and disability and the second measure of care-giving responsibilities are both relatively highly ranked. Workplace barriers and the first measure of care-giving responsibilities are the lowest ranked in terms of the marginal effects.

The ranking of the barriers for the total number of self-reported hours lost to the Australian economy is available for four barrier measures where data are available on whether a person attributes not working and not working additional hours to a barrier.

Overall, there is not a close correlation of foregone hours with the marginal effects rankings. This is because those who report the flexibility of re-training barriers also report high hours foregone due to these barriers. That is, although the prevalence might be a little lower, the full economic effect is higher because of the impact on the average hours worked by this group of people. Flexibility of employment arrangements for the ill and care-givers has the highest number of foregone hours ( 9.3 million), followed by re-training and up-skilling barriers. Both of these are ranked in the middle for marginal effects in terms of total hours worked in the economy. Caregiving responsibilities a the third highest ranked barrier for marginal effects but are second-lowest ranked for foregone hours. Workplace barriers is the lowest ranked barrier for both marginal effects and total foregone hours.

Table 43: Ranking of barriers: prevalence and economic outcome, 2011

| Barrier | Number of people experiencing barrier |  | Riskadjusted prevalence |  | Marginal effects(2011) |  | Foregone hours (2011) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rank | N | Rank | \% | Rank | Hours | Rank | Hours |
| Physical illness, injury and disability, and mental health (2) | 1 | 1,621,139 | 5 | 22.1 | 1 | 1,603,262 | N/A | N/A |
| Physical illness, injury and disability, and mental health (1) | 2 | 849,820 | 3 | 27.6 | 2 | 855,466 | N/A | N/A |
| Care-giving responsibilities (2) | 3 | 693,841 | 2 | 33.4 | 3 | 707,807 | 3 | 6,210,578 |
| Flexibility of employment arrangements | 4 | 573,164 | 7 | 15.5 | 4 | 559,800 | 1 | 9,339,359 |
| Re-training and up-skilling barriers | 5 | 498,898 | 4 | 22.8 | 5 | 396,097 | 2 | 7,007,679 |
| Age discrimination | 6 | 412,034 | 8 | 8.5 | 6 | 375,106 |  |  |
| Care-giving responsibilities (1) | 7 | 330,054 | 6 | 15.9 | 7 | 331,802 | N/A | N/A |
| Workplace barriers | 8 | 298,015 | 1 | 40.0 | 8 | 284,178 | 4 | 5,407,942 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

### 5.5.1 Section overview

This section has provided a range of measures to rank the importance of barriers to mature age employment. These offer alternative interpretations of the relative importance of the barriers, which should be borne in mind. However, this is a useful guide to assess the relative importance of the effect of the barriers on mature age employment participation and hours worked in the economy.

The report has so far focused on experiences and perceptions of mature age job seekers, employees and NILF. Additional insight into the barriers to mature age employment participation can be gained by exploring issues from the perspective of employers; this is addressed in the section.

### 5.6 Employers' perspective: DEEWR Survey of Employers

In this section, we supplement the previous findings with an analysis of the 2010 DEEWR Survey of Employers.

### 5.6.1 About the 2010 DEEWR Survey of Employers

The 2010 DEEWR Survey of Employers collected data from employers about their experiences with and attitudes towards the employment of mature age people. ${ }^{\times v i}$ These data are used to contrast the employers' experiences and attitudes employing mature age people with the experiences and perceptions of mature age people. Importantly, the survey instrument:

- asked employers whether they currently employ a mature age person at their worksite
- whether they have a formal policy as to the recruitment and retention of older workers
- any steps they have taken to retain employees who may retireto rate a number of benefits and challenges to employing mature age workers.
The 2010 DEEWR Survey of Employers was conducted between October and December 2010 by TNS Social Research on behalf of DEEWR. The survey included a 20 minute CATI (Computer Assisted Telephone Interview) instrument, following pilot testing and some qualitative research to inform the questionnaire design. Data was weighted to $A B S$ Counts of Australian Businesses (2007).
The survey was subject to a multifaceted sampling procedure drawing on six sample sources for business contacts, as outlined below (Table 44). These data were weighted to account for nonresponse and sample bias. One limitation of the Survey of Employers is the relatively small cell sizes for workplaces with formal policies on recruiting and employing mature age workers. Furthermore, cell sizes become small when the analysis is disaggregated by whether the workplace employs a mature age worker on site. These small cell limitations should be kept in mind when interpreting the results.

Table 44: Survey of employers strata

| Strata | Description |
| :---: | :---: |
| JSA | DEEWR sample of employers who had a JSA jobseeker referred to them between Sept 12009 and Aug 312010 |
| DES A ${ }^{1}$ (DMS: Disability Management Service) | DEEWR sample of employers who had a DES A jobseeker referred to them between Mar 12010 and Aug 312010 AND has not had a DES B or a non-DEN/DESNRS jobseeker referred to them in the last two years |
| DES B (ESS: <br> Employment Support Service) | DEEWR sample of employers who had a DES B jobseeker referred to them between Mar 1 and Aug 312010 AND has not had a DES A or a non-DEN/DES/NRS jobseeker referred to them in the last two years |
| AJS | DEEWR sample of employers who had lodged a job ad on the Australian JobSearch website between Sept 12009 and Aug 312010 |
| RANDOM | Random sample of businesses purchased by DEEWR from Impact Lists |
| IEP | DEEWR sample of users of either Tailored Assistance, Indigenous Cadetships, Indigenous Wage Subsidy or CDEP Work Experience, between Sept 12009 and Aug 312010 |

[^22]Notes:
1 DES A and DES B were working titles for the DES Disability Management Service and Employment Support Service respectively.

### 5.6.2 Actions undertaken to retain retiring employees

In this section, we analyse the types of actions undertaken by employers to retain otherwise retiring employees. Many of these actions can be viewed as steps that may overcome specific workplace barriers. For example, changing a mature age workers workload and providing greater flexibility in contractual arrangements and other conditions. Results in Table 45 show that such actions are quite prevalent among Australian employers. For example, about 70\% of employers had either: reduced the mature age worker's workload, changed their workload or changed their working arrangements. About 60\% of employers reported offering a training or mentoring role to encourage retention. Only 1 in 3 workplaces reported increasing remuneration as a means of retaining mature age workers.

Table 45: Percentage of workplaces that have taken any steps to retain employees who might otherwise retire, 2010

| Actions Undertaken |  |
| :--- | :--- |
| 1. Reduced their workload and/or work responsibilities | 66.8 |
| Yes | 73.9 |
| 2. Changed their work hours | 68.0 |
| Yes | 60.8 |
| 3. Changed their work arrangements e.g. to part time or work as a casual or contractor before they retire |  |
| Yes | 27.8 |
| 4. Offered a training or mentoring role to pass on their knowledge and skills to other employees |  |
| Yes | 21273 |
| 5. Offered higher pay or wages | 270 |
| Yes |  |
|  |  |
| Weighted |  |
| Unweighted |  |
| Source: 2010 DEEWR Survey of Employers. Note: 1-3 includes less than 1\% of "don't know" cases in the denominator; 4 includes 2\% of "don't |  |
| know" cases in the denominator; 5 includes 5\% of "don't know" cases in the denominator. |  |

Importantly, the Survey of Employers also enables a disaggregation of actions taken by employers by (1.) whether they currently employ mature age workers, and (2.) whether they have a formal policy on recruiting and employing mature age people. In interpreting these data, however, the small unweighted sample size needs to be taken into account. When cross tabulated by these variables, the sample includes only 14 workplaces with a written mature age plan, and 24 workers with a non-written mature age plan. The remaining 226 workplaces have no current policy.
As shown in Table 46, there are some important differences in the propensity to undertake different strategies to retain retiring workers by policy type. As would be expected, workplaces with a written mature age policy are far more likely to undertake all of these strategies. This is particularly the case for reducing workload/responsibilities, changing work arrangements and offering a mentoring role, where well over $90 \%$ of those with a written policy have a procedure in place. Although based on a small sample, it is clear that those workplaces with written mature age policies are in a better position to overcome workplace barriers to mature age participation. Interestingly, with the exception of offering a mentoring or training type role, the differences between workplaces with no formal policy and those with a non-written policy are not too significant.

Table 46: Percentage of workplaces reporting actions taken to retain retiring workers, by policy type, 2010

Does your workplace have a formal policy on recruiting and employing mature age workers?

|  | Yes, Written | Yes, Unwritten | No |
| :--- | :---: | :---: | :---: |
| Reduced their workload and/or work responsibilities |  | 67.8 |  |
| Yes | 91.7 | 60.3 |  |
| Changed their work hours |  |  | 75.7 |
| Yes | 74.8 | 66.6 |  |

Changed their work arrangements e.g. to part time or work as a casual or contractor before they retire

| Yes | 99.6 | 64.2 | 68.1 |
| :--- | :---: | :---: | :---: |
| Offered a training or mentoring role to pass on their knowledge and skills to other employees |  |  |  |
| Yes | 97.0 | 90.8 | 51.9 |
| Offered higher pay or wages |  |  |  |
| Yes | 73.2 | 32.7 | 25.3 |
|  |  |  | 16425 |
| Weighted | 472 | 4338 | 226 |
| Unweighted | $\mathbf{1 4}$ | 24 |  |

Source: 2010 DEEWR Survey of Employers. Note: Includes 'don't know' cases in denominator, see Table 45 for distribution.
In contrast to these strong effects by policy type, there appears to be only small differences between workplaces with and without mature age persons with respect to available actions to retain retiring workers (Table 47).

Table 47: Percentage of workplaces reporting actions taken to retain retiring workers, by employment of mature age workers, 2010

Does your organisation currently employ mature age workers at your worksite?

|  | Yes | No |
| :--- | :---: | :---: |
| Reduced their workload and/or work responsibilities | 65.5 | 74.9 |
| Yes | 73.0 | 79.6 |
| Changed their work hours | 66.2 | 79.4 |
| Yes |  |  |
| Changed their work arrangements e.g. to part time or work as a casual or contractor before they retire |  |  |
| Yes | 60.8 | 60.8 |
| Offered a training or mentoring role to pass on their knowledge and skills to other employees |  |  |
| Yes | 29.0 | 19.9 |
| Offered higher pay or wages |  | 2,850 |
| Yes | $\mathbf{1 8 , 4 2 3}$ | 18 |

Source: 2010 DEEWR Survey of Employers. Note: Includes 'don't know' cases in denominator, see Table 45 for distribution.

### 5.6.3 Challenges of employing mature age employees

Survey respondents were also asked an open-ended, unprompted question as follows; 'What challenges do you see in employing mature age people at your workplace?'. Overall, the results from the employers' perceptions of employing mature age workers is overwhelmingly positivewith less than $10 \%$ of employers reporting each of the specific challenges contained in the
survey. Of the more prevalent responses where 'may lack skills/qualifications' = 8\%, 'less productive/slower/may require help' = 5.9\% and 'not suited to the type of work we do' = 9.4\% (Table 48). Encouragingly, less than 1\% of employers state that mature age workers are 'Inconsistent/Unreliable'. Furthermore, about 60\% of workplaces reported no challenge at all.

Table 48: Percentage of workplaces reporting challenges to employing mature age employees, 2010

|  | Challenges |
| :--- | :--- |
|  | Company/public attitude to mature age people |
| Yes | 0.5 |
|  | May lack necessary skills/qualifications |
| Yes | 7.9 |
|  | Inconsistent/unreliable |
| Yes | 0.5 |
|  | Inexperienced and too hard to re-train |
| Yes | 1.9 |
|  | Less productive/ slower/ require more help |
| Yes | 5.9 |
|  | Matching them to the appropriate role/job |
| Yes | 1.6 |
|  | Difficult to integrate / fit in at the workplace |
| Yes | 3.3 |
|  | Absences and time off from the workplace |
| Yes | 1.7 |
|  | Not suited to the type of work we do |
| Yes | 9.4 |
|  | Likely to retire soon |
| Yes | 2.3 |
|  | Other (Please specify) |
| Yes | 3.3 |
| Yes | Physical limitations / injuries |
| Yes | Don't know |
| Yes | None <br> Weighted |
| Unweighted | $\mathbf{1 3 9 . 1}, 246$ |

Source: 2010 DEEWR Survey of Employers

### 5.6.4 Prompted benefits and challenges

Finally, the 2010 DEEWR Survey of Employers also included a section in which both the benefits as well as the challenges were incorporated into one module. However, of the five statements included in the survey, just one included a statement on the benefits of employing mature age workers. Specifically, respondents were asked:
'I'm going to read out some benefits and challenges other businesses have told us about when employing mature age people. Using a scale of 0 to 10 where 0 is strongly disagree and 10 is strongly agree, to what extent do you agree or disagree'.

They were than prompted to rate a scale for:

- mature age workers are not as productive as other staff
- it can be hard to integrate mature age workers into the workforce
- mature age workers have a good attitude to work
- it can be hard to find Mature Age employees with the relevant skills we need
- it can be hard to find Mature Age employees with the necessary experience

As shown in Table 49 below, a sizeable minority of employers state that it can be hard to find Mature Age employees with the relevant skills or experience necessary. Only a very small minority disagree that mature age workers have a good attitude to work, while most disagree that mature age workers are less productive than other staff or are hard to integrate into the workforce.

Table 49: Percentage of employers ranking the benefits and challenges of mature age workers, by policy type, 2010

|  | Does your workplace have a formal policy on recruiting and employing mature age workers? |  |  |
| :---: | :---: | :---: | :---: |
|  | Yes, Written | Yes, Unwritten | No |
| Mature age workers are not as productive as other staff |  |  |  |
| Total Disagree | 56 | 71 | 67 |
| Neither | 31 | 22 | 21 |
| Total Agree | 11 | 7 | 9 |
| It can be hard to integrate mature age workers into the workforce |  |  |  |
| Total Disagree | 52 | 50 | 55 |
| Neither | 34 | 25 | 26 |
| Total Agree | 9 | 16 | 16 |
| Mature age workers have a good attitude to work |  |  |  |
| Total Disagree | 0.7 | 6.4 | 3.7 |
| Neither | 12.5 | 13.2 | 16.9 |
| Total Agree | 74.4 | 80.5 | 77.0 |
| It can be hard to find Mature Age employees with the relevant skills we need |  |  |  |
| Total Disagree | 16.0 | 44.0 | 36.3 |
| Neither | 32.2 | 38.1 | 31.4 |
| Total Agree | 46.9 | 17.9 | 28.7 |
| It can be hard to find Mature Age employees with the necessary experience |  |  |  |
| Total Disagree | 20.5 | 42.2 | 41.4 |
| Neither | 27.9 | 41.0 | 28.6 |
| Total Agree | 46.7 | 16.8 | 27.4 |
| Unweighted | 48 | 41 | 1130 |
| Weighted | 2,463 | 6,284 | 121,378 |

[^23]Table 50 replicates this analysis by whether the workplace currently employs mature age workers. In general, those workplaces that employ older workers have a somewhat more positive attitude towards mature age workers compared with other workplaces. If mature age workers are employed at their worksite, employers are more likely to disagree that mature age workers are not as productive as other staff ( $73 \%$ v 53\%), that it can be hard to integrate mature age workers into the workforce ( $59 \%$ v $45 \%$ ) and that it can be hard to find Mature Age employees with the necessary experience ( $45 \%$ v 33\%). In regards to the attitude of mature age workers and the relevance of their skills, the differences by whether mature age workers are employed are not significant.

Table 50: Percentage of employer rankings the benefits and challenges of mature age workers, by current employment of mature age workers, 2010

|  |  | Does your organisation currently employmature age workers at your worksite? |
| :--- | :--- | :---: |
|  | Yes | No |
|  | Mature age workers are not as productive as other staff |  |
| Total Disagree | 73 | 53 |
| Neither | 18 | 27 |
| Total Agree | 8 | 14 |
|  | It can be hard to integrate mature age workers into the workforce |  |
| Total Disagree | 59 | 45 |
| Neither | 24 | 31 |
| Total Agree | 15 | 21 |
|  | Mature age workers have a good attitude to work |  |
| Total Disagree | 3 | 6 |
| Neither | 16 | 19 |
| Total Agree | 80 | 72 |
|  | It can be hard to find Mature Age employees with the relevant skills we need |  |
| Total Disagree | 38 | 33 |
| Neither | 33 | 29 |
| Total Agree | 26 | 35 |
|  | It can be hard to find Mature Age employees with the necessary experience |  |
| Total Disagree | 45 | 33 |
| Neither | 29 | 30 |
| Total Agree | 25 | 34 |
|  | 968 | 271 |
| Unweighted | 89,158 | 41,680 |
| Weighted |  |  |
|  |  |  |

Source: 2010 DEEWR Survey of Employers. Note: "Don't Know" included in denominator. Total disagree = 0-3 on scale. Neither =4-6 on scale. Total agree $=7$-10 on scale.

### 5.6.5 Section overview

This section has provided insights into the perceptions of employers regarding the benefits and challenges they encounter when employing mature age Australians. The data from the 2010 DEEWR Survey of Employers have allowed us to use employers' perspectives to complement findings from the National Survey of employees and job seekers. In particular, that many workplaces have adopted strategies to maintain mature workers rather than have them retire, but have not applied these extensively. These results however, are tempered by the small cell sizes offered across the measures in the survey instrument.

## 6. DISCUSSION

Increasing the level of mature age employment in Australia is a major public policy priority in the context the economic challenges of an ageing population. Indeed, in recent years, the Australian Government has introduced a number of programs and policies to support mature age employment. Notwithstanding these contributions, there remains significant scope to increase the labour force participation of mature age Australians.

Indeed, the first report to the Consultative Forum on Mature Age Participation identified 14 barriers to mature age employment-which require specific actions to improve the employment prospects of mature age people.×vii
This report has sought to measure the prevalence of these barriers using the results of the first national Survey of Barriers to Employment for Mature Age Australians. Approximately 3000 Australians aged 45-74 were surveyed about their experiences, attitudes and perceptions of the 14 barriers. In addition, socio-economic, demographic and employment data were also collected-to isolate the characteristics of those who report being most affected by the barriers.
Returning to the objectives of this study outlined at the beginning of the report, we have sought to:

- measure the prevalence of each of the barriers to employment, as discussed in the first consultative forum report
- understanding the differences in the prevalence of each of the barriers as they differ by demographic, economic and social characteristics
- examine the degree to which individual barriers interact, creating a multiple obstacles for many older Australians attempting to enter the workforce or increase their hours worked
- undertake a simulation exercise to isolate the proportion of hours lost to the Australian labour market and economy due to the stated barriers to entry
- contrast the perceptions of mature age workers and job seekers, with the views of employers as collected in the 2010 DEEWR Survey of Employers.

In the discussion section that follows, we outline the key findings with respect to each of these objectives. Following, we present the key limitations of the study, and note extensions for future study.

### 6.1 Key findings

### 6.1.1 Prevalence and differences by demographic and socio-economic factors

The 14 barriers to mature age employment participation cover a broad range of issues affecting Australians aged 45-74. The National Survey enables numerous measures of the prevalence of these barriers to be computed, and provide a detailed illustration of the operation of the barriers to mature age workforce participation. Further, the socio-economic and demographic data from the survey provide scope for exploring how the prevalence of the barriers varies across different sub-groups of the mature age population. This section presents the main findings for the barriers.
Illness, injury and disability (including physical and mental health) appears to have a significant impact on employment participation, with it having prevented one-fifth of the total population aged 45-74 from working or looking for work in the last 5 years. Further, illness presently prevents $12 \%$ of people aged 45-74 from looking for work. This barrier disproportionately affects older people and those with a low level of completed education.

Age discrimination also has an impact on employment participation of the mature age population. Discrimination during job search is particularly prevalent, with $36 \%$ of job seekers saying they have experienced job search exclusion in the last 5 years which they attributed to age, influencing the desire to work of half of these people who are not working. Furthermore, five in every six job seekers believe that age discrimination is an issue when looking for a job in Australia. ${ }^{5}$
Discrimination on the basis of age is also prevalent in the workplace; $13 \%$ of all who have worked in the last 5 years say they have experienced exclusion which they attributed to age, influencing the desire to work of $60 \%$ of the people who are not working. Two-thirds of workers believe that workplace-based age discrimination is an issue in Australia.
Direct or indirect experience of being told too you are old has been reported by $23 \%$ of mature age workers or job seekers. Thinking that employers believe the respondent is too old, is a significant reason for discouraged workers and the retired not seeking to be in the workforce. One half of discouraged workers state that employers thinking the respondent is too old is an important reason for not working, and $31 \%$ of the retired say it is an important reason for being retired.

Three-quarters of mature age people have reported that they experienced age discrimination (i.e., age-attributed workplace or job search exclusion, or direct or indirect experience of age discrimination) or perceived it to be an issue in the workplace or when looking for a job. Overall, age discrimination is most commonly reported by those earning low income, who are not employed and not retired, and aged 55-64 years. It is apparent that people with lower economic resources in particular have the highest levels of reported age discrimination.
Age discrimination is also found to have been reported to be experienced by job seekers private recruitment firms. Private recruitment firms, used by one-quarter of job seekers, are reported to provide a good or great deal of effort in helping find work by $20 \%$ of users. One-quarter of job seekers reporting a lack of effort by private recruitment firms in helping them look for work cite age as a reason. This influences the desire to work, of the 62\% of these people who are not employed. People with low education and income are most at risk of attributing a reported lack of effort of private recruitment firms to age.
The barrier of the mismatch of skills and experience, measured based on self-reports of the availability of jobs, shows that almost one-third of people who have worked or looked for a job in the last 5 years state there are no jobs in their line of work in their local area, and $7 \%$ report no jobs in their local area at all. People with low income and low levels of education are most likely to report these problems.

Workplace training and up-skilling is reported as an important enabler of helping mature age people do their job better, get a promotion, find a job and find more hours. People with low education are most likely to need training to help find work, particularly training related to IT/ computers. There is a significant unmet demand for training, with over one-third of workers being unable to attend some form of training that they wanted to attend in the past 5 years. Forty-four per cent cited affordability as a reason for not being able to attend, while only $7 \%$ reported the reason as the training being inappropriate for their skills and experience. The inability to attend workplace training is most experienced by younger workers and those earning a high income, however, affordability issues are most commonly an issue for those earning a low income. Again, these results reflect mature age peoples' perceptions on retraining. The success of retraining programs is reliant upon the aspirations of mature age workers to improve their skills, in addition to the accessibility and appropriateness of the programs.

5 It should be kept in mind that people's perceptions of some barriers (especially age discrimination) may be influenced by a range of information sources, including friends, family, colleagues and mass media.

Care-giving responsibilities are a significant barrier to mature age employment, with 28\% of respondents being carers for an average 33.5 hours per week, and $14 \%$ caring for someone with a long-term illness or disability. These responsibilities prevent over one-third of care-givers from working and just under one-third from working more hours; caring disproportionately affects the workforce participation of females, people aged 45-54, and carers of the long-term ill and people with a disability. An enabler to increase employment participation and hours worked is suitable external care, which help almost half of respondents whose caring responsibilities affect workforce participation to find work or work more hours.

Another means of improving the workforce participation of carers is more flexible employment arrangements. Flexible work patterns would help $61 \%$ of non-employed carers and half of employed carers, whose caring prevents their workforce participation, from working or working more. Flexible work arrangements are also a significant enabler of workforce participation of the ill and injured. Flexible work patterns have been used by one-quarter of those who have been ill, and would help 59\% of non-employed currently ill people to be able to work. Flexible work would most likely help younger workers re-enter the workforce. A reduction in hours as they approach retirement would also help current workers work more years, although for an average of less than one more year.

The superannuation balances of two-thirds of mature age Australians with super have declined in recent years and had an effect on their workforce participation. These declines have led to 40\% of those not retired to delay their retirement by an average 6 years. For 83\% of those already retired, there is no impact, while 11\% of current workers are working more (at an average 12 more hours per week). Forty-one per cent of those not retired are somewhat or extremely confident of having enough superannuation for retirement, while the respective figure for the retired is higher (57\%). Confidence of having enough superannuation in retirement is highest for males, wealthier and more educated people. One half of people with some knowledge of superannuation rules believe the rules change too frequently. The lack of certainty of superannuation rules has impacted the retirement plans of $39 \%$ of these people who are not retired.

The ability to access superannuation as a tax-free income source after age 60 is a measure introduced by the Australian Government to improve workforce participation of mature age people. Overall, the impact of this measure is to delay the intended retirement of people. Around one-sixth of non-retired people are delaying retirement because of tax-free super after age 60. The measure is reducing the planned number of hours worked after age 60 for $34 \%$ of those aged 45-59, while less so for the planned hours worked or number of hours currently worked for those already aged 60.

The withdrawal rate of the Age Pension (i.e. the amount that the pension payment is reduced for each additional dollar earned from working) impacts the desire to work of $17 \%$ receiving this payment. The average maximum of their Pension that they would be willing to lose to work as much as they want is $36 \%$.

The very long-term unemployed, who comprise 23\% of those not employed and not retired, have been without work for an average 6.4 years and a median 4.0 years. The re-entry barriers for the very long-term unemployed include having experienced age-attributed job search exclusion, being ill or injured at present or in the past 5 years, and there being no jobs in their line of work or at all in the local area.

Australian Government employment services are another form of assistance for job seekers, and were used by $15 \%$ of job seekers in the last 5 years, of whom $63 \%$ found the services helpful. They are more likely to be used by those with lower education and from a non-English speaking
background. The main reason for the services not being helpful is because of not matching the job seeker with an appropriate job.
Leisure time is a significant reason influencing when people decide to retire. Five-sixths of nonretired people state that leisure time with family and friends is a very or somewhat important reason for when the non-retired decide when to retire (3rd most important reason). People earning a high income are most likely to state this as an important reason. For 61\% of retired people, this is a reason for when they did decide to retire (2nd most important reason).

Workplace barriers can potentially prevent people with a physical illness, injury or disability from working. Over one-quarter of people ill, injured or disabled in the past 5 years have changed their working condition (e.g., moved to a less physically demanding role) to enable them to work. Among people who have not availed themselves of such a changed condition, $64 \%$ of the nonemployed would be able to work if such changed conditions were available and $25 \%$ of the employed could work more hours. Changed conditions would most likely help workers aged 45-54 years.

Overall, there are some patterns in the socio-economic and demographic variables. Most notably, those with low income and, to a lesser extent, low education are more likely to experience the barriers compared with other population sub-groups. Further, age is related to many barriers, with older people more likely affected by illness while younger people more likely to have care-giving responsibilities and to be influenced by flexible working arrangements. Mature age women too, were found to be prevented from working, or working more hours, due to care-giving responsibilities.
Notwithstanding these similarities, it is not surprising that dissimilar demographic groups in the population face different barriers to mature age employment. Each barrier, in itself, represents a different form of social phenomena and therefore, we do not expect to see the same demographic variables driving all the barriers. That is, the barriers cover a very wide range of issues and understandably, different groups in the population will be more likely to be affected by certain barriers.

### 6.1.2 Summary ranking

In summary, we have provided a number of different measures to rank the importance of barriers to mature age employment. Each provides an alternative interpretation and this should be kept in mind when analysing these results. Similarly, in interpreting these results it should be kept in mind that many of these barriers are very broad and one or two measures may not account for the breadth of this barrier. The reader is redirected to section 5.2 for a full overview of the different prevalence measures for the respective barriers. Notwithstanding these limitations, this ranking exercise is useful to gauge relative importance of the barriers as they affect mature age workforce participation and hours worked economy wide.

- Across the raw and adjusted prevalence measures, it appears that superannuation, illness, injury and disability, and age discrimination are consistently ranked highly. Similarly, there is a high degree of concordance between these rankings and those provided by the Forum.
- Similarly, there is consistency in the barriers ranked as lower barriers, including tax transfer system and re-entry issues for VLTU.
- Importantly, the leisure time trade-off barrier, which was lowly ranked by Forum members, has a very high ranking in the survey instrument. This is because leisure time trade-off, being a supply side constraint, is not necessarily regarded by generally as a barrier to which mature age people have little control in overcoming.
- Finally, rankings from the simulation exercise indicate the importance of illness, injury and disability and one measure of care-giving responsibilities, consistent with earlier rankings. In contrast, the simulation exercise demonstrates the importance of flexible work arrangements on total foregone hours, in contrast to raw and risk-adjusted prevalence. Interestingly, when comparing the marginal effects with the total hours foregone, there are some disparities. This is because although the prevalence rates are a little lower for several barriers, the actual effect on average hours worked is much greater-leading to a larger overall effect on hours worked in the economy.


### 6.1.3 Interaction of barriers

The interaction of the barriers helps in identifying how mature age people may experience multiple obstacles to enter the workforce or increase their hours worked. Some interactions have already been discussed above, including the age discrimination experienced by those using private recruitment firms, and how flexible work arrangements can help the ill and care-givers find work or more hours.

Some key findings of the interactions include:

- Illness, injury or disability is more likely to prevent someone from working or looking for work if they:
- state there are no jobs in their line of work or at all in their local area (14\% current illness prevents working/ working more hours if agree/ strongly agree, 5\% if don't agree/strongly agree)
- are care-givers of a person with a long-term illness or disability
- do not state that leisure is a reason for deciding when to retire
- not confident have enough superannuation for retirement ( $6 \%$ currently ill if confident, $13 \%$ if not confident)
- receive Government support
- Overall, age discrimination is more likely to be reported to be experienced and perceived by those vulnerable in the workplace, including:
- the ill, injured or disabled (22\% experience 3 discriminations if illness/injury/disability prevented working or looking for work in last 5 years, $13 \%$ if not)
- care-givers of the long-term ill or disabled (18\% experience 3 discriminations if carers, $14 \%$ if not carers)
- the unemployed (39\% experience 3 discriminations if unemployed, $12 \%$ if not unemployed)
- More specifically, reported workplace exclusion that is attributed to age is highest for those who experience the physical illness, injury and disability and mismatch of skills and experience barriers.
- Reported job search exclusion that is attributed to age is highest for the unemployed or very long-term unemployed, those experiencing the barrier of mismatch of skills and experience, and job seekers who have used an Australian Government employment service or private recruitment firms.
- Care-giving of a person with a long-term illness or disability is highest for:
- discouraged workers (17\% discouraged if care-giver, $10 \%$ if not)
- those not confident of having enough superannuation for retirement (11\% discouraged if confident, $15 \%$ if not confident)
- people who state there are no jobs in the local area or at all (21\% discouraged if agree/ strongly agree no jobs at all in local area, $12 \%$ if do not agree).


### 6.1.4 Simulation exercise: hours and workers foregone

To contextualise these prevalence data, and provide insight into the likely loss to the labour force due to the barriers to mature age employment over time, we project the population, labour supply, unemployed population, part-time workers and full-time worker populations across timewith and without barriers in place. Results from this simulation exercise offer an alternative view of the prevalence of barriers to mature age employment-that is, they offer the interpretation of the workers or hours lost to the economy due to the existence of barriers.
Importantly, our projections are highly comparable to the ABS series projections, showing the Australian population increasing from 22.6 million in 2011, to about 35.3 million in 2056-of which we project about 8.4 million Australians will be aged 65 and over. This represents an increase in the proportion of the population aged 65 and over from 13.7\% in 2011 to 19\% in 2031 to 23.6\% in 2056. When combined with our labour supply assumptions, we project the Australian labour force rising from around 11.45 million in 2011 to about 13.9 million in just 20 years time.
For the barriers for which we have full data in the survey, we find a very significant impact on the Australian economy over time:

- The flexibility of workplace arrangements for care-givers and the ill barrier results in a loss of almost 450000 potential employees by 2031, translating to just under 12.5 million hours foregone.
- The up-skilling and re-training barrier results in a loss of 207000 workers by 2031 and over 9 million hours foregone each week.
- The single item care-givers barrier results in a loss of almost 215000 potential employees by 2031- accounting for over 8.3 million hours per week.
- The workplace and illness barrier results in a loss of 234000 workers by 2031, or 7.27 million hours per week.

Our results from the projections indicate that over time, as the Australian population continues to age and grow, the amount of workers foregone and hours foregone from the economy grows significantly. This suggests that the sooner appropriate programmatic and policy responses are put in place, the lower the total cost imposed on the economy of the barriers to employment.
Results from the projections also point to the significant unmet demand for hours worked by the NILF population, and also part-time workers. According to the ABS definition a person not actively seeking work is not regarded as being in the labour force and therefore having a preference to work zero hours per week. However many people defined as being outside the labour force state they would like to work, in some cases significant hours, if barriers to their labour force participation were removed. This is particularly the case for women. For example:

- The flexibility of workplace arrangements for care-givers and the ill barrier results in a loss of 200000 hours per week worked by part time male workers, compared with over 1 million hours lost from part time female workers.
- The care-giving barrier results in a loss of 1.1 million hours worked by NILF males compared to 2.4 million hours worked by NILF females.

For males, however, many of the effects are stronger for the unemployed group for some barriers. For instance:

- The workplace and illness barrier results in the loss of 542000 hours lost from unemployed males, compared with 306000 hours foregone from unemployed females.

The importance of these findings is that the Australian economy is not benefitting from the workforce participation of many mature age workers, and not just the currently unemployed.

Mature age Australians who are currently working either full-time or part-time, cite that because of barriers to working further hours, they are not offering their full potential to the Australian economy. Similarly, there is a very large potential to increase employment participation from the NILF population. Although, not actively seeking work in a formal statistical sense, the hours lost as specifically reported by mature age people themselves is very significant.

### 6.1.5 Employers' perspective

One limitation of both the prevalence analysis and projections also is that they are reliant upon data measuring the perceptions of mature age Australians only. To garner insight into the perceptions of employers-specifically, the benefits and challenges faced when employing mature age Australians, we use recently released data from the 2010 DEEWR Employers Survey. In summary, when asked about these perceptions:

- Overall, the sizeable majority of employers cite minimal challenges to employing mature workers.
- Many organisations have adopted strategies to maintain mature workers rather than have them retire. However, there is scope for more extensive use of such strategies.
- Unfortunately, a minority of employers have tended to agree with statements that offer a potentially negative view of mature age workers. For example, around $10 \%$ of employers stated 'Mature age workers are not as productive as other staff'. This is consistent with reports from the Barriers survey, where $7 \%$ of job seekers state that a potential employer has directly told them they are too old, and two-thirds of workers think that age discrimination is an issue in the workplace in Australia.
- These results also underscore the utility of having a written mature age plan in place. Organisations with such a plan are far more likely to have procedures in place to help retain mature age employees who would otherwise retire. Indeed, organisations with a 'non-written' plan only differ from those without any plan with respect to offering a training or mentoring role.
- Furthermore, those organisations that currently employ mature age workers have more positive attitudes towards mature age workers themselves. Unfortunately, the survey itself tends to focus primarily on the challenges of employing mature age workers. In the entire rating module, only one benefit is included, alongside an additional four measures of challenges. Future modules should enable employers to report on the many benefits of employing mature age workers.


### 6.2 Limitations

The report has presented extensive evidence about the range of barriers to mature age employment in Australia, using the results from the Survey of Barriers to Employment for Mature Age Australians and the DEEWR Survey of Employers. However, there are some limitations about the data and methods utilised in this report, which should be borne in mind when interpreting results.

### 6.2.1 Survey of Barriers to Employment for Mature Age Australians

- The most significant limitation of the findings is that the survey instrument includes only information from mature age people. The survey is the means of measuring barrier prevalence and projecting their impact on labour force supply. This may introduce bias in their reporting of perceptions of the barriers to mature age employment, which may differ from that experienced by other people or institutions involved in workforce issues (e.g., employers). However, the survey provides a rigorous and representative sample of mature age employees, job seekers and those retired throughout Australia. The report also considers the perspective of employers in retaining and recruiting mature age workers from the Survey of Barriers, which provides an appropriate comparison with the reports of mature age people.
- One source of bias resulting from self-reported data is that peoples' perceptions of some barriers were surveyed, in addition to their experiences. It should be kept in mind that peoples' perceptions of some barriers (e.g. age discrimination) may be influenced by a range of information sources, including friends, family, colleagues and mass media.
- The responses to hypothetical scenarios where the barrier is removed may differ from the how the person would respond should this happen in real life. A person's actual labour force behaviour, in terms of whether to work and how much to work, in response to the removal of a barrier will be influenced by numerous factors (e.g. personal financial circumstances, spouse's employment status) that are not considered in these scenarios.
- Another limitation of the survey is that closer examination of certain barriers could not be undertaken due to time and cost constraints that prevented longer interviews with respondents. More detailed information would provide additional insight into the operation of certain barriers. One such barrier is leisure time trade-off, for which there is scope for further exploration with additional and more targeted questions.
- A drawback of the survey is that it focuses on people aged 45-74 years. Although this provides a broad overview of mature age people, including those who will be approaching the end of their working life in coming years and decades, additional perspective could be gained by comparison with younger people. Such comparison would enable identification of whether mature age people face relatively greater barriers to mature age employment participation than younger cohorts.
- The survey is a one-off cross-sectional study, which doesn't account for changes in perceptions over time among different cohorts.
- Finally, a challenge of the rankings of barriers using the survey data is that the barriers are very diverse. It is difficult to devise consistent measures across all barriers, given the time and cost constraints of the survey.

Despite these drawbacks, there are many positive attributed of this survey, in addition to the wide-ranging evidence that it provides of the barriers to mature age employment participation:

- It is the first national survey of its kind in Australia to quantify the barriers faced by older Australians in engaging in the workforce.
- A broad range of socio-economic and demographic data was collected to enable investigation of how experience of the barriers varies among different segments of the population, to allow for targeted programmatic and policy responses.
- The sample size of just over 3000 respondents has enabled the barriers to be measured with high statistical accuracy, and to allow for the detailed analyses by socio-economic and demographic factors.
- The survey instrument was refined based on a pilot test. The final survey instrument was conducted smoothly, with ORC reporting no significant problems with the survey questions of the overall operation of the survey.


### 6.2.2 Projections

There are some limitations associated with the projections exercise:

- As with all demographic projections, there is a caveat that present a simulated future based on a series of fixed assumptions and should not be considered forecasts. For the purpose of this exercise, the age-sex specific rates of labour force participation, unemployment and average hours worked have been kept constant throughout the projection period.
- As well as assuming the continuation of existing trends in fertility, mortality and migration, the projections assume a fixed relationship between a population at risk of the barrier and the
population itself. For example, when looking at care-giving responsibilities, the propensities assume there is a constant propensity for a person of age x , sex y and workforce status z to be at 'risk' of having a care-giving responsibility. With important age and cohort shifts occurring in the older Australian population, in conjunction with future exogenous policy shocks, this assumption may be invalid.
- Moreover, the projections are based upon a behavioural shift on behalf of the population aged 45-74, using data from the Survey of Barriers. When the effects of the respective barriers are calculated across the full population, the true economic impact of each of the barriers would undoubtedly be much higher. For example, affordable and accessible childcare for families would undoubtedly reduce the size of the barrier of caring responsibilities for the whole population.
- The projections assume there is sufficient demand to subsume the additional supply of labour. The projections are conducted from a supply perspective and take no account of labour demand.
- The projections for each barrier stand alone and cannot be combined to produce the total estimate of hours and workers lost to the economy due to the existence of a barrier. The main reason for this is, as shown earlier in this report, there are significant interaction effects among the barriers to labour force participation, particularly as they relate to illness and age discrimination. Thus, simply adding across the estimated of foregone hours and workers would result in a substantial overestimate of the culminated effect of the barriers;
- As reported above, the projections are based on people's responses to hypothetical scenarios in the survey instrument. In reality, people's actions may differ from these responses and will be influenced by many unknown factors which cannot be analysed here.


### 6.2.3 Survey of employers

There are some drawbacks of the Survey of Employers, including:

- The Survey of Employers is based on the views of employers, with no responses from employees within their organisation.
- The sample size of the Survey of Employers is relatively small for the mature age module, and prevents more detailed and rigorous analysis from being conducted.
- One limitation of the Survey of Employers is the relatively small cell sizes for workplaces with formal policies on recruiting and employing mature age workers. Furthermore, cell sizes become small when the analysis is disaggregated by whether the workplace employs a mature age worker on site. These small cell limitations should be kept in mind when interpreting the results.
- There is no information on the actual respondent, such as their position within the organisation.
- The survey has a lack of measures of the benefits of mature age workers, and instead focuses on the challenges and problems of employing older workers.
- The design of the employer survey does not allow a cross-classification of variables across modules. For example, because respondents answering the mature age module are sampled mutually exclusively and independently of the younger age module, it is not possible to crossclassify the perceptions of younger workers with mature age workers. Cross-classification would enable us to answer the question: do employers with a negative attitude towards mature age workers also have a negative attitude towards younger aged workers? That is, are certain groups of employers acting ageist, regardless of the employee's age.


## 7. CONCLUDING COMMENTS

The Australian Government has prioritised improving mature age employment prospects as one means of harnessing the potential of mature age people and of managing the economic and social implications of population ageing. On behalf of the Department of Education, Employment and Workplace Relations and in partnership with the Consultative Forum on Mature Age Participation and ORC International, the National Seniors Productive Ageing Centre has put to field Australia's first nationally representative Survey of the Barriers to Employment for Mature Age Australians.

Among the key findings furnished from this exercise, are:

- The ranking of the prevalence of the barriers reveal that strongest barriers to mature age employment include superannuation, illness, injury and disability, age discrimination and flexibility of workplace arrangements for the ill and care-givers. However, policy makers should not focus on these barriers to the detriment of the other barriers reported herein. There are strong interactions between many barriers, and so it is clear that policy responses require a holistic approach. Further, some barriers, such as those only related to job seekers, can only be experienced by specific population sub-groups. That is, the population-wide prevalence may be lower than other barriers, but when considering the population at risk the prevalence is high; that is, they are an extremely important barrier for this sub-population.
- Results also indicate that the barrier of leisure time trade-off prevents many mature age people form working. This indicates that the elimination of structural barriers, such as inflexible workplace arrangements, must occur concurrently with behavioural shifts among the current cohort of mature age workers themselves. The leisure time trade-off, being a supply side constraint, is not necessarily regarded as a barrier to which mature age people have little control in overcoming. That is, it is often at times viewed as a personal choice. However, this attitude towards early retirement is not necessarily a function of individual choice alone: but rather embedded in a historical setting in which previous policy setting have normalised the pursuit of leisure activities in the later life course.
- The projections indicate that as the population continues to age and grow, the potential loss of workers and hours from the Australian economy grows substantially. This finding suggests that policy interventions need to occur sooner rather than later. The longer the time period until interventions are introduced to reduce barriers, the larger the accumulation of losses to the economy. Indeed, the implications for the economy are not insignificant. Results here indicate that introducing greater flexibility for a person with an illness or care-giving responsibilities would lead to an additional 450000 workers and 1.25 million hours worked each week in 20 years' time.
- The projections also underscore the many hours lost to the labour market from groups other than the unemployed. Mature age Australians who are currently working either full-time or part-time cite that because of barriers to working further hours, they are not offering their full potential to the Australian economy. Similarly, there is a very large potential to increase employment participation from the NILF population. Although not actively seeking work in a formal statistical sense, the hours lost as specifically reported by mature age people themselves is very significant.
- Although by and large employers report few challenges to employing mature age workers, a sizeable minority hold out dated stereotypes of mature age workers. This is consistent with reports from employees in the Survey of Barriers of experience of direct age discrimination. Encouragingly, however, employers with a written mature age plan are well placed to retain mature age employees because they have workplace policies enabling changes in working hours or contractual arrangements and the possibility of mentoring focused roles which all enable them to benefit from the skills, experience and knowledge of mature age workers.

Notwithstanding these key findings offered from this project, the limitations as discussed above need to be kept in mind when developing programmatic and policy responses. Future research may investigate ways of overcoming these limitations and extending the analysis presented herein.
Specifically, the following research priorities provide fruitful avenues for research:

1. A future DEEWR Survey of Employers could include a subsample of employees. This would allow a multilevel analysis of individuals, within organisations, within industry structure. This would enable a disaggregation of the levels of variability in the prevalence of each barrier as they appear at the individual level, organisational level and industry level. For example, this kind of data would enable an analysis of the degree to which employees' and employers' perceptions of age-based discrimination play out in the workplace. There are obviously technical challenges to consider, such as the effect on the survey response rate by adding employees to an employer based survey.
2. A future Survey of Barriers should seek to place a greater focus on certain barriers to enable more detailed measurement of their prevalence. Leisure time trade-off, for example, could be further explored through more specific questions regarding the factors influencing people's decision about working versus having more leisure time.
3. Future analysis could also extend the projection of hours lost to the economy to the proportion of GDP lost due to the existence of barriers to participation and barriers to an increase in hours. This would outline more specifically the impact of the barriers on the Australian economy.
4. Further analysis could also incorporate the impact of macroeconomic uncertainty on barriers. For example, the impact of exogenous shocks such as a financial crisis on the barriers (beyond the impact on superannuation) and the interaction of labour demand and supply could provide more evidence to investigate alternative projection scenarios. Also, any changes in the political and policy environment may mean updating analyses on a regular basis.
5. The Survey of Barriers could be extended to people aged less than 45 years, as mentioned in the limitations section, to enable comparison of barrier prevalence with younger people. This proposal could provide important information on how age-based discrimination affects the labour market behaviour of younger Australians as well as mature age people.
6. In this study we have not included a detailed analysis of pathways to retirement. Future research could investigate the degree to which alternative pathways interact with selected barriers to mature age participation. For example, do some mature age workers become consultants in later life to enable flexible working strategies which are not available in the traditional workforce?

## APPENDIX A: DETAILED TABLES

Table A.1: Current employment status (\% of total population) by socio-economic and demographic characteristics, 2011-12

|  | Currently employed |  | Not employed \& not retired |  | Retired |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 61.9 | 59.3-64.6 | 9.9 | 8.1-11.7 | 28.1 | 25.8-30.4 | 1,505 | 3,628,392 |
| Female | 54.4* | 51.5-57.2 | 12.8* | 10.6-15.0 | 32.8* | 30.4-35.3 | 1,502 | 3,716,645 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 80.8 | 77.6-84.0 | 14.8 | 11.9-17.7 | 4.4 | 2.9-5.9 | 700 | 3,064,368 |
| 55-64 | 57.2* | 54.4-60.1 | 11.7 | 9.8-13.6 | 31.0* | 28.4-33.7 | 1,189 | 2,597,009 |
| 65-74 | 18.1* | 15.9-20.4 | 4.6* | 3.4-5.9 | 77.3* | 74.8-79.7 | 1,118 | 1,683,660 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 62.0 | 59.7-64.3 | 9.7 | 8.1-11.4 | 28.3 | 26.3-30.2 | 2,051 | 5,100,317 |
| Not married | 49.2* | 45.5-52.9 | 15.2* | 12.3-18.1 | 35.6* | 32.3-38.8 | 944 | 2,209,959 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 50.6 | 47.6-53.6 | 12.4 | 10.2-14.6 | 36.9 | 34.3-39.6 | 1,433 | 3,371,225 |
| Finished HS | 62.7* | 59.0-66.3 | 10.6 | 8.0-13.3 | 26.7* | 23.7-29.7 | 818 | 2,080,344 |
| Bachelor + | 68.3* | 64.6-72.0 | 10.2 | 7.6-12.9 | 21.5* | 18.5-24.4 | 718 | 1,821,526 |

## Country of birth

| Australia | 58.3 | $56.0-60.6$ | 11.3 | $9.7-12.9$ | 30.4 | $28.5-32.4$ | 2,252 | $5,531,190$ |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| Other Engl. spk. | 58.6 | $53.9-63.4$ | 8.9 | $6.0-11.9$ | 32.4 | $28.2-36.7$ | 513 | $1,194,813$ |
| Non-Engl. spk. | 55.9 | $48.5-63.3$ | 17.0 | $10.6-23.5$ | 27.0 | $21.4-32.6$ | 238 | 609,902 |

## Residence

| Capital city | 59.3 | $56.8-61.9$ | 11.6 | $9.7-13.5$ | 29.1 | $26.9-31.2$ | 1,834 | $4,498,688$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Other | 56.2 | $53.0-59.4$ | 11.0 | $8.9-13.1$ | $32.8^{*}$ | $30.0-35.6$ | 1,173 | $2,846,349$ |

Personal income

| Up to \$20,000 | 20.7 | $16.7-24.8$ | 21.8 | $17.7-26.0$ | 57.4 | $52.8-62.1$ | 591 | $1,214,519$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| $\$ 20,001-\$ 36,400$ | $55.8^{\star}$ | $50.5-61.0$ | $11.7^{\star}$ | $7.6-15.9$ | $32.5^{\star}$ | $28.1-36.9$ | 480 | $1,141,674$ |
| $\$ 36,401-\$ 65,000$ | $79.0^{*}$ | $75.7-82.3$ | $3.6^{*}$ | $2.0-5.2$ | $17.4^{\star}$ | $14.5-20.4$ | 536 | $1,397,353$ |
| $\$ 65,001+$ | $90.2^{*}$ | $87.7-92.6$ | $2.5^{*}$ | $1.3-3.7$ | $7.3^{\star}$ | $5.1-9.5$ | 501 | $1,546,768$ |
| Total | 58.1 | $56.1-60.1$ | $\mathbf{1 1 . 4}$ | $\mathbf{9 . 9 - 1 2 . 8}$ | $\mathbf{3 0 . 5}$ | $\mathbf{2 8 . 8}-\mathbf{3 2 . 2}$ | $\mathbf{3 , 0 0 7}$ | $\mathbf{7 , 3 4 5 , 0 3 7}$ |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.2: Employment status - full-time (35+ hours per week) or part-time (less than 35 hours per week) - (\% of currently employed population) by socio-economic and demographic characteristics, 2011-12

|  | Full-time |  | Part-time |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |
| Male | 80.0 | 77.0-82.9 | 20.0 | 17.1-23.0 | 766 | 2,247,752 |
| Female | 44.7* | 40.4-49.0 | 55.3* | 51.0-59.6 | 673 | 2,020,286 |
| Age |  |  |  |  |  |  |
| 45-54 | 67.9 | 63.7-72.0 | 32.1 | 28.0-36.3 | 564 | 2,476,181 |
| 55-64 | 59.9* | 56.0-63.7 | 40.1* | 36.3-44.0 | 659 | 1,486,764 |
| 65-74 | 42.6* | 36.0-49.3 | 57.4* | 50.7-64.0 | 216 | 305,093 |
| Marital status Married | 62.9 | 59.6-66.2 | 37.1 | 33.8-40.4 | 1,039 | 3,160,796 |
| Not married | 63.8 | 58.5-69.2 | 36.2 | 30.8-41.5 | 393 | 1,087,851 |
| Education |  |  |  |  |  |  |
| Not finished HS | 60.2 | 55.7-64.7 | 39.8 | 35.3-44.3 | 586 | 1,706,993 |
| Finished HS | 63.7 | 58.5-61.9 | 36.2 | 31.1-41.4 | 426 | 1,304,057 |
| Bachelor + | 66.8 | 61.9-71.6 | 33.2 | 28.4-38.1 | 423 | 1,243,832 |
| Country of birth |  |  |  |  |  |  |
| Australia | 62.0 | 58.8-65.3 | 38.0 | 34.7-41.2 | 1,081 | 3,223,447 |
| Other Engl. spk. | 68.0 | 61.5-74.6 | 32.0 | 25.4-38.5 | 246 | 700,609 |
| Non-Engl. spk. | 65.0 | 55.0-75.1 | 35.0 | 24.9-45.0 | 111 | 341,184 |
| Residence |  |  |  |  |  |  |
| Capital city | 64.3 | 60.8-67.9 | 35.7 | 32.1-39.2 | 908 | 2,668,337 |
| Other | 61.6 | 57.0-66.2 | 38.4 | 33.8-43.0 | 531 | 1,599,701 |
| Personal income |  |  |  |  |  |  |
| Up to \$20,000 | 13.3 | 6.6-20.0 | 86.7 | 80.0-93.4 | 96 | 251,927 |
| \$20,001-\$36,400 | 19.9 | 14.4-25.4 | 80.1 | 74.6-85.6 | 231 | 636,689 |
| \$36,401-\$65,000 | 66.8* | 61.5-72.1 | 33.2* | 27.9-38.5 | 371 | 1,103,787 |
| \$65,001+ | 88.0* | 84.9-91.1 | 12.0* | $8.9-15.1$ | 427 | 1,394,511 |
| Total | 63.3 | 60.5-66.1 | 36.7 | 33.9-39.5 | 1,439 | 4,268,038 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.3: Unemployed (\% of labour force, i.e., currently employed plus unemployed) and discouraged workers (\% of people not employed and not retired) by socio-economic and demographic characteristics, 2011-12

|  | Unemployed (\% of labour force) |  |  |  | Discouraged <br> (\% of not employed \& not retired) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 5.9 | 4.1-7.7 | 815 | 2,388,953 | 19.7 | 12.7-26.8 | 138 | 359,902 |
| Female | 5.6 | 3.6-7.6 | 711 | 2,140,446 | 24.6 | 16.3-32.9 | 156 | 475,519 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 6.0 | 3.9-8.0 | 601 | 2,633,946 | 19.7 | 10.7-28.7 | 100 | 453,288 |
| 55-64 | 6.0 | 4.3-7.8 | 703 | 1,582,499 | 21.4 | 14.5-28.3 | 142 | 304,259 |
| 65-74 | 2.5* | 0.5-4.5 | 222 | 312,954 | 43.2* | 29.5-56.9 | 52 | 77,875 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 4.9 | 3.4-6.3 | 1,095 | 3,321,931 | 24.5 | 16.7-32.2 | 182 | 496,941 |
| Not married | 8.4* | 5.3-11.6 | 424 | 1,188,078 | 18.9 | 11.1-26.8 | 111 | 335,771 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 5.6 | 3.4-7.8 | 617 | 1,808,026 | 25.2 | 16.7-33.8 | 140 | 419,143 |
| Finished HS | 5.4 | 3.1-7.8 | 452 | 1,379,183 | 22.6 | 11.0-34.2 | 77 | 220,889 |
| Bachelor + | 6.4 | 3.9-8.9 | 453 | 1,329,034 | 14.4 | 7.3-21.6 | 73 | 186,212 |
| Country of birth Australia | 4.9 | 3.5-6.4 | 1,134 | 3,390,470 | 23.2 | 16.7-29.7 | 219 | 624,640 |
| Other Engl. spk. | 7.6 | 3.9-11.4 | 267 | 758,627 | 16.8 | 5.9-27.7 | 44 | 106,860 |
| Non-Engl. spk. | 9.6 | 4.1-15.1 | 124 | 377,503 | 23.9 | 4.1-43.8 | 31 | 103,920 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 6.1 | 4.3-7.8 | 965 | 2,841,205 | 23.8 | 16.0-31.6 | 177 | 523,059 |
| Other | 5.2 | 3.2-7.3 | 561 | 1,688,194 | 20.2 | 12.8-27.7 | 117 | 312,362 |
| Total | 5.8 | 4.4-7.1 | 1,526 | 4,529,399 | 22.5 | 16.9-28.1 | 294 | 835,421 |
| Median years since worked | 0.8 |  | 86 | 255,434 | 4.0 |  | 71 | 185,182 |
| Average years since worked | 1.6 | 1.1-2.1 | 86 | 255,434 | 6.7 | 4.8-8.8 | 71 | 185,182 |

[^24]Table A.4: Occupation (\% of people who have ever worked) by socio-economic and demographic characteristics, 2011-12

|  | Machinery operator/ driver, labourer |  | Technician/trades, community/ personal services worker |  | Manager/ professional |  | Clerical/ administrative/ sales worker |  | Student/ Other |  | N NW |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 18.7 | 16.4-21 | 24.6 | 22.1-27.1 | 46.7 | 43.7-49.6 | 8.9 | 7.2-10.6 | 1.1 | 0.6-1.7 | 1,488 | 3,592,859 |
| Female | 7.6* | 6.0-9.1 | 15.8* | 13.7-18.0 | 38.1* | 35.3-41.0 | 36.8* | 33.9-39.7 | 1.7 | 0.9-2.5 | 1,472 | 3,645,831 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 45-54 | 11.9 | 9.3-14.5 | 21.3 | 18.1-24.6 | 41.7 | 37.8-45.7 | 23.5 | 20.1-27.0 | 1.5 | 0.6-2.5 | 693 | 3,032,233 |
| 55-64 | 13.7 | 11.7-15.8 | 20.1 | 17.7-22.4 | 43.3 | 40.3-46.2 | 21.3 | 18.9-23.7 | 1.6 | 0.9-2.3 | 1,171 | 2,558,105 |
| 65-74 | 14.3 | 12.2-16.4 | 18.3 | 16.0-20.6 | 42.1 | 39.1-45.1 | 24.4 | 21.7-27.0 | 0.9 | 0.3-1.5 | 1,096 | 1,648,353 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |
| Married | 11.8 | 10.2-13.4 | 20.4 | 18.4-22.4 | 44.9 | 42.4-47.4 | 21.7 | 19.6-23.9 | 1.2 | 0.7-1.8 | 2,027 | 5,044,120 |
| Not married | 16.2* | 13.5-18.9 | 19.8 | 16.8-22.8 | 36.4* | 32.8-40.0 | 25.7* | 22.5-28.9 | 1.9 | 0.9-2.9 | 923 | 2,164,916 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 20.2 | 17.8-22.5 | 25.9 | 23.2-28.7 | 24.1 | 21.5-26.6 | 28.9 | 26.1-31.7 | 1.0 | 0.4-1.5 | 1,400 | 3,290,844 |
| Finished HS | 11.7* | 9.0-14.5 | 20.0* | 16.8-23.1 | 41.4* | 37.5-45.3 | 25.0 | 21.4-28.5 | 1.9 | 0.9-2.9 | 808 | 2,062,198 |
| Bachelor + | $1.4 *$ | 0.5-2.3 | 10.0* | 7.5-12.5 | 77.5* | 73.9-81.1 | 9.4* | 6.8-12.0 | 1.7 | 0.6-2.9 | 715 | 1,815,119 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |  |  |
| Australia | 13.0 | 11.4-14.6 | 20.6 | 18.6-22.5 | 41.5 | 39.1-43.9 | 23.6 | 21.5-25.7 | 1.3 | 0.8-1.8 | 2,224 | 5,476,524 |
| Other Engl. spk. | 13.2 | 9.7-16.6 | 18.3 | 14.3-22.2 | 46.2 | 41.2-51.3 | 21.2 | 17.1-25.3 | 1.2 | $-0.1-2.4$ | 501 | 1,170,455 |
| Non-Engl. spk. | 14.0 | 9.1-18.9 | 20.0 | 13.8-26.1 | 42.5 | 35.0-50.1 | 20.3 | 14.2-26.3 | 3.3 | 0.6-5.9 | 231 | 582,580 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital city | 11.5 | 9.8-13.1 | 18.5 | 16.4-20.6 | 43.9 | 41.2-46.5 | 24.5 | 22.1-26.9 | 1.7 | 1.0-2.4 | 1,814 | 4,445,768 |
| Other | 15.7* | 13.3-18.1 | 22.9* | 20.0-25.7 | 40.0 | 36.7-43.2 | 20.5* | 17.8-23.1 | 1.0 | 0.5-1.6 | 1,146 | 2,792,923 |
| Personal income |  |  |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 21.4 | 17.6-25.1 | 21.6 | 17.8-25.5 | 25.5 | 21.6-29.4 | 30.7 | 26.4-35.0 | 0.9 | 0.1-1.6 | 570 | 1,168,590 |
| \$20,001-\$36,400 | 15.6* | 11.7-19.5 | 20.2 | 15.9-24.5 | 34.4* | 29.4-39.4 | 28.9 | 23.9-34.0 | 0.9 | 0.1-1.7 | 476 | 1,134,052 |
| \$36,401-\$65,000 | 13.3* | 9.9-16.6 | 23.6 | 19.6-27.6 | 39.6* | 34.8-44.3 | $21.7^{*}$ | 17.6-25.8 | 1.9 | 0.7-3.0 | 533 | 1,391,265 |
| \$65,001+ | 6.9 * | 4.4-9.5 | 18.1 | 14.2-22.0 | 63.7* | 58.9-68.5 | 9.4* | 6.3-12.5 | 1.9 | 0.5-3.3 | 501 | 1,546,768 |
| Total | 13.1 | 11.7-14.5 | 20.2 | 18.5-21.9 | 42.4 | 40.3-44.4 | 22.9 | 21.2-24.7 | 1.4 | 0.9-1.9 | 2,960 | 7,238,690 | * $\mathrm{p}<0.05$; Note: For those who do not presently work, occupation refers to previous occupation. Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.5: Ever been public servant (\% of people who have ever worked) and currently public servant (\% of people currently working) by socio-economic and demographic characteristics, 2011-12

|  | $\%$ of ever worked |  |  |  | $\%$ of currently working |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\%$ | $95 \%$ Cl | N Unw | N W | $\%$ | $95 \%$ CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 27.1 | $24.5-29.7$ | 1,495 | $3,605,660$ | 23.3 | $20.0-26.7$ | 766 | $2,247,752$ |
| Female | $31.7^{*}$ | $29.0-34.5$ | 1,484 | $3,677,382$ | $31.7^{\star}$ | $27.7-35.7$ | 673 | $2,020,286$ |

Age

| $45-54$ | 29.0 | $25.4-32.7$ | 694 | $3,042,871$ | 29.1 | $25.1-33.1$ | 564 | $2,476,181$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $55-64$ | 30.0 | $27.3-32.7$ | 1,181 | $2,580,287$ | 26.2 | $22.7-29.6$ | 659 | $1,486,764$ |
| $65-74$ | 29.4 | $26.7-32.2$ | 1,104 | $1,659,885$ | $17.9^{*}$ | $12.7-23.1$ | 216 | 305,093 |


| Marital status |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Married | 28.7 | $26.4-30.9$ | 2,038 | $5,073,194$ | 25.7 | $22.6-28.7$ | 1,039 | $3,160,796$ |
| Not married | 31.4 | $27.9-34.9$ | 930 | $2,177,797$ | 31.7 | $26.4-37.1$ | 393 | $1,087,851$ |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 21.6 | $19.1-24.1$ | 1,412 | $3,322,620$ | 19.3 | $15.5-23.1$ | 586 | $1,706,993$ |
| Finished HS | $31.0^{*}$ | $27.3-34.7$ | 812 | $2,069,522$ | $26.8^{*}$ | $22.0-31.7$ | 426 | $1,304,057$ |
| Bachelor + | $42.7^{*}$ | $38.6-46.8$ | 717 | $1,818,959$ | $38.9^{*}$ | $33.7-44.1$ | 423 | $1,243,832$ |

Country of birth

| Australia | 31.0 | $28.8-33.2$ | 2,236 | $5,498,046$ | 28.5 | $25.4-31.6$ | 1,081 | $3,223,447$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Other Engl. spk. | $24.7^{*}$ | $20.3-29.0$ | 505 | $1,178,137$ | 22.8 | $16.9-28.6$ | 246 | 700,609 |
| Non-Engl. spk. | $24.3^{*}$ | $17.9-30.6$ | 234 | 597,727 | 24.0 | $14.7-33.7$ | 111 | 341,184 |


| Residence |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Capital city | 28.8 | $26.4-31.2$ | 1,821 | $4,469,477$ | 26.2 | $23.0-29.5$ | 908 | $2,668,337$ |
| Other | 30.5 | $27.4-33.5$ | 1,158 | $2,813,565$ | 28.9 | $24.4-33.4$ | 531 | $1,599,701$ |


| Personal income |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Up to \$20,000 | 23.1 | $19.4-26.8$ | 576 | $1,178,108$ | 10.2 | $3.1-17.3$ | 96 | 251,927 |
| $\$ 20,001-\$ 36,400$ | $29.4^{*}$ | $24.5-34.3$ | 477 | $1,137,314$ | $22.8^{*}$ | $16.1-29.6$ | 231 | 636,689 |
| $\$ 36,401-\$ 65,000$ | $33.4^{*}$ | $28.8-37.9$ | 535 | $1,395,775$ | $28.8^{*}$ | $23.5-34.2$ | 371 | $1,103,787$ |
| $\$ 65,001+$ | $33.3^{*}$ | $28.8-37.9$ | 501 | $1,546,768$ | $32.6^{*}$ | $27.7-37.4$ | 427 | $1,394,511$ |
| Total | 29.5 | $27.6-31.4$ | $\mathbf{2 , 9 7 9}$ | $\mathbf{7 , 2 8 3 , 0 4 2}$ | $\mathbf{2 7 . 3}$ | $24.6-29.9$ | $\mathbf{1 , 4 3 9}$ | $4,268,038$ |

[^25]Table A.6: Industry of employment (\% of people who have ever worked) by socio-economic and demographic characteristics, 2011-12

|  | Construction, Manufacturing, Mining |  | Agriculture, Forestry and Fishing etc |  | Government, Education etc |  | Wholesale/ retail trade etc |  | Cultural/ recreational/ personal etc |  | Other |  | $\xrightarrow[\text { Unw }]{\text { N }}$ | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 23.4 | 20.9-26.0 | 15.8 | 13.6-18.0 | 37.2 | 34.4-40.1 | 10.3 | 8.6-12.0 | 7.0 | 5.5-8.4 | 6.3 | 4.9-7.7 | 1,490 | 3,597,652 |
| Female | $6.4 *$ | 5.0-7.8 | $4.7{ }^{*}$ | 5.0-7.8 | 44.9* | 41.9-47.8 | 19.1* | 16.7-21.4 | 19.3* | 16.9-21.6 | 5.7 | 4.3-7.1 | 1,478 | 3,659,717 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45-54 | 15.7 | 12.8-18.6 | 11.0 | 8.4-13.5 | 41.0 | 37.0-44.9 | 13.2 | 10.5-15.9 | 12.9 | 10.2-15.6 | 6.3 | 4.4-8.2 | 692 | 3,033,448 |
| 55-64 | 14.9 | 12.8-17.0 | 8.9 | 7.2-10.6 | 41.2 | 38.3-44.1 | 13.9 | 11.8-16.0 | 15.5 | 11.8-16.0 | 5.7 | 4.4-7.0 | 1,177 | 2,571,617 |
| 65-74 | 13.1 | 11.1-15.1 | 11.0 | 9.1-12.8 | 41.2 | 38.2-44.1 | 18.7* | 16.4-21.1 | 10.1 | 16.4-21.1 | 5.9 | 4.4-7.3 | 1,099 | 1,652,303 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Married | 16.3 | 14.4-18.1 | 11.1 | 9.4-12.7 | 40.5 | 38.0-43.0 | 13.9 | 12.2-15.6 | 12.4 | 10.7-14.1 | 5.9 | 4.7-7.1 | 2,029 | 5,056,178 |
| Not married | 11.6* | 9.2-14.0 | 8.4* | 6.4-10.4 | 42.5 | 38.8-46.2 | 16.7 | 13.9-19.5 | 15.1 | 12.5-17.8 | 5.7 | . $1-7.3$ | 928 | 2,169,139 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 18.8 | 16.4-21.3 | 13.9 | 11.7-16.0 | 28.7 | 25.9-31.4 | 19.6 | 17.2-22.0 | 12.5 | 10.6-14.4 | 6.5 | 5.0-8.0 | 1,406 | 3,305,532 |
| Finished HS | 13.8* | 11.1-16.4 | 11.1 | 8.5-13.7 | 43.2* | 39.3-47.1 | 14.2* | 11.4-17.0 | 13.5 | 10.7-16.3 | $4.2^{*}$ | 2.7-5.7 | 810 | 2,065,151 |
| Bachelor + | 8.9* | 6.3-11.4 | $2.7{ }^{*}$ | 1.4-4.0 | 61.8* | 57.7-66.0 | 5.6 * | 3.9-7.3 | 14.5 | 11.4-17.6 | 6.6 | 4.4-8.7 | 716 | 1,817,515 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Australia | 14.2 | 12.5-15.9 | 10.8 | 9.3-12.3 | 41.6 | 39.3-44.0 | 14.5 | 12.8-16.2 | 13.6 | 12.8-16.2 | 5.3 | 4.3-6.3 | 2,227 | 5,476,591 |
| Other Engl. spk. | 15.5 | 11.8-19.2 | 9.8 | 6.7-13.0 | 40.5 | 35.6-45.5 | 16.0 | 12.7-19.3 | 11.9 | 12.7-19.3 | 6.2 | 3.8-8.5 | 504 | 1,176,487 |
| Non-Engl. spk. | 19.3 | 13.5-25.1 | $5.8 *$ | 2.7-8.9 | 36.5 | 29.3-43.7 | 14.7 | 9.2-20.2 | 12.2 | 7.0-20.2 | 11.6* | 5.8-17.3 | 233 | 595,160 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital city | 15.0 | 13.1-16.9 | 8.2 | 6.7-9.7 | 41.2 | 38.6-43.8 | 14.7 | 12.8-16.6 | 14.1 | 12.2-16.0 | 6.7 | 5.3-8.1 | 1,818 | 4,464,459 |
| Other | 14.5 | 12.2-16.9 | 13.5* | 11.2-15.8 | 40.8 | 37.5-44.1 | 14.7 | 12.5-17.0 | 11.7 | 9.6-13.8 | 4.8* | 3.5-6.0 | 1,150 | 2,792,909 |
| * $p<0.05$; Note: For those who do not presently work, industry refers to previous industry of employment. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/ retail trade etc: Wholesale/ retail trade, Hosp Property and business services. Cultural/ recreational/ personal etc: Cultural/ recreational/ personal/ health \& community services. Source: Authors' calculations from the 2011 Age Australians Survey. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table A. 6 continues

|  | Construction, Manufacturing, Mining |  | Agriculture, Forestry and Fishing etc |  | Government, Education etc |  | Wholesale/ retail trade etc |  | Cultural/ recreational/ personal etc |  | Other |  | N | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Personal income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 15.4 | 12.1-18.7 | 11.1 | 8.5-13.7 | 34.3 | 30.0-38.6 | 17.5 | 13.9-21.6 | 13.7 | 10.5-17.0 | 7.9 | 5.3-10.5 | 574 | 1,174,313 |
| \$20,001-\$36,400 | 8.4* | 5.7-11.1 | 8.5 | 5.3-11.7 | 41.1 | 35.8-46.3 | 22.1 | 17.5-26.7 | 15.2 | 11.1-19.3 | 4.7 | 2.7-6.7 | 475 | 1,134,151 |
| \$36,401-\$65,000 | 13.4 | 10.1-16.8 | 10.8 | 7.8-13.8 | 42.9* | 38.1-47.6 | 11.3* | 8.4-14.3 | 14.1 | 10.7-17.5 | 7.4 | 4.7-10.2 | 534 | 1,388,921 |
| \$65,001+ | 21.5* | 17.2-25.9 | 11.5 | 8.3-14.7 | 47.2* | 42.3-52.2 | 6.7* | 4.2-9.3 | 8.6* | 6.0-11.1 | 4.4* | 2.5-6.4 | 501 | 1,546,768 |
| Total | 14.8 | 13.3-16.3 | 10.2 | 8.9-11.5 | 41.1 | 39.0-43.1 | 14.7 | 13.3-16.2 | 13.2 | 11.8-14.6 | 6.0 | 5.0-7.0 | 2,968 | 7,257,369 |
| * $\mathrm{p}<0.05$; Note: For those who do not presently work, industry refers to previous industry of employment. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/ retail trade etc: Wholesale/ retail trade, Hosp Property and business services. Cultural/ recreational/ personal etc: Cultural/ recreational/ personal/ health \& community services. Source: Authors' calculations from the 2011-12 Age Australians Survey. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Physical illness, injury and disability, and mental health
Table A.7: Had illness, injury or disability for at least 2 months in last 5 years (\% of total population) by socio-economic and demographic characteristics, and average length of time unable to work because of illness, injury or disability, 2011-12

|  | Illness/injury/disability last 5 years |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |
| Male | 35.1 | 32.3-37.8 | 1,505 | 3,628,392 |
| Female | 35.7 | 33.0-38.5 | 1,502 | 3,716,645 |
| Age |  |  |  |  |
| 45-54 | 29.9 | 26.2-33.5 | 700 | 3,064,368 |
| 55-64 | 35.4* | 32.7-38.2 | 1,189 | 2,597,009 |
| 65-74 | 45.5* | 42.5-48.4 | 1,118 | 1,683,660 |
| Marital status |  |  |  |  |
| Married | 30.9 | 28.7-33.2 | 2,051 | 5,100,317 |
| Not married | 45.7* | 42.0-49.3 | 944 | 2,209,959 |
| Education |  |  |  |  |
| Not finished HS | 41.4 | 38.4-44.3 | 1,433 | 3,371,225 |
| Finished HS | 32.9* | 29.2-36.5 | 818 | 2,080,344 |
| Bachelor + | 26.7* | 23.1-30.5 | 718 | 1,821,526 |
| Country of birth |  |  |  |  |
| Australia | 35.4 | 33.2-37.6 | 2,252 | 5,531,190 |
| Other Engl. spk. | 34.2 | 29.5-38.9 | 513 | 1,194,813 |
| Non-Engl. spk. | 37.6 | 30.4-44.7 | 238 | 609,902 |
| Residence |  |  |  |  |
| Capital city | 33.3 | 30.9-35.8 | 1,834 | 4,498,688 |
| Other | 38.7* | 35.5-41.8 | 1,173 | 2,846,349 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 58.3 | 53.8-62.8 | 591 | 1,214,519 |
| \$20,001-\$36,400 | 39.4* | 34.1-44.7 | 480 | 1,141,674 |
| \$36,401-\$65,000 | 27.0* | 22.9-31.1 | 536 | 1,397,353 |
| \$65,001+ | 20.3* | 16.4-24.3 | 501 | 1,546,768 |
| Public servant |  |  |  |  |
| Yes | 35.9 | 32.3-39.5 | 882 | 1,163,243 |
| No | 35.0 | 32.6-37.3 | 2,081 | 5,100,187 |
| Total | 35.4 | 33.5-37.4 | 3,007 | 7,345,037 |
| Average length of time unable to work (years) | 5.3 | 4.7-5.8 | 615 | 1,413,596 |

[^26]Table A.7.1: Logistic regression results of had illness, injury or disability for at least 2 months in last 5 years, 2011-12

|  | Coef. | z |
| :--- | :---: | :---: |
| Female | $-0.246^{\star}$ | -2.90 |
| Age |  |  |
| 2 | 0.084 | 0.77 |
| 3 | $0.280^{\star}$ | 2.47 |
| Not married | $0.516^{\star}$ | 5.91 |
| Education |  | -1.75 |
| 2 | -0.171 | -3.68 |
| 3 | $-0.399^{\star}$ |  |
| Country of birth |  | -0.96 |
| 2 | -0.107 | 1.85 |
| 3 | 0.285 | 1.79 |
| Not capital city | 0.150 |  |
| Personal income |  | -6.17 |
| 2 | $-0.802^{\star}$ | -8.32 |
| 3 | $-1.112^{\star}$ | -9.44 |
| 4 | $-1.434^{\star}$ | -6.10 |
| 5 | $-0.706^{\star}$ | 0.95 |
| Constant | 0.146 | -1 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers Employment for Mature Age Australians Survey.

Table A.8: Illness in last 5 years prevented from working or looking for work (\% of ill for 2 months in last 5 years, \% of total population) by socio-economic and demographic characteristics, 2011-12

|  | Prevent from working/ looking for work (\% of ill) |  |  |  | Prevent from working/ looking for work (\% of population) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 60.6 | 55.8-65.4 | 566 | 1,272,261 | 21.2 | 18.9-23.6 | 1,505 | 3,628,392 |
| Female | 55.0 | 50.4-59.5 | 583 | 1,328,217 | 19.6 | 17.4-21.9 | 1,502 | 3,716,645 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 59.7 | 52.5-66.9 | 213 | 914,762 | 17.8 | 14.8-20.8 | 700 | 3,064,368 |
| 55-64 | 63.4 | 58.7-68.1 | 430 | 920,441 | 22.5* | 20.1-24.9 | 1,189 | 2,597,009 |
| 65-74 | 48.4* | 44.0-52.9 | 506 | 765,276 | 22.0* | 19.6-24.5 | 1,118 | 1,683,660 |
| Marital Status Married | 54.7 | 50.5-59.0 | 699 | 1,577,082 | 16.9 | 15.1-18.7 | 2,051 | 5,100,317 |
| Not married | 61.8* | 56.5-67.1 | 446 | 1,009,437 | 28.2* | 25.0-31.5 | 944 | 2,209,959 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 59.3 | 55.5-63.0 | 865 | 1,958,339 | 21.0 | 19.1-22.9 | 2,252 | 5,531,190 |
| Other Engl. spk. | 49.0* | 40.4-57.5 | 180 | 408,766 | 16.8* | 13.1-20.4 | 513 | 1,194,813 |
| Non-Engl. spk. | 61.3 | 49.6-72.9 | 102 | 229,092 | 23.0 | 17.0-29.0 | 238 | 609,902 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 55.1 | 50.7-59.5 | 659 | 1,499,897 | 18.4 | 16.3-20.4 | 1,834 | 4,498,688 |
| Other | 61.3 | 56.3-66.3 | 490 | 1,100,581 | 23.7* | 21.1-26.4 | 1,173 | 2,846,349 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 68.7 | 63.4-73.9 | 351 | 708,193 | 40.0 | 35.6-44.5 | 591 | 1,214,519 |
| \$20,001-\$36,400 | 53.6* | 44.8-62.4 | 183 | 450,235 | 21.1* | 16.5-25.8 | 480 | 1,141,674 |
| \$36,401-\$65,000 | 53.8* | 45.1-62.4 | 158 | 377,639 | 14.5* | 11.3-17.7 | 536 | 1,397,353 |
| \$65,001+ | 36.0* | 26.0-46.1 | 108 | 314,729 | 7.3* | 4.9-9.7 | 501 | 1,546,768 |
| Total | 57.7 | 54.4-61.0 | 1,149 | 2,600,478 | 20.4 | 18.8-22.1 | 3,007 | 7,345,037 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.8.1: Logistic regression results of lliness in last 5 years prevented from working or looking for work (\% of ill for 2 months in last 5 years, $\%$ of total population), 2011-12

|  | (\% of ill) |  | (\% of population) |  |
| :--- | :---: | :---: | :---: | ---: |
|  | Coef. | $\mathbf{z}$ | Coef. | $\mathbf{z}$ |
| Female | $-0.566^{\star}$ | -4.08 | $-0.512^{\star}$ | -5.07 |
| Age |  |  |  | 0.29 |
| 2 | -0.080 | -0.42 | 0.038 | -2.17 |
| 3 | $-0.851^{\star}$ | -4.41 | $-0.298^{\star}$ | 6.42 |
| Not married | $0.455^{\star}$ | 3.22 | $0.651^{\star}$ |  |
| Education |  |  |  | -2.84 |
| 2 | -0.288 | -1.83 | $-0.332^{\star}$ | -3.84 |
| 3 | -0.245 | -1.32 | $-0.522^{\star}$ |  |
| Country of birth |  |  |  | -1.56 |
| 2 | -0.238 | -1.29 | -0.219 | 2.01 |
| 3 | 0.168 | 0.70 | $0.354^{\star}$ | 2.96 |
| Not capital city | $0.327^{\star}$ | 2.43 | $0.293^{\star}$ |  |
| Personal income |  |  |  | -6.92 |
| 2 | $-0.964^{\star}$ | -4.77 | $-1.033^{\star}$ | -8.40 |
| 3 | $-0.864^{\star}$ | -3.98 | $-1.315^{\star}$ | -10.01 |
| 4 | $-1.563^{\star}$ | -5.87 | $-2.02^{\star}$ | -5.85 |
| 5 | $-0.383^{\star}$ | -2.16 | $-0.744^{\star}$ | -1.43 |
| Constant | $1.394^{\star}$ | 5.56 | -0.25 | 0 |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.9: Currently have illness, injury or disability (\% of total population) by socio-economic and demographic characteristics, 2011-12

|  | Current Illness/injury/disability |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |
| Male | 30.1 | 27.4-32.7 | 1,505 | 3,628,392 |
| Female | 31.4 | 28.7-34.1 | 1,502 | 3,716,645 |
| Age |  |  |  |  |
| 45-54 | 25.7 | 22.2-29.2 | 700 | 3,064,368 |
| 55-64 | 31.4* | 28.7-34.1 | 1,189 | 2,597,009 |
| 65-74 | 39.0* | 36.1-41.9 | 1,118 | 1,683,660 |
| Marital status |  |  |  |  |
| Married | 25.2 | 23.1-27.3 | 2,051 | 5,100,317 |
| Not married | 43.4* | 39.7-47.0 | 944 | 2,209,959 |
| Employment status |  |  |  |  |
| Employed | 20.2 | 17.9-22.6 | 1,439 | 4,268,038 |
| Not employed \& not retired | 44.6* | 37.9-51.4 | 294 | 835,421 |
| Retired | 45.7* | 42.8-48.6 | 1,274 | 2,241,578 |
| Education |  |  |  |  |
| Not finished HS | 36.0 | 33.2-38.9 | 1,433 | 3,371,225 |
| Finished HS | 28.9* | 25.4-32.4 | 818 | 2,080,344 |
| Bachelor + | 22.8* | 19.2-26.5 | 718 | 1,821,526 |
| Country of birth |  |  |  |  |
| Australia | 31.0 | 28.8-33.1 | 2,252 | 5,531,190 |
| Other Engl. spk. | 29.6 | 25.1-34.0 | 513 | 1,194,813 |
| Non-Engl. spk. | 31.0 | 24.1-38.0 | 238 | 609,902 |
| Residence Capital city | 28.6 | 26.2-31 | 1,834 | 4,498,688 |
| Other | 34.1* | 31.1-37.1 | 1,173 | 2,846,349 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 53.2 | 48.7-57.8 | 591 | 1,214,519 |
| \$20,001-\$36,400 | 35.1* | 29.9-40.3 | 480 | 1,141,674 |
| \$36,401-\$65,000 | 25.7* | 21.4-30.1 | 536 | 1,397,353 |
| \$65,001+ | 15.0* | 11.6-18.5 | 501 | 1,546,768 |
| Public servant (current) |  |  |  |  |
| Yes | 20.5 | 15.9-25.1 | 376 | 1,163,242 |
| No | 20.2 | 17.4-22.9 | 1,059 | 3,093,475 |
| Total | 30.8 | 28.9-32.6 | 3,007 | 7,345,037 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.9.1: Logistic regression results for currently have illness, injury or disability, 2011-12

|  | Coef. | z |
| :--- | ---: | ---: |
| Female | $-0.246^{\star}$ | -2.37 |
| Age |  |  |
| 2 | -0.078 | -0.59 |
| 3 | -0.203 | -1.28 |
| Not married | $0.573^{\star}$ | 5.60 |
| Employed |  |  |
| 2 | $0.633^{*}$ | 3.48 |
| 3 | $0.715^{*}$ | 5.35 |
| Education |  | -1.65 |
| 2 | -0.192 | -1.88 |
| 3 | -0.244 |  |
| Country of birth |  | -1.50 |
| 2 | -0.198 | 0.52 |
| 3 | 0.099 | 0.70 |
| Not capital city | 0.070 |  |
| Personal income |  | -4.97 |
| 2 | $-0.673^{*}$ | -6.20 |
| 3 | $-0.904^{*}$ | -6.94 |
| 4 | $-1.193^{*}$ | -5.71 |
| 5 | $-0.669^{*}$ | -0.44 |
| Constant | -0.826 |  |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.10: Current illness, injury or disability prevents from working or looking for work (\% of currently ill and not working, \% of total population) by socio-economic and demographic characteristics, 2011-12

Prevents from working/ looking for work Prevents from working/ looking for work
(\% of ill and not working) (\% of population)

|  | \% | 95\% CI | N Unw | N W | $\%$ | $95 \% \mathrm{CI}$ | N Unw | N W |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 64.2 | $58.6-69.9$ | 333 | 655,495 | 11.6 | $9.8-13.4$ | 1,505 | $3,628,392$ |  |
| Female | 57.9 | $52.1-63.6$ | 355 | 741,090 | 11.5 | $9.7-13.3$ | 1,502 | $3,716,645$ |  |
| Age |  |  |  |  |  |  |  |  |  |
| $45-54$ | 73.6 | $62.7-84.4$ | 72 | 318,055 | 7.6 | $5.4-9.8$ | 700 | $3,064,368$ |  |
| $55-64$ | 74.8 | $69.1-80.5$ | 232 | 492,755 | $14.2^{\star}$ | $12.2-16.2$ | 1,189 | $2,597,009$ |  |
| $65-74$ | $42.2^{\star}$ | $37.2-47.2$ | 384 | 585,775 | $14.7^{\star}$ | $12.6-16.8$ | 1,118 | $1,683,660$ |  |
| Marital status |  |  |  |  |  |  |  |  |  |
| Married | 58.6 | $53.1-64.1$ | 382 | 733,221 | 8.4 | $7.1-9.7$ | 2,051 | $5,100,317$ |  |
| Not married | 62.5 | $56.4-68.7$ | 302 | 649,405 | $18.4^{\star}$ | $15.6-21.2$ | 944 | $2,209,959$ |  |

Education

| Not finished HS | 65.7 | $60.7-70.6$ | 418 | 841,389 | 16.4 | $14.3-18.5$ | 1,433 | $3,371,225$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: | :--- |
| Finished HS | 56.3 | $47.7-64.8$ | 164 | 342,066 | $9.2^{\star}$ | $7.0-11.5$ | 818 | $2,080,344$ |
| Bachelor + | $47.8^{\star}$ | $35.3-60.3$ | 90 | 187,176 | $4.9^{\star}$ | $3.0-6.8$ | 718 | $1,821,526$ |

Country of birth

| Australia | 61.8 | $57.2-66.4$ | 520 | $1,064,676$ | 11.9 | $10.4-13.4$ | 2,252 | $5,531,190$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Other Engl. spk. | 55.9 | $45.6-66.2$ | 109 | 205,274 | 9.6 | $6.8-12.4$ | 513 | $1,194,813$ |
| Non-Engl. spk. | 62.9 | $47.4-78.3$ | 57 | 122,354 | 12.6 | $7.8-17.4$ | 238 | 609,902 |


| Residence |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Capital city | 59.7 | $54.0-65.4$ | 377 | 788,319 | 10.5 | $8.8-12.1$ | 1,834 | $4,498,688$ |
| Other | 62.3 | $56.6-68.1$ | 311 | 608,266 | $13.3^{*}$ | $11.3-15.3$ | 1,173 | $2,846,349$ |


| Personal income |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Up to $\$ 20,000$ | 63.8 | $57.5-70.1$ | 280 | 567,364 | 29.8 | $25.7-34$ | 591 | $1,214,519$ |
| $\$ 20,001-\$ 36,400$ | 54.4 | $42.9-65.9$ | 107 | 246,167 | $11.7^{\star}$ | $7.8-15.7$ | 480 | $1,141,674$ |
| $\$ 36,401-\$ 65,000$ | $41.5^{\star}$ | $27.1-55.8$ | 53 | 93,860 | $2.8^{\star}$ | $1.5-4.1$ | 536 | $1,397,353$ |
| $\$ 65,001+$ | $23.3^{*}$ | $2.9-43.8$ | 17 | 32,415 | $0.5^{\star}$ | $0.0-1.0$ | 501 | $1,546,768$ |
| Total | 60.8 | $56.8-64.9$ | 688 | $\mathbf{1 , 3 9 6 , 5 8 5}$ | $\mathbf{1 1 . 6}$ | $10.3-12.8$ | $\mathbf{3 , 0 0 7}$ | $\mathbf{7 , 3 4 5 , 0 3 7}$ |

[^27]Table A.10.1: Logistic regression results for current illness, injury or disability prevents from working or looking for work (\% of currently ill and not working, \% of total population), 2011-12

|  | (\% of ill and not working) |  | (\% of population) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.655* | -3.45 | -0.616* | -4.88 |
| Age |  |  |  |  |
| 2 | 0.081 | 0.23 | $0.437^{*}$ | 2.32 |
| 3 | -1.455* | -4.41 | 0.066 | 0.35 |
| Not married | 0.225 | 1.20 | $0.767 *$ | 6.05 |
| Education |  |  |  |  |
| 2 | -0.541* | -2.50 | -0.451* | -3.02 |
| 3 | -0.459 | -1.62 | -0.957* | -4.82 |
| Country of birth |  |  |  |  |
| 2 | 0.16 | 0.63 | -0.086 | -0.49 |
| 3 | 0.37 | 1.10 | 0.403 | 1.82 |
| Not capital city | 0.111 | 0.62 | 0.216 | 1.73 |
| Personal income |  |  |  |  |
| 2 | -0.912* | -3.54 | -1.273* | -6.93 |
| 3 | -1.242* | -3.50 | -2.396* | -9.22 |
| 4 | -1.919* | -3.00 | $-3.754^{*}$ | -7.23 |
| 5 | 0.095 | 0.44 | -0.65* | -4.55 |
| Constant | 1.71* | 4.36 | -1.005* | -4.48 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Discrimination in employment on the basis of age
Table A.11: Leading types of reported workplace exclusion in last 5 years, and reported experiencing that exclusion and attributed any exclusion to age (\% of people who have worked last 5 years but not self-employed), 2011-12

|  | Workplace exclusion |  | Attributed any exclusion to age |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |
| Been unfairly excluded from work-related training or education opportunities | 11.6 | 9.6-13.5 | 4.8 | 3.6-6.0 |
| Been denied a job promotion | 10.6 | 8.8-12.4 | 5.3 | 4.0-6.6 |
| Been given lesser responsibilities | 11.8 | 9.9-13.7 | 4.6 | 3.5-5.8 |
| Been paid less than other workers in similar roles | 17.3 | 15.0-19.6 | 4.4 | 3.2-5.5 |
| Received an unfair job evaluation | 12.9 | 10.9-14.9 | 5.1 | 3.8-6.4 |
| Been denied work-related benefits | 7.8 | 6.2-9.4 | 2.6 | $1.7-3.4$ |
| Felt as though you were being either forced out, forced to retire or targeted in restructures | 18.1 | 15.9-20.3 | 7.4 | 6.0-8.8 |
| Received insulting jokes or comments | 18.7 | 16.4-21.0 | 6.0 | 4.7-7.3 |
| Experienced any workplace exclusion (\& attributed to age) | 45.0 | 42.1-47.8 | 13.3 | 11.4-15.1 |
| N Unw | 1,564 |  | 1,564 |  |
| N W | 4,324,205 |  | 4,324,205 |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.12: Factors that reported workplace exclusion attributed to (\% of people who have reported experiencing workplace exclusion in last 5 years), 2011-12

|  | $\%$ | $95 \% \mathbf{C l}$ |
| :--- | ---: | ---: |
| Age | 29.5 | $25.7-33.3$ |
| Gender | 10.0 | $7.4-12.7$ |
| Race | 4.6 | $2.6-6.7$ |
| Health/ disability | 7.4 | $5.3-9.4$ |
| Other | 61.2 | $57.0-65.4$ |
| Can't say | 5.8 | $3.6-7.9$ |
| N Unw | 672 |  |
| $\mathbf{N}$ W | $\mathbf{1 , 9 4 4 , 4 9 4}$ |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.13: Reported experiencing any workplace exclusion in last 5 years, and reported workplace exclusion attributed to age (\% of people who have worked last 5 years excluding selfemployed) by socio-economic and demographic characteristics, 2011-12

|  | Experienced any exclusion |  | Attributed to age |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |
| Male | 45.0 | 41.0-49.0 | 13.7 | 11.0-16.4 | 766 | 2,069,408 |
| Female | 44.9 | 40.9-48.9 | 12.9 | 10.3-15.4 | 798 | 2,254,797 |
| Age |  |  |  |  |  |  |
| 45-54 | 48.9 | 44.3-53.5 | 10.8 | 8.0-13.7 | 520 | 2,260,580 |
| 55-64 | 42.3** | 38.6-46.1 | 16.1** | 13.4-18.9 | 713 | 1,585,467 |
| 65-74 | $35.1^{* *}$ | 29.8-40.3 | 15.3* | 11.4-19.2 | 331 | 478,158 |
| Marital status |  |  |  |  |  |  |
| Married | 42.6 | 39.1-46.0 | 12.5 | 10.3-14.6 | 1,071 | 3,035,012 |
| Not married | 50.8 | 45.7-55.9 | 14.8 | 11.4-18.3 | 488 | 1,273,483 |
| Employment status |  |  |  |  |  |  |
| Employed | 43.4 | 40.1-46.7 | 12.5 | 10.3-14.6 | 1,099 | 3,299,303 |
| Not employed \& not retired | 64.5 ** | 55.6-73.4 | 19.0* | 12.4-25.6 | 154 | 452,384 |
| Retired | 38.5 | 55.8-67.2 | 13.3 | 9.5-17.1 | 311 | 572,518 |
| Education |  |  |  |  |  |  |
| Not finished HS | 46.0 | 41.6-50.5 | 14.5 | 11.4-17.5 | 646 | 1,777,144 |
| Finished HS | 45.4 | 40.2-50.6 | 12.7 | 9.4-16.0 | 459 | 1,278,809 |
| Bachelor + | 43.1 | 37.9-48.3 | 12.3 | 9.1-15.5 | 452 | 1,255,150 |
| Country of birth |  |  |  |  |  |  |
| Australia | 43.4 | 40.1-46.7 | 13.0 | 10.9-15.1 | 1,160 | 3,245,587 |
| Other Engl. spk. | 45.1 | 38.4-51.8 | 12.6 | 8.2-17.0 | 279 | 722,793 |
| Non-Engl. spk. | 59.3** | 49.2-69.4 | 17.2 | 10.1-24.4 | 124 | 353,027 |
| Residence |  |  |  |  |  |  |
| Capital city | 45.8 | 42.2-49.3 | 12.7 | 10.5-14.9 | 1,026 | 2,813,629 |
| Other | 43.5 | 38.7-48.2 | 14.4 | 11.1-17.7 | 538 | 1,510,576 |
| Personal income |  |  |  |  |  |  |
| Up to \$20,000 | 50.2 | 41.9-58.4 | 19.3 | 12.7-25.9 | 185 | 434,815 |
| \$20,001-\$36,400 | 48.2 | 40.9-55.6 | 11.8 | 7.4-16.1 | 256 | 672,423 |
| \$36,401-\$65,000 | 48.2 | 42.4-54.0 | 13.9 | 10.0-17.7 | 362 | 1,021,889 |
| \$65,001+ | 39.0** | 33.4-44.7 | 10.1** | 6.9-13.2 | 361 | 1,133,816 |

Public servant

| Yes | 43.9 | $39.1-48.8$ | 14.8 | $11.4-18.2$ | 537 | $1,498,338$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| No | 45.7 | $42.2-49.2$ | 12.5 | $10.4-14.7$ | 1,018 | $2,803,667$ |
| Occupation |  |  |  |  |  |  |
| Machinery operator etc | 47.3 | $39.1-55.6$ | 14.0 | $8.2-19.8$ | 191 | 496,845 |

[^28]Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A. 13 continues

|  | Experienced any exclusion |  | Attributed to age |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Technician/trades, community etc | 51.4 | 45.1-57.7 | 17.1 | 12.5-21.7 | 310 | 897,631 |
| Manager/ professional | 41.4 | 37.2-45.7 | 11.6 | 9.0-14.1 | 683 | 1,870,552 |
| Clerical/ admin./ sales worker | 45.8 | 39.7-51.8 | 13.6 | 9.5-17.6 | 351 | 974,307 |
| Student/ Other | 40.7 | 15.9-65.5 | 4.0** | 0.0-11.7 | 19 | 54,219 |
| Industry, Construction, Manuf., Mining | 47.8 | 39.9-55.7 | 11.5 | $6.8-16.2$ | 195 | 582,085 |
| Agriculture, Forestry and Fishing etc | 43.4 | 33.0-53.8 | 13.8 | 6.5-21.1 | 120 | 335,738 |
| Government, Education etc | 45.1 | 40.9-49.3 | 14.9 | 11.9-17.8 | 712 | 1,972,415 |
| Wholesale/ retail trade etc | 42.6 | 34.9-50.3 | 11.2 | 7.2-15.2 | 219 | 571,034 |
| Cultural/ recr./ personal etc | 46.6 | 39.1-54.0 | 11.6 | 7.2-16.1 | 229 | 626,773 |
| Other | 43.2 | 31.0-55.3 | 13.7 | 6.0-21.5 | 84 | 220,656 |
| Total | 45.0 | 42.1-47.8 | 13.3 | 11.4-15.1 | 1,564 | 4,324,205 |

${ }^{* *} \mathrm{p}<0.05$ * $\mathrm{p}<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services worker. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Transport and Storage, Electricity/ Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/ retail trade etc: Wholesale/ retail trade, Hospitality/Tourism/ Accommodation, Property and business services. Cultural/recreational/ personal etc: Cultural/ recreational/ personal/ health and community services.

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.13.1: Logistic regression results for reported experiencing any workplace exclusion in last 5 years, and reported workplace exclusion attributed to age, 2011-12

|  | Experienced any exclusion |  | Attributed to age |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.091 | -0.70 | -0.047 | -0.27 |
| Age |  |  |  |  |
| 2 | -0.237* | -1.89 | $0.517^{* *}$ | 2.83 |
| 3 | -0.588** | -3.41 | $0.507^{* *}$ | 2.15 |
| Not married | $0.347^{* *}$ | 2.91 | 0.182 | 1.13 |
| Employment status |  |  |  |  |
| 2 | 0.900** | 4.36 | $0.620^{* *}$ | 2.55 |
| 3 | -0.022 | -0.13 | -0.112 | -0.51 |
| Education |  |  |  |  |
| 2 | -0.074 | -0.55 | -0.067 | -0.36 |
| 3 | -0.178 | -1.14 | -0.109 | -0.51 |
| Country of birth |  |  |  |  |
| 2 | -0.004 | -0.03 | -0.201 | -0.96 |
| 3 | 0.828** | 3.92 | 0.51* | 1.95 |
| Not capital city | -0.035 | -0.30 | 0.127 | 0.80 |
| Personal income |  |  |  |  |
| 2 | 0.072 | 0.35 | -0.319 | -1.16 |
| 3 | 0.073 | 0.36 | -0.152 | -0.58 |
| 4 | -0.295 | -1.35 | -0.38 | -1.31 |
| 5 | -0.138 | -0.69 | -0.07 | -0.28 |
| Occupation |  |  |  |  |
| 2 | $0.358 *$ | 1.77 | $0.612^{* *}$ | 2.19 |
| 3 | 0.193 | 0.96 | 0.257 | 0.90 |
| 4 | 0.059 | 0.28 | 0.167 | 0.56 |
| 5 | -0.275 | -0.51 | -0.96 | -0.90 |
| Industry |  |  |  |  |
| 2 | -0.25 | -1.00 | 0.005 | 0.01 |
| 3 | -0.118 | -0.64 | 0.219 | 0.85 |
| 4 | -0.115 | -0.52 | 0.145 | 0.47 |
| 5 | -0.096 | -0.44 | -0.083 | -0.27 |
| 6 | 0.035 | 0.13 | 0.259 | 0.68 |
| Constant | -0.175 | -0.61 | $-2.412^{* *}$ | -6.02 |

[^29]Table A.14: Reported workplace exclusion attributed to age influenced desire to work or work more hours (\% of people who reported experiencing workplace exclusion in last 5 years and attributed it to age, and 1. Not employed 2. Currently employed) by socio-economic and demographic characteristics, 2011-12

|  | Influenced desire to work |  |  |  | Influenced desire to work more hours |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 48.4 | 30.7-66.0 | 41 | 81,921 | 26.5 | 14.6-38.5 | 72 | 201,786 |
| Female | 70.8* | 55.5-86.1 | 39 | 79,939 | 31.4 | 19.7-43.1 | 74 | 210,332 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 62.1 | 29.8-94.5 | 9 | 38,142 | 27.9 | 14.2-41.6 | 47 | 206,998 |
| 55-64 | 58.6 | 42.8-74.4 | 40 | 79,731 | 31.1 | 20.4-41.7 | 78 | 175,855 |
| 65-74 | 58.7 | 40.7-76.7 | 31 | 43,986 | 24.2 | 5.4-43.0 | 21 | 29,264 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 61.6 | 46.6-76.5 | 46 | 88,764 | 29.2 | 18.9-39.4 | 99 | 289,803 |
| Not married | 56.9 | 37.6-76.2 | 34 | 73,096 | 30.2 | 15.6-44.7 | 46 | 115,840 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 53.6 | 34.5-72.7 | 36 | 77,460 | 26.6 | 14.1-39.1 | 62 | 179,479 |
| Finished HS | 74.7 | 56.0-93.3 | 24 | 48,349 | 23.2 | 7.2-39.1 | 40 | 114,232 |
| Bachelor + | 51.7 | 28.3-75.2 | 20 | 36,050 | 38.3 | 22.5-54.1 | 44 | 118,413 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 61.6 | 47.8-75.4 | 60 | 123,199 | 31.6 | 21.5-41.8 | 106 | 298,737 |
| Other Engl. spk. | 43.1 | 11.4-74.8 | 10 | 21,046 | 19.4 | 2.0-36.8 | 25 | 70,157 |
| Non-Engl. spk. | 64.2 | 33.5-95.0 | 10 | 17,615 | 26.3 | 2.3-50.3 | 15 | 43,224 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 58.3 | 44.3-72.2 | 61 | 125,841 | 28.0 | 17.4-38.7 | 84 | 230,878 |
| Other | 63.6 | 40.5-86.7 | 19 | 36,018 | 30.2 | 17.0-43.5 | 62 | 181,240 |

Personal income

| Up to \$20,000 | 65.4 | $42.5-88.3$ | 22 | 48,038 | 25.1 | $0.7-49.5$ | 13 | 35,915 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 20,001-\$ 36,400$ | 53.6 | $21.8-85.3$ | 12 | 23,736 | 41.3 | $16.4-66.1$ | 21 | 55,441 |
| $\$ 36,401-\$ 65,000$ | 51.8 | $19.2-84.3$ | 10 | 15,918 | 22.6 | $9.6-35.5$ | 45 | 125,846 |
| $\$ 65,001+$ | 28.6 | $-19.8-76.9$ | 4 | 8,392 | 34.3 | $17.3-51.4$ | 38 | 105,944 |

Public servant

| Yes | 63.6 | $45.1-82.2$ | 46 | 96,243 | 29.1 | $15.3-42.9$ | 56 | 171,539 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | 57.6 | $42.3-72.8$ | 33 | 64,411 | 28.9 | $18.5-39.3$ | 90 | 240,579 |
| Total | 59.5 | $47.5-\mathbf{7 1 . 5}$ | 80 | $\mathbf{1 6 1 , 8 5 9}$ | 29.0 | $\mathbf{2 0 . 6 - 3 7 . 3}$ | $\mathbf{1 4 6}$ | 412,118 |
| \% of all not employed/ <br> employed | 3.1 | $\mathbf{2 . 1 - 4 . 1}$ | $\mathbf{1 , 5 6 8}$ | $3,076,999$ | 2.8 | $\mathbf{1 . 9 - 3 . 7}$ | $\mathbf{1 , 4 3 9}$ | $4,268,038$ |

[^30]Table A.14.1: Logistic regression results for reported workplace exclusion attributed to age influenced desire to work or work more hours, 2011-12

|  | Influenced desire to work |  | Influenced desire to work more hours |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | 0.331 | 0.52 | 0.277 | 0.62 |
| Age |  |  |  |  |
| 2 | 0.623 | 0.69 | 0.057 | 0.13 |
| 3 | 0.529 | 0.60 | -0.255 | -0.39 |
| Not married | 0.524 | 0.91 | 0.098 | 0.22 |
| Education |  |  |  |  |
| 2 | 1.257* | 1.84 | -0.531 | -1.00 |
| 3 | 0.372 | 0.48 | 0.507 | 1.07 |
| Country of birth |  |  |  |  |
| 2 | -0.259 | -0.28 | -0.520 | -0.92 |
| 3 | 1.071 | 0.99 | -0.340 | -0.49 |
| Not capital city | -0.294 | -0.45 | -0.056 | -0.14 |
| Personal income |  |  |  |  |
| 2 | -0.488 | -0.60 | 0.386 | 0.47 |
| 3 | -0.855 | -0.84 | -0.334 | -0.45 |
| 4 | -2.092 | -1.41 | -0.18 | -0.23 |
| 5 | 0.313 | 0.46 | -0.405 | -0.51 |
| Constant | -0.727 | -0.76 | -0.791 | -0.95 |

${ }^{* *} p<0.05$ * $p<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.15: Leading types of reported job search exclusion in last 5 years, and reported experiencing that exclusion and attributed any exclusion to age (\% of people who have looked for job in last 5 years), 2011-12

|  | Job search exclusion |  | Attributed any exclusion to age |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |
| Been passed over for a job interview when qualified for that job | 37.8 | 33.7-41.8 | 22.3 | 19.0-25.7 |
| Been unsuccessful at the job interview stage when qualified for that job | 43.1 | 39.0-47.2 | 22.7 | 19.3-26.1 |
| Been told "too qualified" for job | 31.5 | 27.6-35.4 | 18.6 | 15.4-21.7 |
| Been asked your age during the job application process | 28.7 | 25.0-32.5 | 20.3 | 17.0-23.6 |
| Put off applying for a job because the job because job advertisement asked for "dynamic worker" or similar | 22.6 | 19.2-26.1 | 14.9 | 12.0-17.9 |
| Experienced any job search exclusion (\& attributed to age) | 70.4 | 66.6-74.1 | 36.3 | 32.4-40.2 |
| N Unw | 744 |  | 744 |  |
| N W |  | 2,260,525 |  | 2,260,525 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.16: Factors that reported job search exclusion attributed to (\% of people who have reported experiencing job search exclusion in last 5 years), 2011-12

|  | $\%$ | $95 \% \mathrm{Cl}$ |
| :--- | ---: | ---: |
| Age | 51.6 | $46.7-56.6$ |
| Gender | 5.8 | $3.6-8.0$ |
| Race | 2.4 | $0.8-4.1$ |
| Health/ disability | 7.1 | $4.7-9.6$ |
| Other | 41.0 | $36.0-45.9$ |
| Can't say | 9.5 | $6.4-12.6$ |
| N Unw | 517 |  |
| N W | $\mathbf{1 , 5 9 0 , 8 8 9}$ |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.17: Reported experiencing any job search exclusion in last 5 years, and reported job search exclusion attributed to age (\% of people who have looked for job in last 5 years) by socioeconomic and demographic characteristics, 2011-12

|  | Experienced any exclusion |  | Attributed to age |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |
| Male | 74.6 | 69.8-79.3 | 37.3 | 31.9-42.7 | 390 | 1,152,385 |
| Female | 66.0** | 60.3-71.8 | 35.4 | 29.7-41.0 | 354 | 1,108,140 |
| Age |  |  |  |  |  |  |
| 45-54 | 70.6 | 65.1-76.2 | 30.2 | 24.7-35.8 | 301 | 1,348,529 |
| 55-64 | 72.0 | 67.1-76.8 | 46.3** | 40.8-51.7 | 344 | 770,653 |
| 65-74 | 59.1** | 49.2-68.9 | 40.7* | 30.9-50.5 | 99 | 141,343 |
| Marital status |  |  |  |  |  |  |
| Married | 70.1 | 65.6-74.5 | 37.3 | 32.6-42.0 | 526 | 1,626,789 |
| Not married | 71.0 | 64.0-78.0 | 33.2 | 26.4-39.9 | 216 | 626,246 |
| Employment status |  |  |  |  |  |  |
| Employed | 68.2 | 63.6-72.9 | 31.0 | 26.5-35.6 | 485 | 1,609,328 |
| Not employed \& not retired | $79.5{ }^{* *}$ | 72.2-86.7 | 50.6** | 41.6-59.7 | 155 | 458,273 |
| Retired | 66.8 | 23.6-42.6 | 46.6** | 36.5-56.7 | 103 | 192,923 |
| Education |  |  |  |  |  |  |
| Not finished HS | 70.1 | 64.1-76.1 | 37.8 | 31.5-44.2 | 289 | 890,858 |
| Finished HS | 71.6 | 64.8-78.3 | 40.3 | 32.9-47.8 | 222 | 691,476 |
| Bachelor + | 69.5 | 62.8-76.2 | 30.4 | 24.0-36.7 | 233 | 678,191 |
| Country of birth |  |  |  |  |  |  |
| Australia | 70.6 | 66.2-75.0 | 35.6 | 31.0-40.2 | 532 | 1,641,242 |
| Other Engl. spk. | 69.0 | 60.4-77.5 | 37.7 | 28.7-46.7 | 140 | 408,505 |
| Non-Engl. spk. | 71.5 | 58.4-84.6 | 39.2 | 26.4-52.0 | 72 | 210,777 |

${ }^{* *} \mathrm{p}<0.05$ * $\mathrm{p}<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services worker. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Transport and Storage, Electricity/ Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/ retail trade etc: Wholesale/ retail trade, Hospitality/ Tourism/ Accommodation, Property and business services. Cultural/ recreational/ personal etc: Cultural/ recreational/ personal/ health and community services.

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

Table A. 17 continues

|  | Experienced any exclusion |  | Attributed to age |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Residence |  |  |  |  |  |  |
| Capital city | 71.0 | 66.3-75.7 | 38.1 | 33.1-43.1 | 471 | 1,448,066 |
| Other | 69.3 | 63.2-75.3 | 33.2 | 27.0-39.3 | 273 | 812,459 |
| Personal income |  |  |  |  |  |  |
| Up to \$20,000 | 79.5 | 71.7-87.3 | 52.6 | 42.6-62.5 | 129 | 334,998 |
| \$20,001-\$36,400 | 70.2 | 60.1-80.3 | 37.8** | 27.9-47.6 | 116 | 346,506 |
| \$36,401-\$65,000 | 71.0 | 62.8-79.1 | 36.4** | 28.0-44.8 | 151 | 476,232 |
| \$65,001+ | 63.5 ** | 55.3-71.8 | 24.2** | 17.0-31.4 | 159 | 520,253 |
| Occupation |  |  |  |  |  |  |
| Machinery operator etc | 71.6 | 61.5-81.8 | 43.8 | 32.0-55.7 | 89 | 265,343 |
| Technician/trades, community etc | 73.7 | 65.9-81.4 | 36.3 | 28.4-44.3 | 165 | 511,625 |
| Manager/ professional | 66.4 | 60.4-72.4 | 30.1** | 24.6-35.5 | 314 | 921,587 |
| Clerical/ admin./ sales worker | 74.8 | 67.2-82.4 | 43.8 | 34.9-52.7 | 165 | 532,180 |
| Student/ Other | 53.4 | 13.3-93.4 | 43.9 | 6.2-81.6 | 8 | 21,079 |
| Industry Construction, Manuf., Mining | 77.7 | 69.0-86.4 | 41.5 | 31.3-51.6 | 109 | 375,866 |
| Agriculture, Forestry and Fishing etc | 70.3 | 58.4-82.2 | 35.7 | 23.0-48.3 | 67 | 199,637 |
| Government, Education etc | 69.8 | 63.9-75.6 | 35.4 | 29.1-41.6 | 308 | 925,742 |
| Wholesale/retail trade etc | 71.9 | 61.1-82.7 | 34.1 | 23.4-44.9 | 98 | 286,069 |
| Cultural/ recr./ personal etc | 67.9 | 58.2-77.5 | 34.7 | 25.7-43.8 | 123 | 365,723 |
| Other | 56.9** | 39.2-74.7 | 42.7 | 25.1-60.2 | 36 | 99,119 |
| Total | 70.4 | 66.6-74.1 | 36.3 | 32.4-40.2 | 744 | 2,260,525 |

${ }^{* *} \mathrm{p}<0.05$ * $\mathrm{p}<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services worker. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Transport and Storage, Electricity/ Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/ retail trade etc: Wholesale/ retail trade, Hospitality/ Tourism/ Accommodation, Property and business services. Cultural/ recreational/ personal etc: Cultural/ recreational/ personal/ health and community services.

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

Table A.17.1: Logistic regression results for reported experiencing any job search exclusion in last 5 years, and reported job search exclusion attributed to age, 2011-12

|  | Experienced any exclusion |  | Attributed to age |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.475** | -2.38 | -0.144 | -0.76 |
| Age |  |  |  |  |
| 2 | 0.058 | 0.30 | $0.639 * *$ | 3.47 |
| 3 | -0.767** | -2.62 | 0.195 | 0.68 |
| Employment status |  |  |  |  |
| 2 | 0.28 | 1.08 | $0.457^{* *}$ | 1.99 |
| 3 | 0.132 | 0.42 | 0.34 | 1.19 |
| Education |  |  |  |  |
| 2 | 0.17 | 0.79 | 0.12 | 0.60 |
| 3 | 0.155 | 0.64 | -0.21 | -0.91 |
| Country of birth |  |  |  |  |
| 2 | -0.092 | -0.41 | 0.176 | 0.82 |
| 3 | 0.191 | 0.60 | 0.01 | 0.04 |
| Not capital city | -0.135 | -0.75 | -0.228 | -1.31 |
| Personal income |  |  |  |  |
| 2 | -0.389 | -1.24 | -0.181 | -0.66 |
| 3 | -0.407 | -1.30 | -0.332 | -1.21 |
| 4 | -0.994** | -3.05 | -1.039** | -3.40 |
| 5 | -0.524* | -1.78 | -0.538** | -2.06 |
| Occupation |  |  |  |  |
| 2 | 0.463 | 1.45 | 0.167 | 0.57 |
| 3 | 0.143 | 0.45 | 0.056 | 0.19 |
| 4 | 0.533 | 1.57 | 0.293 | 0.93 |
| 5 | -0.196 | -0.23 | 0.68 | 0.80 |
| Industry |  |  |  |  |
| 2 | -0.477 | -1.29 | -0.559 | -1.58 |
| 3 | -0.37 | -1.27 | -0.441* | -1.68 |
| 4 | -0.367 | -1.04 | -0.618* | -1.93 |
| 5 | -0.365 | -1.070 | -0.266 | -0.86 |
| 6 | -0.948** | -2.15 | 0.07 | 0.17 |
| Constant | $1.596{ }^{* *}$ | 3.68 | -0.043 | -0.11 |

${ }^{* *} \mathrm{p}<0.05^{*} \mathrm{p}<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.18: Reported job search exclusion attributed to age and influenced desire to work or work more hours (\% of people who reported experiencing job search exclusion in last 5 years and attributed to age, and 1. Not employed 2. Currently employed) by socio-economic and demographic characteristics, 2011-12

|  | Influenced desire to work |  |  |  | Influenced desire to work more hours |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 59.8 | 46.5-73.0 | 66 | 158,979 | 25.1 | 14.9-35.4 | 88 | 270,791 |
| Female | 45.6 | 30.7-60.5 | 60 | 163,030 | 17.9 | 9.6-26.1 | 78 | 228,782 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 48.7 | 28.7-68.8 | 31 | 133,266 | 12.5 | 3.4-21.7 | 64 | 274,209 |
| 55-64 | 53.4 | 41.0-65.7 | 70 | 152,521 | 33.9** | 23.6-44.2 | 87 | 204,093 |
| 65-74 | 63.6 | 44.3-82.9 | 25 | 36,222 | 24.8 | 3.1-46.5 | 15 | 21,270 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 46.0 | 32.9-59.2 | 82 | 212,684 | 17.2 | 10.0-24.4 | 127 | 394,581 |
| Not married | 65.4* | 50.2-80.5 | 44 | 109,325 | 41.7** | 24.8-58.6 | 38 | 98,517 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 57.7 | 41.3-74.0 | 51 | 134,290 | 20.2 | 9.0-31.3 | 64 | 202,693 |
| Finished HS | 55.7 | 35.5-75.9 | 38 | 97,827 | 19.5 | 8.8-30.2 | 57 | 180,904 |
| Bachelor + | 41.6 | 23.9-59.4 | 37 | 89,893 | 28.3 | 14.2-42.3 | 45 | 115,976 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 48.1 | 35.7-60.6 | 87 | 232,284 | 23.4 | 14.9-31.9 | 116 | 352,743 |
| Other Engl. spk. | 68.3* | 48.0-88.7 | 25 | 58,836 | 21.5 | $6.8-36.2$ | 34 | 95,060 |
| Non-Engl. spk. | 56.2 | 29.1-83.3 | 14 | 30,889 | 11.6 | $-2.1-25.3$ | 16 | 51,769 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 50.0 | 37.2-62.9 | 85 | 218,222 | 18.3 | 10.7-25.9 | 107 | 333,854 |
| Other | 58.0 | 41.1-75.0 | 41 | 103,786 | 28.9 | 15.7-42.1 | 59 | 165,718 |

Personal income

| Up to \$20,000 | 56.9 | $40.6-73.1$ | 46 | 112,232 | 42.0 | $16.7-67.3$ | 21 | 63,826 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 20,001-\$ 36,400$ | 68.6 | $44.0-93.2$ | 15 | 35,834 | 20.0 | $5.2-34.9$ | 35 | 95,094 |
| $\$ 36,401-\$ 65,000$ | 55.7 | $25.2-86.2$ | 12 | 22,929 | 19.0 | $8.1-29.9$ | 49 | 150,435 |
| $\$ 65,001+$ | 22.2 | $-16.6-61.0$ | 5 | 11,445 | $11.2^{\star \star}$ | $1.5-21.0$ | 36 | 114,420 |
| Total | 52.6 | $42.2-63.0$ | 126 | 322,009 | 21.8 | $15.0-28.6$ | 166 | 499,572 |
| \% of all not <br> employed/ employed | 5.5 | $4.1-6.9$ | $\mathbf{1 , 5 6 8}$ | $3,077,570$ | 2.6 | $1.7-3.4$ | $\mathbf{1 , 4 3 9}$ | $4,267,467$ |

[^31]Table A.18.1: Logistic regression results for reported job search exclusion attributed to age influenced desire to work or work more hours, 2011-12

|  | Influenced desire to work |  | Influenced desire to work more hours |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.340 | -0.75 | -0.860* | -1.74 |
| Age |  |  |  |  |
| 2 | 0.329 | 0.63 | $1.080^{* *}$ | 2.15 |
| 3 | 0.726 | 1.15 | 0.89 | 1.19 |
| Not married | 0.917* | 1.93 | $1.437 * *$ | 2.82 |
| Education |  |  |  |  |
| 2 | -0.167 | -0.35 | -0.141 | -0.27 |
| 3 | -1.015* | -1.84 | 0.474 | 0.89 |
| Country of birth |  |  |  |  |
| 2 | 0.576 | 1.08 | -0.167 | -0.32 |
| 3 | 0.558 | 0.77 | -0.411 | -0.56 |
| Not capital city | -0.136 | -0.30 | 0.504 | 1.15 |
| Personal income |  |  |  |  |
| 2 | 0.613 | 0.91 | $-1.643^{* *}$ | -2.31 |
| 3 | 0.066 | 0.09 | $-1.527^{* *}$ | -2.31 |
| 4 | -0.991 | -0.82 | $-2.026^{* *}$ | -2.64 |
| 5 | 0.324 | 0.63 | -0.896 | -1.24 |
| Constant | -0.251 | -0.39 | -0.778 | -1.00 |
| ${ }^{* *} \mathrm{p}<0.05$ * $\mathrm{p}<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey |  |  |  |  |

Table A.19: Person who reported being directly told respondent too old for job in last 5 years, 2011-12

|  | $\%$ | $95 \% ~ C l$ | N Unw | N W |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  <br> not self-employed) | 3.0 | $2.0-3.9$ | 1,564 | $4,324,205$ |
| Work colleague (\% of people who have worked in last 5 years) | 6.4 | $5.2-7.6$ | 2,040 | $5,549,250$ |
| Potential employer (\% of people who have looked for job in last 5 years) | 7.3 | $5.1-9.4$ | 744 | $2,260,525$ |
| Australia Government service provider (\% of people who have worked or <br> looked for job in last 5 years) | 1.7 | $1.1-2.4$ | 2,091 | $5,676,472$ |
| Private recruitment agency (\% of people who have used) | 8.8 | $4.6-12.9$ | 171 | 552,718 |
| Family friend or member (\% of people who have worked or looked for <br> job in last 5 years) | 9.3 | $\mathbf{7 . 9 - 1 0 . 6}$ | 2,091 | $5,676,472$ |
| Any (\% of people who have worked or looked for job in last 5 years) | $\mathbf{1 5 . 8}$ | $\mathbf{1 4 . 1 - 1 7 . 6}$ | $\mathbf{2 , 0 9 1}$ | $\mathbf{5 , 6 7 6 , 4 7 2}$ |

[^32]Table A.20: Reported being directly told too old for job by any source in last 5 years, reported being indirectly indicated too old for job in last 5 years, and reported either directly or indirectly told too old for job in last 5 years (\% of people who have worked or looked for job in last 5 years) by socio-economic and demographic characteristics, 2011-12

|  | Directly |  | Indirectly |  | Directly or Indirectly |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 17.3 | 14.8-19.9 | 14.3 | 12.0-16.7 | 24.8 | 21.9-27.7 | 1,120 | 2,955,691 |
| Female | 14.2 * | 11.9-16.5 | 13.9 | 11.5-16.3 | 21.0* | 18.2-23.8 | 971 | 2,720,781 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 15.0 | 12.1-17.8 | 12.8 | 10.1-15.5 | 21.2 | 17.9-24.5 | 657 | 2,873,871 |
| 55-64 | 16.1 | 13.7-18.5 | 16.2* | 13.8-18.7 | 24.8 | 21.9-27.6 | 952 | 2,107,911 |
| 65-74 | 18.4 | 14.9-21.9 | 13.2 | 10.2-16.3 | 25.0 | 21.1-28.9 | 482 | 694,690 |


| Marital status |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Married | 14.9 | $12.9-16.9$ | 14.3 | $12.2-16.3$ | 22.1 | $19.7-24.5$ | 1,474 | $4,085,323$ |
| Not married | 18.1 | $14.7-21.6$ | 13.5 | $10.6-16.5$ | 25.2 | $21.3-29.2$ | 609 | $1,568,846$ |

## Employment status

| Employed | 14.2 | $12.2-16.2$ | 12.0 | $10.1-13.9$ | 20.1 | $17.8-22.4$ | 1,439 | $4,268,038$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  <br> not retired | $28.5^{\star \star}$ | $21.7-35.2$ | $28.2^{\star \star}$ | $21.4-34.9$ | $43.9^{\star \star}$ | $36.2-51.5$ | 220 | 625,370 |
| Retired | 14.6 | $11.2-18.1$ | 14.5 | $11.0-17.9$ | 22.2 | $18.1-26.3$ | 432 | 783,064 |

## Education

| Not finished HS | 17.7 | $14.9-20.5$ | 14.3 | $11.6-16.9$ | 25.1 | $21.8-28.4$ | 893 | $2,386,594$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Finished HS | 15.0 | $11.8-18.2$ | 12.1 | $9.1-15.1$ | 20.3 | $16.7-24.0$ | 600 | $1,676,306$ |
| Bachelor + | 14.0 | $10.9-17.1$ | 16.2 | $13.0-19.4$ | 22.8 | $19.1-26.5$ | 588 | $1,590,245$ |

Country of birth

| Australia | 14.9 | $12.9-16.9$ | 13.9 | $12.0-15.8$ | 22.3 | $19.9-24.6$ | 1,561 | $4,261,716$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Other Engl. spk. | 17.8 | $13.4-22.2$ | 15.4 | $11.1-19.8$ | 23.3 | $18.3-28.3$ | 360 | 931,132 |
| Non-Engl. spk. | 20.0 | $13.5-26.4$ | 13.9 | $8.1-19.6$ | 28.8 | $21.3-36.3$ | 169 | 480,825 |


| Residence |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capital city | 16.5 | $14.3-18.8$ | 15.1 | $12.9-17.3$ | 24.1 | $21.5-26.7$ | 1,323 | $3,569,301$ |
| Other | 14.6 | $11.8-17.4$ | 12.5 | $9.8-15.1$ | 21.1 | $17.9-24.3$ | 768 | $2,107,171$ |

## Personal income

| Up to \$20,000 | 21.6 | $15.8-27.4$ | 21.0 | $15.2-26.8$ | 31.7 | $25.3-38.2$ | 267 | 607,249 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 20,001-\$ 36,400$ | 16.0 | $11.8-20.1$ | 16.4 | $12.2-20.7$ | $24.4^{\star}$ | $19.4-29.4$ | 342 | 873,325 |
| $\$ 36,401-\$ 65,000$ | $15.2^{*}$ | $11.6-18.9$ | $14.7^{\star}$ | $11.0-18.4$ | $23.0^{* *}$ | $18.7-27.4$ | 448 | $1,252,529$ |
| $\$ 65,001+$ | $12.7^{* *}$ | $9.4-16.0$ | $8.5^{* *}$ | $5.8-11.1$ | $17.0^{* *}$ | $13.3-20.7$ | 469 | $1,479,828$ |

## Public servant

| Yes | 13.7 | $10.6-16.8$ | 13.8 | $10.6-17.0$ | 21.5 | $17.8-25.2$ | 604 | $1,661,010$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | 16.8 | $14.7-18.9$ | 14.2 | $12.3-16.2$ | 23.7 | $21.2-26.1$ | 1,474 | $3,985,417$ |

[^33]Table A. 20 continues

|  | Directly |  | Indirectly |  | Directly or Indirectly |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% Cl | \% | 95\% CI | \% | 95\% Cl |  |  |
| Occupation |  |  |  |  |  |  |  |  |
| Machinery operator etc | 22.1 | 16.2-28.0 | 14.2 | 9.2-19.3 | 28.1 | 21.7-34.5 | 264 | 686,646 |
| Technician/trades, community etc | 19.3 | 15.0-23.5 | 15.4 | 11.5-19.3 | 25.6 | 20.9-30.3 | 418 | 1,174,584 |
| Manager/ professional | $13.4{ }^{\star *}$ | 11.1-15.8 | 12.0 | 9.7-14.2 | $19.7^{* *}$ | 16.9-22.5 | 940 | 2,501,106 |
| Clerical/ admin./ sales worker | $14.5{ }^{\star *}$ | 10.8-18.3 | 18.0 | 13.9-22.2 | 25.3 | 20.6-29.9 | 423 | 1,191,193 |
| Student/ Other | 6.8** | 0.0-16.1 | 9.0 | 0.0-19.2 | 11.9** | 0.4-23.4 | 31 | 83,203 |
| Industry |  |  |  |  |  |  |  |  |
| Construction, Manuf., Mining | 19.1 | 14.1-24.1 | 14.1 | 9.8-18.4 | 25.2 | 19.7-30.8 | 304 | 856,778 |
| Agriculture, Forestry and Fishing etc | 18.1 | 12.1-24.0 | 12.3 | 7.1-17.4 | 23.6 | 17.1-30.1 | 213 | 579,493 |
| Government, Education etc | $14.2{ }^{*}$ | 11.6-16.8 | 14.6 | 11.9-17.3 | 22.2 | 19.0-30.1 | 841 | 2,311,425 |
| Wholesale/ retail trade etc | 15.6 | 11.3-20.0 | 14.2 | 10.0-18.3 | 22.3 | 17.3-27.3 | 300 | 772,641 |
| Cultural/ recr./ personal etc | 15.0 | 10.4-19.7 | 13.8 | 9.2-18.4 | 23.0 | 17.5-28.6 | 301 | 811,493 |
| Other | 18.2 | 10.7-25.8 | 15.7 | 8.5-23.0 | 24.9 | 16.5-33.2 | 124 | 323,096 |
| Total | 15.8 | 14.1-17.6 | 14.1 | 12.4-15.8 | 23.0 | 21.0-25.0 | 2,091 | 5,676,472 |

${ }^{* *} p<0.05$ * $p<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services worker. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Transport and Storage, Electricity/ Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/ retail trade etc: Wholesale/ retail trade, Hospitality/ Tourism/ Accommodation, Property and business services. Cultural/recreational/ personal etc: Cultural/ recreational/ personal/ health and community services. Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

Table A.20.1: Logistic regression results for reported being directly told too old for job by any source in last 5 years, reported being indirectly indicated too old for job in last 5 years, and reported either directly or indirectly told too old for job in last 5 years, 2011-12

|  | Directly |  | Indirectly |  | Directly or Indirectly |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z |
| Female | 0.088 | 0.60 | -0.177 | -1.16 | -0.124 | -0.97 |
| Age |  |  |  |  |  |  |
| 2 | 0.051 | 0.34 | 0.233 | 1.48 | 0.15 | 1.15 |
| 3 | 0.335* | 1.81 | -0.056 | -0.27 | 0.206 | 1.25 |
| Not married | 0.174 | 1.27 | -0.047 | -0.32 | 0.088 | 0.73 |
| Employment status |  |  |  |  |  |  |
| 2 | $0.695^{* *}$ | 3.57 | $0.834 * *$ | 4.23 | $0.954^{* *}$ | 5.52 |
| 3 | -0.231 | -1.22 | 0.082 | 0.43 | -0.1 | -0.62 |
| Education |  |  |  |  |  |  |
| 2 | -0.168 | -1.09 | -0.045 | -0.27 | -0.18 | -1.31 |
| 3 | -0.193 | -1.07 | $0.517^{* *}$ | 2.80 | 0.13 | 0.84 |
| Country of birth |  |  |  |  |  |  |
| 2 | 0.16 | 0.97 | 0.07 | 0.41 | 0.012 | 0.08 |
| 3 | $0.531^{* *}$ | 2.46 | -0.002 | -0.01 | $0.473^{* *}$ | 2.46 |
| Not capital city | -0.133 | -0.99 | -0.194 | -1.35 | -0.152 | -1.30 |
| Personal income |  |  |  |  |  |  |
| 2 | 0.074 | 0.34 | 0.156 | 0.700 | 0.126 | 0.65 |
| 3 | -0.057 | -0.25 | -0.154 | -0.680 | -0.075 | -0.39 |
| 4 | -0.198 | -0.83 | -0.663** | -2.570 | -0.361* | -1.71 |
| 5 | -0.099 | -0.47 | -0.331 | -1.520 | -0.164 | -0.89 |
| Occupation |  |  |  |  |  |  |
| 2 | 0.001 | 0.00 | 0.149 | 0.63 | 0.04 | 0.21 |
| 3 | -0.244 | -1.18 | -0.174 | -0.73 | -0.229 | -1.22 |
| 4 | -0.502** | -2.15 | 0.24 | 0.96 | -0.074 | -0.37 |
| 5 | -1.152 | -1.52 | -0.394 | -0.60 | -0.795 | -1.39 |
| Industry |  |  |  |  |  |  |
| 2 | -0.028 | -0.12 | -0.122 | -0.42 | 0.042 | 0.19 |
| 3 | -0.22 | -1.11 | -0.023 | -0.11 | -0.038 | -0.22 |
| 4 | -0.107 | -0.46 | 0.064 | 0.25 | 0.008 | 0.04 |
| 5 | -0.428* | -1.74 | -0.004 | -0.01 | -0.084 | -0.40 |
| 6 | 0.139 | 0.49 | 0.203 | 0.66 | 0.275 | 1.08 |
| Constant | -1.38** | -4.61 | -1.786** | -5.47 | -1.096** | -4.08 |

[^34]Table A.21: Person reported being told too old by in last 5 years: employer (\% of people who have worked in last 5 years \& not self-employed), work colleague (\% of people who have worked in last 5 years), potential employer (\% of people who have looked for work in last 5 years) by occupation and industry, 2011-12

|  | Employer |  |
| :--- | :--- | :---: |
| $\%$ | $95 \% \mathrm{Cl} \quad \mathrm{N}$ Un |  |


|  | Employer |  |  |  | Work colleague |  |  |  | Potential employer |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |
| Machinery operator etc | 7.1 | 2.3-11.9 | 191 | 496,845 | 9.5 | 5.1-13.8 | 258 | 676,003 | 15.4 | 6.0-24.8 | 89 | 265,343 |
| Technician/trades, community etc | 4.4 | 1.7-7.1 | 310 | 897,631 | 9.4 | 6.1-12.7 | 408 | 1,148,736 | 8.5 | 3.6-13.3 | 165 | 511,625 |
| Manager/ professional | $1.4{ }^{* *}$ | 0.6-2.2 | 683 | 1,870,552 | 5.1* | 3.5-6.7 | 923 | 2,467,836 | 4.9** | 2.4-7.3 | 315 | 921,587 |
| Clerical/ admin./ sales worker | $2.5 *$ | 0.7-4.3 | 351 | 974,307 | 4.4** | 2.2-6.5 | 406 | 1,136,612 | 6.2* | 1.9-10.5 | 165 | 532,180 |
| Student/ Other | 4.4 | 0.0-13.0 | 19 | 54,219 | 2.9* | 0.0-8.5 | 31 | 83,203 | 11.4 | 0.0-33.1 | 8 | 21,079 | Industry


| Construction, Manuf., Mining | 4.2 | 1.2-7.1 | 195 | 582,085 | 7.2 | 3.7-10.8 | 296 | 842,875 | 7.3 | 2.6-11.9 | 109 | 375,866 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agric., Forestry \& Fishing etc | 2.1 | 0.0-4.2 | 120 | 335,738 | 6.6 | 2.7-10.5 | 210 | 572,264 | 9.9 | 0.7-19.0 | 67 | 199,637 |
| Government,Education etc | 2.8 | 1.3-4.3 | 712 | 1,972,415 | 5.8 | 4.1-7.6 | 821 | 2,254,863 | 7.7 | 4.0-11.3 | 308 | 925,742 |
| Wholesale/ retail trade etc | 2.4 | 0.2-4.6 | 219 | 571,034 | 4.7 | 2.4-6.9 | 290 | 747,481 | 6.7 | 2.0-11.5 | 98 | 286,069 |
| Cultural/ recr./ personal etc | 2.6 | 0.3-4.7 | 229 | 626,773 | 8.5 | 4.5-12.4 | 294 | 794,219 | 3.9 | 0.4-7.4 | 123 | 365,723 |
| Other | 5.1 | 0.0-11.5 | 84 | 220,656 | 6.6 | 1.3-11.9 | 122 | 318,883 | 13.1 | 0.0-27.2 | 36 | 99,119 |
| Total | 3.0 | 2.0-3.9 | 1,564 | 4,324,205 | 6.4 | 5.2-7.6 | 2,040 | 5,549,250 | 7.3 | 5.1-9.4 | 744 | 2,260,525 |
| ${ }^{* *} p<0.05$ * $p<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services worker Agriculture, Forestry and Fishing, Transport and Storage, Electricity/Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insur etc: Wholesale/ retail trade, Hospitality/Tourism/ Accommodation, Property and business services. Cultural/ recr./ personal etc: Cultural/ recreational/ personal/ health and com |  |  |  |  |  |  |  |  |  |  |  |  |
| Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey |  |  |  |  |  |  |  |  |  |  |  |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey
Table A.22: Agreement (state strongly agree or agree) that age discrimination is an issue in workplace in Australia (\% of people who have worked in past 5 years) or looking for job in Australia (\% of people who have looked for job in past 5 years), by socio-economic and demographic characteristics, 2011-12
Issue in workplace in Australia (Strongly agree/agree)

|  | Issue in workplace in Australia (Strongly agree/agree) |  |  |  | Issue looking for job in Australia (Strongly agree/agree) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% Cl | N Unw | N W | \% | 95\% Cl | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 65.3 | 62.0-68.6 | 1,085 | 2,888,724 | 81.7 | 77.4-86.0 | 390 | 1,152,385 |
| Female | 67.8 | 64.4-71.3 | 936 | 2,624,385 | 84.9 | 80.7-89.0 | 354 | 1,108,140 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 66.0 | 62.1-69.9 | 645 | 2,817,636 | 82.8 | 78.4-87.2 | 301 | 1,348,529 |
| 55-64 | 67.1 | 63.9-70.2 | 916 | 2,031,591 | 83.8 | 79.7-87.9 | 344 | 770,653 |
| 65-74 | 66.8 | 62.4-71.2 | 460 | 663,882 | 84.8 | 77.6-91.9 | 99 | 141,343 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 65.7 | 62.9-68.6 | 1,427 | 3,981,476 | 82.8 | 79.2-86.4 | 526 | 1,626,789 |
| Not married | 68.5 | 64.1-72.8 | 586 | 1,509,330 | 84.3 | 78.9-89.7 | 216 | 626,246 |
| Employment status |  |  |  |  |  |  |  |  |
| Employed | 64.4 | 61.6-67.2 | 1,439 | 4,268,038 | 80.9 | 77.0-84.7 | 486 | 1,609,328 |
| Not employed \& not retired | 83.3** | 77.8-88.8 | 194 | 542,682 | 91.0** | 86.1-95.9 | 155 | 458,273 |
| Retired | 66.3 | 61.2-71.3 | 388 | 702,390 | 84.9 | 77.1-92.7 | 103 | 192,924 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 64.1 | 60.3-67.9 | 856 | 2,299,828 | 80.7 | 75.6-85.8 | 289 | 890,858 |
| Finished HS | 67.5 | 63.2-71.8 | 580 | 1,623,728 | 85.9 | 81.0-90.9 | 222 | 691,476 |
| Bachelor + | 69.0 | 64.7-73.4 | 575 | 1,566,227 | 84.0 | 78.6-89.3 | 233 | 678,191 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 67.6 | 64.9-70.3 | 1,518 | 4,156,252 | 83.3 | 79.7-86.8 | 532 | 1,641,242 |
| Other Engl. spk. | 61.9 * | 56.0-67.8 | 346 | 903,384 | 81.3 | 74.3-88.4 | 140 | 408,505 |
| Non-Engl. spk. | 65.5 | 56.8-74.1 | 156 | 450,675 | 87.0 | 78.7-95.4 | 72 | 210,777 |
| ${ }^{* *} p<0.05$ * $p<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services wo Agriculture, Forestry and Fishing, Transport and Storage, Electricity/Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Ins etc: Wholesale/ retail trade, Hospitality/ Tourism/ Accommodation, Property and business services. Cultural/ recreational/ personal etc: Cultural/ recreational/ personal/ health and <br> Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey |  |  |  |  |  |  |  |  |

Table A. 22 continues

Table A.22.1: Logistic regression results for agreement (state strongly agree or agree) that age discrimination is an issue in workplace in Australia or looking for job in Australia, 2011-12

|  | Issue in workplace in Australia |  | Issue looking for job in Australia |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | 0.013 | 0.11 | 0.028 | 0.11 |
| Age |  |  |  |  |
| 2 | 0.038 | 0.32 | 0.062 | 0.26 |
| 3 | 0.03 | 0.19 | 0.009 | 0.02 |
| Not married | 0.037 | 0.32 | 0.335 | 1.28 |
| Employment status |  |  |  |  |
| 2 | 0.609** | 2.82 | $0.611^{*}$ | 1.75 |
| 3 | 0.061 | 0.39 | 0.721 | 1.59 |
| Education |  |  |  |  |
| 2 | 0.193 | 1.53 | 0.540** | 1.99 |
| 3 | $0.317^{* *}$ | 2.16 | 0.461 | 1.48 |
| Country of birth |  |  |  |  |
| 2 | -0.182 | -1.33 | -0.115 | -0.41 |
| 3 | -0.304 | -1.55 | -0.014 | -0.03 |
| Not capital city | -0.103 | -0.95 | -0.178 | -0.79 |
| Personal income |  |  |  |  |
| 2 | -0.39* | -1.87 | -0.078 | -0.19 |
| 3 | -0.391* | -1.92 | -0.424 | -1.08 |
| 4 | $-0.582^{* *}$ | -2.73 | -0.721* | -1.74 |
| 5 | $-0.441^{* *}$ | -2.24 | -0.011 | -0.03 |
| Occupation |  |  |  |  |
| 2 | -0.156 | -0.84 | -0.293 | -0.70 |
| 3 | -0.017 | -0.09 | -0.395 | -0.91 |
| 4 | -0.002 | -0.01 | -0.601 | -1.35 |
| 5 | -0.106 | -0.24 | -0.607 | -0.51 |
| Industry |  |  |  |  |
| 2 | -0.236 | -1.16 | -0.721 | -1.63 |
| 3 | -0.139 | -0.84 | -0.351 | -0.96 |
| 4 | 0.007 | 0.03 | -0.907** | -2.17 |
| 5 | 0.043 | 0.22 | -0.067 | -0.15 |
| 6 | -0.025 | -0.10 | 0.069 | 0.11 |
| Constant | $1.186^{* *}$ | 4.31 | 2.197** | 3.82 |
| ${ }^{* *} \mathrm{p}<0.05$ * $\mathrm{p}<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |

Table A.23: Importance (extremely or somewhat important) of employers thinking respondent is too old reason for being retired (\% of retired) or not looking for work (\% of discouraged workers) by socio-economic and demographic characteristics, 2011-12

|  | Reason for being retired |  |  | Reason for not looking for work |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 31.1 | 27.0-35.2 | 552 | 936,620 | 40.8 | 21.1-60.5 | 33 | 71,045 |
| Female | 31.3 | 27.1-35.6 | 521 | 957,650 | 53.2 | 33.2-73.2 | 39 | 116,846 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 28.2 | 13.1-43.3 | 34 | 125,334 | 46.6 | 20.6-72.7 | 18 | 89,271 |
| 55-64 | 32.6 | 27.4-37.9 | 341 | 710,252 | 53.2 | 34.8-71.6 | 31 | 65,002 |
| 65-74 | 30.7 | 27.2-34.1 | 698 | 1,058,684 | 44.5 | 23.3-65.8 | 23 | 33,618 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 30.9 | 27.3-34.5 | 715 | 1,247,606 | 46.2 | 27.5-64.9 | 46 | 121,594 |
| Not married | 32.5 | 27.4-37.6 | 354 | 634,003 | 50.8 | 27.6-74.0 | 25 | 63,588 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 31.5 | 27.4-35.6 | 568 | 1,006,062 | 53.9 | 33.3-74.5 | 35 | 105,730 |
| Finished HS | 32.5 | 26.7-38.4 | 275 | 486,878 | 59.6 | 31.5-87.6 | 18 | 49,959 |
| Bachelor + | 29.1 | 22.6-35.6 | 213 | 375,028 | 16.4* | 0.0-34.0 | 17 | 26,838 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 31.0 | 27.6-34.4 | 800 | 1,418,396 | 51.9 | 35.9-68.0 | 56 | 145,033 |
| Other Engl. spk. | 28.5 | 21.8-35.2 | 193 | 335,296 | 55.5 | 21.5-89.6 | 9 | 17,995 |
| Non-Engl. spk. | 39.3 | 28.0-50.7 | 78 | 135,646 | 23.4 | 0.0-57.8 | 7 | 24,863 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 30.6 | 26.8-34.3 | 637 | 1,106,548 | 44.3 | 25.1-63.5 | 44 | 124,641 |
| Other | 32.2 | 27.4-36.9 | 436 | 787,722 | 56.8 | 36.3-77.3 | 28 | 63,250 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 40.3 | 34.4-46.2 | 303 | 532,626 | 39.8 | 13.2-66.4 | 18 | 45,607 |
| \$20,001-\$36,400 | 28.7 ** | 21.8-35.6 | 183 | 323,500 | 74.4* | 48.8-99.9 | 13 | 39,692 |
| \$36,401-\$65,000 | 24.5** | 16.9-32.2 | 136 | 231,893 | 35.7 | 0.0-76.7 | 6 | 11,096 |
| \$65,001+ | 23.5** | 10.8-36.3 | 53 | 109,998 | 19.9 | 0.0-46.1 | 9 | 15,049 |
| Public servant |  |  |  |  |  |  |  |  |
| Yes | 28.6 | 23.8-33.4 | 385 | 684,285 | - |  |  |  |
| No | 32.6 | 28.8-36.3 | 679 | 1,193,999 | - |  |  |  |

Occupation (retired within last 5 years)

| Machinery operator etc | 40.4 | $25.8-55.0$ | 47 | 74,362 | - |
| :--- | ---: | ---: | ---: | ---: | :--- |
| Technician/trades, <br> community etc | $24.1^{*}$ | $13.3-34.9$ | 68 | 121,403 | - |
| Manager/ professional | $25.9^{*}$ | $18.7-33.1$ | 172 | 318,359 | - |
| Clerical/ admin./ sales <br> worker | 35.5 | $25.0-46.0$ | 90 | 164,932 | - |
| Student/ Other | 21.1 | $0.0-56.8$ | 7 | 17,582 | - |

[^35]Table A. 23 continues

|  | Reason for being retired |  |  | Reason for not looking for work |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Industry (retired within last 5 years) |  |  |  |  |  |  |  |  |
| Construction, Manuf., Mining | 34.7 | 22.2-47.2 | 59 | 100,925 | - |  |  |  |
| Agric., Forestry \& Fishing etc | 37.7 | 18.3-57.1 | 27 | 44,007 | - |  |  |  |
| Government, Education etc | 25.6 | 18.9-32.4 | 191 | 359,858 | - |  |  |  |
| Wholesale/ retail trade etc | 40.4 | 26.7-54.0 | 60 | 109,518 | - |  |  |  |
| Cultural/ recr./ personal etc | 13.0** | 0.6-25.3 | 28 | 52,343 | - |  |  |  |
| Other | 28.3 | 7.6-48.9 | 21 | 32,217 | - |  |  |  |
| Total | 31.2 | 28.3-34.2 | 1,073 | 1,894,270 | 48.5 | 34.0-63.0 | 72 | 187,891 |

${ }^{* *} \mathrm{p}<0.05$ * $\mathrm{p}<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services worker. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Transport and Storage, Electricity/ Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/ retail trade etc: Wholesale/ retail trade, Hospitality/ Tourism/ Accommodation, Property and business services. Cultural/recreational/ personal etc: Cultural/ recreational/ personal/ health and community services.

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.23.1: Logistic regression results for importance (extremely or somewhat important) of employers thinking respondent is too old reason for being retired or not looking for work, 2011-12

|  | Reason for being retired |  | Reason for not looking for work |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.398** | -2.29 | 0.968 | 1.47 |
| Age |  |  |  |  |
| 2 | -0.172 | -0.40 | 0.748 | 0.79 |
| 3 | -0.319 | -0.76 | 0.801 | 0.80 |
| Not married | 0.155 | 1.01 | 1.288* | 1.81 |
| Education |  |  |  |  |
| 2 | 0.233 | 1.31 | -0.678 | -0.91 |
| 3 | 0.242 | 1.07 | $-2.295^{\star *}$ | -2.45 |
| Country of birth |  |  |  |  |
| 2 | -0.154 | -0.78 | -0.365 | -0.37 |
| 3 | 0.374 | 1.36 | -0.929 | -0.59 |
| Not capital city | 0.051 | 0.34 | 0.247 | 0.37 |
| Personal income |  |  |  |  |
| 2 | -0.556** | -2.59 | 0.774 | 0.860 |
| 3 | -0.826** | -3.27 | -0.576 | -0.47 |
| 4 | -0.991** | -2.60 | -0.239 | -0.20 |
| 5 | -0.571** | -3.18 | 1.37 | 1.62 |
| Occupation |  |  |  |  |
| 2 | 0.037 | 0.14 | - | - |
| 3 | -0.183 | -0.74 | - | - |
| 4 | 0.29 | 1.12 | - | - |
| 5 | 0.381 | 0.62 | - | - |
| Industry |  |  |  |  |
| 2 | 0.042 | 0.14 | - | - |
| 3 | -0.225 | -1.02 | - | - |
| 4 | 0.144 | 0.54 | - | - |
| 5 | -0.271 | -0.83 | - | - |
| 6 | -0.676* | -1.66 | - | - |
| Constant | 0.015 | 0.03 | -1.32 | 1.230 |
| ${ }^{* *} \mathrm{p}<0.05$ * $\mathrm{p}<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey |  |  |  |  |

Table A.24: Number of age discriminations (1: reported either exclusion in workplace or job search attributed to age, 2: reported being told directly or indirectly too old for job, 3: think age discrimination is an issue in Australia in the workplace or looking for job, \% of people who have worked last 5 years excluding self-employed, or looked for job in last 5 years) by socio-economic and demographic characteristics, 2011-12

Table A. 24 continues

Table A.24.1: Multinomial logistic regression results for number of age discriminations, 2011-12

|  | 1-2 v 0 |  | 3 v 0 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.234* | -1.65 | -0.361* | -2.71 |
| Age |  |  |  |  |
| 2 | 0.023 | 0.16 | 0.221 | 1.12 |
| 3 | 0.096 | 0.05 | -0.204 | -0.73 |
| Not married | 0.160 | 1.16 | 0.218 | 1.16 |
| Employment status |  |  |  |  |
| 2 | $0.739 * *$ | 2.63 | $1.633^{* *}$ | 5.19 |
| 3 | -0.103 | -0.56 | 0.035 | 0.14 |
| Education |  |  |  |  |
| 2 | 0.071 | 0.48 | -0.015 | -0.07 |
| 3 | 0.117 | 0.66 | 0.359 | 1.48 |
| Country of birth |  |  |  |  |
| 2 | -0.245 | -1.56 | -0.171 | -0.76 |
| 3 | -0.001 | -0.01 | 0.237 | 0.77 |
| Not capital city | -0.042 | -0.33 | -0.189 | -1.03 |
| Personal income |  |  |  |  |
| 2 | $-0.522^{* *}$ | -2.04 | -0.580* | -1.81 |
| 3 | -0.599** | -2.37 | -0.795** | -2.5 |
| 4 | -0.903** | -3.41 | -1.462** | -4.18 |
| 5 | -0.668** | -2.73 | -0.893** | -2.92 |
| Occupation |  |  |  |  |
| 2 | 0.253 | 1.16 | 0.535* | 1.75 |
| 3 | $0.457^{* *}$ | 2.11 | 0.341 | 1.09 |
| 4 | 0.483** | 2.09 | 0.617 | 1.9 |
| 5 | -0.074 | -0.15 | -0.540 | -0.62 |
| Industry |  |  |  |  |
| 2 | -0.219 | -0.49 | -0.357 | -0.94 |
| 3 | 0.030 | 0.15 | -0.253 | -0.92 |
| 4 | -0.022 | -0.09 | -0.481 | -1.39 |
| 5 | 0.185 | 0.75 | 0.129 | 0.39 |
| 6 | -0.083 | -0.27 | -0.081 | -0.2 |
| Constant | $1.218{ }^{* *}$ | 3.64 | -0.033 | -0.07 |

[^36]Issues around private recruitment firm practices
Table A.25: Used private recruitment firm in job search in last 5 years (\% of people who looked for a job in last 5 years) by socio-economic and demographic characteristics, 2011-12

|  | \% | 95\% CI | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |
| Male | 30.9 | 25.5-36.3 | 390 | 1,152,385 |
| Female | 17.8* | 13.2-22.4 | 354 | 1,108,140 |
| Age |  |  |  |  |
| 45-54 | 26.1 | 20.6-31.5 | 301 | 1,348,529 |
| 55-64 | 23.7 | 19.1-28.2 | 344 | 770,653 |
| 65-74 | 13.4* | 6.8-20.0 | 99 | 141,343 |
| Marital status |  |  |  |  |
| Married | 25.4 | 21.0-29.9 | 526 | 1,626,789 |
| Not married | 21.2 | 15.2-27.2 | 216 | 626,246 |
| Education |  |  |  |  |
| Not finished HS | 19.2 | 13.9-24.7 | 289 | 890,858 |
| Finished HS | 26.7 | 19.9-33.4 | 222 | 691,476 |
| Bachelor + | 29.0* | 22.1-35.8 | 233 | 678,191 |
| Country of birth |  |  |  |  |
| Australia | 22.4 | 18.2-26.6 | 532 | 1,641,242 |
| Other Engl. spk. | 29.0 | 20.0-38.0 | 140 | 408,505 |
| Non-Engl. spk. | 31.8 | 19.7-44.0 | 72 | 210,777 |
| Residence |  |  |  |  |
| Capital city | 26.5 | 21.9-31.2 | 471 | 1,448,066 |
| Other | 20.7 | 14.8-26.6 | 273 | 812,459 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 24.6 | 15.5-33.7 | 129 | 334,998 |
| \$20,001-\$36,400 | 18.4 | 10.2-26.7 | 116 | 346,506 |
| \$36,401-\$65,000 | 17.7 | 11.1-24.3 | 151 | 476,232 |
| \$65,001+ | 34.5 | 26.0-43.1 | 159 | 520,253 |
| Total | 24.5 | 20.8-28.1 | 744 | 2,260,525 |

[^37]Table A.25.1: Logistic regression results for used private recruitment firm in job search in last 5 years, 2011-12

|  | Coef. | z |
| :--- | :---: | ---: |
| Female | $-0.541^{*}$ | -2.78 |
| Age |  |  |
| 2 | -0.02 | -0.10 |
| 3 | $-0.752^{*}$ | -2.24 |
| Not married | -0.054 | -0.26 |
| Education |  |  |
| 2 | 0.375 | 1.66 |
| 3 | 0.153 | 0.66 |
| Country of birth |  | 0.88 |
| 2 | 0.204 | 1.74 |
| 3 | 0.518 | -0.83 |
| Not capital city | -0.163 |  |
| Personal income |  | -0.83 |
| 2 | -0.27 | -1.41 |
| 3 | -0.436 | 0.02 |
| 4 | 0.005 | -0.07 |
| 5 | -0.022 | -2.91 |
| Constant | $-0.924^{*}$ |  |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.26: Rating of support (\% stating very good or good) and rating of effort (\% stating good or great deal) of private recruitment firm in helping find job (\% who used private recruitment firm) by socio-economic and demographic characteristics, 2011-12

|  | Rating of support of private recruitment firm (very good/good) |  | Rating of effort of private recruitment firm in looking for job (great/ good deal) |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |
| Male | 28.0 | 18.6-37.3 | 17.0 | 9.4-24.7 | 108 | 355,908 |
| Female | 47.7* | 33.2-62.1 | 25.7 | 12.9-38.5 | 63 | 196,811 |
| Age |  |  |  |  |  |  |
| 45-54 | 34.0 | 22.3-45.6 | 19.0 | 9.5-28.6 | 74 | 351,511 |
| 55-64 | 36.9 | 26.3-47.5 | 21.2 | 12.3-30.1 | 83 | 182,268 |
| 65-74 | 35.4 | 10.1-60.8 | 29.7 | 5.2-54.3 | 14 | 18,939 |
| Marital status |  |  |  |  |  |  |
| Married | 33.6 | 24.0-43.3 | 18.5 | 10.8-26.2 | 124 | 413,551 |
| Not married | 36.0 | 20.8-51.2 | 21.4 | 8.7-34.1 | 46 | 132,692 |
| Education |  |  |  |  |  |  |
| Not finished HS | 38.8 | 23.6-54.0 | 25.8 | 12.4-39.3 | 54 | 171,850 |
| Finished HS | 32.4 | 18.0-46.8 | 14.5 | 5.0-23.9 | 58 | 184,293 |
| Bachelor + | 34.1 | 20.7-47.5 | 20.4 | 8.8-32.4 | 59 | 196,575 |
| Country of birth |  |  |  |  |  |  |
| Australia | 36.1 | 25.8-46.4 | 23.2 | 14.5-32.0 | 110 | 367,124 |
| Other Engl. spk. | 26.4 | 10.4-42.3 | 12.8 | 0.5-25.2 | 38 | 118,522 |
| Non-Engl. spk. | 44.1 | 21.0-67.2 | 15.9 | 0.0-34.7 | 23 | 67,072 |
| Residence |  |  |  |  |  |  |
| Capital city | 37.1 | 27.1-47.2 | 22.7 | 14.2-31.2 | 118 | 384,317 |
| Other | 30.1 | 16.2-44.0 | 14.2 | 3.4-25.0 | 53 | 168,401 |
| Personal income |  |  |  |  |  |  |
| Up to \$20,000 | 41.3 | 18.4-64.1 | 12.3 | 0.0-25.0 | 29 | 82,404 |
| \$20,001-\$36,400 | 41.9 | 17.8-66.1 | 19.9 | 0.1-39.6 | 22 | 63,903 |
| \$36,401-\$65,000 | 22.5 | 5.1-39.9 | 13.5 | 1.8-28.8 | 29 | 84,360 |
| \$65,001+ | 39.2 | 24.0-54.4 | 23.0 | 10.3-35.7 | 47 | 179,679 |
| Total | 35.0 | 26.8-43.2 | 20.1 | 13.3-26.9 | 171 | 552,718 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.26.1: Logistic regression results of rating of support (stating very good or good) and rating of effort (stating good or great deal) of private recruitment firm in helping find job, 2011-12

|  | Rating of support of private recruitment firm |  | Rating of effort of private recruitment firm in looking for job |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | 1.089* | 2.77 | 0.808 | 1.67 |
| Age |  |  |  |  |
| 2 | 0.561 | 1.46 | 0.827 | 1.73 |
| 3 | 0.335 | 0.49 | 0.832 | 1.05 |
| Not married | 0.179 | 0.45 | 0.545 | 1.11 |
| Education |  |  |  |  |
| 2 | -0.604 | -1.32 | -0.906 | -1.66 |
| 3 | -0.571 | -1.19 | -1.234* | -2.09 |
| Country of birth |  |  |  |  |
| 2 | -0.538 | -1.15 | -0.984 | -1.61 |
| 3 | 0.334 | 0.62 | -0.98 | -1.22 |
| Not capital city | -0.419 | -1.05 | -0.976 | -1.87 |
| Personal income |  |  |  |  |
| 2 | 0.487 | 0.79 | 0.627 | 0.76 |
| 3 | -0.252 | -0.41 | 0.149 | 0.18 |
| 4 | 1.182* | 2.04 | 1.765* | 2.30 |
| 5 | 0.158 | 0.28 | 0.966 | 1.32 |
| Constant | -1.163 | -1.81 | -1.942* | -2.35 |

Table A.27: Reported lack of effort of private recruitment firm attributed to own age or any reason, and if influenced desire to work or work more hours, 2011-12

|  | $\%$ | $95 \%$ CI | N Unw | N W |
| :--- | ---: | ---: | ---: | ---: | :---: |
| Reported lack of effort attributed to age (\% of people who used <br> private recruitment firm) | 24.0 | $16.6-31.3$ | 171 | 552,718 |
| If reported lack of effort attributed to age influenced desire to work <br> (\% of people attributing to age \& not employed) | 62.4 | $36.2-88.6$ | 18 | 41,285 |
| If reported lack of effort attributed to age influenced desire to work <br> more hours (\% of people attributing to age \& employed) | 26.7 | $2.5-50.9$ | 26 | 91,074 |
| Reported lack of effort attributed to any reason (\% of people who <br> used private recruitment firm) | 48.1 | $39.4-56.9$ | 171 | 552,718 |
| If reported lack of effort attributed to age influenced desire to work <br> (\% of people attributing to age \& not employed) | 46.4 | $23.6-69.2$ | 29 | 80,094 |
| If reported lack of effort attributed to age influenced desire to work <br> more hours (\% of people attributing to age \& employed) | 24.0 | $8.0-40.0$ | 47 | 185,890 |

[^38]Table A.28: Reported lack of effort of private recruitment firm attributed to age (\% of people using private recruitment firm) by socio-economic and demographic characteristics, 2011-12

|  | \% | 95\% CI | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |
| Male | 23.3 | 14.4-32.3 | 108 | 355,908 |
| Female | 25.0 | 12.3-37.8 | 63 | 196,811 |
| Age |  |  |  |  |
| 45-54 | 21.8 | 11.5-32.0 | 74 | 651,511 |
| 55-64 | 27.8 | 17.8-37.8 | 83 | 182,268 |
| 65-74 | 27.3 | 4.0-50.6 | 14 | 18,939 |
| Marital status |  |  |  |  |
| Married | 24.0 | 15.1-33.0 | 124 | 413,551 |
| Not married | 24.8 | 12.2-37.4 | 46 | 132,692 |
| Education |  |  |  |  |
| Not finished HS | 33.5 | 19.1-47.9 | 54 | 171,850 |
| Finished HS | 30.3 | 15.8-44.8 | 58 | 184,293 |
| Bachelor + | 9.7* | 2.7-16.6 | 59 | 196,575 |
| Country of birth |  |  |  |  |
| Australia | 22.8 | 13.4-32.3 | 110 | 367,124 |
| Other Engl. spk. | 32.5 | 16.3-48.6 | 38 | 118,522 |
| Non-Engl. spk. | 15.1 | 1.6-28.5 | 23 | 67,072 |
| Residence |  |  |  |  |
| Capital city | 26.7 | 17.4-36.0 | 118 | 384,317 |
| Other | 17.7 | 6.9-28.5 | 53 | 168,401 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 45.0 | 22.6-67.4 | 29 | 82,404 |
| \$20,001-\$36,400 | 25.0 | 6.1-43.8 | 22 | 63,903 |
| \$36,401-\$65,000 | 26.7 | 8.6-44.8 | 29 | 84,360 |
| \$65,001+ | 14.0* | 1.9-26.1 | 47 | 179,679 |
| Total | 24.0 | 16.6-31.3 | 171 | 552,718 |

Table A.28.1: Logistic regression results of reported lack of effort of private recruitment firm attributed to age, 2011-12

|  | Coef. | z |
| :--- | ---: | ---: |
| Female | -0.712 | -1.56 |
| Age |  |  |
| 2 | 0.033 | 0.07 |
| 3 | -0.610 | -0.83 |
| Not married | 0.273 | 0.60 |
| Education |  |  |
| 2 | -0.750 | -1.48 |
| 3 | $-1.869^{*}$ | -2.94 |
| Country of birth |  |  |
| 2 | $1.087^{*}$ | 2.24 |
| 3 | -0.187 | -0.28 |
| Not capital city | -0.807 | -1.64 |
| Personal income |  |  |
| 2 | -0.649 | -1.02 |
| 3 | $-1.33^{\star}$ | -2.05 |
| 4 | $-2.223^{*}$ | -3.12 |
| 5 | -1.022 | -1.69 |
| Constant | 0.899 | 1.28 |

[^39]Mismatch of skills and experience with industry demands
Table A.29: No jobs available in line of work in local area and no jobs available at all in local area (\% of people who have worked in last 5 years or looked for job in last 5 years) by socio-economic and demographic characteristics, 2011-1

|  | No jobs in line of work in local area (Strongly agree/agree) |  | No jobs at all in local area (Strongly agree/agree) |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |
| Male | 34.2 | 31.0-37.3 | 7.6 | 5.9-9.4 | 1,120 | 2,955,691 |
| Female | 29.0* | 25.7-32.2 | 6.6 | 4.9-8.3 | 971 | 2,720,781 |
| Age |  |  |  |  |  |  |
| 45-54 | 29.6 | 25.9-33.4 | 6.1 | 4.2-8.1 | 657 | 2,873,871 |
| 55-64 | 33.2 | 30.1-36.3 | 7.8 | 6.1-9.6 | 952 | 2,107,911 |
| 65-74 | 35.4* | 31.1-39.7 | 9.0 | 6.5-11.5 | 482 | 694,690 |
| Marital status |  |  |  |  |  |  |
| Married | 32.2 | 29.5-34.9 | 6.4 | 5-7.8 | 1,474 | 4,085,323 |
| Not married | 29.8 | 25.7-33.8 | 8.8 | 6.2-11.3 | 609 | 1,568,846 |
| Education |  |  |  |  |  |  |
| Not finished HS | 33.3 | 29.8-36.9 | 9.0 | 6.8-11.1 | 893 | 2,386,594 |
| Finished HS | 30.9 | 26.8-35.1 | 6.8 | 4.6-8.9 | 600 | 1,676,306 |
| Bachelor + | 29.5 | 25.3-33.7 | 4.1* | 2.5-5.8 | 588 | 1,590,245 |
| Country of birth |  |  |  |  |  |  |
| Australia | 31.5 | 28.9-34.1 | 6.8 | 5.4-8.1 | 1,561 | 4,261,716 |
| Other Engl. spk. | 31.6 | 26.1-37.1 | 5.8 | $3.3-8.3$ | 360 | 931,132 |
| Non-Engl. spk. | 33.5 | 24.9-42.0 | 12.9 | 6.4-19.4 | 169 | 480,825 |
| Residence |  |  |  |  |  |  |
| Capital city | 31.7 | 28.8-34.5 | 6.8 | 5.3-8.3 | 1,323 | 3,569,301 |
| Other | 31.7 | 28.0-35.4 | 7.7 | 5.6-9.7 | 768 | 2,107,171 |
| Personal income |  |  |  |  |  |  |
| Up to \$20,000 | 41.8 | 35.1-48.6 | 14.8 | 9.8-19.8 | 267 | 607,249 |
| \$20,001-\$36,400 | 31.6* | 25.8-37.5 | 9.1 | $5.4-12.7$ | 342 | 873,325 |
| \$36,401-\$65,000 | 26.0* | 21.5-30.5 | 5.8* | $3.4-8.3$ | 448 | 1,252,529 |
| \$65,001+ | 26.4* | 22.2-30.7 | 4.5* | 2.6-6.4 | 469 | 1,479,828 |
| Total | 31.7 | 29.4-33.9 | 7.1 | 5.9-8.3 | 2,091 | 5,676,472 |

[^40]Table A.29.1: Logistic regression results for no jobs available in line of work in local area and no jobs available at all in local area, 2011-12

|  | No jobs in line of work in local area (Strongly agree/agree) |  | No jobs at all in local area (Strongly agree/agree) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.35* | -3.360 | -0.193 | -1.050 |
| Age |  |  |  |  |
| 2 | 0.197 | 1.71 | 0.315 | 1.47 |
| 3 | 0.284* | 2.04 | 0.418 | 1.71 |
| Not married | 0.002 | 0.02 | 0.302 | 1.64 |
| Education |  |  |  |  |
| 2 | 0.009 | 0.07 | -0.219 | -1.07 |
| 3 | -0.135 | -1.09 | -0.637* | -2.68 |
| Country of birth |  |  |  |  |
| 2 | -0.046 | -0.34 | -0.091 | -0.37 |
| 3 | -0.121 | -0.64 | 0.527 | 1.78 |
| Not capital city | -0.103 | -0.99 | 0.004 | 0.02 |
| Personal income |  |  |  |  |
| 2 | -0.357* | -2.02 | -0.414 | -1.58 |
| 3 | -0.626* | -3.65 | -0.876* | -3.19 |
| 4 | -0.521* | -2.97 | -0.912* | -3.10 |
| 5 | -0.073 | -0.44 | -0.685* | -2.63 |
| Constant | -0.164 | -0.87 | -1.885* | -6.21 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Re-training and up-skilling barriers
Table A.30: Training or up-skilling options would help do job better (\% of currently employed) by socio-economic and demographic characteristics, 2011-12

|  | IT/computers |  | Other training/ up-skilling |  | No training would help |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 29.8 | 26.1-33.5 | 49.4 | 45.4-53.4 | 29.2 | 25.7-32.8 | 766 | 2,247,752 |
| Female | 35.0 | 30.9-39.1 | 48.7 | 44.4-53.0 | 27.4 | 23.6-31.2 | 673 | 2,020,286 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 32.1 | 27.9-36.2 | 54.1 | 49.7-58.6 | 24.9 | 21.0-28.7 | 564 | 2,476,181 |
| 55-64 | 32.1 | 28.5-35.8 | 44.4* | 40.5-48.3 | 31.4* | 27.8-35.0 | 659 | 1,486,764 |
| 65-74 | 34.4 | 28.0-40.8 | 30.7* | 24.4-36.9 | 42.0* | 35.3-48.7 | 216 | 305,093 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 33.5 | 30.3-36.8 | 49.4 | 46.0-52.9 | 27.3 | 24.3-30.3 | 1,039 | 3,160,796 |
| Not married | 29.1 | 24.0-34.3 | 48.0 | 42.3-53.7 | 31.1 | 26.0-36.2 | 393 | 1,087,851 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 34.4 | 30.0-38.9 | 47.4 | 42.7-52.1 | 30.4 | 26.1-34.6 | 586 | 1,706,993 |
| Finished HS | 32.9 | 27.8-38.0 | 49.9 | 44.5-55.3 | 25.6 | 21.1-30.1 | 426 | 1,304,057 |
| Bachelor + | 28.7 | 23.9-33.4 | 50.1 | 44.8-55.5 | 28.6 | 23.7-33.4 | 423 | 1,243,832 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 33.9 | 30.7-37.2 | 48.7 | 45.2-52.1 | 27.7 | 24.8-30.7 | 1,081 | 3,223,447 |
| Other Engl. spk. | 25.1* | 19.4-30.8 | 53.4 | 46.4-60.4 | 28.6 | 22.4-34.8 | 246 | 700,609 |
| Non-Engl. spk. | 31.4 | 21.5-41.4 | 44.6 | 33.9-55.2 | 33.2 | 22.8-43.5 | 111 | 341,184 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 31.0 | 27.6-34.4 | 50.9 | 47.2-54.6 | 27.7 | 24.4-30.9 | 908 | 2,668,337 |
| Other | 34.3 | 29.6-39.0 | 46.0 | 41.1-50.8 | 29.5 | 25.2-33.8 | 531 | 1,599,701 |


| Personal income |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Up to \$20,000 | 36.2 | $24.6-47.8$ | 42.5 | $30.8-54.1$ | 35.3 | $25.1-45.6$ | 96 | 251,927 |
| $\$ 20,001-\$ 36,400$ | 32.3 | $25.2-39.5$ | 43.0 | $35.5-50.5$ | 35.0 | $27.6-42.3$ | 231 | 636,689 |
| $\$ 36,401-\$ 65,000$ | 35.5 | $30.0-40.9$ | 48.4 | $42.7-54.2$ | 25.4 | $20.4-30.4$ | 371 | $1,103,787$ |
| $\$ 65,001+$ | 31.2 | $26.2-36.1$ | 54.9 | $49.6-60.1$ | $24.0^{*}$ | $19.7-28.4$ | 427 | $1,394,511$ |

Public servant

| Yes | $37.8^{*}$ | $32.2-43.3$ | 52.9 | $47.3-58.6$ | 23.1 | $18.4-27.8$ | 376 | $1,163,243$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | 30.2 | $27.0-33.4$ | 47.7 | $44.3-51.2$ | $30.3^{\star}$ | $27.2-33.3$ | 1,059 | $3,093,475$ |
| Total | 32.3 | $\mathbf{2 9 . 5 - 3 5 . 0}$ | $\mathbf{4 9 . 1}$ | $\mathbf{4 6 . 1 - 5 2 . 0}$ | $\mathbf{2 8 . 4}$ | $\mathbf{2 5 . 8 - \mathbf { 3 1 . 0 }}$ | $\mathbf{1 , 4 3 9}$ | $\mathbf{4 , 2 6 8 , 0 3 8}$ |

[^41]Table A.30.1: Logistic regression results for training or up-skilling options would help do job better, 2011-12

|  | IT/computers |  | Other training/ up-skilling |  | No training would help |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z |
| Female | 0.336* | 2.73 | 0.042 | 0.36 | -0.249* | -1.97 |
| Age |  |  |  |  |  |  |
| 2 | 0.04 | 0.31 | -0.389* | -3.30 | 0.339* | 2.57 |
| 3 | 0.246 | 1.38 | -0.908* | -5.10 | $0.634 *$ | 3.56 |
| Not married | -0.274* | -2.05 | -0.032 | -0.25 | 0.223 | 1.67 |
| Education |  |  |  |  |  |  |
| 2 | -0.101 | -0.72 | -0.064 | -0.48 | -0.032 | -0.22 |
| 3 | -0.253 | -1.71 | -0.013 | -0.09 | 0.038 | 0.25 |
| Country of birth |  |  |  |  |  |  |
| 2 | -0.204 | -1.27 | 0.085 | 0.57 | 0.055 | 0.34 |
| 3 | -0.057 | -0.26 | -0.272 | -1.28 | 0.265 | 1.20 |
| Not capital city | -0.01 | -0.08 | -0.109 | -0.94 | 0.094 | 0.75 |
| Personal income |  |  |  |  |  |  |
| 2 | -0.077 | -0.29 | 0.159 | 0.62 | -0.106 | -0.42 |
| 3 | 0.208 | 0.84 | 0.298 | 1.23 | -0.575* | -2.34 |
| 4 | 0.127 | 0.50 | 0.434 | 1.76 | -0.567* | -2.27 |
| 5 | -0.082 | -0.32 | 0.254 | 1.02 | -0.217 | -0.88 |
| Public servant | -0.315* | -2.38 | -0.138 | -1.09 | 0.275 | 1.92 |
| Constant | -0.561 | -1.87 | -0.002 | -0.01 | -0.916* | -3.04 |

[^42]Table A.31: Training or up-skilling options would help gain promotion/get better job elsewhere/get better paid job (\% of currently employed) by socio-economic and demographic characteristics, 2011-12

|  | IT/computers |  | Other training/ up-skilling |  | No training would help |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% Cl |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 24.1 | 20.6-27.6 | 51.7 | 47.7-55.7 | 32.8 | 29.1-36.5 | 766 | 2,247,752 |
| Female | 25.6 | 21.8-29.5 | 55.8 | 51.6-60.1 | 28.5 | 24.8-32.2 | 673 | 2,020,286 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 25.7 | 21.7-29.6 | 60.7 | 51.6-60.1 | 25.1 | 21.3-28.8 | 564 | 2,476,181 |
| 55-64 | 23.3 | 20.0-26.6 | 47.9* | 44.0-51.9 | 35.8* | 32.0-39.5 | 659 | 1,486,764 |
| 65-74 | 25.6 | 19.7-31.4 | 24.6* | 18.8-30.3 | 53.2* | 46.5-60.0 | 216 | 305,093 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 25.5 | 22.5-28.6 | 53.8 | 50.4-57.2 | 30.8 | 27.7-33.8 | 1,039 | 3,160,796 |
| Not married | 23.3 | 18.4-28.1 | 53.1 | 47.5-58.7 | 30.9 | 25.9-35.9 | 393 | 1,087,851 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 32.0 | 27.6-36.4 | 52.1 | 47.5-56.8 | 28.4 | 24.5-32.5 | 586 | 1,706,993 |
| Finished HS | 22.1* | 17.4-26.7 | 55.0 | 49.7-60.3 | 30.4 | 25.7-35.2 | 426 | 1,304,057 |
| Bachelor + | 17.9* | 13.8-22.0 | 54.5 | 49.2-59.8 | 33.9 | 29.0-38.9 | 423 | 1,243,832 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 25.2 | 22.2-28.2 | 52.9 | 49.5-56.3 | 30.5 | 27.5-33.5 | 1,081 | 3,223,447 |
| Other Engl. spk. | 24.8 | 18.5-31.0 | 55.2 | 48.3-62.2 | 31.6 | 25.3-37.8 | 246 | 700,609 |
| Non-Engl. spk. | 22.2 | 13.3-31.1 | 57.7 | 47.2-68.2 | 31.0 | 21.0-41.0 | 111 | 341,184 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 25.1 | 21.8-28.4 | 55.3 | 51.6-58.9 | 29.8 | 26.5-33.0 | 908 | 2,668,337 |
| Other | 24.5 | 20.3-28.7 | 50.9 | 46.1-55.7 | 32.5 | 28.1-36.9 | 531 | 1,599,701 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 31.7 | 20.5-42.9 | 52.5 | 41.2-63.8 | 31.4 | 21.7-41.1 | 96 | 251,927 |
| \$20,001-\$36,400 | 31.9 | 24.6-39.2 | 48.4 | 40.8-56.1 | 29.3 | 22.7-36.0 | 231 | 636,689 |
| \$36,401-\$65,000 | 25.7 | 20.7-30.7 | 55.6 | 50.0-61.3 | 28.0 | 22.9-33.1 | 371 | 1,103,787 |
| \$65,001+ | 21.6 | 17.1-26.0 | 57.7 | 52.6-62.9 | 30.5 | 25.8-35.2 | 427 | 1,394,511 |
| Public servant |  |  |  |  |  |  |  |  |
| Yes | 22.6 | 17.7-27.6 | 60.0 | 54.5-65.5 | 27.2 | 22.3-33.1 | 376 | 1,163,243 |
| No | 25.7 | 22.7-28.8 | 51.3* | 47.9-54.8 | 32.0 | 28.9-35.1 | 1,059 | 3,093,475 |
| Total | 24.8 | 22.3-27.4 | 53.6 | 50.7-56.6 | 30.8 | 28.2-33.4 | 1,439 | 4,268,038 |

Table A.31.1: Logistic regression results for training or up-skilling options would help gain promotion/ get better job elsewhere/get better paid job, 2011-12

|  | IT/computers |  | Other training/ up-skilling |  | No training would help |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Coef. | $\mathbf{z}$ | Coef. | z | Coef. | z |
| Female | -0.002 | -0.02 | 0.146 | 1.24 | -0.103 | -0.84 |
| Age |  |  |  |  |  |  |
| 2 | -0.125 | -0.90 | $-0.500^{\star}$ | -4.21 | $0.523^{\star}$ | 4.06 |
| 3 | 0.010 | 0.05 | $-1.428^{\star}$ | -7.64 | $1.11^{\star}$ | 6.30 |
| Not married | -0.068 | -0.47 | -0.037 | -0.29 | 0.045 | 0.34 |
| Education |  |  |  |  |  |  |
| 2 | $-0.551^{\star}$ | -3.60 | -0.086 | -0.640 | 0.272 | 1.93 |
| 3 | $-0.611^{\star}$ | -3.74 | -0.154 | -1.10 | $0.359^{\star}$ | 2.47 |
| Country of birth |  |  |  |  |  |  |
| 2 | 0.041 | 0.240 | 0.025 | 0.17 | 0.032 | 0.21 |
| 3 | -0.088 | -0.350 | 0.187 | 0.88 | -0.122 | -0.54 |
| Not capital city | -0.043 | -0.320 | -0.121 | -1.03 | 0.109 | 0.90 |
| Personal income |  |  |  |  |  |  |
| 2 | 0.201 | 0.73 | 0.013 | 0.05 | -0.218 | -0.83 |
| 3 | 0.025 | 0.10 | 0.193 | 0.80 | -0.28 | -1.13 |
| 4 | -0.134 | -0.49 | 0.145 | 0.59 | -0.037 | -0.15 |
| 5 | -0.251 | -0.91 | -0.12 | -0.49 | 0.196 | 0.79 |
| Public servant | 0.154 | 1.01 | $-0.265^{\star}$ | -2.05 | 0.176 | 1.29 |
| Constant | $-0.790^{\star}$ | -2.43 | 0.537 | 1.85 | $-1.299^{\star}$ | -4.32 |

[^43]Table A.32: Training or up-skilling options would help find more hours (\% of part-time workers) by socio-economic and demographic characteristics, 2011-12

|  | IT/computers |  | Other training/ up-skilling |  | No training would help |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 17.6 | 11.6-23.5 | 27.8 | 20.6-35.0 | 54.5 | 46.7-62.4 | 201 | 450,170 |
| Female | 19.7 | 15.1-24.3 | 37.6* | 31.9-43.2 | 46.4 | 40.6-52.2 | 378 | 1,116,742 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 21.4 | 15.0-27.7 | 37.5 | 29.9-45.1 | 44.5 | 36.6-52.4 | 184 | 795,353 |
| 55-64 | 15.5 | 11.1-19.8 | 34.6 | 28.7-40.5 | 52.3 | 46.2-58.4 | 274 | 596,586 |
| 65-74 | 21.0 | 13.7-28.2 | 22.7* | 15.2-30.2 | 56.0 | 47.0-65.0 | 121 | 174,973 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 18.8 | 14.4-23.1 | 35.5 | 30.2-40.9 | 48.1 | 42.6-53.6 | 421 | 1,172,162 |
| Not married | 20.1 | 13.0-27.2 | 32.6 | 24.2-40.9 | 50.8 | 41.7-59.9 | 157 | 393,345 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 27.5 | 20.8-34.2 | 36.5 | 29.5-43.5 | 45.2 | 37.9-52.5 | 251 | 679,389 |
| Finished HS | 11.3* | 6.6-16.0 | 34.2 | 25.5-42.9 | 49.3 | 40.3-58.3 | 161 | 472,979 |
| Bachelor + | 14.2* | 8.4-20.1 | 32.7 | 24.6-40.8 | 53.7 | 45.2-62.3 | 166 | 413,184 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 18.9 | 14.6-23.1 | 36.0 | 30.8-41.2 | 48.4 | 43.1-53.8 | 448 | 1,223,663 |
| Other Engl. spk. | 22.4 | 12.3-32.6 | 34.4 | 22.5-46.4 | 47.4 | 35.0-59.9 | 87 | 223,984 |
| Non-Engl. spk. | 14.7 | 3.8-25.7 | 22.3 | 9.1-35.5 | 54.2 | 37.0-71.3 | 44 | 119,265 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 17.0 | 12.5-21.5 | 32.5 | 26.7-38.3 | 52.2 | 46.1-58.4 | 353 | 952,141 |
| Other | 22.3 | 16.0-28.6 | 38.3 | 31.0-45.5 | 43.3 | 36.0-50.6 | 226 | 614,772 |

Personal income

| Up to \$20,000 | 19.8 | $9.5-30.1$ | 49.8 | $37.2-62.4$ | 34.2 | $22.8-45.5$ | 81 | 218,471 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 20,001-\$ 36,400$ | 25.7 | $17.9-33.4$ | 37.8 | $29.4-46.2$ | 43.9 | $35.1-52.8$ | 179 | 509,976 |
| $\$ 36,401-\$ 65,000$ | 16.0 | $9.1-22.8$ | $30.1^{\star}$ | $21.6-38.5$ | $51.7^{\star}$ | $42.1-61.3$ | 133 | 366,214 |
| $\$ 65,001+$ | 17.1 | $6.8-27.4$ | $20.0^{\star}$ | $9.0-31.0$ | $62.5^{\star}$ | $49.1-75.9$ | 62 | 167,109 |

Public servant

| Yes | 15.5 | $8.4-22.7$ | 31.5 | $22.3-40.8$ | 52.4 | $42.4-62.4$ | 128 | 367,921 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | 20.3 | $16.0-24.7$ | 36.0 | $30.8-41.3$ | 47.7 | $42.3-53.1$ | 448 | $1,189,441$ |
| Total | $\mathbf{1 9 . 1}$ | $\mathbf{1 5 . 4 - \mathbf { 2 2 . 8 }}$ | $\mathbf{3 4 . 8}$ | $\mathbf{3 0 . 2 - \mathbf { 3 9 . 3 }}$ | $\mathbf{4 8 . 7}$ | $\mathbf{4 4 . 0 - 5 3 . 5}$ | $\mathbf{5 7 9}$ | $\mathbf{1 , 5 6 6 , 9 1 2}$ |
| Average more hours <br> per week like to work | $\mathbf{1 4 . 5}$ | $\mathbf{1 1 . 5 - \mathbf { 1 7 . 4 }}$ | $\mathbf{1 3 . 7}$ | $\mathbf{1 1 . 9 - \mathbf { 1 5 . 6 }}$ | $\mathbf{-}$ |  |  |  |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.32.1: Logistic regression results of training or up-skilling options would help find more hours, 2011-12

|  | IT/computers |  | Other training/ up-skilling |  | No training would help |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z |
| Female | -0.149 | -0.590 | 0.215 | 1.00 | 0.007 | 0.03 |
| Age |  |  |  |  |  |  |
| 2 | -0.448 | -1.74 | -0.176 | -0.84 | 0.418* | 2.05 |
| 3 | -0.151 | -0.48 | -0.643* | -2.23 | 0.475 | 1.81 |
| Not married | 0.139 | 0.56 | 0.013 | 0.06 | 0.011 | 0.06 |
| Education |  |  |  |  |  |  |
| 2 | -0.711* | -2.53 | -0.189 | -0.83 | 0.200 | 0.93 |
| 3 | -0.579* | -2.01 | 0.008 | 0.04 | 0.240 | 1.07 |
| Country of birth |  |  |  |  |  |  |
| 2 | 0.495 | 1.66 | -0.04 | -0.15 | -0.254 | -1.02 |
| 3 | -0.004 | -0.01 | -0.59 | -1.51 | 0.043 | 0.13 |
| Not capital city | 0.185 | 0.81 | 0.177 | 0.92 | -0.321 | -1.77 |
| Personal income |  |  |  |  |  |  |
| 2 | 0.348 | 1.02 | -0.289 | -1.03 | 0.263 | 0.94 |
| 3 | -0.033 | -0.09 | -0.438 | -1.45 | 0.405 | 1.36 |
| 4 | 0.021 | 0.04 | -1.279* | -3.00 | 1.046* | 2.78 |
| 5 | -0.38 | -0.96 | -0.797* | -2.53 | 0.919* | 3.04 |
| Public servant | 0.161 | 0.57 | 0.09 | 0.39 | -0.124 | -0.58 |
| Constant | -1.149* | -2.27 | -0.225 | -0.53 | -0.621 | -1.52 |

[^44]Table A.33: Respondent perception of whether training or up-skilling options would help find a job (\% of people not working and not fully retired and have worked or looked for job in last 5 years) by socio-economic and demographic characteristics, 2011-12

|  | IT/computers |  | Other training/ up-skilling |  | No training would help |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 31.2 | 20.7-41.6 | 35.7 | 25.4-46 | 42.2 | 31.8-52.5 | 112 | 294,334 |
| Female | 33.2 | 22.5-43.8 | 62.4 | 52.1-72.7 | 19.6* | 12.0-27.3 | 108 | 331,036 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 38.9 | 26.8-51.1 | 61.1 | 49.2-72.9 | 19.8 | 10.5-29.1 | 75 | 339,375 |
| 55-64 | 23.3 | 15.1-31.6 | 40.5 | 31.0-50.0 | 40.5* | 30.9-50.0 | 110 | 235,405 |
| 65-74 | 28.7 | 13.5-44.0 | 18.1 | $5.7-30.6$ | 52.7* | 35.9-69.6 | 35 | 50,590 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 29.9 | 20.2-39.6 | 59.1 | 49.6-68.6 | 26.4 | 18.6-34.3 | 138 | 385,514 |
| Not married | 36.0 | 24.2-47.7 | 34.9 | 23.4-46.5 | 36.4 | 24.8-48.0 | 82 | 239,856 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 40.2 | 28.3-52.1 | 54.9 | 43.2-66.6 | 20.2 | 11.6-28.9 | 93 | 287,521 |
| Finished HS | 31.8 | 17.4-46.1 | 51.1 | 36.0-66.2 | 31.2 | 17.9-44.7 | 59 | 160,703 |
| Bachelor + | 20.3* | 9.0-31.6 | 40.7 | 25.7-55.8 | 44.8* | 30.7-59.0 | 65 | 171,562 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 33.2 | 24.7-41.6 | 47.8 | 38.7-56.8 | 27.6 | 20.0-35.3 | 160 | 458,327 |
| Other Engl. spk. | 24.5 | 5.2-43.8 | 58.8 | 41.1-76.6 | 36.8 | 19.7-53.8 | 37 | 93,180 |
| Non-Engl. spk. | 36.2 | 9.8-62.5 | 51.4 | 25.5-77.2 | 38.1 | 14.9-61.3 | 23 | 73,862 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 28.5 | 19.4-37.7 | 53.0 | 43.1-62.9 | 29.2 | 20.9-37.6 | 140 | 409,016 |
| Other | 39.2 | 26.7-51.7 | 43.9 | 31.5-56.3 | 32.1 | 21.1-43.1 | 80 | 216,354 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 38.4 | 24.3-52.5 | 43.3 | 29.6-57.0 | 26.6 | 14.4-38.8 | 61 | 169,552 |
| \$20,001-\$36,400 | 18.8 | 3.6-34.0 | 40.2 | 17.2-63.2 | 41.8 | 20.0-63.6 | 28 | 88,301 |
| \$36,401-\$65,000 | 30.6 | 5.8-55.5 | 29.4 | 4.8-54.0 | 46.5 | 22.3-70.8 | 20 | 44,104 |
| \$65,001+ | 22.7 | 1.7-43.7 | 33.8 | 11.6-56.1 | 49.9 | 25.6-74.2 | 19 | 39,074 |
| Total | 32.2 | 24.7-39.7 | 49.9 | 42.0-57.7 | 30.2 | 23.5-36.9 | 220 | 625,370 |
| Average more hours per week like to work | 26.1 | 22.9-29.2 | 26.7 | 22.5-30.8 |  |  |  |  |

[^45]Table A.33.1: Logistic regression results for respondent perception of whether training or up-skilling options would help find a job, 2011-12

|  | IT/computers |  | Other training/ up-skilling |  | No training would help |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Coef. | $\mathbf{z}$ | Coef. | $\mathbf{z}$ | Coef. | z |
| Female | 0.171 | 0.49 | 0.457 | 1.35 | -0.616 | -1.770 |
| Age |  |  |  |  |  |  |
| 2 | -0.415 | -1.08 | -0.321 | -0.87 | 0.409 | 1.01 |
| 3 | -0.022 | -0.04 | $-1.247^{\star}$ | -2.32 | 0.75 | 1.48 |
| Not married | 0.460 | 1.27 | $-0.919^{\star}$ | -2.50 | 0.351 | 0.96 |
| Education |  |  |  |  |  |  |
| 2 | -0.060 | -0.15 | -0.306 | -0.76 | 0.39 | 0.92 |
| 3 | $-1.169^{\star}$ | -2.27 | $-1.233^{\star}$ | -2.56 | $1.68^{\star}$ | 3.63 |
| Country of birth |  |  |  |  |  |  |
| 2 | -0.651 | -1.25 | 0.268 | 0.62 | 0.539 | 1.20 |
| 3 | 0.516 | 0.80 | -0.742 | -1.11 | 0.349 | 0.56 |
| Not capital city | 0.197 | 0.56 | -0.507 | -1.42 | 0.345 | 0.95 |
| Personal income |  |  |  |  |  |  |
| 2 | -0.599 | -1.06 | -0.31 | -0.60 | 0.567 | 1.10 |
| 3 | 0.004 | 0.01 | -0.588 | -0.92 | 0.084 | 0.14 |
| 4 | -0.136 | -0.20 | 0.048 | 0.08 | 0.106 | 0.17 |
| 5 | 0.16 | 0.39 | -0.27 | -0.66 | 0.252 | 0.59 |
| Public servant | -0.323 | -0.80 | 0.192 | 0.48 | 0.268 | 0.66 |
| Constant | -0.401 | -0.67 | 0.703 | 1.17 | $-2.019^{\star}$ | -3.05 |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.34: Type of workplace training attended in past 5 years (\% of people who have worked in last 5 years), 2011-12

|  | $\%$ | $95 \% \mathrm{Cl}$ |
| :--- | ---: | ---: |
| Off-the-job education/training paid for by employer | 33.4 | $31.0-35.8$ |
| Off-the-job education/training paid for by yourself | 23.3 | $21.1-25.5$ |
| On-the-job education/ training | 40.7 | $38.2-43.2$ |
| Other work-related education/training | 12.8 | $11.1-14.4$ |
| Any training | 71.6 | $69.4-73.8$ |
| N Unw | 2,021 |  |
| NW | $5,513,110$ |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Table A.35: Attended any work-related training in last 5 years (\% of people who have worked in last 5 years), if rated any training very or somewhat useful (\% of people who have attended any work-related training in last 5 years) and any training wanted to attend in last 5 years but unable to (\% of people who have worked in last 5 years) by socio-economic and demographic characteristics, 2011-12

|  | Attended any work-related training in last 5 years |  |  |  | Training rated very or somewhat useful |  |  |  | Any training wanted to attend in last 5 years but unable to |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 69.8 | 66.8-72.8 | 1,085 | 2,888,724 | 88.2 | 85.4-91.0 | 612 | 1,774,403 | 34.5 | 31.1-37.8 | 1,085 | 2,888,724 |
| Female | 73.6 | 70.4-76.8 | 936 | 2,624,385 | 92.2* | 89.9-94.6 | 611 | 1,777,573 | 40.0* | 36.4-43.7 | 936 | 2,624,385 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 45-54 | 78.1 | 74.6-81.5 | 645 | 2,817,637 | 91.4 | 88.7-94.2 | 467 | 2,011,027 | 44.4 | 40.3-48.5 | 645 | 2,817,637 |
| 55-64 | 70.0* | 67.0-73.1 | 916 | 2,031,591 | 88.8 | 86.3-91.4 | 563 | 1,258,268 | 32.6* | 29.5-35.7 | 916 | 2,031,591 |
| 65-74 | 48.9* | 44.2-53.5 | 460 | 663,882 | 87.5 | 83.2-91.8 | 193 | 282,682 | 20.1* | 16.4-23.8 | 460 | 663,882 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |
| Married | 72.2 | 69.6-74.8 | 1,427 | 3,981,477 | 90.8 | 88.7-92.9 | 877 | 2,609,773 | 37.2 | 34.3-40.1 | 1,427 | 3,981,477 |
| Not married | 70.1 | 65.9-74.3 | 586 | 1,509,330 | 88.3 | 84.6-92.0 | 342 | 927,212 | 37.3 | 32.7-41.8 | 586 | 1,509,330 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 62.5 | 58.7-66.2 | 856 | 2,429,828 | 85.1 | 81.3-88.8 | 500 | 1,430,126 | 32.5 | 28.8-36.3 | 856 | 2,429,828 |
| Finished HS | 74.6* | 70.8-78.5 | 580 | 1,623,728 | 92.2* | 89.4-95.0 | 406 | 1,210,390 | 37.4 | 32.9-41.9 | 580 | 1,623,728 |
| Bachelor + | 82.3* | 78.8-85.7 | 575 | 1,566,227 | 94.0* | 91.6-96.3 | 452 | 1,288,888 | 43.4* | 38.8-48.1 | 575 | 1,566,227 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |  |  |
| Australia | 72.5 | 70.0-74.9 | 1,518 | 4,156,252 | 90.0 | 87.8-92.1 | 926 | 2,702,126 | 37.2 | 34.4-40.0 | 1,518 | 4,156,252 |
| Other Engl. spk. | 71.9 | 66.7-77.2 | 346 | 903,384 | 88.4 | 88.4-95.5 | 89 | 252,128 | 34.4 | 28.6-40.3 | 346 | 903,384 |
| Non-Engl. spk. | 63.3 | 54.0-72.6 | 156 | 450,675 | 92.0 | 81.8-94.9 | 208 | 597,723 | 41.9 | 32.4-51.3 | 156 | 450,675 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital city | 70.9 | 68.1-73.7 | 1,282 | 3,474,075 | 90.7 | 88.6-92.9 | 775 | 2,229,322 | 38.6 | 35.5-41.7 | 1,282 | 3,474,075 |
| Other | 72.8 | 69.3-76.3 | 739 | 2,039,035 | 89.2 | 86.1-92.4 | 448 | 1,322,654 | 34.6 | 30.6-38.6 | 739 | 2,039,035 |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |  |  |  |  |  |  |  |  |

Table A. 35 continues

|  | Attended any work-related training in last 5 years |  |  |  | Training rated very or somewhat useful |  |  |  | Any training wanted to attend in last 5 years but unable to |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Personal income |  |  |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 57.4 | 50.4-64.5 | 239 | 550,487 | 85.8 | 79.2-92.4 | 107 | 269,430 | 32.9 | 25.7-40.0 | 239 | 550,487 |
| \$20,001-\$36,400 | 64.5 | 58.4-70.6 | 327 | 835,465 | 88.9 | 84.1-93.7 | 173 | 474,319 | 34.2 | 27.9-40.5 | 327 | 835,465 |
| \$36,401-\$65,000 | 74.9* | 70.3-79.4 | 446 | 1,248,076 | 89.2 | 85.4-93.1 | 292 | 833,913 | 36.6 | 31.5-41.6 | 446 | 1,248,076 |
| \$65,001+ | 84.3* | 80.8-87.8 | 468 | 1,477,849 | 93.1* | 90.2-96.0 | 359 | 1,159,507 | 44.5* | 39.4-49.6 | 468 | 1,477,849 |
| Public servant |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 82.8 | 79.5-86.0 | 585 | 1,610,230 | 91.1 | 88.0-94.2 | 460 | 1,333,027 | 39.1 | 34.5-43.8 | 585 | 1,610,230 |
| No | 67.0* | 64.3-69.8 | 1,425 | 3,877,519 | 89.7 | 87.5-91.9 | 898 | 2,591,037 | 36.3 | 33.5-39.3 | 1,425 | 3,877,519 |
| Total | 71.6 | 69.4-73.8 | 2,021 | 5,513,110 | 90.2 | 88.4-92.0 | 1,223 | 3,551,976 | 37.1 | 34.7-39.6 | 2,021 | 5,513,110 |

Table A.35.1: Logistic regression results for attended any work-related training in last 5 years, if rated any training very or somewhat useful and any training wanted to attend in last 5 years but unable to, 2011-12

|  | Attended any work-related training in last 5 years |  | Training rated very or somewhat useful |  | Any training unable to attend in last 5 years but wanted to |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z |
| Female | 0.444* | -3.98 | 0.627* | 2.98 | 0.402* | 3.78 |
| Age |  |  |  |  |  |  |
| 2 | -0.358* | 2.80 | -0.279 | -1.25 | -0.522* | -4.67 |
| 3 | -1.102* | 7.55 | -0.055 | -0.18 | -1.056* | -7.02 |
| Not married | 0.023 | 0.20 | -0.313 | -1.46 | 0.119 | 1.06 |
| Education |  |  |  |  |  |  |
| 2 | 0.317* | -2.54 | 0.585* | 2.41 | 0.137 | 1.11 |
| 3 | $0.742^{*}$ | -5.32 | $0.742^{*}$ | 2.92 | $0.468^{*}$ | 3.67 |
| Country of birth |  |  |  |  |  |  |
| 2 | -0.062 | 0.44 | -0.059 | -0.22 | -0.089 | -0.65 |
| 3 | -0.262 | 1.30 | -0.468 | -1.31 | 0.065 | 0.34 |
| Not capital city | 0.13 | -1.17 | 0.046 | 0.22 | -0.1 | -0.93 |
| Personal income |  |  |  |  |  |  |
| 2 | 0.241 | -1.32 | 0.329 | 0.94 | 0.019 | 0.10 |
| 3 | 0.659* | -3.67 | 0.538 | 1.66 | 0.175 | 0.95 |
| 4 | 1.091* | -5.61 | $0.981 *$ | 2.78 | $0.383^{*}$ | 2.04 |
| 5 | 0.109 | -0.64 | 0.444 | 1.35 | -0.08 | -0.43 |
| Public servant | -0.601* | 4.77 | -0.117 | -0.54 | 0.069 | 0.61 |
| Constant | 0.715* | -3.10 | 1.462* | 3.58 | -0.761* | -3.35 |

[^46]Table A.36: Reasons for not being able to attend training (\% of those where there was training unable to attend in last 5 years) by socio-economic and demographic characteristics, 2011-12

|  | Employer wouldn't fund/ allow attendance |  | Could not afford it |  | Could not fit in with other work commitments |  | Training inappropriate for skills/ experience |  | Training inappropriate for language ability |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% Cl | \% | 95\% Cl | \% | 95\% Cl | \% | 95\% CI | \% | 95\% Cl |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 32.1 | 26.2-37.9 | 41.1 | 35.0-47.2 | 62.7 | 56.8-68.7 | 7.0 | 4.1-9.9 | 2.0 | 0.5-3.5 | 326 | 995,661 |
| Female | 33.3 | 27.5-39.0 | 46.1 | 40.1-52.1 | 65.9 | 60.2-71.6 | 7.1 | 4.0-10.3 | 0.7 | -0.1-1.5 | 350 | 1,050,751 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 45-54 | 38.2 | 32.2-44.2 | 46.4 | 40.2-52.6 | 66.3 | 60.4-72.2 | 6.6 | 3.5-9.6 | 1.4 | 0.2-2.6 | 287 | 1,250,375 |
| 55-64 | 24.2* | 19.2-29.2 | 39.2 | 33.5-44.9 | 62.9 | 57.3-68.6 | 7.2 | 4.1-10.2 | 0.6 | 0.0-1.5 | 297 | 662,608 |
| 65-74 | 23.1* | 14.3-32.0 | 39.7 | 29.5-49.8 | 53.4* | 43.0-63.8 | 11.1 | 4.8-17.4 | 4.5 | 0.1-8.8 | 92 | 133,429 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |
| Married | 30.7 | 26.0-35.5 | 41.8 | 36.7-46.9 | 65.6 | 60.8-70.5 | 7.0 | 4.4-9.5 | 0.7 | 0.0-1.3 | 472 | 1,480,852 |
| Not married | 38.0 | 30.1-45.9 | 48.6 | 40.8-56.5 | 60.8 | 53.2-68.4 | 6.9 | 3.2-10.6 | 2.6 | 0.3-4.9 | 203 | 562,647 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 30.6 | 23.8-37.5 | 44.8 | 37.6-52.0 | 64.3 | 57.3-71.2 | 8.8 | 5.2-12.5 | 2.3 | 0.4-4.2 | 245 | 748,045 |
| Finished HS | 37.2 | 29.6-44.7 | 41.3 | 33.6-49.0 | 60.0 | 52.4-67.7 | 9.2 | 4.3-14.0 | 1.1 | 0.0-2.5 | 199 | 307,371 |
| Bachelor + | 31.3 | 24.3-38.2 | 45.0 | 37.6-52.4 | 69.4 | 62.9-76.0 | 3.3* | 0.9-5.8 | 0.4 | 0.0-1.3 | 228 | 679,737 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |  |  |
| Australia | 32.0 | 27.4-36.7 | 42.8 | 37.9-47.7 | 64.4 | 59.6-69.1 | 7.1 | 4.5-9.6 | 0.9 | 0.0-1.7 | 509 | 1,546,548 |
| Other Engl. spk. | 32.2 | 22.3-42.2 | 45.5 | 34.8-56.2 | 59.4 | 48.9-69.9 | 7.3 | 2.7-11.8 | 1.4 | 0.0-3.1 | 111 | 311,178 |
| Non-Engl. spk. | 39.0 | 23.4-54.6 | 47.8 | 32.1-63.4 | 72.5 | 60.0-84.9 | 6.9 | 0.6-13.2 | 5.0 | 0.0-10.7 | 56 | 188,686 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital city | 33.0 | 27.9-38.0 | 46.5 | 41.2-51.8 | 64.7 | 59.6-69.7 | 6.6 | 4.0-9.3 | 1.3 | 0.3-2.4 | 445 | 1,341,239 |
| Other | 32.2 | 25.3-39.1 | 38.2 | 31.1-45.2 | 63.7 | 56.7-70.8 | 7.9 | 4.3-11.6 | 1.3 | 0.0-2.7 | 231 | 705,173 |

Table A. 36 continues

|  | Employer wouldn't fund/ allow attendance |  | Could not afford it |  | Could not fit in with other work commitments |  | Training inappropriate for skills/ experience |  | Training inappropriate for language ability |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Personal income |  |  |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 15.2 | 6.3-24.1 | 58.4 | 45.0-71.7 | 50.7 | 36.9-64.5 | 16.1 | 3.1-29.0 | 5.0 | 0.0-11.0 | 67 | 180,856 |
| \$20,001-\$36,400 | 26.9 | 15.5-38.4 | 47.7 | 36.1-59.4 | 62.7 | 51.5-73.9 | 7.2 | 2.3-12.2 | 1.0 | 0.0-2.3 | 99 | 285,687 |
| \$36,401-\$65,000 | 41.1* | 32.5-49.6 | 43.2 | 34.6-51.8 | 66.5 | 58.3-74.6 | 9.0 | 4.7-13.4 | 1.1 | 0.0-2.6 | 156 | 456,735 |
| \$65,001+ | 40.3* | 32.6-47.9 | $37.6^{*}$ | 30.0-45.2 | $66.5^{*}$ | 59.3-73.7 | 4.6 | 1.4-7.9 | 0.9 | 0.0-2.2 | 196 | 657,724 |
| Public servant |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 40.3 | 32.5-48.2 | 45.9 | 38.0-53.8 | 61.2 | 53.4-69.0 | 6.9 | 3.2-10.6 | 0.9 | 0.0-2.1 | 205 | 1,610,230 |
| No | 29.1* | 24.4-33.9 | 42.5 | 37.5-47.6 | 65.7 | 61.0-70.6 | 7.0 | 4.4-9.7 | 1.5 | 0.0-2.6 | 468 | 3,877,519 |
| Total | 32.7 | 28.6-36.8 | 43.6 | 39.4-47.9 | 64.4 | 60.3-68.5 | 7.1 | 4.9-9.2 | 1.3 | 0.5-2.2 | 676 | 2,046,412 |

*p<0.05; Source: Authors' calculuations from the 2011-12 Bariers to Employment tor Mature Age Austraians Survey.

Table A.36.1: Logistic regression results for reasons for not being able to attend training, 2011-12

|  | Employerwouldn't fund/allowattendance |  | Could not afford it |  | Could not fit in with other work commitments |  | Training inappropriate for their skills/ experience |  | Training inappropriate for language ability |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z | Coef. | z | Coef. | z |
| Female | 0.103 | 0.54 | 0.054 | 0.31 | 0.275 | 1.56 | -0.317 | -0.97 | -1.952* | -2.26 |
| Age |  |  |  |  |  |  |  |  |  |  |
| 2 | -0.852* | -4.27 | -0.331 | -1.86 | -0.146 | -0.80 | 0.001 | 0.00 | -1.071 | -1.17 |
| 3 | -0.541 | -1.81 | -0.383 | -1.45 | -0.428 | -1.62 | 0.609 | 1.39 | 0.597 | 0.71 |
| Not married | 0.303 | 1.49 | 0.209 | 1.15 | -0.177 | -0.95 | -0.083 | -0.240 | 1.606* | 2.16 |
| Education |  |  |  |  |  |  |  |  |  |  |
| 2 | 0.26 | 1.13 | -0.157 | -0.75 | -0.304 | -1.44 | -0.037 | -0.10 | -1.43 | -1.55 |
| 3 | -0.071 | -0.30 | -0.044 | -0.21 | 0.03 | 0.14 | -0.961* | -2.13 | -2.00 | -1.68 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |
| 2 | 0.073 | 0.29 | 0.23 | 1.02 | -0.177 | -0.78 | 0.422 | 1.06 | 1.351 | 1.53 |
| 3 | 0.522 | 1.59 | 0.608* | 1.99 | 0.007 | 0.02 | 0.446 | 0.77 | 2.462* | 2.44 |
| Not capital city | -0.011 | -0.06 | -0.186 | -1.06 | 0.035 | 0.19 | 0.122 | 0.38 | 0.197 | 0.280 |
| Personal income |  |  |  |  |  |  |  |  |  |  |
| 2 | 0.066 | 0.15 | -0.37 | -1.14 | 0.473 | 1.44 | -0.195 | -0.36 | -1.219 | -1.16 |
| 3 | 1.209* | 3.19 | -0.56 | -1.84 | 0.689* | 2.24 | 0.117 | 0.24 | -0.964 | -0.96 |
| 4 | 1.149* | 3.02 | -0.902* | -2.94 | 0.674* | 2.20 | -0.735 | -1.31 | -1.159 | -1.13 |
| 5 | 0.304 | 0.75 | -0.516 | -1.65 | 0.604 | 1.91 | -1.038 | -1.67 | -1.638 | -1.28 |
| Public servant | -0.419* | -2.12 | -0.169 | -0.93 | 0.122 | 0.65 | -0.322 | -0.95 | -0.002 | 0.00 |
| Constant | $-1.156^{*}$ | -2.65 | 0.509 | 1.41 | 0.058 | 0.16 | -1.791* | -2.86 | $-3.039 *$ | -2.39 |

[^47]Care-giving responsibilities
Table A.37: Care-givers (\% of total population) by socio-economic and demographic characteristics, 2011-12

|  | Care-givers (\% of population) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |
| Male | 22.0 | 19.5-24.6 | 1,505 | 3,628,392 |
| Female | 34.4* | 31.5-37.3 | 1,502 | 3,716,645 |
| Age |  |  |  |  |
| 45-54 | 35.1 | 31.3-39.0 | 700 | 3,064,368 |
| 55-64 | 25.1* | 22.5-27.7 | 1,189 | 2,597,009 |
| 65-74 | 20.9* | 18.4-23.3 | 1,118 | 1,683,660 |
| Marital status |  |  |  |  |
| Married | 29.9 | 27.5-32.2 | 2,051 | 5,100,317 |
| Not married | 24.4* | 20.9-27.8 | 944 | 2,209,959 |
| Employment status |  |  |  |  |
| Employed | 28.3 | 25.5-31.1 | 1,439 | 4,268,038 |
| Not employed \& not retired | 38.2* | 31.4-45.0 | 294 | 835,421 |
| Retired | 24.6 | 22.0-27.1 | 1,274 | 2,241,578 |
| Education |  |  |  |  |
| Not finished HS | 25.8 | 23.0-28.6 | 1,433 | 3,371,225 |
| Finished HS | 28.0 | 24.3-31.7 | 818 | 2,080,344 |
| Bachelor + | 33.5* | 29.3-37.6 | 718 | 1,821,527 |
| Country of birth |  |  |  |  |
| Australia | 28.5 | 26.3-30.8 | 2,252 | 5,531,190 |
| Other Engl. spk. | 24.0 | 19.6-28.4 | 513 | 1,194,813 |
| Non-Engl. spk. | 35.0 | 27.3-42.7 | 238 | 609,902 |
| Residence |  |  |  |  |
| Capital city | 30.2 | 27.6-32.8 | 1,834 | 4,498,688 |
| Other | 25.3* | 22.3-28.3 | 1,173 | 2,846,349 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 27.9 | 23.8-32.1 | 591 | 1,214,519 |
| \$20,001-\$36,400 | 28.5 | 23.4-33.5 | 480 | 1,141,674 |
| \$36,401-\$65,000 | 30.4 | 25.6-35.2 | 536 | 1,397,353 |
| \$65,001+ | 24.9 | 20.5-29.3 | 501 | 1,546,768 |
| Public servant (current) |  |  |  |  |
| Yes | 30.0 | 24.5-35.5 | 376 | 1,163,243 |
| No | 27.6 | 24.4-30.7 | 1,059 | 3,093,475 |
| Total | 28.3 | 26.3-30.3 | 3,007 | 7,345,037 |

[^48]Table A.37.1: Logistic regression results for care-givers, 2011-12

|  | Coef. | z |
| :--- | :---: | ---: |
| Female | $0.695^{*}$ | 7.35 |
| Age | $-0.519^{*}$ | -4.48 |
| 2 | $-0.797^{*}$ | -5.58 |
| 3 | $-0.521^{*}$ | -5.11 |
| Not married |  |  |
| Employment status | $0.444^{*}$ | 2.78 |
| 2 | $0.274^{*}$ | 2.21 |
| 3 |  |  |
|  | 0.062 | 0.56 |
| Education | $0.362^{*}$ | 3.15 |
| 2 | -0.185 | -1.48 |
| 3 | 0.105 | 0.63 |
| Country of birth | $-0.255^{*}$ | -2.69 |
| 2 |  |  |
| 3 | -0.065 | -0.43 |
| Not capital city | -0.099 | -0.64 |
| Personal income | -0.299 | -1.74 |
| 2 | -0.253 | -1.90 |
| 3 | $-0.838^{*}$ | -4.75 |
| 4 |  |  |
| 5 |  |  |
| Constant |  |  |

* $p<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.38: Type of person currently provide care to (\% of population) by age of carer, 2011-12

|  | 45-59 |  | 60-74 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |
| Spouse/partner | 2.8 | 1.9-3.8 | 6.5 | 5.3-7.7 |
| Parent | 8.4 | 6.7-10.1 | 4.6 | 3.6-5.7 |
| Grandparent | 0.2 | 0.0-0.5 | 0.1 | 0.0-0.3 |
| Other elderly person | 0.6 | 0.1-1.1 | 0.8 | 0.3-1.3 |
| Own child/baby | 17.9 | 15.3-20.4 | 3.3 | 2.4-4.2 |
| Grandchild | 2.2 | 1.4-2.9 | 6.8 | 5.6-8.0 |
| Other child | 1.8 | 0.9-2.7 | 0.6 | 0.2-1.0 |
| Other family | 1.5 | 0.8-2.3 | 1.8 | 1.1-2.4 |
| Other | 0.9 | 0.2-1.5 | 1.1 | 0.5-1.6 |
| N Unw | 1,219 |  | 1,788 |  |
| NW | 4,414,436 |  | 0,601 |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.39: Care for person with long-term illness or disability (\% of total population), and average hours per week provide care (all care-givers) by socio-economic and demographic characteristics, 2011-12

|  | Care for person with long-term illness or disability |  |  |  | Average hours per week provide care |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% Cl | N Unw | N W | Hours | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 9.6 | 7.8-11.4 | 1,505 | 3,628,392 | 27.4 | 23.7-31.2 | 254 | 716,009 |
| Female | 17.9* | 15.5-20.2 | 1,502 | 3,716,645 | 37.2* | 33.3-41.0 | 422 | 1,163,855 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 15.7 | 12.7-18.7 | 700 | 3,064,368 | 38.1 | 33.2-43.0 | 217 | 980,289 |
| 55-64 | 13.6 | 11.5-15.6 | 1,189 | 2,597,009 | 27.1* | 23.1-31.2 | 264 | 597,941 |
| 65-74 | 10.5* | 8.7-12.4 | 1,118 | 1,683,660 | 31.1 | 25.2-37.1 | 195 | 301,635 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 14.2 | 12.5-16.0 | 2,051 | 5,100,317 | 32.9 | 29.8-36.0 | 500 | 1,379,801 |
| Not married | 12.7 | 9.9-15.6 | 944 | 2,209,959 | 35.6 | 29.2-42.0 | 170 | 482,525 |
| Employment status |  |  |  |  |  |  |  |  |
| Employed | 12.3 | 10.3-14.3 | 1,439 | 4,268,038 | 29.7 | 26.2-33.1 | 324 | 1,092,055 |
| Not employed \& not retired | 23.5* | 17.6-29.4 | 294 | 835,421 | 46.0* | 36.6-55.3 | 90 | 306,007 |
| Retired | 13.0 | 11.0-14.9 | 1,274 | 2,241,578 | 34.2 | 29.2-39.3 | 262 | 481,803 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 13.5 | 11.3-15.6 | 1,433 | 3,371,225 | 38.6 | 33.7-43.4 | 293 | 765,844 |
| Finished HS | 13.8 | 10.9-16.7 | 818 | 2,080,344 | 33.4 | 28.1-38.7 | 184 | 533,917 |
| Bachelor + | 14.1 | 11.2-17.0 | 718 | 1,821,527 | 27.2 | 23.2-31.1 | 194 | 566,281 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 14.4 | 12.7-16.2 | 2,252 | 5,531,190 | 34.9 | 31.4-38.1 | 513 | 1,426,077 |
| Other Engl. spk. | 9.7* | 6.8-12.7 | 513 | 1,194,813 | 24.9* | 20.1-29.6 | 101 | 254,929 |
| Non-Engl. spk. | 15.8 | 10.1-21.5 | 238 | 609,902 | 35.3 | 25.7-44.9 | 62 | 198,858 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 13.9 | 11.9-15.9 | 1,834 | 4,498,688 | 31.4 | 28.2-34.6 | 447 | 1,251,646 |
| Other | 13.6 | 11.3-15.8 | 1,173 | 2,846,349 | 37.6 | 32.2-43.0 | 229 | 628,219 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 15.2 | 12.0-18.5 | 591 | 1,214,519 | 43.0 | 35.1-50.8 | 138 | 296,876 |
| \$20,001-\$36,400 | 16.1 | 11.8-20.4 | 480 | 1,141,674 | 40.6 | 32.0-49.2 | 108 | 297,878 |
| \$36,401-\$65,000 | 14.9 | 11.0-18.7 | 536 | 1,397,353 | 27.0* | 22.0-32.0 | 125 | 392,192 |
| \$65,001+ | 10.0* | 6.9-13.0 | 501 | 1,546,768 | 25.7* | 20.7-30.7 | 106 | 348,821 |
| Care for ill/disability |  |  |  |  |  |  |  |  |
| Yes | - | - | - | - | 37.1 | 32.5-41.7 | 337 | 907,563 |
| No | - | - | - | - | 30.1* | 26.9-33.3 | 339 | 972,303 |
| Public servant (current) |  |  |  |  |  |  |  |  |
| Yes | 16.6 | 12.0-21.2 | 376 | 1,163,243 | 29.7 | 22.8-36.7 | 81 | 300,225 |
| No | 10.5* | 8.4-12.7 | 1,059 | 3,093,475 | 29.5 | 25.5-33.5 | 242 | 785,622 |
| Total | 13.8 | 12.3-15.3 | 3,007 | 7,345,037 | 33.5 | 30.7-36.3 | 676 | 1,879,865 |

[^49]Table A.39.1: Logistic regression results for care for person with long-term illness or disability, and linear regression results for average hours per week provide care, 2011-12

|  | Care for person with long-term illness or disability |  | Average hours per week provide |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | t |
| Female | $0.769 *$ | 6.12 | 6.864* | 2.09 |
| Age |  |  |  |  |
| 2 | -0.225 | -1.49 | -13.74* | -3.68 |
| 3 | -0.555* | -2.95 | -16.039* | -3.23 |
| Not married | -0.558* | -4.12 | 0.69 | 0.20 |
| Employment status |  |  |  |  |
| 2 | $0.823 *$ | 4.36 | 12.697* | 2.47 |
| 3 | 0.302 | 1.86 | 9.485* | 2.16 |
| Education |  |  |  |  |
| 2 | -0.016 | -0.11 | -6.547 | -1.75 |
| 3 | 0.246 | 1.64 | -8.655* | -2.25 |
| Country of birth |  |  |  |  |
| 2 | -0.344* | -1.97 | -8.013 | -1.86 |
| 3 | 0.17 | 0.80 | 5.045 | 0.94 |
| Not capital city | 0.004 | 0.03 | 3.815 | 1.19 |
| Personal income |  |  |  |  |
| 2 | 0.015 | 0.08 | -1.21 | -0.24 |
| 3 | -0.108 | -0.54 | -11.615* | -2.24 |
| 4 | -0.35 | -1.53 | -9.133 | -1.56 |
| 5 | -0.269 | -1.59 | -7.141 | -1.58 |
|  |  |  |  |  |
| Constant | -2.05* | -8.84 | 42.457* | 7.09 |

Table A.40: Care-giving prevents from working (\% of all not employed care-givers, \% of all not employed population) by socio-economic and demographic characteristics, 2011-12

|  | (\% of care-givers) |  |  |  | (\% of not employed population) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 29.6 | 20.4-28.9 | 129 | 260,230 | 5.6 | 3.5-7.6 | 739 | 1,380,640 |
| Female | 39.1 | 32.2-46.1 | 269 | 610,129 | 14.1* | 11.2-17.0 | 829 | 1,696,359 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 43.6 | 29.3-58.0 | 56 | 256,192 | 19.0 | 11.8-26.2 | 136 | 588,187 |
| 55-64 | 38.6 | 30.3-46.9 | 143 | 305,517 | 10.6* | 7.9-13.4 | 530 | 1,110,245 |
| 65-74 | 28.0 | 21.6-34.4 | 199 | 308,650 | $6.3^{\star}$ | 4.6-7.9 | 902 | 1,378,567 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 34.3 | 27.8-40.9 | 291 | 619,023 | 11.0 | 8.6-13.4 | 1,012 | 1,939,520 |
| Not married | 40.9 | 30.0-51.9 | 104 | 245,876 | 9.0 | 6.0-11.9 | 551 | 1,122,108 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 41.7 | 34.0-49.5 | 216 | 467,488 | 11.7 | 9.2-14.2 | 847 | 1,664,232 |
| Finished HS | 35.7 | 23.6-47.9 | 97 | 221,267 | 10.2 | 5.9-14.4 | 392 | 776,287 |
| Bachelor + | 19.9* | 9.9-30.0 | 80 | 172,665 | 6.0* | 2.7-9.2 | 295 | 577,695 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 36.8 | 30.3-43.2 | 308 | 685,411 | 10.9 | 8.7-13.2 | 1,171 | 2,307,743 |
| Other Engl. spk. | 31.3 | 18.7-43.9 | 58 | 109,243 | $6.9 *$ | 3.7-10.1 | 267 | 494,204 |
| Non-Engl. spk. | 39.2 | 18.8-59.5 | 32 | 75,705 | 11.0 | 4.6-17.5 | 127 | 268,718 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 33.0 | 25.9-40.1 | 253 | 559,289 | 10.1 | 7.6-12.5 | 926 | 1,830,351 |
| Other | 42.2 | 33.3-51.2 | 145 | 311,070 | 10.5 | 7.7-13.4 | 642 | 1,246,648 |

Personal income

| Up to \$20,000 | 40.4 | $31.0-49.7$ | 138 | 282,656 | 11.8 | $8.5-15.2$ | 495 | 962,592 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 20,001-\$ 36,400$ | 39.9 | $25.4-54.4$ | 62 | 156,626 | 12.4 | $7.5-17.3$ | 249 | 504,985 |
| $\$ 36,401-\$ 65,000$ | $17.2^{*}$ | $3.6-30.8$ | 35 | 64,350 | $3.8^{*}$ | $0.6-6.9$ | 165 | 293,566 |
| $\$ 65,001+$ | 33.1 | $4.6-61.5$ | 12 | 27,146 | 5.9 | $0.0-11.9$ | 74 | 152,256 |

Care for l-t ill/disability

| Yes | 51.4 | $43.7-59.2$ | 220 | 486,753 | 51.4 | $43.7-59.1$ | 220 | 486,753 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $17.1^{*}$ | $9.4-24.7$ | 178 | 383,605 | $2.5^{*}$ | $1.3-3.8$ | 1,348 | $2,590,246$ |
| Total | $\mathbf{3 6 . 3}$ | $\mathbf{3 0 . 7 - 4 1 . 9}$ | $\mathbf{3 9 8}$ | $\mathbf{8 7 0 , 3 5 9}$ | $\mathbf{1 0 . 3}$ | $\mathbf{8 . 4 - 1 2 . 1}$ | $\mathbf{1 , 5 6 8}$ | $\mathbf{3 , 0 7 6 , 9 9 9}$ |

[^50]Table A.40.1: Logistic regression results for care-giving prevents from working (\% of all not employed care-givers, $\%$ of all not employed population), 2011-12

|  | Care-givers |  | Not employed population |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | 0.473 | 1.57 | 0.75* | 2.65 |
| Age |  |  |  |  |
| 2 | 0.034 | 0.08 | -0.054 | -0.13 |
| 3 | -0.698 | -1.70 | -0.79 | -1.96 |
| Not married | 0.261 | 0.87 | 0.032 | 0.11 |
| Education |  |  |  |  |
| 2 | -0.861* | -2.54 | -0.788* | -2.38 |
| 3 | -1.522* | -3.81 | -1.423* | -3.53 |
| Country of birth |  |  |  |  |
| 2 | 0.595 | 1.50 | 0.643 | 1.70 |
| 3 | 0.449 | 0.89 | 0.336 | 0.71 |
| Not capital city | -0.2 | -0.72 | -0.337 | -1.28 |
| Personal income |  |  |  |  |
| 2 | 0.04 | 0.11 | 0.101 | 0.28 |
| 3 | -0.834 | -1.51 | -0.748 | -1.38 |
| 4 | 0.213 | 0.28 | 0.276 | 0.38 |
| 5 | -0.275 | -0.88 | -0.267 | -0.87 |
| Care for l-t ill/disability | -2.094* | 6.81 | -4.209* | 14.38 |
| Constant | -1.505* | -2.80 | -3.671* | -7.04 |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.41: Care-giving prevents from working more hours (\% of employed care-givers, \% of all employed population) by socio-economic and demographic characteristics, 2011-12

|  | (\% of care-givers) |  |  |  | (\% of employed population) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 27.0 | 19.0-35.1 | 155 | 538,272 | 6.5 | 4.3-8.7 | 766 | 2,247,752 |
| Female | 34.7 | 27.1-42.3 | 199 | 669,692 | 11.5* | 8.6-14.4 | 673 | 2,020,286 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 32.4 | 25.0-39.8 | 179 | 819,690 | 10.7 | 7.9-13.5 | 564 | 2,476,181 |
| 55-64 | 31.8 | 23.8-39.8 | 147 | 345,677 | 7.4 | 5.2-9.6 | 659 | 1,486,764 |
| 65-74 | 6.3* | -2.2-14.8 | 28 | 42,596 | 0.9* | 0.0-2.1 | 216 | 305,093 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 29.5 | 23.3-35.6 | 267 | 903,517 | 8.4 | 6.4-10.4 | 1,039 | 3,160,796 |
| Not married | 36.0 | 23.9-48.2 | 84 | 292,368 | 9.7 | 5.8-13.5 | 393 | 1,087,851 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 26.2 | 16.7-35.6 | 116 | 402,898 | 6.2 | 3.6-8.7 | 586 | 1,706,993 |
| Finished HS | 26.9 | 18.2-35.6 | 106 | 361,430 | 7.4 | 4.9-10.0 | 426 | 1,304,057 |
| Bachelor + | 38.6 | 28.9-48.2 | 131 | 436,638 | 13.5* | 9.4-17.7 | 423 | 1,243,832 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 28.4 | 22.3-34.5 | 263 | 892,824 | 7.9 | 5.9-9.8 | 1,081 | 3,223,447 |
| Other Engl. spk. | 36.6 | 22.1-51.1 | 56 | 177,237 | 9.3 | 4.9-13.6 | 246 | 700,609 |
| Non-Engl. spk. | 43.3 | 23.7-62.8 | 35 | 137,903 | 17.5 | 8.0-27.0 | 111 | 341,184 |


| Residence |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capital city | 33.0 | $26.1-39.9$ | 234 | 799,001 | 9.9 | $7.5-12.3$ | 908 | $2,668,337$ |
| Other | 27.9 | $18.9-37.0$ | 120 | 408,963 | 7.1 | $4.5-9.7$ | 531 | $1,599,701$ |


| Personal income |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Up to $\$ 20,000$ | 43.0 | $18.9-67.2$ | 21 | 56,650 | 9.7 | $2.6-16.7$ | 96 | 251,927 |
| $\$ 20,001-\$ 36,400$ | 34.9 | $20.9-49.0$ | 56 | 168,242 | 9.2 | $5.0-13.5$ | 231 | 636,689 |
| $\$ 36,401-\$ 65,000$ | 29.6 | $19.3-39.9$ | 97 | 360,430 | 9.7 | $5.9-13.4$ | 371 | $1,103,787$ |
| $\$ 65,001+$ | 25.6 | $15.8-35.4$ | 102 | 357,666 | 6.6 | $3.7-9.4$ | 427 | $1,394,511$ |

Care for l-t ill/disability

| Yes | 33.8 | $25.6-42.0$ | 159 | 524,853 | 33.8 | $25.6-42.0$ | 159 | 524,853 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | 29.3 | $21.8-36.9$ | 195 | 683,111 | $5.4^{\star}$ | $3.7-7.0$ | 1,280 | $3,743,185$ |

Public servant (current)

| Yes | 27.2 | $17.2-37.2$ | 94 | 348,875 | 8.2 | $4.8-11.5$ | 376 | $1,163,243$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | 32.5 | $25.9-39.0$ | 259 | 852,880 | 9.0 | $6.8-11.1$ | 1,059 | $3,093,475$ |
| Total | 31.3 | $\mathbf{2 5 . 8}-\mathbf{3 6 . 8}$ | $\mathbf{3 5 4}$ | $\mathbf{1 , 2 0 7 , 9 6 4}$ | $\mathbf{8 . 9}$ | $\mathbf{7 . 1} \mathbf{- 1 0 . 7}$ | $\mathbf{1 , 4 3 9}$ | $\mathbf{4 , 2 6 8 , 0 3 8}$ |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.41.1: Logistic regression results for care-giving prevents from working more hours (\% of employed care-givers, \% of all employed population), 2011-12

|  | Care-givers |  | Employed population |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | 0.185 | 0.66 | 0.268 | 1.07 |
| Age |  |  |  |  |
| 2 | -0.258 | -1.01 | -0.533* | $-2.27$ |
| 3 | -2.223* | -2.83 | -2.473* | -3.27 |
| Not married | 0.076 | 0.25 | -0.121 | -0.45 |
| Education |  |  |  |  |
| 2 | 0.366 | 1.13 | 0.44 | 1.47 |
| 3 | 0.701* | 2.18 | 0.932* | 3.19 |
| Country of birth |  |  |  |  |
| 2 | 0.291 | 0.85 | 0.258 | 0.85 |
| 3 | 0.12 | 0.29 | 0.274 | 0.71 |
| Not capital city | -0.159 | -0.59 | -0.23 | -0.92 |
| Personal income |  |  |  |  |
| 2 | -0.44 | -0.77 | -0.324 | -0.66 |
| 3 | -0.862 | -1.54 | -0.62 | -1.31 |
| 4 | -1.282* | -2.18 | -1.064* | -2.15 |
| 5 | -0.585 | -1.03 | -0.45 | -0.94 |
| Care for l-t ill/disability | -0.479 | 1.90 | -2.519* | 10.68 |
| Constant | -0.604 | -1.01 | -2.782* | -5.46 |

[^51]Table A.42: Suitable external care would help care-givers work (\% of people where care-giving prevents from working) or work more hours (\% of people where care-giving prevents from working more hours) by socio-economic and demographic characteristics, and average (more) hours per week able to work if suitable external care available, 2011-12

|  | Help work |  |  |  | Help work more hours |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% Cl | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 56.0 | 36.9-75.1 | 33 | 77,101 | 61.5 | 44.4-78.5 | 52 | 185,253 |
| Female | 42.6 | 31.5-53.6 | 102 | 238,800 | 41.2 | 28.1-54.4 | 47 | 177,120 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 48.1 | 27.2-69.1 | 26 | 111,741 | 46.0 | 32.0-60.0 | 58 | 265,366 |
| 55-64 | 45.8 | 32.0-59.7 | 54 | 117,797 | 56.1 | 40.7-71.6 | 44 | 177,120 |
| 65-74 | 42.9 | 29.5-56.3 | 55 | 86,363 | 52.8 | 0.0-100.0 | 2 | 15,568 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 43.9 | 32.3-55.6 | 95 | 212,594 | 47.2 | 34.7-59.8 | 77 | 266,140 |
| Not married | 48.4 | 30.8-66.0 | 39 | 100,598 | 56.5 | 35.5-77.5 | 26 | 105,326 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 53.0 | 41.2-64.5 | 86 | 143,397 | 49.7 | 28.0-71.3 | 27 | 105,435 |
| Finished HS | 39.6 | 18.5-60.8 | 29 | 142,999 | 48.1 | 30.0-66.2 | 32 | 97,150 |
| Bachelor + | 25.2* | 3.3-47.1 | 16 | 22,143 | 47.0 | 30.3-63.8 | 44 | 168,359 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 43.1 | 32.1-54.0 | 103 | 252,055 | 53.2 | 40.3-66.1 | 72 | 253,421 |
| Other Engl. spk. | 57.1 | 33.8-80.3 | 19 | 34,189 | 55.5 | 30.3-80.7 | 19 | 64,871 |
| Non-Engl. spk. | 56.6 | 26.5-86.6 | 13 | 29,656 | 24.2* | 0.0-49.1 | 13 | 59,648 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 45.0 | 32.0-57.9 | 80 | 184,486 | 48.3 | 35.2-61.5 | 71 | 263,725 |
| Other | 47.1 | 32.4-61.7 | 55 | 131,415 | 50.6 | 31.3-69.9 | 33 | 11,216 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 45.8 | 30.3-61.4 | 54 | 114,060 | 55.6 | 15.7-95.6 | 8 | 24,385 |
| \$20,001-\$36,400 | 64.7 | 44.4-85.0 | 25 | 62,524 | 61.2 | 37.1-85.4 | 19 | 58,766 |
| \$36,401-\$65,000 | 58.3 | 13.5-100.0 | 6 | 11,052 | 39.1 | 19.1-59.1 | 28 | 106,633 |
| \$65,001+ | 41.1 | 0.0-91.7 | 4 | 8,972 | 58.6 | 37.0-80.1 | 24 | 91,577 |
| Care for l-t ill/disability |  |  |  |  |  |  |  |  |
| Yes | 47.3 | 36.8-57.8 | 111 | 144,801 | 60.2 | 46.1-74.4 | 56 | 177,559 |
| No | 40.2 | 17.4-63.1 | 24 | 146,842 | 39.1* | 23.7-54.5 | 48 | 200,382 |
| Total | 45.8 | 36.1-55.6 | 135 | 315,901 | 49.0 | 38.1-59.9 | 104 | 377,941 |
| Average (more) hours per week able to work | 23.9 | 21.2-26.6 | 59 | 137,143 | 15.2 | 12.5-17.9 | 47 | 161,191 |

[^52]Table A.42.1: Logistic regression results for suitable external care would help care-givers work or work more hours, 2011-12

|  | Help work |  | Help work more hours |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | 0.069 | 0.15 | -1.230* | 0.025 |
| Age |  |  |  |  |
| 2 | -0.551 | -0.94 | 0.473 | 0.325 |
| 3 | -0.505 | -0.85 | -1.035 | 0.57 |
| Not married | -0.232 | -0.49 | 0.690 | 0.221 |
| Education |  |  |  |  |
| 2 | -0.243 | -0.42 | 0.082 | 0.9 |
| 3 | -0.877 | -1.11 | 0.719 | 0.233 |
| Country of birth |  |  |  |  |
| 2 | 0.936 | 1.38 | 0.245 | 0.685 |
| 3 | 0.700 | 0.99 | -0.895 | 0.273 |
| Not capital city | -0.105 | -0.24 | -0.081 | 0.876 |
| Personal income |  |  |  |  |
| 2 | 0.849 | 1.48 | -0.548 | 0.611 |
| 3 | 1.041 | 1.06 | -1.424 | 0.165 |
| 4 | 0.131 | 0.12 | -2.216* | 0.049 |
| 5 | -0.325 | -0.65 | -1.593 | 0.116 |
| Care for I-t ill/disability | 0.570 | 1.08 | -0.569 | 0.236 |
| Constant | 0.235 | 0.34 | 1.923 | 0.095 |

[^53]Table A.43: Care-giving responsibilities have impacted upon ability to accumulate superannuation (\% of people where care-giving prevents from working or working more hours) by socio-economic and demographic characteristics, 2011-12

|  | \% | 95\% CI | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |
| Male | 51.9 | 38.6-65.3 | 71 | 222,562 |
| Female | 63.3 | 55.4-71.2 | 168 | 471,280 |
| Age |  |  |  |  |
| 45-54 | 70.1 | 59.9-80.3 | 84 | 377,106 |
| 55-64 | 53.5* | 43.2-63.8 | 98 | 227,702 |
| 65-74 | 31.2* | 19.0-43.5 | 57 | 89,034 |
| Marital status |  |  |  |  |
| Married | 56.7 | 48.3-65.2 | 172 | 478,734 |
| Not married | 66.0 | 53.0-78.9 | 65 | 205,923 |
| Education |  |  |  |  |
| Not finished HS | 50.9 | 40.2-61.6 | 113 | 300,532 |
| Finished HS | 59.8 | 46.3-73.2 | 61 | 176,171 |
| Bachelor + | 72.6* | 61.1-84.1 | 60 | 202,781 |
| Country of birth |  |  |  |  |
| Australia | 60.2 | 52.1-68.3 | 175 | 505,477 |
| Other Engl. spk. | 52.1 | 34.0-70.3 | 38 | 99,061 |
| Non-Engl. spk. | 64.7 | 44.3-85.1 | 26 | 89,304 |
| Residence |  |  |  |  |
| Capital city | 59.7 | 50.9-68.5 | 151 | 448,211 |
| Other | 59.6 | 48.1-71.0 | 88 | 245,631 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 60.0 | 46.3-73.7 | 62 | 138,445 |
| \$20,001-\$36,400 | 50.5 | 34.5-66.5 | 44 | 121,291 |
| \$36,401-\$65,000 | 61.5 | 43.5-79.5 | 34 | 117,686 |
| \$65,001+ | 50.3 | 29.0-71.5 | 28 | 100,550 |
| Care for ill/disability |  |  |  |  |
| Yes | 60.0 | 51.9-68.2 | 167 | 427,928 |
| No | 59.0 | 46.3-71.8 | 72 | 265,914 |
| Public servant (current) |  |  |  |  |
| Yes | 73.4 | 56.4-90.3 | 25 | 94,815 |
| No | 58.3 | 45.9-70.7 | 78 | 276,917 |
| Total | 59.7 | 52.6-66.7 | 239 | 693,842 |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |

Table A.43.1: Logistic regression results for care-giving responsibilities have impacted upon ability to accumulate superannuation, 2011-12

|  | Coef. | z |
| :--- | :--- | ---: |
| Female | 0.070 | 0.210 |
| Age |  |  |
| 2 | -0.627 | -1.72 |
| 3 | $-2.047^{*}$ | -4.29 |
| Not married | $0.714^{*}$ | 2.01 |
| Education |  |  |
| 2 | 0.216 | 0.55 |
| 3 | 0.768 | 1.78 |
| Country of birth |  | -0.17 |
| 2 | -0.072 | 0.25 |
| 3 | 0.135 | 1.08 |
| Not capital city | 0.357 |  |
| Personal income |  | -2.81 |
| 2 | $-1.395^{*}$ | -2.17 |
| 3 | $-1.183^{*}$ | -3.11 |
| 4 | $-1.884^{*}$ | -0.88 |
| 5 | -0.395 | 1.29 |
| Care for l-t ill/disability | 0.446 | 1.37 |
| Constant | 0.777 |  |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |

Flexibility of employment arrangements
Table A.44: More flexible work arrangement would help care-givers work or work more hours (\% of care-givers whose care-giving responsibilities prevent from working or working more hours), average (more) hours per week work, 2011-12

|  | \% of care-givers |  |  |  |  | (More) Hours would work |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\%$ | $95 \%$ CI | N Unw | N W | Average | $95 \%$ CI | N Unw | N W |
| Work | 61.0 | $51.1-70.9$ | 116 | 277,379 | 18.2 | $16.3-20.1$ | 59 | 157,846 |
| Work more hours | 48.6 | $36.3-60.9$ | 79 | 278,357 | 12.7 | $10.4-15.1$ | 32 | 122,093 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.45: Used flexible work arrangement if had illness, injury or disability in last 5 years (\% of people ill in last 5 years and worked in last 5 years but not self-employed) by socio-economic and demographic characteristics, 2011-12

|  | Used flexible work arrangement in last 5 years |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |
| Male | 21.1 | 15.6-26.5 | 280 | 719,500 |
| Female | 26.2 | 20.5-31.9 | 290 | 775,967 |
| Age |  |  |  |  |
| 45-54 | 24.2 | 17.4-31.0 | 171 | 733,322 |
| 55-64 | 24.1 | 18.7-29.5 | 252 | 551,108 |
| 65-74 | 21.1 | 14.5-27.7 | 147 | 211,037 |
| Marital status |  |  |  |  |
| Married | 21.4 | 16.6-26.1 | 357 | 946,440 |
| Not married | 27.4 | 20.4-34.4 | 212 | 546,115 |
| Education |  |  |  |  |
| Not finished HS | 19.2 | 13.9-24.5 | 272 | 713,439 |
| Finished HS | 26.3 | 18.3-34.2 | 160 | 417,531 |
| Bachelor + | 29.6* | 20.9-38.3 | 133 | 356,759 |
| Country of birth |  |  |  |  |
| Australia | 23.2 | 18.6-27.8 | 421 | 1,116,506 |
| Other Engl. spk. | 25.2 | 14.9-35.5 | 94 | 235,738 |
| Non-Engl. spk. | 25.3 | 13.2-37.4 | 55 | 143,223 |
| Residence |  |  |  |  |
| Capital city | 25.0 | 19.8-30.1 | 358 | 934,034 |
| Other | 21.6 | 15.5-27.8 | 212 | 561,433 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 18.5 | 10.6-26.4 | 100 | 228,886 |
| \$20,001-\$36,400 | 21.2 | 12.4-30.1 | 101 | 269,224 |
| \$36,401-\$65,000 | 25.1 | 16.0-34.1 | 129 | 345,244 |
| \$65,001+ | 30.9 | 20.5-41.4 | 91 | 279,779 |
| Public servant |  |  |  |  |
| Yes | 24.5 | 17.4-31.5 | 202 | 530,407 |
| No | 23.2 | 18.4-28.0 | 365 | 958,684 |
| Total | 23.7 | 19.7-27.7 | 570 | 1,495,467 |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey |  |  |  |  |

Table A.45.1: Logistic regression results for used flexible work arrangement if had illness, injury or disability in last 5 years, 2011-12

|  | Coef. | z |
| :--- | ---: | ---: |
| Female | 0.256 | 1.17 |
| Age |  |  |
| 2 | -0.019 | -0.08 |
| 3 | -0.040 | -0.14 |
| Not married | $0.435^{*}$ | 2.00 |
| Education |  |  |
| 2 | 0.238 | 0.95 |
| 3 | 0.428 | 1.54 |
| Country of birth |  |  |
| 2 | -0.071 | -0.25 |
| 3 | 0.187 | 0.52 |
| Not capital city | 0.061 | 0.28 |
| Personal income |  | 0.61 |
| 2 | 0.212 | 0.20 |
| 3 | 0.069 | 1.91 |
| 4 | 0.704 | 0.34 |
| 5 | 0.116 | 0.98 |
| Public servant | 0.223 | -4.68 |
| Constant | $-1.991^{*}$ |  |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.46: Flexible work arrangement would help people currently with illness, injury of disability work or work more hours (\% of currently ill who have not used flexible work arrangement but not self-employed and 1. Not employed, or 2. Employed) by socio-economic and demographic characteristics, and average number (more) hours per week could work if flexible work available, 2011-12

|  | Flexible work arrangement would help work (not employed) |  |  |  | Flexible work arrangement would help work more hours (employed) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 58.6 | 44.4-72.9 | 67 | 154,181 | 24.0 | 12.9-35.1 | 77 | 228,597 |
| Female | 58.4 | 44.2-72.5 | 61 | 149,342 | 22.5 | 12.5-32.6 | 85 | 242,334 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 73.9 | 55.2-92.5 | 26 | 120,076 | 22.9 | 11.5-34.4 | 60 | 261,549 |
| 55-64 | 47.3* | 32.8-61.8 | 50 | 106,579 | 25.9 | 15.7-36.0 | 77 | 174,879 |
| 65-74 | 50.1* | 36.1-64.1 | 52 | 76,869 | 12.5 | 0.0-25.9 | 25 | 34,503 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 61.0 | 48.4-73.6 | 77 | 184,576 | 21.3 | 12.8-29.9 | 102 | 291,767 |
| Not married | 54.6 | 38.5-70.7 | 51 | 118,947 | 26.4 | 12.7-40 | 60 | 179,165 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 49.1 | 35.7-62.5 | 68 | 151,668 | 24.7 | 13.3-36.2 | 72 | 208,694 |
| Finished HS | 67.0 | 50.2-83.9 | 35 | 83,218 | 24.0 | 10.6-37.5 | 47 | 134,869 |
| Bachelor + | 70.5 | 47.3-93.7 | 24 | 67,232 | 20.2 | 5.5-34.9 | 42 | 126,008 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 52.9 | 41.6-64.2 | 99 | 231,687 | 23.4 | 14.5-32.3 | 118 | 359,864 |
| Other Engl. spk. | 69.3 | 47.5-91.1 | 21 | 49,491 | 29.0 | 12.1-45.9 | 33 | 81,000 |
| Non-Engl. spk. | 92.4* | 76.5-100.0 | 8 | 22,345 | $6.0^{*}$ | 0.0-17.8 | 11 | 30,067 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 63.0 | 50.5-75.5 | 79 | 192,486 | 26.5 | 16.4-36.6 | 98 | 284,082 |
| Other | 50.7 | 34.0-67.4 | 49 | 111,037 | 18.3 | 7.6-28.9 | 64 | 186,849 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 59.5 | 41.2-77.8 | 37 | 88,208 | 32.5 | 10.6-54.4 | 20 | 47,934 |
| \$20,001-\$36,400 | 55.0 | 29.8-80.3 | 23 | 58,542 | 24.2 | 6.7-41.7 | 30 | 85,693 |
| \$36,401-\$65,000 | 83.7 | 65.5-100.0 | 14 | 27,332 | 20.3 | 6.8-33.8 | 48 | 140,680 |
| \$65,001+ | 50.1 | 0.0-100.0 | 4 | 5,966 | 28.5 | 11.5-45.6 | 34 | 120,428 |
| Public servant |  |  |  |  |  |  |  |  |
| Yes | 56.8 | 41.1-72.4 | 53 | 123,606 | 29.1 | 15.1-43.1 | 56 | 163,265 |
| No | 59.7 | 46.6-72.9 | 75 | 179,917 | 20.1 | 11.6-28.6 | 106 | 307,666 |
| Total | 58.5 | 48.5-68.5 | 128 | 303,523 | 23.2 | 15.8-30.7 | 162 | 470,931 |
| Average number (more) hours per week could work | 28.1 | 22.1-34.1 | 63 | 167,410 | 11.0 | 8.6-13.5 | 31 | 92,864 |

[^54]Table A.46.1: Logistic regression results for flexible work arrangement would help people currently with illness, injury of disability work or work more hours, 2011-12

|  | Would use flexible work arrangement to <br> work (not employed) | Would use flexible work arrangement to <br> work more hours (employed) |  |  |
| :--- | :---: | ---: | :---: | ---: |
|  | Coef. | $\mathbf{z}$ | Coef. | z |
| Female | -0.109 | -0.21 | -0.249 | -0.58 |
| Age | $-2.183^{*}$ | -2.75 |  |  |
| 2 | $-2.173^{*}$ | -2.79 | 0.207 | 0.47 |
| 3 | -0.009 | -0.02 | -0.835 | -1.15 |
| Not married |  |  | -0.071 | -0.17 |
| Education | -0.369 | -0.57 |  |  |
| 2 | 0.169 | 0.21 | -0.268 | -0.55 |
| 3 |  |  | -0.487 | -0.89 |
| Country of birth | $1.885^{*}$ | 2.21 |  |  |
| 2 | 1.396 | 1.13 | 0.312 | 0.65 |
| 3 | -0.462 | -0.92 | -1.099 | -0.98 |
| Not capital city |  |  | -0.336 | -0.80 |
| Personal income | -0.576 | -0.86 |  |  |
| 2 | 1.485 | 1.46 | -0.285 | -0.41 |
| 3 | -0.112 | -0.09 | -0.767 | -1.11 |
| 4 | 0.257 | 0.43 | -0.085 | -0.11 |
| 5 | -0.634 | -1.16 | -1.127 | -1.44 |
| Public servant | $2.491^{*}$ | 2.46 | -0.346 | -0.80 |
| Constant |  |  | -0.012 | -0.01 |

[^55]Table A.47: Reducing hours in transition to retirement would persuade workers to put off retirement (\% of people currently working but not self-employed) and mentoring younger workers would put off retirement (\% of people currently working) by socio-economic and demographic characteristics, and average additional years of work if could reduce hours/mentor, and average hours work in additional years of work, 2011-12

|  | Reducing hours would put off retirement |  |  |  | Mentoring would put off retirement |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 60.7 | 56.0-65.3 | 533 | 1,585,551 | 49.8 | 45.8-53.8 | 766 | 2,247,752 |
| Female | 64.3 | 59.8-68.8 | 566 | 1,713,753 | 48.6 | 44.3-52.9 | 673 | 2,020,286 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 68.0 | 63.4-72.7 | 448 | 1,949,687 | 53.7 | 49.3-58.1 | 564 | 2,476,181 |
| 55-64 | 56.4* | 51.9-60.8 | 508 | 1,149,503 | 44.8* | 40.9-48.7 | 659 | 1,486,764 |
| 65-74 | 44.8* | 36.5-53.1 | 143 | 200,113 | 34.4* | 28.0-40.9 | 216 | 305,093 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 62.5 | 58.7-66.3 | 776 | 2,386,988 | 50.4 | 46.9-53.8 | 1,039 | 3,160,796 |
| Not married | 62.2 | 56.1-68.2 | 319 | 899,516 | 45.4 | 39.7-51.1 | 393 | 1,087,851 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 56.6 | 51.3-61.9 | 439 | 1,309,878 | 47.3 | 42.7-52.0 | 586 | 1,706,993 |
| Finished HS | 63.1 | 57.3-69.0 | 327 | 997,886 | 49.9 | 44.5-55.3 | 426 | 1,304,057 |
| Bachelor + | 69.9* | 64.6-75.2 | 330 | 985,380 | 51.3 | 45.9-56.7 | 423 | 1,248,832 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 62.7 | 59.0-66.4 | 813 | 2,484,878 | 49.4 | 46.0-52.8 | 1,081 | 3,223,447 |
| Other Engl. spk. | 60.6 | 53.0-68.1 | 199 | 554,319 | 49.7 | 42.6-56.8 | 246 | 700,609 |
| Non-Engl. spk. | 66.0 | 54.3-77.7 | 86 | 257,308 | 47.3 | 36.7-58.0 | 111 | 341,184 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 61.7 | 57.7-65.8 | 709 | 2,109,999 | 47.6 | 43.9-51.3 | 908 | 2,668,337 |
| Other | 64.0 | 58.7-69.3 | 390 | 1,189,305 | 51.9 | 47.1-56.7 | 531 | 1,599,701 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 51.7 | 38.3-65.0 | 72 | 190,577 | 47.7 | 36.1-59.2 | 96 | 251,927 |
| \$20,001-\$36,400 | 51.9 | 43.2-60.6 | 179 | 508,918 | 45.3 | 37.7-52.8 | 231 | 636,689 |
| \$36,401-\$65,000 | 62.9 | 56.9-68.9 | 298 | 896,263 | 52.3 | 46.6-58.0 | 371 | 1,103,787 |
| \$65,001+ | 70.2* | 64.8-75.6 | 333 | 1,074,720 | 52.1 | 46.8-57.4 | 427 | 1,394,511 |
| Public servant |  |  |  |  |  |  |  |  |
| Yes | 67.0 | 61.6-72.3 | 353 | 1,101,470 | 49.6 | 43.9-55.3 | 376 | 1,163,242 |
| No | 60.3 | 56.3-64.3 | 743 | 2,187,957 | 49.3 | 45.9-52.7 | 1,059 | 3,093,475 |
| Total | 62.5 | 59.3-65.8 | 1,099 | 3,299,303 | 49.2 | 46.3-52.2 | 1,439 | 4,268,038 |
| Average additional years of work | 0.6 | 0.2-1.0 | 540 | 1,696,775 | 2.5 | 2.0-2.9 | 532 | 1,694,506 |
| Average hours work in additional years of work | 21.2 | 20.6-21.8 | 627 | 1,971,296 | 20.7 | 20.0-21.4 | 631 | 1,985,061 |

[^56]Table A.47.1: Logistic regression results for reducing hours in transition to retirement would persuade workers to put off retirement and mentoring younger workers would put off retirement, 2011-12

|  | Reducing would put | Mentoring would put off retirement |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | 0.368* | 2.58 | -0.041 | -0.35 |
| Age |  |  |  |  |
| 2 | -0.506* | -3.51 | -0.326* | -2.72 |
| 3 | -0.842* | -3.93 | -0.758* | -4.31 |
| Not married | 0.037 | 0.25 | -0.156 | -1.23 |
| Education |  |  |  |  |
| 2 | 0.107 | 0.68 | 0.119 | 0.89 |
| 3 | 0.282 | 1.66 | 0.124 | 0.89 |
| Country of birth |  |  |  |  |
| 2 | -0.035 | -0.20 | 0.009 | 0.06 |
| 3 | 0.426 | 1.58 | -0.026 | -0.12 |
| Not capital city | 0.163 | 1.17 | 0.184 | 1.58 |
| Personal income |  |  |  |  |
| 2 | 0.179 | 0.60 | 0.212 | 0.82 |
| 3 | 0.482 | 1.69 | 0.384 | 1.57 |
| 4 | 0.801* | 2.74 | 0.347 | 1.40 |
| 5 | 0.397 | 1.35 | 0.022 | 0.09 |
| Public servant | 0.068 | 0.46 | 0.091 | 0.71 |
| Constant | -0.06 | -0.18 | -0.207 | -0.71 |

[^57]
## Superannuation

Table A.48: Employer of yourself ever made superannuation contributions (\% of people who have worked in last 20 years or looked for job in last 5 years), and average number of years contributed to superannuation, by socio-economic and demographic characteristics, 2011-12

|  | Ever contributed to superannuation |  |  |  | How long contributed to superannuation (average years) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | Years | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 95.0 | 93.7-96.3 | 1,448 | 3,519,327 | 22.5 | 21.9-23.1 | 1330 | 3,252,536 |
| Female | 93.3 | 91.9-94.7 | 1,337 | 3,411,227 | 17.0* | 16.4-17.5 | 1177 | 3,047,710 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 95.9 | 94.2-97.5 | 687 | 3,007,392 | 18.0 | 17.3-18.7 | 646 | 2,808,651 |
| 55-64 | 94.6 | 93.2-95.9 | 1,134 | 2,485,308 | 20.8* | 20.2-21.5 | 1034 | 2,266,032 |
| 65-74 | 90.0* | 88.0-92.0 | 964 | 1,437,854 | 22.3* | 21.4-23.1 | 827 | 1,225,563 |
| Employment status |  |  |  |  |  |  |  |  |
| Employed | 97.4 | 96.5-98.3 | 1,439 | 4,268,038 | 19.6 | 19.1-20.2 | 1367 | 4,067,421 |
| Not employed \& not retired | 87.1* | 82.1-92.0 | 270 | 762,621 | 16.2* | 14.9-17.6 | 229 | 628,566 |
| Retired | 89.8* | 87.9-91.8 | 1,076 | 1,899,895 | 21.7* | 21.0-22.5 | 911 | 1,604,260 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 95.8 | 94.9-96.7 | 1,925 | 4,870,320 | 20.3 | 19.8-20.8 | 1772 | 4,523,723 |
| Not married | 90.4* | 88.0-92.7 | 849 | 2,028,183 | 18.5* | 17.8-19.3 | 726 | 1,750,592 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 91.5 | 89.8-93.2 | 1,283 | 3,095,976 | 18.6 | 18.0-19.2 | 1116 | 2,717,381 |
| Finished HS | 95.0* | 93.3-96.7 | 769 | 1,982,768 | 19.3 | 18.5-20.1 | 700 | 1,815,506 |
| Bachelor + | 98.2* | 97.4-99.1 | 708 | 1,803,174 | 22.3* | 21.6-23.1 | 672 | 1,729,952 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 94.1 | 92.9-95.2 | 2,086 | 5,220,686 | 20.5 | 20.0-21.0 | 1880 | 4,747,550 |
| Other Engl. spk. | 95.9 | 94.3-97.6 | 480 | 1,138,011 | 18.0* | 17.1-18.9 | 435 | 1,049,795 |
| Non-Engl. spk. | 91.5 | 87.5-95.5 | 216 | 564,126 | 17.1* | 15.6-18.6 | 189 | 495,171 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 95.3 | 94.3-96.4 | 1,712 | 4,256,067 | 20.4 | 19.9-20.9 | 1560 | 3,935,401 |
| Other | 92.4* | 90.5-94.2 | 1,073 | 2,674,487 | 18.9* | 18.2-19.5 | 947 | 2,364,846 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 88.1 | 85.1-91.1 | 485 | 1,015,712 | 15.8 | 14.8-16.8 | 405 | 857,858 |
| \$20,001-\$36,400 | 93.3* | 90.7-95.9 | 451 | 1,079,301 | 18.7* | 17.7-19.9 | 411 | 993,127 |
| \$36,401-\$65,000 | 98.6* | 97.6-99.5 | 530 | 1,386,015 | 21.5* | 20.6-22.4 | 508 | 1,332,490 |
| \$65,001+ | 97.3* | 95.5-99.1 | 499 | 1,543,584 | 22.1* | 21.3-23.0 | 484 | 1,491,005 |
| Total | 94.2 | 93.2-95.1 | 2,785 | 6,930,554 | 19.8 | 19.4-20.2 | 2507 | 6,300,246 |

[^58]Table A.48.1: Logistic regression results for employer of yourself ever made superannuation, and linear regression results for average number of years contributed to superannuation, 2011-12

|  | Ever contributed to superannuation |  | How long contributed to superannuation (years) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | t |
| Female | -0.158 | -0.91 | $-5.727^{*}$ | -13.00 |
| Age |  |  |  |  |
| 2 | -0.412 | -1.52 | $3.515^{*}$ | 6.65 |
| 3 | -0.813* | -3.06 | $5.384^{*}$ | 9.32 |
| Not married | $-0.562^{*}$ | -3.26 | -1.471* | -3.13 |
| Education |  |  |  |  |
| 2 | 0.384 | 1.91 | 1.155* | 2.26 |
| 3 | 1.099* | 3.88 | $4.258^{*}$ | 7.97 |
| Country of birth |  |  |  |  |
| 2 | 0.249 | 0.99 | -3.304* | -5.86 |
| 3 | -0.506 | -1.69 | -4.558* | -5.55 |
| Not capital city | -0.21 | -1.23 | -1.976* | -4.50 |
| Personal income |  |  |  |  |
| 2 | $0.587^{*}$ | 2.40 | $3.658^{*}$ | 5.05 |
| 3 | 1.531* | 4.46 | $5.165^{*}$ | 7.33 |
| 4 | 1.105* | 3.10 | 4.872* | 6.46 |
| 5 | 0.326 | 1.59 | 2.991* | 4.46 |
| Constant | $2.796^{*}$ | 8.53 | 17.556* | 21.78 |
| * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |

Table A.49: Income intend to receive at retirement (\% of not retired) or presently receive in retirement (\% of retired), 2011-12

|  | Intend to receive (not retired) |  | Currently receive (retired) |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $\%$ | $95 \% \mathrm{Cl}$ | $\%$ | $95 \% \mathrm{Cl}$ |
| Superannuation | 81.4 | $79.3-83.5$ | 47.0 | $43.9-50.2$ |
| Government pension | 57.2 | $54.5-59.9$ | 58.5 | $55.4-61.7$ |
| Other Government benefits | 13.3 | $11.4-15.1$ | 11.8 | $9.6-13.9$ |
| Business/investment income | 38.6 | $35.9-41.2$ | 27.9 | $25.1-30.8$ |
| Using your savings | 49.0 | $46.3-51.7$ | 36.8 | $33.7-40.0$ |
| Spouse/partner's superannuation | 39.5 | $36.9-42.2$ | 18.9 | $16.5-21.3$ |
| Spouse/partner's other income | 31.5 | $28.9-34.0$ | 25.4 | $22.7-28.2$ |
| Other | 3.7 | $2.7-4.7$ | 5.5 | $4.0-7.0$ |
| N Unw | $\mathbf{1 , 7 0 9}$ |  | $\mathbf{1 , 0 7 6}$ |  |
| N W | $\mathbf{5 , 0 3 0 , 6 5 9}$ |  | $\mathbf{1 , 8 9 9}, 895$ |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.50: Superannuation is an intended income source at retirement and is a current income source at retirement (\% of people who have worked in last 20 years or looked for job in last 5 years and 1. not retired, 2. retired) by socio-economic and demographic characteristics, 2011-12

|  | Superannuation planned income source at retirement (not retired) |  |  |  | Superannuation current income source at retirement (retired) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 82.8 | 80.0-85.6 | 895 | 2,581,303 | 58.3 | 53.8-62.9 | 553 | 938,024 |
| Female | 79.9 | 76.8-83.0 | 814 | 2,449,356 | 36.0* | 31.8-40.3 | 523 | 961,871 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 82.6 | 79.4-85.7 | 653 | 2,882,058 | 10.4 | 0.5-20.4 | 34 | 125,334 |
| 55-64 | 80.6 | 77.8-83.4 | 792 | 1,772,175 | 48.1* | 42.7-53.6 | 342 | 713,133 |
| 65-74 | 75.7* | 70.4-80.9 | 264 | 376,425 | 50.6* | 46.8-54.4 | 700 | 1,061,429 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 83.1 | 80.7-85.6 | 1,208 | 3,619,969 | 51.7 | 47.8-55.6 | 717 | 1,250,351 |
| Not married | 77.4* | 73.3-81.5 | 494 | 1,391,300 | 38.9* | 33.5-44.2 | 355 | 636,883 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 74.5 | 70.8-78.1 | 712 | 2,084,289 | 39.9 | 35.7-44.1 | 571 | 1,011,687 |
| Finished HS | 84.3* | 80.6-88.0 | 494 | 1,495,891 | 47.4* | 41.2-53.6 | 275 | 486,878 |
| Bachelor + | 89.3* | 86.3-92.3 | 495 | 1,428,146 | 67.9* | 60.5-75.2 | 213 | 375,028 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 81.3 | 78.9-83.7 | 1,285 | 3,800,886 | 49.6 | 45.9-53.2 | 801 | 1,419,800 |
| Other Engl. spk. | 86.4 | 81.9-90.8 | 286 | 799,834 | 38.0* | 30.8-45.2 | 194 | 338,176 |
| Non-Engl. spk. | 72.1* | 63.2-81.0 | 137 | 427,140 | 41.0 | 29.9-52.2 | 79 | 136,987 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 83.9 | 81.4-86.4 | 1,072 | 3,143,894 | 50.6 | 46.5-54.7 | 640 | 1,112,173 |
| Other | 77.1* | 73.4-80.8 | 637 | 1,886,765 | 42.0* | 37.1-46.9 | 436 | 787,722 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 58.4 | 50.3-66.5 | 180 | 478,801 | 22.9 | 18.1-27.7 | 305 | 536,911 |
| \$20,001-\$36,400 | 78.5* | 72.9-84.2 | 268 | 755,801 | 61.2* | 53.4-68.9 | 183 | 323,500 |
| \$36,401-\$65,000 | 89.6* | 86.5-92.7 | 394 | 1,154,122 | 80.6* | 73.5-87.8 | 136 | 231,893 |
| \$65,001+ | 91.2* | 88.2-94.2 | 446 | 1,433,586 | 73.1* | 56.7-89.6 | 53 | 109,998 |
| Total | 81.4 | 79.3-83.5 | 1,709 | 5,030,659 | 47.0 | 43.9-50.2 | 1,076 | 1,899,895 |

* $p<0.05$ Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.50.1: Logistic regression results for superannuation is an intended income source at retirement and is a current income source at retirement, 2011-12

|  | Not retired |  | Retired |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | 0.131 | 0.94 | -0.714* | -4.73 |
| Age |  |  |  |  |
| 2 | -0.122 | -0.80 | 2.538* | 3.87 |
| 3 | -0.384* | -1.97 | 2.783* | 4.29 |
| Not married | -0.464* | -3.22 | -0.448* | -2.83 |
| Education |  |  |  |  |
| 2 | $0.464^{*}$ | 2.89 | 0.324 | 1.84 |
| 3 | 0.885* | 4.85 | $0.942^{*}$ | 4.53 |
| Country of birth |  |  |  |  |
| 2 | 0.005 | 0.030 | -0.499* | -2.51 |
| 3 | -0.58* | -2.38 | -0.462 | -1.60 |
| Not capital city | -0.358* | -2.58 | $-0.343^{*}$ | -2.26 |
| Personal income |  |  |  |  |
| 2 | $0.962^{*}$ | 4.39 | 1.698* | 7.73 |
| 3 | 1.611* | 7.24 | 2.409* | 8.56 |
| 4 | 1.755* | 7.37 | 1.98* | 4.93 |
| 5 | $0.732^{*}$ | 3.64 | $0.972^{*}$ | 5.31 |
| Constant | $0.484^{*}$ | 2.09 | -3.161* | -4.68 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.51: Confidence (\% extremely or somewhat confident) that have enough superannuation for retirement (\% of people who have had contributions made to superannuation or (intend to) receive superannuation income in retirement, and 1. Not retired, 2. Retired) by socioeconomic and demographic characteristics, 2011-12

|  | Extremely/somewhat confident have enough super for retirement (not retired) |  |  |  | Extremely/somewhat confident have enough super to retire on (retired) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 47.6 | 43.8-51.4 | 863 | 2,493,068 | 61.3 | 56.8-65.9 | 521 | 883,632 |
| Female | 34.8* | 31.0-38.6 | 795 | 2,385,301 | 52.2* | 47.5-57.0 | 455 | 835,449 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 40.6 | 36.5-44.7 | 637 | 2,801,109 | 52.0 | 32.4-71.6 | 29 | 107,286 |
| 55-64 | 41.1 | 37.5-44.7 | 765 | 1,712,213 | 61.5 | 55.9-67.0 | 321 | 667,703 |
| 65-74 | 48.5* | 42.3-54.7 | 256 | 365,047 | 54.3 | 50.3-58.2 | 626 | 944,092 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 46.6 | 43.4-49.8 | 1186 | 3,551,284 | 62.4 | 58.5-66.3 | 667 | 1,166,978 |
| Not married | 27.4* | 22.8-31.9 | 465 | 1,307,694 | 46.2* | 40.3-52.0 | 306 | 542,355 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 33.3 | 29.2-37.4 | 684 | 2,000,367 | 50.0 | 45.4-54.6 | 507 | 893,779 |
| Finished HS | 38.5 | 33.6-43.5 | 481 | 1,450,563 | 56.5 | 50.0-62.9 | 250 | 440,228 |
| Bachelor + | 55.3* | 50.3-60.3 | 486 | 1,408,700 | 75.6* | 69.2-81.9 | 206 | 364,611 |
| Country of birth Australia | 40.9 | 37.8-44.0 | 1245 | 3,678,784 | 57.6 | 53.9-61.4 | 730 | 1,290,363 |
| Other Engl. spk. | 43.7 | 37.1-50.3 | 282 | 792,074 | 55.8 | 47.9-63.8 | 176 | 306,726 |
| Non-Engl. spk. | 41.3 | 31.2-51.3 | 130 | 404,713 | 50.0 | 37.5-62.4 | 68 | 117,060 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 44.9 | 41.4-48.3 | 1046 | 3,073,606 | 59.4 | 55.2-63.7 | 587 | 1,015,069 |
| Other | 35.4* | 31.2-39.6 | 612 | 1,804,763 | 53.3 | 48.0-58.6 | 389 | 704,012 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 24.7 | 17.3-32.1 | 170 | 454,663 | 30.5 | 24.7-36.3 | 260 | 456,222 |
| \$20,001-\$36,400 | 31.2 | 24.7-37.8 | 255 | 717,747 | 59.2* | 51.2-67.1 | 168 | 295,749 |
| \$36,401-\$65,000 | 36.9* | 31.5-42.2 | 391 | 1,146,065 | 82.4* | 75.3-89.4 | 132 | 227,032 |
| \$65,001+ | 58.7* | 53.6-63.9 | 439 | 1,411,796 | 95.5* | 90.2-100.7 | 53 | 109,998 |
| Total | 41.4 | 38.7-44.1 | 1658 | 4,878,369 | 56.9 | 53.6-60.2 | 976 | 1,719,081 |

[^59]Table A.51.1: Regression results for confidence that have enough superannuation for retirement, 2011-12

|  | Not retired |  | Retired |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.307* | -2.71 | -0.108 | -0.68 |
| Age |  |  |  |  |
| 2 | 0.112 | 0.95 | 0.618 | 1.31 |
| 3 | $0.488{ }^{*}$ | 2.95 | 0.524 | 1.13 |
| Not married | -0.781* | -6.16 | -0.504* | -3.06 |
| Education |  |  |  |  |
| 2 | 0.206 | 1.57 | 0.242 | 1.33 |
| 3 | 0.803* | 6.00 | 0.807* | 3.73 |
| Country of birth |  |  |  |  |
| 2 | -0.166 | -1.13 | -0.078 | -0.38 |
| 3 | -0.326 | -1.55 | -0.439 | -1.45 |
| Not capital city | -0.266* | -2.33 | -0.132 | -0.84 |
| Personal income |  |  |  |  |
| 2 | 0.392 | 1.71 | 1.05* | 4.77 |
| 3 | 0.523* | 2.45 | $2.134 *$ | 7.51 |
| 4 | 1.018* | 4.72 | 3.539* | 4.76 |
| 5 | 0.460* | 2.13 | 0.986* | 5.26 |
| Constant | -0.745* | -3.26 | -1.021* | -2.06 |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |

Table A.52: Change in superannuation balance due to financial events in recent years (\% of people who have had contributions made to superannuation), 2011-12

|  | $\%$ | $95 \% ~ C l$ |
| :--- | ---: | ---: |
| Decreased | 66.8 | $64.7-68.9$ |
| Increased | 28.4 | $26.4-30.4$ |
| Can't say | 4.8 | $3.8-5.8$ |
| N Unw | 2,605 |  |
| N W | $6,527,070$ |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

Table A.53: Superannuation decreased due to financial events in recent years (\% of people who have had contributions made to superannuation) by socio-economic and demographic characteristics, 2011-12

|  | Superannuation decreased |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |
| Male | 68.1 | 65.2-71.0 | 1,372 | 3,343,915 |
| Female | 65.5 | 62.3-68.6 | 1,233 | 3,183,155 |
| Age |  |  |  |  |
| 45-54 | 66.8 | 62.9-70.7 | 661 | 2,883,098 |
| 55-64 | 67.8 | 64.9-70.7 | 1,072 | 2,350,190 |
| 65-74 | 65.1 | 61.9-68.3 | 872 | 1,293,781 |
| Marital status |  |  |  |  |
| Married | 68.9 | 66.4-71.4 | 1,829 | 4,665,451 |
| Not married | 61.1* | 57.2-65.1 | 766 | 1,832,479 |
| Education |  |  |  |  |
| Not finished HS | 64.3 | 61.0-67.5 | 1,167 | 2,832,682 |
| Finished HS | 66.9 | 63.0-70.9 | 727 | 1,883,927 |
| Bachelor + | 71.4* | 67.5-75.3 | 691 | 1,771,259 |
| Country of birth |  |  |  |  |
| Australia | 67.8 | 65.4-70.2 | 1,952 | 4,911,757 |
| Other Engl. spk. | 65.0 | 59.9-70.1 | 454 | 1,091,557 |
| Non-Engl. spk. | 61.8 | 53.5-70.0 | 196 | 516,025 |
| Residence |  |  |  |  |
| Capital city | 67.6 | 64.9-70.3 | 1,617 | 4,056,711 |
| Other | 65.5 | 62.1-69.0 | 988 | 2,470,359 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 57.4 | 52.1-62.8 | 422 | 894,997 |
| \$20,001-\$36,400 | 64.5 | 58.9-70.0 | 420 | 1,007,131 |
| \$36,401-\$65,000 | 67.3* | 62.7-71.9 | 519 | 1,366,122 |
| \$65,001+ | 72.7* | 68.2-77.1 | 488 | 1,501,943 |
| Total | 66.8 | 64.7-68.9 | 2,605 | 6,527,070 |

[^60]Table A.53.1: Logistic regression results for superannuation decreased due to financial events in recent years, 2011-12

|  | Coef. | z |
| :--- | :---: | ---: |
| Female | 0.046 | 0.48 |
| Age |  |  |
| 2 | -0.017 | -0.15 |
| 3 | -0.078 | -0.62 |
| Not married | $-0.320^{\star}$ | -3.24 |
| Education |  |  |
| 2 | 0.095 | 0.87 |
| 3 | $0.241^{*}$ | 2.07 |
| Country of birth |  | -0.93 |
| 2 | -0.112 | -0.92 |
| 3 | -0.163 | -1.11 |
| Not capital city | -0.104 |  |
| Personal income |  | 1.63 |
| 2 | 0.248 | 1.88 |
| 3 | 0.281 | 2.16 |
| 4 | $0.350^{\star}$ | 1.88 |
| 5 | 0.263 | 4.02 |
| Constant | $0.694^{*}$ |  |

[^61]Table A.54: Impact of superannuation decrease due to financial events in recent years on retirement plans (\% of people whose superannuation decreased due to financial events in recent years and not retired) by socio-economic and demographic characteristics, and average more/less years work,

|  | Delaying retirement |  | Will retire earlier |  | Have come out of retirement and are working |  | Came out of $r / m e n t$ but could not find job |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 35.6 | 31.4-39.9 | 0.6 | 0.0-1.0 | 2.4 | 1.4-3.4 | 1.5 | 0.7-2.3 | 57.1 | 52.6-61.5 | 600 | 1,726,409 |
| Female | 45.4* | 40.6-50.2 | 0.5 | 0.0-1.0 | 1.0 | 0.3-1.7 | 0.3 | 0.0-0.7 | 50.1* | 45.2-54.9 | 537 | 1,578,537 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 45-54 | 36.0 | 31.2-40.8 | 0.2 | 0.0-0.5 | 0.2 | 0.0-0.5 | 0.0 | - | 60.2 | 55.3-65.2 | 430 | 1,858,867 |
| 55-64 | 47.2* | 42.9-51.6 | 1.2 | 0.2-2.2 | 2.5* | 1.2-3.8 | 2.4 | 1.1-3.7 | 45.1* | 40.8-49.5 | 537 | 1,203,754 |
| 65-74 | 39.3 | 31.8-46.7 | 0.0 | - | 10.1* | 5.4-14.7 | 0.6 | 0.0-1.7 | 46.8* | 39.2-54.4 | 170 | 242,324 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |
| Married | 39.7 | 36.0-43.5 | 0.7 | 0.2-1.3 | 1.8 | 1.0-2.5 | 1.0 | 0.4-1.6 | 54.2 | 50.3-58 | 826 | 2,448,623 |
| Not married | 41.7 | 35.5-47.9 | 0.0 | - | 1.7 | 0.5-2.9 | 0.7 | 0.0-1.5 | 52.6 | 46.2-59 | 305 | 838,911 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 43.0 | 37.8-48.2 | 1.1 | 0.1-2.0 | 1.2 | 0.4-2.0 | 0.4 | 0.0-0.8 | 49.5 | 44.2-54.9 | 447 | 1,276,498 |
| Finished HS | 40.5 | 34.6-46.4 | 0.0 | - | 2.0 | 0.8-3.3 | 2.0 | 0.7-3.3 | 53.4 | 47.4-59.5 | 330 | 997,750 |
| Bachelor + | 36.7 | 31.1-42.3 | 0.4 | 0.0-0.9 | 2.2 | 1.0-3.4 | 0.6 | 0.1-1.2 | 59.3* | 53.6-65.0 | 357 | 1,026,316 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |  |  |
| Australia | 40.6 | 36.9-44.3 | 0.6 | 0.1-1.1 | 1.5 | 0.9-2.1 | 0.8 | 0.3-1.3 | 53.8 | 50.0-57.6 | 862 | 2,525,684 |
| Other Engl. spk. | 41.4 | 33.7-49.2 | 0.3 | 0.0-1.0 | 2.1 | 0.2-4.0 | 1.1 | 0.0-2.4 | 54.2 | 46.4-62.1 | 190 | 528,054 |
| Non-Engl. spk. | 34.8 | 23.4-46.2 | 0.0 | - | 3.5 | 0.3-6.6 | 1.8 | 0.0-4.4 | 52.8 | 40.5-65.1 | 84 | 248,409 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital city | 38.6 | 34.6-42.6 | 0.3 | 0.0-0.7 | 1.9 | 1.1-2.7 | 0.9 | 0.3-1.4 | 55.4 | 51.3-59.5 | 731 | 2,116,632 |
| Other | 43.4 | 37.9-48.8 | 0.9 | 0.0-1.8 | 1.5 | 0.5-2.5 | 1.0 | 0.2-1.8 | 50.7 | 45.2-56.2 | 406 | 1,188,313 |
| Personal income |  |  |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 34.0 | 23.3-44.6 | 2.1 | 0.0-5.1 | 2.1 | 0.0-4.4 | 3.4 | 0.1-6.7 | 54.3 | 43.5-65.2 | 103 | 253,504 |

[^62]Table A. 54 continues

|  | Delaying retirement |  | Will retire earlier |  | Have come out of retirement and are working |  | Came out of $r / m e n t$ but could not find job |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| \$20,001-\$36,400 | 46.5 | 37.5-55.5 | 0.0 | - | 3.8 | 1.5-6.2 | 1.2 | 0.0-2.7 | 43.6 | 34.6-52.6 | 166 | 457,942 |
| \$36,401-\$65,000 | 42.6 | 36.1-49.1 | 0.0 | 0.0-1.7 | 1.6 | 0.5-2.8 | 1.0 | 0.0-2.0 | 52.5 | 45.9-59.2 | 273 | 795,152 |
| \$65,001+ | 37.8 | 32.0-43.6 | 0.8 | 0.1-0.9 | 1.2 | 0.2-2.2 | 0.0 | - | 58.7 | 52.7-64.6 | 316 | 1,018,868 |
| Total | 40.3 | 37.1-43.5 | 0.5 | 0.0-1.0 | 1.7 | 1.1-2.4 | 0.9 | 0.4-1.4 | 53.7 | 50.4-57.0 | 1,137 | 3,304,945 |
| Average more/less years work | 5.7 | 5.3-6.1 | 4.7 | 2.1-7.2 | 4.3 | 3.6-5.0 | - |  | - |  | - |  |

Table A.54.1: Multinomial logistic regression results for impact of superannuation decrease due to financial events in recent years on retirement plans, 2011-12

|  | Delaying retirement v no impact |  | Will retire earlier v no impact |  | Have come out of retirement and are working v no impact |  | Came out of r/ment but could not find job v no impact |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z | Coef. | z |
| Female | 0.431* | 3.12 | 0.898 | 1.04 | -0.637 | -1.43 | -2.195* | -2.72 |
| Age |  |  |  |  |  |  |  |  |
| 2 | 0.567* | 4.00 | 1.876 | 1.71 | 2.761* | 2.65 | 16.082 | 0.02 |
| 3 | 0.38 | 1.83 | -13.965 | -0.01 | 3.842* | 3.65 | 14.126 | 0.02 |
| Not married | 0.088 | 0.59 | -15.416 | -0.01 | 0.052 | 0.11 | -0.143 | -0.21 |
| Education |  |  |  |  |  |  |  |  |
| 2 | 0.017 | 0.11 | -15.773 | -0.01 | 0.707 | 1.44 | 1.667* | 2.34 |
| 3 | -0.377* | -2.33 | -0.646 | -0.70 | 0.494 | 1.03 | 0.407 | 0.47 |
| Country of birth |  |  |  |  |  |  |  |  |
| 2 | 0.061 | 0.35 | -0.16 | -0.14 | -0.179 | -0.34 | 0.304 | 0.42 |
| 3 | 0.161 | 0.60 | -15.232 | 0.00 | 1.077 | 1.87 | 0.949 | 1.08 |
| Not capital city | 0.169 | 1.23 | 0.805 | 0.99 | 0.001 | 0.00 | 0.064 | 0.11 |
| Personal income |  |  |  |  |  |  |  |  |
| 2 | $0.754^{*}$ | 2.68 | -15.961 | -0.01 | 1.082 | 1.54 | -0.419 | -0.49 |
| 3 | 0.66* | 2.53 | -15.752 | -0.01 | 0.138 | 0.19 | -1.426 | -1.76 |
| 4 | $0.713^{*}$ | 2.68 | 0.099 | 0.09 | -0.233 | -0.30 | -16.916 | -0.02 |
| 5 | 0.433 | 1.62 | -0.497 | -0.47 | -0.392 | -0.50 | -1.023 | -1.27 |
| Constant | -1.317* | -4.60 | -4.837* | -3.08 | -5.865* | -4.68 | -18.055 | -0.02 |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Table A.55: Impact of superannuation decrease due to financial events in recent years on retirement (\% of people whose superannuation decreased due to financial events in recent years and retired) by socio-economic and demographic characteristics, and average more/less years worked, 2011-12

|  | Came out of r/ment but could not find job |  | Will come out of retirement |  | Retired early |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 2.2 | 0.6-3.8 | 2.6 | 0.6-4.6 | 6.9 | 4.0-9.7 | 82.4 | 77.7-87.1 | 329 | 550,799 |
| Female | 2.1 | 0.2-4.0 | 0.6 | -0.6-1.7 | 9.7 | 6.1-13.4 | 83.4 | 78.8-88.0 | 278 | 504,852 |
| Age |  |  |  |  |  |  |  |  |  |  |
| 45-54 | 5.5 | 0.0-16.0 | 4.9 | 0.0-14.4 | 6.1 | -5.6-17.8 | 72.9 | 49.0-96.9 | 16 | 65,775 |
| 55-64 | 2.1 | 0.0-4.1 | 2.9 | 0.4-5.4 | 10.1 | 5.8-14.5 | 80.9 | 75.2-86.7 | 191 | 389,858 |
| 65-74 | 1.9 | 0.6-3.1 | 0.5 | 0.0-1.1 | 7.3 | 4.7-9.8 | 85.2 | 81.7-88.7 | 400 | 600,018 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Married | 1.8 | 0.5-3.1 | 0.8 | 0.0-1.7 | 8.5 | 5.7-11.2 | 84.7 | 81.2-88.3 | 443 | 765,670 |
| Not married | 3.2 | 0.1-6.3 | 4.0 | 0.5-7.6 | 7.9 | 3.7-12.1 | 79.7 | 73.1-86.4 | 162 | 281,573 |
| Education |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 3.2 | 1.1-5.3 | 1.9 | 0.0-3.7 | 9.0 | 5.6-12.4 | 79.9 | 75.0-84.9 | 313 | 543,539 |
| Finished HS | 0.0 | - | 0.8 | 0.0-2.5 | 7.1 | 2.8-11.4 | 88.5* | 83.2-93.8 | 153 | 263,463 |
| Bachelor + | 2.2 | 0.0-4.9 | 1.9 | 0.0-4.8 | 6.9 | 2.7-11.0 | 83.7 | 77.2-90.3 | 134 | 238,724 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |
| Australia | 1.8 | 0.6-3.0 | 0.7 | 0.0-1.4 | 9.1 | 6.4-11.7 | 83.2 | 79.5-86.9 | 461 | 803,992 |
| Other Engl. spk. | 1.5 | 0.0-3.6 | 2.5 | 0.0-5.8 | 7.8 | 1.7-14 | 84.7 | 77.0-92.3 | 106 | 181,354 |
| Non-Engl. spk. | 7.7 | 0.0-18.3 | 10.7 | 0.0-22.6 | 0.0 | - | 74.5 | 58.8-90.2 | 40 | 70,306 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Capital city | 2.5 | 0.8-4.2 | 1.8 | 0.2-3.4 | 9.3 | $6.1-12.5$ | 81.5 | 76.9-86.0 | 363 | 624,813 |
| Other | 1.7 | 0.0-3.4 | 1.4 | -0.3-3.1 | 6.7 | 3.5-9.8 | 84.9 | 80.3-89.5 | 244 | 430,838 |
| Personal income |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 4.3 | 0.6-8.0 | 1.8 | 0.0-4.4 | 11.5 | 5.9-17 | 76.4 | 68.2-84.5 | 144 | 260,470 |
| \$20,001-\$36,400 | 1.5 | 0.0-3.6 | 1.5 | 0.0-4.5 | 9.1 | 3.2-15 | 84.8 | 77.4-92.2 | 112 | 191,638 |

Table A. 55 continues

|  | Came out of r/ment but could not find job |  | Will come out of retirement |  | Retired early |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| \$36,401-\$65,000 | 1.1 | 0.0-3.2 | 0.0 | - | 3.5 | 0.0-7.6 | 86.7 | 78.8-94.6 | 77 | 124,101 |
| \$65,001+ | 2.3 | 0.0-6.7 | 0.0 | - | 0.0 | - | 97.7* | 93.3-100.0 | 35 | 72,772 |
| Total | 2.2 | 0.9-3.4 | 1.6 | 0.5-2.8 | 8.2 | 6.0-10.5 | 82.9 | 79.6-86.2 | 607 | 1,055,651 |
| Average more/less years worked | - |  | 7.9 | 3.0-12.8 | 6.7 | 5.5-7.9 | - |  | - |  |

Table A.55.1: Multinomial logistic regression results for impact of superannuation decrease due to financial events in recent years on retirement, 2011-12

|  | Came out of $r /$ ment but could not find job v no impact |  | Will come out of retirement $v$ no impact |  | Retired early v no impact |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z |
| Female | -0.644 | -0.950 | -2.906* | -2.13 | 0.055 | 0.16 |
| Age |  |  |  |  |  |  |
| 2 | -1.326 | -1.01 | -0.175 | -0.11 | 0.102 | 0.09 |
| 3 | -1.269 | -1.05 | -2.881 | -1.69 | -0.175 | -0.16 |
| Not married | 0.703 | 1.08 | 1.696 | 1.90 | 0.115 | 0.32 |
| Education |  |  |  |  |  |  |
| 2 | -16.283 | -0.01 | -1.167 | -0.86 | -0.071 | -0.18 |
| 3 | -0.443 | -0.61 | -0.585 | -0.49 | 0.093 | 0.22 |
| Country of birth |  |  |  |  |  |  |
| 2 | 0.159 | 0.19 | 0.807 | 0.63 | -0.708 | -1.41 |
| 3 | 0.072 | 0.06 | $3.738 *$ | 2.79 | -16.527 | -0.01 |
| Not capital city | -0.475 | -0.73 | 0.963 | 0.89 | -0.363 | -1.08 |
| Personal income |  |  |  |  |  |  |
| 2 | -1.067 | -1.25 | -0.062 | -0.04 | -0.287 | -0.64 |
| 3 | -1.211 | -1.08 | -15.124 | -0.01 | -1.17 | -1.75 |
| 4 | -0.594 | -0.50 | -16.708 | -0.01 | -16.558 | -0.01 |
| 5 | -1.346 | -1.60 | 0.841 | 0.78 | -0.255 | -0.66 |
| Constant | -1.122 | -0.87 | -3.953* | -2.11 | -1.644 | -1.43 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.56: Impact of superannuation decrease due to financial events in recent years on working hours (\% of people whose superannuation decreased due to financial events in recent years and currently working) by socio-economic and demographic characteristics, and average more/ less hours per week, 2011-12

|  | Working more |  | Working less |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% Cl | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 9.6 | 6.8-12.5 | 1.5 | 0.3-2.6 | 88.5 | 85.5-91.6 | 518 | 1,536,576 |
| Female | 12.0 | 8.8-15.1 | 2.5 | 0.7-4.4 | 85.0 | 81.5-88.6 | 456 | 1,348,868 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 8.5 | 5.6-11.4 | 2.0 | $0.3-3.7$ | 89.1 | 85.8-92.5 | 385 | 1,670,994 |
| 55-64 | 13.4* | 10.1-16.7 | 1.5 | 0.3-2.6 | 84.7 | 81.2-88.1 | 452 | 1,020,106 |
| 65-74 | 15.5* | 9.2-21.8 | 4.2* | 0.9-7.6 | 79.5* | 72.6-86.4 | 137 | 194,345 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 10.5 | 8.0-13.0 | 2.2 | 0.8-3.5 | 86.8 | 84.1-89.6 | 715 | 2,176,917 |
| Not married | 11.7 | 7.5-15.8 | 1.4 | 0.1-2.6 | 86.8 | 82.4-91.1 | 253 | 691,115 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 11.2 | 0.8-14.8 | 2.2 | 0.7-3.6 | 86.2 | 82.4-90.2 | 382 | 1,107,620 |
| Finished HS | 13.0 | 8.9-17.1 | 1.7 | 0.0-4.2 | 84.3 | 79.6-89.0 | 284 | 470,560 |
| Bachelor + | 7.9 | 4.9-10.9 | 1.9 | 0.0-3.6 | 90.2 | 86.8-93.6 | 307 | 897,204 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 10.2 | 7.9-12.5 | 2.1 | 0.8-3.3 | 87.4 | 84.8-90 | 737 | 2,189,400 |
| Other Engl. spk. | 8.4 | 3.6-13.3 | 0.3* | 0.0-0.8 | 90.8 | 85.8-95.8 | 163 | 470,560 |
| Non-Engl. spk. | 20.8 | 10.2-31.4 | 4.6 | 0.0-10.1 | 73.6* | 62.0-85.1 | 73 | 222,685 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 9.1 | 6.8-11.5 | 2.3 | 0.7-3.8 | 88.0 | 85.3-90.8 | 626 | 1,838,580 |
| Other | 13.5 | 9.4-17.5 | 1.4 | 0.3-2.5 | 84.9 | 80.7-89.1 | 348 | 1,046,864 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 14.2 | 4.5-23.9 | 14.2 | 0.0-29.6 | 71.6 | 55.7-87.5 | 54 | 129,932 |
| \$20,001-\$36,400 | 12.2 | 6.4-18.0 | 2.3 | 0.0-4.6 | 84.6 | 78.2-91.0 | 145 | 395,938 |
| \$36,401-\$65,000 | 13.3 | 8.9-17.7 | 2.1 | 0.3-4.0 | 84.3 | 79.6-89.0 | 258 | 764,953 |
| \$65,001+ | 9.1 | 5.4-12.8 | 0.1 | 0.1-0.4 | 90.3 | 86.6-94.0 | 300 | 985,819 |
| Total | 10.7 | 8.6-12.8 | 2.0 | 0.9-3.0 | 86.9 | 84.6-89.2 | 974 | 2,885,444 |
| Average more/less hours per week | 11.9 | 10.6-13.2 | 10.6 | 7.9-13.3 | - |  | - |  |

* $p<0.05$; Source: Authors' calculations from the 2011-12 Employment for Mature Age Australians Survey.

Table A.56.1: Multinomial logistic regression results for impact of superannuation decrease due to financial events in recent years on working hours, 2011-12

|  | Working more v no impact |  | Working less v no impact |  |
| :--- | :---: | ---: | :---: | ---: |
|  | Coef. | $\mathbf{z}$ | Coef. | $\mathbf{z}$ |
| Female | 0.359 | 1.62 | 0.377 | 0.74 |
| Age |  |  |  |  |
| 2 | $0.482^{*}$ | 2.06 | -0.338 | -0.60 |
| 3 | $0.844^{*}$ | 2.66 | 0.733 | 1.16 |
| Not married | -0.056 | -0.24 | -0.239 | -0.43 |
| Education |  |  |  |  |
| 2 | 0.326 | 1.35 | -0.82 | -1.22 |
| 3 | -0.122 | -0.46 | -0.098 | -0.18 |
| Country of birth |  |  |  |  |
| 2 | -0.389 | -1.22 | -1.322 | -1.26 |
| 3 | $1.025^{*}$ | 3.15 | 1.087 | 1.57 |
| Not capital city | 0.319 | 1.51 | -0.197 | -0.39 |
| Personal income |  |  |  |  |
| 2 | -0.002 | 0.00 | $-1.347^{*}$ | -1.89 |
| 3 | 0.105 | 0.24 | $-1.36^{*}$ | -2.04 |
| 4 | -0.247 | -0.54 | $-3.271^{*}$ | -2.80 |
| 5 | -0.441 | -0.96 | $-1.807^{*}$ | -2.50 |
| Constant | $-2.602^{*}$ | -5.19 | $-1.992^{*}$ | -2.38 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Employment for Mature Age Australians Survey.

Table A.57: Knowledge (great deal/fair amount) of superannuation rules (\% of people who have had contributions made to superannuation, or intend to receive/currently receive superannuation income in retirement) and agreement (strongly agree of agree) that superannuation rules change too frequently to adequately plan for retirement (\% of these people who know at least something about superannuation rules), 2011-12

|  | Knowledge of superannuation (great deal/fair amount) |  |  |  | Superannuation rules change too frequently (agree/strongly agree) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 53.8 | 50.7-56.8 | 1,384 | 3,376,700 | 53.9 | 50.7-57.1 | 1,259 | 3,058,673 |
| Female | 39.9* | 36.8-43.0 | 1,250 | 3,220,750 | 50.4 | 46.9-53.8 | 1,094 | 2,827,664 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 40.7 | 36.7-44.8 | 666 | 2,908,395 | 52.5 | 48.2-56.8 | 598 | 2,595,960 |
| 55-64 | 52.5* | 49.4-55.6 | 1,086 | 2,379,916 | 52.8 | 49.6-56.0 | 995 | 2,166,883 |
| 65-74 | 50.8* | 47.4-54.1 | 882 | 1,309,138 | 50.4 | 46.8-54.0 | 760 | 1,123,495 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 49.5 | 46.9-52.1 | 1,853 | 4,718,262 | 54.5 | 51.8-57.3 | 1688 | 4,271,771 |
| Not married | 40.2* | 36.2-44.2 | 771 | 1,850,049 | 46.5* | 42.1-50.9 | 656 | 1,586,833 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 40.4 | 37.1-43.6 | 1,191 | 2,894,146 | 55.0 | 51.5-58.6 | 1037 | 2,515,437 |
| Finished HS | 47.7* | 43.5-51.8 | 731 | 1,890,792 | 53.5 | 49.2-57.9 | 657 | 1,691,298 |
| Bachelor + | 57.4* | 53.2-61.7 | 692 | 1,773,311 | 46.2* | 41.7-50.6 | 646 | 1,652,609 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 47.1 | 44.6-49.7 | 1,975 | 4,969,147 | 53.0 | 50.3-55.7 | 1774 | 4,458,030 |
| Other Engl. spk. | 44.7 | 39.4-49.9 | 458 | 1,098,800 | 48.7 | 43.1-54.3 | 405 | 976,213 |
| Non-Engl. spk. | 50.5 | 42.2-58.9 | 198 | 521,773 | 52.0 | 43.0-60.9 | 123 | 450,042 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 48.0 | 45.2-50.8 | 1,633 | 4,088,674 | 52.7 | 49.7-55.7 | 1469 | 3,659,961 |
| Other | 45.3 | 41.7-48.8 | 1,001 | 2,508,775 | 51.4 | 47.6-55.2 | 884 | 2,226,376 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 31.5 | 26.8-36.3 | 430 | 910,884 | 48.9 | 43.0-54.8 | 352 | 748,994 |
| \$20,001-\$36,400 | 44.8* | 39.1-50.4 | 423 | 1,013,496 | 48.2 | 42.2-54.2 | 379 | 892,816 |
| \$36,401-\$65,000 | 47.4* | 42.5-52.2 | 523 | 1,373,097 | 56.0 | 51.0-61.0 | 485 | 1,250,662 |
| \$65,001+ | 47.2* | 53.0-62.9 | 492 | 1,521,794 | 50.7 | 45.5-55.9 | 464 | 1,426,741 |
| Total | 47.0 | 44.8-49.2 | 2,634 | 6,597,450 | 52.2 | 49.9-54.6 | 2,353 | 5,886,337 |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.57.1: Logistic regression results for knowledge (great deal/fair amount) of superannuation rules and agreement (strongly agree of agree) that superannuation rules change too frequently to adequately plan for retirement, 2011-12

|  | Knowledge of superannuation |  | Superannuation rules change too frequently |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.413* | -4.75 | -0.101 | -1.07 |
| Age |  |  |  |  |
| 2 | $0.700^{*}$ | 6.52 | 0.052 | 0.47 |
| 3 | $0.767{ }^{*}$ | 6.52 | 0.052 | 0.42 |
| Not married | $-0.346{ }^{*}$ | -3.70 | $-0.266^{*}$ | -2.64 |
| Education |  |  |  |  |
| 2 | $0.431 *$ | 4.26 | -0.168 | -1.55 |
| 3 | 0.664* | 6.20 | $-0.437^{*}$ | -3.87 |
| Country of birth |  |  |  |  |
| 2 | -0.221 | -1.96 | -0.155 | -1.30 |
| 3 | -0.040 | -0.24 | 0.016 | 0.09 |
| Not capital city | -0.031 | -0.35 | -0.051 | -0.54 |
| Personal income |  |  |  |  |
| 2 | 0.609* | 4.15 | -0.128 | -0.80 |
| 3 | $0.742^{*}$ | 5.19 | 0.013 | 0.08 |
| 4 | 0.986* | 6.40 | 0.047 | 0.29 |
| 5 | $0.593 *$ | 4.44 | 0.131 | 0.89 |
| Constant | -1.105* | -6.71 | $0.524^{*}$ | 2.98 |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.58: Lack of certainty of superannuation rules affects retirement plans or retirement (\% of people who agree or strongly agree that superannuation rules change too frequently and 1. Not retired, 2. Retired), 2011-12

|  | Lack of certainty affects retirement plans |  |  |  | Lack of certainty affects retirement |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 38.0 | 32.9-43.1 | 447 | 1,253,320 | 24.3 | 18.5-30.0 | 238 | 395,871 |
| Female | 39.5 | 33.7-45.4 | 357 | 1,073,397 | 25.5 | 19.0-32.1 | 189 | 351,114 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 36.5 | 30.7-42.3 | 302 | 1,321,930 | 26.5 | 0.7-52.2 | 12 | 41,157 |
| 55-64 | 43.3 | 38.1-48.5 | 373 | 822,981 | 24.6 | 17.7-31.6 | 158 | 321,288 |
| 65-74 | 33.8 | 25.5-42.0 | 129 | 181,807 | 24.7 | 19.4-30.3 | 257 | 384,540 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 38.7 | 34.3-43.2 | 604 | 1,771,784 | 27.6 | 0.2-32.8 | 320 | 557,875 |
| Not married | 38.6 | 31.0-46.2 | 197 | 548,646 | 16.7* | 9.1-24.3 | 107 | 189,109 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 38.3 | 32.5-44.2 | 340 | 981,405 | 22.9 | 17.2-28.5 | 229 | 402,835 |
| Finished HS | 39.5 | 32.4-46.6 | 239 | 716,646 | 25.5 | 16.9-34.2 | 109 | 188,881 |
| Bachelor + | 38.1 | 30.8-45.4 | 221 | 615,101 | 28.7 | 18.2-39.1 | 84 | 148,282 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 38.6 | 34.2-43.0 | 613 | 1,771,588 | 23.0 | 18.2-27.8 | 332 | 590,858 |
| Other Engl. spk. | 39.8 | 30.1-49.5 | 128 | 368,342 | 28.1 | 17.0-39.2 | 65 | 106,881 |
| Non-Engl. spk. | 37.4 | 24.0-50.8 | 63 | 186,788 | 41.8 | 22.2-61.3 | 29 | 47,194 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 36.9 | 32.1-41.7 | 504 | 1,463,790 | 24.6 | 19.1-30.5 | 270 | 465,372 |
| Other | 41.7 | 35.4-48.0 | 300 | 862,927 | 25.3 | 18.3-32.4 | 157 | 281,613 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 47.5 | 34.0-60.9 | 70 | 186,298 | 23.9 | 15.2-32.6 | 104 | 179,768 |
| \$20,001-\$36,400 | 38.6 | 28.0-49.2 | 111 | 298,177 | 20.5 | 11.0-30.0 | 74 | 132,447 |
| \$36,401-\$65,000 | 35.0 | 27.7-42.4 | 198 | 589,767 | 30.8 | 18.7-42.8 | 64 | 110,435 |
| \$65,001+ | 39.0 | 3.2-46.5 | 221 | 674,523 | 27.7 | 0.8-46.9 | 26 | 48,750 |
| Total | 38.7 | 34.9-42.6 | 804 | 2,326,717 | 24.9 | 20.5-29.2 | 427 | 746,985 |

[^63]Table A.58.1: Logistic regression results for lack of certainty of superannuation rules affects retirement plans or retirement, 2011-12

|  | Lack of certainty affects retirement plans |  | Lack of certainty affects retirement |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | 0.203 | 1.22 | 0.166 | 0.66 |
| Age |  |  |  |  |
| 2 | 0.151 | 0.91 | -0.252 | -0.35 |
| 3 | -0.087 | -0.37 | -0.25 | -0.35 |
| Not married | 0.066 | 0.37 | -0.716* | -2.37 |
| Education |  |  |  |  |
| 2 | -0.021 | -0.12 | 0.174 | 0.61 |
| 3 | -0.157 | -0.81 | 0.297 | 0.91 |
| Country of birth |  |  |  |  |
| 2 | 0.069 | 0.33 | -0.007 | -0.02 |
| 3 | 0.186 | 0.64 | 0.702 | 1.53 |
| Not capital city | 0.107 | 0.67 | 0.165 | 0.67 |
| Personal income |  |  |  |  |
| 2 | -0.16 | -0.50 | -0.013 | -0.03 |
| 3 | -0.3 | -1.02 | 0.295 | 0.77 |
| 4 | -0.208 | -0.69 | 0.194 | 0.36 |
| 5 | -0.148 | -0.50 | 0.183 | 0.57 |
| Constant | -0.391 | -1.23 | -1.052 | -1.35 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Tax transfer system
Table A.59: Aware of tax-free superannuation after age 60 (\% of people who have had contributions made to superannuation, or intend to receive/currently receive superannuation income in retirement) by age, socio-economic and demographic characteristics, 2011-12

|  | Age 45-59 |  |  |  | Age 60-74 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 64.6 | 60.3-68.9 | 560 | 2,066,169 | 81.9 | 79.2-84.6 | 817 | 1,297,004 |
| Female | 54.5* | 50.0-59.0 | 579 | 2,070,937 | 75.2 | 71.8-78.5 | 658 | 1,120,954 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 62.0 | 58.3-65.7 | 822 | 3,015,851 | 80.7 | 78.2-83.2 | 1,013 | 1,662,908 |
| Not married | 51.8* | 45.8-57.9 | 312 | 1,099,267 | 74.4 | 70.4-78.5 | 457 | 747,899 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 54.0 | 49.0-59.1 | 461 | 1,687,699 | 76.2 | 73.0-79.4 | 714 | 1,170,925 |
| Finished HS | 58.4 | 52.7-64.0 | 351 | 1,262,734 | 76.1 | 71.6-80.6 | 376 | 621,193 |
| Bachelor + | 68.7* | 63.1-74.4 | 324 | 1,173,674 | 87.0* | 83.4-90.5 | 368 | 599,637 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 59.9 | 56.3-63.4 | 873 | 3,158,804 | 79.9 | 77.4-82.3 | 1,085 | 1,773,507 |
| Other Engl. spk. | 60.6 | 52.7-68.5 | 173 | 628,000 | 73.3 | 67.9-78.6 | 283 | 467,789 |
| Non-Engl. spk. | 54.5 | 42.8-66.2 | 91 | 344,624 | 81.7* | 74.1-89.3 | 106 | 174,609 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 60.7 | 56.7-64.7 | 709 | 2,605,834 | 79.1 | 76.4-81.9 | 913 | 1,462,287 |
| Other | 57.6 | 52.4-62.7 | 430 | 1,531,272 | 78.1* | 74.7-81.6 | 562 | 955,670 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 55.4 | 45.7-65.2 | 116 | 392,010 | 74.5 | 69.5-79.6 | 306 | 502,987 |
| \$20,001-\$36,400 | 47.9 | 39.2-56.6 | 158 | 589,066 | 76.9* | 71.8-82.1 | 264 | 422,822 |
| \$36,401-\$65,000 | 51.4 | 44.9-57.9 | 265 | 946,490 | 83.3 | 78.6-88.1 | 256 | 423,325 |
| \$65,001+ | 69.5* | 64.0-74.9 | 333 | 1,250,482 | 91.1* | 86.3-95.9 | 157 | 264,397 |
| Total | 59.5 | 56.4-62.7 | 1,139 | 4,137,106 | 78.8 | 76.6-80.9 | 1,475 | 2,417,957 |

[^64]Table A.59.1: Logistic regression results for aware of tax-free superannuation after age 60 (age 45-59 and 60-74), 2011-12

|  | $45-59$ |  |  | 60-74 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.176 | -1.22 | $-0.294^{*}$ | -2.17 |
| Not married | -0.357 | -2.41 | -0.423 | -2.96 |
| Education |  |  |  |  |
| 2 | -0.007 | -0.04 | 0.151 | 0.98 |
| 3 | $0.530^{*}$ | 2.74 | $0.513^{*}$ | 3.03 |
| Country of birth |  |  |  | -0.78 |
| 2 | -0.439 | -2.60 | -0.144 | -1.43 |
| 3 | 0.153 | 0.50 | -0.346 | -1.25 |
| Not capital city | 0.028 | 0.20 | -0.169 |  |
| Personal income |  |  |  | -1.31 |
| 2 | 0.043 | 0.21 | -0.331 | -0.44 |
| 3 | 0.34 | 1.50 | -0.101 | 1.49 |
| 4 | $1.161^{*}$ | 3.31 | 0.36 | 1.06 |
| 5 | 0.001 | 0.01 | 0.258 | 2.57 |
| Constant | $1.429^{*}$ | 7.18 | $0.611^{*}$ |  |

[^65]Table A.60: How tax-free superannuation after age 60 would affect retirement (\% of people unaware of tax-free super after 60, age 60-74 and retired) by socio-economic and demographic characteristics, and average additional years work, 2011-12

|  | Would come out of retirement |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |
| Male | 8.6 | 2.8-14.5 | 84.0 | 76.5-91.6 | 90 | 136,455 |
| Female | 2.1* | 0.0-4.9 | 92.6* | 87.5-97.6 | 102 | 172,396 |
| Marital status |  |  |  |  |  |  |
| Married | 4.5 | 0.9-8.1 | 92.2 | 87.4-96.9 | 118 | 194,126 |
| Not married | 5.7 | 0.2-11.3 | 83.1 | 74.5-91.7 | 74 | 114,725 |
| Education |  |  |  |  |  |  |
| Not finished HS | 4.8 | 0.6-9.1 | 89.6 | 83.7-95.6 | 103 | 162,719 |
| Finished HS | 3.5 | 0.0-8.4 | 90.4 | 83.0-97.9 | 54 | 89,966 |
| Bachelor + | 5.5 | 0.0-13.0 | 88.1 | 76.8-99.3 | 31 | 48,859 |
| Country of birth |  |  |  |  |  |  |
| Australia | 4.3 | 0.9-7.7 | 90.1 | 85.0-95.1 | 134 | 214,034 |
| Other Engl. spk. | 8.0 | $0.3-15.7$ | 82.7 | 72.1-93.3 | 47 | 76,937 |
| Non-Engl. spk. | 0.0 | - | 100.0 | - | 11 | 17,880 |
| Residence |  |  |  |  |  |  |
| Capital city | 4.1 | 0.5-7.7 | 91.4 | 86.4-96.4 | 115 | 183,087 |
| Other | 6.2 | 0.9-11.6 | 85.1 | 77.1-93.0 | 77 | 125,765 |
| Personal income |  |  |  |  |  |  |
| Up to \$20,000 | 1.2 | 1.2-3.6 | 91.4 | 84.6-98.2 | 61 | 99,390 |
| \$20,001-\$36,400 | 8.7 | 0.0-18.4 | 87.8 | 76.4-99.2 | 34 | 51,969 |
| \$36,401-\$65,000 | 6.3 * | 5.9-18.6 | 88.8 | 73.5-100.0 | 14 | 20,900 |
| \$65,001+ | 0.0 | - | 100.0 | - | 3 | 5,698 |
| Total | 5.0 | 1.9-8.0 | 88.8 | 84.4-93.2 | 192 | 308,852 |
| Average additional years work | 10.0 | 0.0-20.2 | - |  | - |  |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.60.1: Regression results for how tax-free superannuation after age 60 would affect retirement (people unaware of tax-free super after 60, age 60-74 and retired), 2011-12

|  | Coef. | z |
| :--- | ---: | ---: |
| Female | -1.348 | -1.50 |
| Not married | -0.164 | -0.20 |
| Education |  |  |
| 2 | -0.118 | -0.13 |
| 3 | 0.124 | 0.13 |
| Country of birth |  |  |
| 2 | 0.99 | 1.26 |
| 3 | - | -1.09 |
| Not capital city | 0.07 |  |
| Personal income | 1.349 | 1.07 |
| 2 | 1.384 | 0.91 |
| 3 | - | - |
| 4 | 1.36 | 1.18 |
| 5 | $-3.636^{*}$ | -3.01 |
| Constant |  | 0.0 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Table A.61: How tax-free superannuation after age 60 has affected retirement (\% of people aware of tax-free super after 60, age 60-74 and retired) by socioeconomic and demographic characteristics, and average more/less years work, 2011-12

|  | Came out of r/ment but could not find job |  | Will come out of retirement |  | Retired early |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 1.4 | 0.3-2.5 | 1.5 | 0.2-2.7 | 10.4 | 7.2-13.6 | 85.4 | 81.8-89.1 | 380 | 589,527 |
| Female | 0.2 | 0.0-0.7 | 0.0 | - | 8.4 | 5.0-11.7 | 88.3 | 84.4-92.2 | 281 | 469,342 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Married | 0.9 | 0.1-1.6 | 0.4 | 0.0-1.0 | 8.8 | 6.1-11.5 | 87.7 | 84.6-90.7 | 469 | 747,747 |
| Not married | 0.9 | 0.0-2.2 | 1.8 | 0.0-3.8 | 11.4 | 6.8-15.9 | 84.3 | 79.0-89.5 | 190 | 308,371 |
| Education |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 1.3 | 0.1-2.4 | 0.7 | 0.0-1.7 | 10.8 | 7.4-14.2 | 85.5 | 81.6-89.3 | 339 | 548,034 |
| Finished HS | 0.4 | 0.0-1.2 | 1.2 | 0.0-2.9 | 8.3 | 3.9-12.7 | 87.1 | 81.8-92.4 | 161 | 253,521 |
| Bachelor + | 0.5 | 0.0-1.6 | 0.7 | 0.0-2.0 | 7.8 | 3.3-12.3 | 88.9 | 83.7-94.1 | 152 | 244,159 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |
| Australia | 1.2 | 0.3-2.0 | 0.7 | 0.0-1.5 | 10.4 | 7.5-13.2 | 85.8 | 82.6-89.0 | 495 | 793,990 |
| Other Engl. spk. | 0.0 | - | 0.9 | 0.0-2.6 | 5.7 | 1.5-9.8 | 91.8* | 86.8-96.7 | 116 | 186,197 |
| Non-Engl. spk. | 0.0 | - | 1.8 | 0.0-5.4 | 10.3 | 1.5-19.1 | 83.5 | 72.7-94.3 | 49 | 76,630 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Capital city | 0.8 | 0.0-1.6 | 1.1 | 0.0-2.3 | 8.5 | 5.7-11.3 | 87.1 | 83.8-90.5 | 391 | 606,539 |
| Other | 0.9 | 0.0-2.0 | 0.4 | 0.0-1.1 | 10.9 | 7-14.8 | 86.1 | 81.8-90.4 | 270 | 452,330 |
| Personal income |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 2.4 | 0.3-4.5 | 0.6 | 0.0-1.8 | 9.0 | 4.6-13.4 | 85.7 | 80.5-91.0 | 172 | 279,257 |
| \$20,001-\$36,400 | 1.5 | 0.0-3.6 | 0.0 | - | 8.5 | 2.8-14.2 | 90.0 | 84.0-96.0 | 109 | 171,823 |
| \$36,401-\$65,000 | 0.0 | - | 1.9 | 0.0-4.5 | 8.8 | 2.9-14.7 | 88.5 | 82.1-95.0 | 102 | 161,229 |
| \$65,001+ | 0.0 | - | 2.4 | 0.0-7.2 | 10.5 | 0.7-20.3 | 87.1 | 76.4-97.7 | 40 | 67,382 |
| Total | 0.9 | 0.2-1.5 | 0.8 | 0.1-1.5 | 9.5 | 7.2-11.8 | 86.7 | 84.0-89.4 | 661 | 1,058,869 |
| Average more/less years work | - |  | 10.0 | 0.0-24.0 | 6.2 | 5.2-7.2 | - |  | - | - | *p<0.05; Source: Authors' calcuations from the 2011-12 Bariers to Employment for Mature Age Austraians Sunver.

Table A.61.1: Multinomial logistic regression results for how tax-free superannuation after age 60 has affected retirement (people aware of tax-free super after 60, age 60-74 and retired), 2011-12

|  | Came out of $r /$ ment but could not find job v no impact |  | Will come out of retirement v no impact |  | Retired early v no impact |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z |
| Female | -1.804 | -1.62 | -15.886 | -0.01 | -0.262 | -0.86 |
| Not married | -0.272 | -0.31 | 1.934 | 2.02 | 0.548 | 1.82 |
| Education |  |  |  |  |  |  |
| 2 | -0.448 | -0.40 | 0.539 | 0.49 | -0.08 | -0.23 |
| 3 | 0.111 | 0.10 | -0.795 | -0.59 | -0.319 | -0.82 |
| Country of birth |  |  |  |  |  |  |
| 2 | -15.484 | -0.01 | 0.149 | 0.12 | -0.559 | -1.22 |
| 3 | -16.169 | -0.01 | 0.798 | 0.63 | 0.228 | 0.44 |
| Not capital city | -0.41 | -0.51 | -0.688 | -0.58 | 0.135 | 0.46 |
| Personal income |  |  |  |  |  |  |
| 2 | -0.974 | -1.11 | -15.355 | -0.01 | -0.201 | -0.43 |
| 3 | -17.319 | -0.01 | 1.003 | 0.78 | 0.031 | 0.06 |
| 4 | -17.578 | 0.00 | 1.449 | 0.92 | 0.319 | 0.51 |
| 5 | -16.975 | -0.01 | -0.296 | -0.20 | 0.324 | 0.88 |
| Constant | -2.017* | -2.73 | $-5.031^{* *}$ | -3.59 | $-2.368^{*}$ | -5.77 |

[^66]Table A.62: How tax-free superannuation after age 60 would affect retirement (\% of people aged 45-59 and retired) by socio-economic and demographic characteristics, and average additional years work, 2011-12

|  | Would come out of retirement |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% Cl | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |
| Male | 2.8 | 0.0-6.8 | 93.8 | 87.7-99.9 | 49 | 154,811 |
| Female | 4.2 | 0.0-8.9 | 95.8 | 91.1-100.6 | 66 | 184,224 |
| Marital status |  |  |  |  |  |  |
| Married | 4.6 | 0.1-9.1 | 93.0 | 87.4-98.6 | 73 | 214,563 |
| Not married | 1.9 | 0.0-5.6 | 98.1 | 94.4-100.0 | 41 | 117,475 |
| Education |  |  |  |  |  |  |
| Not finished HS | 5.6 | 0.0-11.1 | 93.0 | 86.9-99.1 | 58 | 171,930 |
| Finished HS | 0.0 | - | 97.1 | 91.3-100.0 | 34 | 95,512 |
| Bachelor + | 3.4 | 0.0-1.0 | 96.6 | 90.0-100.0 | 23 | 71,593 |
| Country of birth |  |  |  |  |  |  |
| Australia | 1.7 | 0.0-4.0 | 96.4 | 92.9-99.9 | 94 | 271,447 |
| Other Engl. spk. | 10.9 | 0.0-26.4 | 89.1 | 73.6-100.0 | 12 | 42,158 |
| Non-Engl. spk. | 12.9 | 0.0-37.0 | 87.1 | 63.0-100.0 | 8 | 22,550 |
| Residence |  |  |  |  |  |  |
| Capital city | 4.2 | 0.1-8.3 | 93.4 | 88.2-98.7 | 76 | 217,876 |
| Other | 2.4 | 0.0-7.2 | 97.6 | 92.8-100.0 | 39 | 121,159 |
| Personal income |  |  |  |  |  |  |
| Up to \$20,000 | 0.0 | - | 96.7 | 90.0-100.0 | 23 | 71,866 |
| \$20,001-\$36,400 | 10.9 | 0.0-23.0 | 85.1 | 71.1-99.2 | 24 | 70,349 |
| \$36,401-\$65,000 | 4.9 | 0.0-14.6 | 95.1 | 85.4-100.0 | 16 | 44,902 |
| \$65,001+ | 0.0 | - | 100.0 | . | 10 | 36,918 |
| Total | 3.6 | 0.4-6.7 | 94.9 | 91.1-98.7 | 115 | 339,035 |
| Average additional years work | 7.9 | 3.8-12.1 | - |  | - | - |

Note: Tests conducted - all non-significant. Regression not conducted because number of cases too small.
Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.63: How tax-free superannuation after age 60 would affect retirement plans (\% of people unaware of tax-free super after 60, age 60-74 and not retired) by socio-economic and demographic characteristics, 2011-12

|  | Would delay retirement |  | Would retire early |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 22.9 | 11.4-34.4 | 0.0 | - | 65.0 | 51.9-78.2 | 57 | 98,796 |
| Female | 7.8 | 1.1-14.6 | 10.3 | 2.4-18.2 | 75.3 | 64.2-86.4 | 60 | 106,118 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 14.6 | 5.8-23.4 | 4.3 | 0.0-9.2 | 73.8 | 62.9-84.6 | 70 | 126,966 |
| Not married | 16.2 | 5.6-26.9 | 7.1 | 0.0-15 | 64.2 | 49.8-78.5 | 46 | 76,543 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 15.3 | 6.6-24.1 | 6.3 | 0.0-12.3 | 69.3 | 57.7-80.9 | 66 | 115,699 |
| Finished HS | 15.8 | 2.6-29.1 | 0.0 | - | 75.6 | 60.3-91.0 | 32 | 58,419 |
| Bachelor + | 8.6 | 0.0-24.8 | 12.5 | 0.0-28.8 | 67.5 | 44.1-90.8 | 18 | 29,391 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 14.8 | 7.0-22.5 | 5.1 | 0.2-10.1 | 69.7 | 59.4-80 | 82 | 142,696 |
| Other Engl. spk. | 8.9 | 0.0-21.0 | 7.4 | 0.0-17.5 | 75.3 | 57.9-92.6 | 27 | 48,162 |
| Non-Engl. spk. | 39.5 | 3.4-75.6 | 0.0 | - | 60.5 | 24.4-96.6 | 8 | 14,057 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 18.6 | 9.1-28.2 | 5.8 | 0.2-11.5 | 65.5 | 53.8-77.1 | 72 | 121,857 |
| Other | 9.9 | 1.4-18.4 | 4.6 | 0.0-10.9 | 77.5 | 65.4-89.7 | 45 | 83,058 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 14.0 | 0.0-29.5 | 12.3 | 0.0-28.7 | 53.9 | 28.7-79.2 | 16 | 28,742 |
| \$20,001-\$36,400 | 18.2 | 3.3-33.1 | 3.9 | 0.0-11.5 | 74.1 | 57.0-91.2 | 27 | 45,542 |
| \$36,401-\$65,000 | 25.0 | 8.0-42.1 | 3.8 | 0.0-11.3 | 62.8 | 43.7-81.8 | 28 | 49,644 |
| \$65,001+ | 25.8 | 0.0-56.7 | 0.0 | - | 64.3 | 31.4-97.1 | 9 | 17,796 |
| Total | 15.1 | 8.4-21.8 | 5.3 | 1.1-9.5 | 70.4 | 61.7-79 | 117 | 204,915 |
| Average more/ less years work | 4.7 | 3.2-6.2 | 3.3 | 1.7-4.9 | - |  | - | - |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.63.1: Multinomial logistic regression results for how tax-free superannuation after age 60 would affect retirement plans (people unaware of tax-free super after 60, age 60-74 and not retired), 2011-12

|  | Would delay retirement v no impact | Would retire early v no impact |  |  |
| :--- | :---: | ---: | ---: | ---: |
|  | Coef. | $\mathbf{z}$ | Coef. | $\mathbf{z}$ |
| Female | $-1.632^{*}$ | -2.10 | 16.896 | 0.01 |
| Not married | 0.038 | 0.05 | -0.309 | -0.28 |
| Education |  |  |  |  |
| 2 | -0.635 | -0.83 | -15.534 | -0.01 |
| 3 | $-4.55^{*}$ | -2.01 | 1.739 | 1.40 |
| Country of birth |  |  |  | 0.39 |
| 2 | -1.245 | -1.36 | 0.435 | 0.00 |
| 3 | 2.966 | 1.75 | -14.653 | -0.15 |
| Not capital city | -1.22 | -1.55 | -0.148 |  |
| Personal income |  |  |  | -0.98 |
| 2 | 0.414 | 0.40 | -1.387 | -0.88 |
| 3 | 0.243 | 0.23 | -1.355 | 0.00 |
| 4 | 0.805 | 0.58 | -1.709 | -0.75 |
| 5 | -2.248 | -1.55 | -0.983 | -0.01 |
| Constant | 0.118 | 0.12 | -17.92 |  |

[^67]Table A.64: How tax-free superannuation after 60 would affect hours worked (\% of people unaware of tax-free super after 60, age 60-74 and currently working) by socio-economic and demographic characteristics, and average more/less hours per week work, 2011-12

|  | Seek to work more |  | Seek to work less |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 4.6 | 0.0-11.0 | 14.1 | 3.2-25.1 | 79.0 | 66.3-91.6 | 43 | 71,019 |
| Female | 0.0 | - | 13.0 | 3.1-23.0 | 82.6 | 71.4-93.9 | 46 | 82,229 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 1.8 | 0.0-5.4 | 13.5 | 3.8-23.2 | 80.7 | 69.6-91.9 | 51 | 90,138 |
| Not married | 2.7 | 0.0-8.0 | 13.9 | 2.3-25.5 | 80.8 | 67.7-93.9 | 37 | 61,705 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 1.8 | 0.0-5.4 | 6.5 | 0.0-13.0 | 87.8 | 78.9-96.6 | 53 | 90,975 |
| Finished HS | 0.0 | - | 31.2 | 11.5-51.0 | 68.8 | 49.0-88.6 | 23 | 41,454 |
| Bachelor + | 7.9 | 0.0-23.0 | 9.1 | 0.0-26.4 | 75.3 | 50.6-100.0 | 13 | 20,820 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 3.0 | 0.0-7.2 | 12.4 | 4.0-20.8 | 81.4 | 71.5-91.2 | 63 | 109,719 |
| Other Engl. spk. | 0.0 | - | 15.7 | 0.0-32.4 | 79.6 | 61.2-97.9 | 20 | 34,127 |
| Non-Engl. spk. | 0.0 | - | 19.2 | 0.0-53.4 | 80.8 | 46.6-115 | 6 | 9,403 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 1.9 | 0.0-5.8 | 9.2 | 1.2-17.2 | 84.7 | 74.6-94.8 | 52 | 84,267 |
| Other | 2.4 | 0.0-7.1 | 18.9 | 5.9-31.9 | 76.4 | 62.4-90.3 | 37 | 68,982 |

## Personal income

| Up to \$20,000 | 0.0 | - | 0.0 | - | 89.2 | $68.7-100.0$ | 9 | 16,460 |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 20,001-\$ 36,400$ | 3.9 | $0.0-11.5$ | 7.9 | $0.0-18.8$ | 80.3 | $64.3-96.4$ | 25 | 42,717 |
| $\$ 36,401-\$ 65,000$ | 0.0 | - | 29.8 | $10.3-49.3$ | 70.2 | $50.7-89.7$ | 23 | 39,296 |
| $\$ 65,001+$ | 0.0 |  | - | 35.7 | $0.0-75.9$ | 64.3 | $24.1-100.0$ | 6 |
| Total | 2.1 | $0.0-5.2$ | 13.6 | $6.2-20.9$ | $\mathbf{8 0 . 9}$ | $\mathbf{7 2 . 5 - 8 9 . 4}$ | 89 | 153,249 |
| Average more/less <br> hours per week work |  |  | 15.3 | $7.0-23.6$ | - |  | - | - |

[^68]Table A.64.1: How tax-free superannuation after 60 would affect hours worked (people unaware of tax-free super after 60, age 60-74 and currently working)

|  | Seek to work less v no impact |  |
| :--- | ---: | ---: |
|  | Coef. | z |
| Female | 1.495 | 1.51 |
| Not married | 0.074 | 0.09 |
| Education |  |  |
| 2 | 1.926 | 1.94 |
| 3 | -0.148 | -0.11 |
| Country of birth |  | -0.04 |
| 2 | -0.041 | 0.02 |
| 3 | 0.030 | 0.35 |
| Not capital city | 0.316 |  |
| Personal income |  | 0.00 |
| 2 | 19.437 | 0.00 |
| 3 | 20.984 | 0.00 |
| 4 | 21.845 | 0.00 |
| 5 | 18.431 | 0.00 |
| Constant | -23.526 |  |
| * $<0.05 ;$ Note: Seek to work less $v$ no impact - regression not conducted because of small numbers. Source: Authors' calculations from the |  |  |
| $2011-12$ Barriers to Employment for Mature Age Australians Survey. |  |  |

Table A.65: How tax-free superannuation after age 60 has affected retirement plans (\% of people aware of tax-free super after 60, age 60-74 and not retired) by socio-economic and demographic characteristics, and average additional years work, 2011-12

|  | Delaying retirement |  | Will retire earlier |  | Have come out of retirement and are working |  | Came out of r/ ment but could not find job |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 17.0 | 12.5-21.4 | 2.8 | 0.8-4.7 | 4.5 | 2.1-6.8 | 2.4 | 0.5-4.3 | 69.5 | 64.0-74.9 | 290 | 472,226 |
| Female | 18.6 | 13.3-23.9 | 0.6 | 0.0-1.7 | 1.9 | 0.0-3.7 | 0.8 | 0.0-1.9 | 76.0 | 70.2-81.8 | 215 | 373,097 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |
| Married | 18.2 | 14.1-22.3 | 1.6 | 0.3-3.0 | 3.7 | 1.8-5.6 | 2.1 | 0.5-3.7 | 71.2 | 66.3-76 | 356 | 594,070 |
| Not married | 15.9 | 9.8-21.9 | 2.2 | 0.0-4.6 | 2.5 | 0.0-4.9 | 0.6 | 0.0-1.9 | 75.6 | 68.5-82.6 | 147 | 248,259 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 23.4 | 17.5-29.4 | 1.3 | 0.0-2.8 | 2.6 | 0.5-4.7 | 1.8 | 0.0-4.7 | 68.3 | 61.9-74.8 | 206 | 344,471 |
| Finished HS | 15.1 | 8.9-21.3 | 1.3 | 0.0-3.2 | 5.4 | 1.4-9.4 | 2.7 | 0.0-5.7 | 71.3 | 63.4-79.3 | 129 | 219,288 |
| Bachelor + | 12.8* | 7.6-18.1 | 2.8 | 0.0-5.4 | 2.6 | 0.3-4.9 | 0.7 | 0.0-2.2 | 77.7* | 71.1-84.2 | 167 | 277,228 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |  |  |
| Australia | 17.0 | 13.1-20.9 | 2.0 | 0.5-3.4 | 3.5 | 1.7-5.3 | 1.8 | 0.4-3.3 | 72.9 | 68.2-77.5 | 374 | 622,788 |
| Other Engl. spk. | 16.5 | 8.6-24.3 | 1.0 | 0.0-3.1 | 2.3 | 0.0-5.5 | 1.8 | 0.0-4.4 | 76.2 | 67.3-85.1 | 93 | 156,493 |
| Non-Engl. spk. | 26.5 | 12.2-40.8 | 1.8 | 0.0-5.4 | 4.3 | 0.0-10.1 | 0.0 | - | 58.2 | 42.2-74.2 | 38 | 66,042 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital city | 16.6 | 12.5-20.6 | 1.8 | 0.3-3.2 | 2.6 | 0.9-4.3 | 0.9 | 0.0-2.0 | 74.6 | 69.8-79.4 | 335 | 550,805 |
| Other | 19.8 | 13.7-25.9 | 1.8 | 0.0-3.9 | 4.7 | 1.6-7.8 | 3.1 | 0.4-5.7 | 68.1 | 61.0-75.2 | 170 | 294,518 |
| Personal income |  |  |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 12.4 | 3.7-21.1 | 3.9 | 0.0-9.2 | 3.5 | 0.0-8.4 | 7.2 | 59.5-83.6 | 71.6 | 59.5-83.6 | 57 | 95,597 |
| \$20,001-\$36,400 | 19.6 | 11.1-28.1 | 2.1 | 0.0-5.1 | 5.9 | 1.3-10.6 | 3.7 | 55.3-75.2 | 65.2 | 55.3-75.2 | 94 | 153,488 |
| \$36,401-\$65,000 | 19.0 | 11.6-26.3 | 1.6 | 0.0-3.9 | 4.9 | 0.9-8.8 | 0.8 | 63.3-80.2 | 71.7 | 63.3-80.2 | 112 | 191,551 |
| \$65,001+ | 17.4 | 10.0-24.9 | 2.9 | 0.0-6.2 | 1.9 | 0.0-4.6 | 0.0 | 68.7-85.2 | 77.0 | 68.7-85.2 | 105 | 173,520 |
| Total | 17.7 | 14.3-21.1 | 1.8 | 0.6-3.0 | 3.3 | 1.8-4.9 | 1.7 | 0.5-2.9 | 72.3 | 68.3-76.3 | 505 | 845,323 |
| Average additional/ less years work | 5.1 | 4.2-6.1 | 4.2 | 1.5-6.9 | 4.2 | 3.0-5.4 | - |  | - |  | - | - | * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.65.1: Multinomial logistic regression results for how tax-free superannuation after age 60 has affected retirement plans (people aware of tax-free super after 60, age 60-74 and not retired, 2011-12

|  | Delaying retirement <br> v no impact | Will retire earlier v <br> no impact | Have come out of <br> retirement and are <br> working v no impact | Came out of r/ment <br> but could not find <br> job v no impact |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Coef. | $\mathbf{z}$ | Coef. | $\mathbf{z}$ | Coef. | $\mathbf{z}$ | Coef. | z |
| Female | 0.051 | 0.19 | -2.124 | -1.890 | -1.128 | -1.84 | -1.104 | -1.24 |
| Not married | -0.165 | -0.56 | 0.764 | 0.98 | -0.235 | -0.38 | -1.247 | -1.10 |
| Education |  |  |  |  |  |  |  |  |
| 2 | -0.419 | -1.35 | -0.019 | -0.02 | 0.838 | 1.39 | 0.685 | 0.78 |
| 3 | $-0.825^{*}$ | -2.64 | 0.473 | 0.56 | 0.066 | 0.10 | -0.75 | -0.63 |
| Country of birth |  |  |  |  |  |  |  |  |
| 2 | 0.05 | 0.15 | -0.606 | -0.55 | -0.606 | -0.77 | 0.592 | 0.65 |
| 3 | $0.951^{*}$ | 2.23 | 0.758 | 0.66 | 0.896 | 1.07 | -12.846 | -0.01 |
| Not capital city | 0.26 | 1.00 | -0.079 | -0.10 | 0.798 | 1.55 | 1.218 | 1.49 |
| Personal income |  |  |  |  |  |  |  |  |
| 2 | 0.476 | 0.94 | -0.229 | -0.22 | 0.928 | 1.07 | -0.617 | -0.75 |
| 3 | 0.655 | 1.35 | -0.967 | -0.92 | 0.423 | 0.49 | -1.993 | -1.70 |
| 4 | 0.549 | 1.09 | -0.62 | -0.62 | -0.763 | -0.73 | -15.923 | -0.02 |
| 5 | 0.356 | 0.74 | -15.193 | -0.02 | -0.802 | -0.78 | -15.813 | -0.02 |
| Constant | $-1.71^{*}$ | -3.61 | $-2.713^{*}$ | -2.80 | $-3.243^{*}$ | -3.68 | $-2.472^{*}$ | -2.76 |

[^69]Table A.66: How tax-free superannuation after age 60 has affected hours worked (\% of people aware of tax-free super after 60, age 60-74 and currently working) by socio-economic and demographic characteristics, average more/less hours per week work, 2011-12

|  | Working more |  | Working less |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 4.1 | 1.5-6.6 | 7.2 | 3.8-10.5 | 87.4 | 83.1-91.7 | 236 | 384,089 |
| Female | 3.1 | 0.4-5.9 | 4.5 | 1.4-7.6 | 91.1 | 86.8-95.5 | 177 | 306,052 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 3.5 | 1.3-5.7 | 6.8 | 3.8-9.7 | 88.7 | 84.9-92.4 | 293 | 489,894 |
| Not married | 3.1 | 0.1-6.1 | 4.1 | 0.5-7.7 | 90.9 | 85.7-96.1 | 118 | 197,253 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 1.7 | 0.0-3.7 | 8.5 | 4.2-12.9 | 88.2 | 83.3-93.2 | 168 | 280,483 |
| Finished HS | 6.1 | 1.6-10.6 | 2.7 | 0.0-5.7 | 88.7 | 82.5-94.8 | 108 | 180,459 |
| Bachelor + | 4.2 | 0.5-7.9 | 5.5 | 1.7-9.3 | 90.3 | 85.2-95.5 | 135 | 226,634 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 3.3 | 1.2-5.3 | 5.9 | 3.2-8.6 | 89.5 | 86.0-93 | 306 | 510,142 |
| Other Engl. spk. | 4.2 | 0.0-9.0 | 7.6 | 1.6-13.5 | 86.5 | 78.5-94.5 | 76 | 126,669 |
| Non-Engl. spk. | 6.1 | 0.0-14.6 | 3.0 | 0.0-8.7 | 90.9 | 80.9-100.0 | 31 | 53,330 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 3.8 | 1.5-6.2 | 4.5 | 2.1-7.0 | 90.0 | 86.3-93.6 | 275 | 451,587 |
| Other | 3.3 | 0.1-6.5 | 8.7 | 3.9-13.5 | 87.4 | 81.7-93.1 | 138 | 238,554 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 4.2 | 0.0-12.3 | 6.0 | 0.0-14.1 | 89.8 | 78.7-100.0 | 30 | 50,400 |
| \$20,001-\$36,400 | 5.6 | 0.7-10.5 | 6.0 | 0.7-11.3 | 87.3 | 80.1-94.5 | 81 | 131,596 |
| \$36,401-\$65,000 | 3.9 | 0.1-7.8 | 6.5 | 1.7-11.2 | 86.0 | 79.0-93.0 | 100 | 171,174 |
| \$65,001+ | 5.7 | 0.7-10.7 | 3.5 | 0.0-7.4 | 90.8 | 84.6-97.0 | 95 | 158,243 |
| Total | 3.7 | 1.8-5.5 | 6.0 | 3.7-8.3 | 89.1 | 86.0-92.2 | 413 | 690,141 |
| Average more/less hours per week work | 16.1 | 10.2-22.1 | 16.5 | 12.0-20.9 | - |  | - | - |

[^70]Table A.66.1: How tax-free superannuation after age 60 has affected hours worked (people aware of tax-free super after 60, age 60-74 and currently working), 2011-12

|  | Working more v no impact | Working less v no impact |  |  |
| :--- | :---: | ---: | ---: | ---: |
|  | Coef. | z | Coef. | z |
| Female | -0.656 | -0.99 | -0.546 | -1.15 |
| Not married | 0.104 | 0.16 | -0.287 | -0.52 |
| Education |  |  |  |  |
| 2 | $1.650^{\star}$ | 1.98 | -0.982 | -1.49 |
| 3 | 1.064 | 1.22 | -0.236 | -0.49 |
| Country of birth |  |  |  |  |
| 2 | 0.165 | 0.24 | 0.463 | 0.90 |
| 3 | 0.867 | 1.01 | -0.528 | -0.50 |
| Not capital city | 0.032 | 0.05 | 0.453 | 1.04 |
| Personal income |  |  |  |  |
| 2 | 0.686 | 0.58 | 0.033 | 0.04 |
| 3 | 0.163 | 0.14 | 0.069 | 0.08 |
| 4 | 0.229 | 0.20 | -0.779 | -0.80 |
| 5 | -14.56 | -0.02 | 0.214 | 0.25 |
| Constant | $-4.27^{\star}$ | -3.29 | $-2.333^{\star}$ | -2.77 |

[^71]Table A.67: How tax-free superannuation after age 60 would affect retirement plans (\% of not retired people age 45-59) by socio-economic and demographic characteristics, and average more/ less years work, 2011-12

|  | Would put off retirement |  | Would retire early |  | No impact |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Male | 18.2 | 14.5-21.8 | 6.6 | 4.2-8.9 | 69.6 | 65.2-74.0 | 511 | 1,911,357 |
| Female | 16.7 | 13.2-20.3 | 5.3 | 3.1-7.6 | 70.1 | 65.7-74.5 | 513 | 1,886,714 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 16.7 | 13.8-19.6 | 6.1 | 4.1-8.0 | 70.5 | 66.8-74.1 | 749 | 2,801,288 |
| Not married | 19.3 | 14.0-24.6 | 5.8 | 3.0-8.5 | 68.2 | 62.1-74.2 | 271 | 981,792 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 19.5 | 15.3-23.8 | 5.2 | 2.4-8.0 | 66.3 | 61.1-71.5 | 403 | 1,515,769 |
| Finished HS | 14.2 | 10.3-18.1 | 5.2 | 2.8-7.6 | 74.1 | 68.9-79.2 | 317 | 1,167,223 |
| Bachelor + | 17.9 | 12.9-22.8 | 7.9 | 4.7-11.1 | 70.4 | 64.7-76.1 | 301 | 1,102,081 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 16.4 | 13.6-19.3 | 6.5 | 4.5-8.5 | 69.8 | 66.3-73.4 | 779 | 2,887,357 |
| Other Engl. spk. | 18.4 | 11.9-24.9 | 4.8 | 1.3-8.2 | 72.7 | 65.4-80.1 | 161 | 585,842 |
| Non-Engl. spk. | 24.9 | 14.0-35.9 | 3.3 | 0.0-7.1 | 64.0 | 52.2-75.7 | 83 | 322,074 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 17.4 | 14.2-20.6 | 6.2 | 4.0-8.3 | 69.7 | 65.7-73.6 | 633 | 2,387,958 |
| Other | 17.5 | 13.3-21.7 | 5.6 | 3.1-8.1 | 70.1 | 65.0-75.1 | 391 | 1,410,113 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 21.4 | 12.2-30.6 | 4.0 | 0.1-7.9 | 63.7 | 52.7-74.7 | 93 | 320,144 |
| \$20,001-\$36,400 | 20.8 | 12.6-29.1 | 6.2 | 0.4-11.9 | 66.3 | 57.0-75.7 | 134 | 518,718 |
| \$36,401-\$65,000 | 16.0 | 11.2-20.8 | 5.3 | 2.4-8.3 | 69.7 | 63.5-75.9 | 249 | 901,587 |
| \$65,001+ | 14.6 | 10.5-18.8 | 8.4 | 5.0-11.7 | 72.6 | 67.4-77.9 | 323 | 1,213,564 |
| Total | 17.4 | 14.9-20.0 | 6.0 | 4.3-7.6 | 69.8 | 66.7-72.9 | 1,024 | 3,798,071 |
| Average more/less years work | 6.1 | 5.4-6.7 | 4.9 | 4.2-5.7 | - |  | - | - |

[^72]Table A.67.1: Multinomial logistic regression results for how tax-free superannuation after age 60 would affect retirement plans (not retired people age 45-59), 2011-12

|  | Put off retirement v no impact |  | Retire early v no impact |  |
| :--- | :---: | ---: | ---: | ---: |
|  | Coef. | z | Coef. | z |
| Female | -0.069 | -0.38 | 0.028 | 0.09 |
| Not married | 0.165 | 0.85 | 0.250 | 0.83 |
| Education |  |  |  |  |
| 2 | -0.237 | -1.14 | 0.222 | 0.62 |
| 3 | -0.267 | -1.22 | 0.535 | 1.54 |
| Country of birth |  |  |  |  |
| 2 | 0.097 | 0.40 | -0.302 | -0.75 |
| 3 | 0.342 | 1.13 | -0.521 | -0.84 |
| Not capital city | -0.012 | -0.07 | -0.013 | -0.05 |
| Personal income |  |  |  |  |
| 2 | -0.011 | -0.03 | 0.005 | 0.01 |
| 3 | -0.22 | -0.69 | 0.194 | 0.33 |
| 4 | -0.263 | -0.81 | 0.472 | 0.81 |
| 5 | -0.06 | -0.18 | 0.035 | 0.05 |
| Constant | $-1.155^{*}$ | -3.54 | $-2.963^{*}$ | -4.85 |

[^73]Table A.68: How tax-free superannuation after age 60 would affect hours worked after age 60 (\% of people age 45-59, currently working) by socio-economic and demographic characteristics, and average hours per week would work, 2011-12

|  | Seek to work more |  | Seek to work less |  | No impact |  | Plan to be retired by then |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 1.6 | 0.5-2.6 | 34.3 | 29.6-39.0 | 58.3 | 53.4-63.2 | 2.4 | 0.8-4.0 | 461 | 1,732,374 |
| Female | 2.8 | 1.2-4.4 | 32.9 | 28.0-37.7 | 56.7 | 51.6-61.8 | 2.6 | 1.1-4.2 | 439 | 1,602,375 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Married | 2.3 | 1.1-3.4 | 33.8 | 29.9-37.7 | 56.3 | 52.2-60.4 | 2.8 | 1.4-4.1 | 675 | 2,526,427 |
| Not married | 1.8 | 0.2-3.4 | 33.2 | 26.4-40.0 | 61.4 | 54.4-68.4 | 1.7 | 0.0-3.3 | 221 | 793,330 |
| Education |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 1.8 | 0.4-3.2 | 32.9 | 27.4-38.5 | 57.0 | 51.2-62.3 | 3.1 | 1.1-5.1 | 342 | 1,279,613 |
| Finished HS | 3.2 | 1.1-5.3 | 29.9 | 24.1-35.7 | 61.7* | 55.5-67.8 | 2.1 | 0.3-3.9 | 285 | 1,055,947 |
| Bachelor + | 1.5 | 0.2-2.9 | 38.8* | 32.5-45.1 | 53.8 | 47.4-60.2 | 2.1 | 0.3-4.0 | 271 | 998,597 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |
| Australia | 2.1 | 1.0-3.2 | 34.9 | 30.9-38.8 | 56.5 | 52.4-60.6 | 2.5 | 1.2-3.9 | 681 | 2,526,371 |
| Other Engl. spk. | 2.0 | 0.0-4.3 | 30.3 | 22.3-38.3 | 62.0 | 53.6-70.5 | 2.8 | 0.3-5.3 | 147 | 535,632 |
| Non-Engl. spk. | 2.6 | 0.0-6.3 | 28.8 | 17.5-40.1 | 58.0 | 45.5-70.6 | 1.5 | 0.0-4.3 | 71 | 269,948 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Capital city | 1.7 | 0.7-2.7 | 33.7 | 29.5-38.0 | 58.2 | 53.7-62.6 | 2.4 | 1.1-3.8 | 563 | 2,092,765 |
| Other | 3.0 | 1.0-4.9 | 33.4 | 27.8-39.0 | 56.5 | 50.6-62.3 | 2.6 | 0.8-4.4 | 337 | 1,241,984 |
| Personal income |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 7.9 | 0.3-15.5 | 13.3 | 0.9-25.7 | 67.8 | 52.9-82.8 | 0.0 | - | 51 | 171,949 |
| \$20,001-\$36,400 | 2.8 | 0.0-6.1 | 30.5 | 21.0-39.9 | 60.0 | 50.1-70.0 | 2.7 | 0.0-6.0 | 117 | 445,203 |
| \$36,401-\$65,000 | 2.1 | 0.4-3.8 | 34.8 | 28.3-41.3 | 57.8 | 51.0-64.5 | 1.4 | 0.0-2.9 | 243 | 881,978 |
| \$65,001+ | 1.3 | 0.2-2.5 | 41.5 | 35.6-47.4 | 51.0 | 45.0-56.9 | 3.6 | 1.3-5.9 | 317 | 1,196,056 |
| Total | 2.1 | 1.2-3.1 | 33.6 | 30.2-37.0 | 57.5 | 54.0-61.1 | 2.5 | 1.4-3.6 | 900 | 3,334,749 |
| Average hours per week would work | 14.3 | 8.3-20.2 | 17.1 | 16.0-18.0 | - |  | - |  | - | - | * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.68.1: Multinomial logistic regression results for how tax-free superannuation after age 60 would affect hours worked after age 60 (people age 45-59, currently working), 2011-12

|  | Seek to work more v <br> no impact |  | Seek to work less v <br> no impact |  | Plan to be retired by then v <br> no impact |  |
| :--- | :---: | ---: | :---: | ---: | ---: | ---: |
|  | Coef. | $\mathbf{z}$ | Coef. | $\mathbf{z}$ | Coef. | $\mathbf{z}$ |
| Female | 0.444 | 0.89 | 0.282 | 1.75 | 0.671 | 1.41 |
| Not married | -0.154 | -0.29 | -0.04 | -0.23 | -0.4 | -0.70 |
| Education |  |  |  |  |  |  |
| 2 | 0.523 | 0.99 | -0.199 | -1.08 | -0.543 | -1.01 |
| 3 | 0.24 | 0.39 | 0.186 | 0.99 | -0.449 | -0.81 |
| Country of birth |  |  |  |  |  |  |
| 2 | -0.159 | -0.24 | -0.164 | -0.78 | 0.461 | 0.84 |
| 3 | 0.439 | 0.55 | -0.119 | -0.40 | -0.375 | -0.35 |
| Not capital city | 0.436 | 0.94 | -0.013 | -0.08 | 0.191 | 0.41 |
| Personal income |  |  |  |  |  |  |
| 2 | -1.056 | -1.32 | $1.119^{\star}$ | 2.29 | 13.093 | 0.03 |
| 3 | -0.967 | -1.39 | 1.339 | 2.87 | 12.86 | 0.02 |
| 4 | -1.157 | -1.52 | $1.635^{\star}$ | 3.48 | 13.827 | 0.03 |
| 5 | -1.322 | -1.63 | 0.906 | 1.87 | 13.394 | 0.03 |
| Constant | $-2.896^{\star}$ | -3.78 | $-1.949^{\star}$ | -4.12 | -16.584 | -0.03 |

[^74]Table A.69: Receive any Government income support (\% of total population) by socio-economic and demographic characteristics, 2011-12

|  | \% | 95\% CI | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |
| Male | 31.5 | 29.0-34.1 | 1,505 | 3,628,392 |
| Female | 38.5* | 35.7-41.3 | 1,502 | 3,716,645 |
| Age |  |  |  |  |
| 45-54 | 21.3 | 18.0-24.7 | 700 | 3,064,368 |
| 55-64 | 25.3 | 22.7-27.8 | 1,189 | 2,597,009 |
| 65-74 | 75.1* | 72.6-77.7 | 1,118 | 1,683,660 |
| Marital status |  |  |  |  |
| Married | 27.9 | 25.8-30.0 | 2,051 | 5,100,317 |
| Not married | 51.2* | 47.5-54.9 | 944 | 2,209,959 |
| Education |  |  |  |  |
| Not finished HS | 44.7 | 41.7-47.6 | 1,433 | 3,371,225 |
| Finished HS | 31.1* | 27.6-34.7 | 818 | 2,080,344 |
| Bachelor + | 20.4* | 17.2-23.7 | 718 | 1,821,527 |
| Country of birth |  |  |  |  |
| Australia | 36.0 | 33.7-38.2 | 2,252 | 5,531,190 |
| Other Engl. spk. | 33.4 | 29.0-37.7 | 513 | 1,194,813 |
| Non-Engl. spk. | 30.0 | 23.6-36.4 | 238 | 609,902 |
| Residence |  |  |  |  |
| Capital city | 31.0 | 28.6-33.3 | 1,834 | 4,498,688 |
| Other | 41.5* | 38.4-44.7 | 1,173 | 2,846,349 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 76.9 | 72.9-80.9 | 591 | 1,214,519 |
| \$20,001-\$36,400 | 50.2* | 44.8-55.5 | 480 | 1,141,674 |
| \$36,401-\$65,000 | 19.2* | 15.5-22.9 | 536 | 1,397,353 |
| \$65,001+ | 6.6* | 4.0-9.2 | 501 | 1,546,768 |
| Total | 35.1 | 33.2-37.0 | 3,007 | 7,345,037 |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |

Table A.70.1: Logistic regression results for receive any Government income support, 2011-12

|  | Coef. | z |
| :--- | :---: | ---: |
| Female | -0.146 | -1.39 |
| Age |  |  |
| 2 | 0.032 | 0.23 |
| 3 | $2.275^{\star}$ | 15.98 |
| Not married | $0.924^{\star}$ | 8.36 |
| Education |  |  |
| 2 | $-0.407^{*}$ | -3.37 |
| 3 | $-0.934^{\star}$ | -6.85 |
| Country of birth |  | -0.18 |
| 2 | -0.025 | 0.23 |
| 3 | 0.045 | 3.98 |
| Not capital city | $0.419^{\star}$ |  |
| Personal income |  | -6.31 |
| 2 | $-1.017^{*}$ | -14.22 |
| 3 | $-2.396^{\star}$ | -15.35 |
| 4 | $-3.586^{\star}$ | -11.13 |
| 5 | $-1.645^{\star}$ | 1.60 |
| Constant | 0.305 |  |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Table A.71: Type of Government income support receive (\% of all population) by socio-economic and demographic characteristics, 2011-12

|  | Age Pension |  | DSP |  | Newstart Allowance |  | Carer Payment |  | Parenting Payment |  | Other |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% Cl | \% | 95\% CI | \% | 95\% CI | \% | 95\% Cl | \% | 95\% Cl | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 14.2 | 12.7-15.7 | 7.4 | 5.9-8.9 | 2.3 | 1.4-3.2 | 1.8 | 1.0-2.6 | 1.4 | 0.6-2.2 | 6.7 | 5.2-8.2 | 1,505 | 3,628,392 |
| Female | 17.8* | 16.0-19.6 | 6.2 | 4.8-7.6 | 2.4 | 1.6-3.3 | 4.8* | 3.5-6.0 | 4.3* | 2.7-5.9 | 6.6 | 5.1-8.0 | 1,502 | 3,716,645 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45-54 | - | - | 5.8 | 3.9-7.7 | 2.4 | 1.3-3.6 | 3.7 | 2.3-5.2 | 6.2 | 4.1-8.2 | 5.7 | 3.7-7.7 | 700 | 3,064,368 |
| 55-64 | - | - | 10.9* | 9.1-12.7 | 3.7 | 2.7-4.8 | 3.2 | 2.2-4.3 | 0.8* | 0.3-1.3 | 5.7 | 4.4-7.0 | 1,189 | 2,597,009 |
| 65-74 | 65.9 | 63.1-68.7 | 2.4* | 1.5-3.3 | 0.0 | - | 2.6 | 1.6-3.5 | 0.0 | - | 9.7* | 8.0-11.5 | 1,118 | 1,683,660 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Married | 14.2 | 12.8-15.5 | 3.9 | 3.0-4.8 | 0.9 | 0.5-1.3 | 3.1 | 2.3-4.0 | 2.2 | 1.2-3.1 | 5.5 | 4.4-6.7 | 2,051 | 5,100,317 |
| Not married | 20.4* | 18.0-22.7 | 13.1* | 10.5-15.6 | $5.7 *$ | 3.9-7.4 | 3.7 | $2.2-5.2$ | 4.5* | 2.5-6.5 | 9.0* | 6.9-11.1 | 944 | 2,209,959 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 21.2 | 19.2-23.2 | 10.2 | 8.4-12.0 | 3.2 | 2.1-4.2 | 4.3 | 3.1-5.5 | 2.8 | 1.5-4.1 | 6.3 | 4.8-7.8 | 1,433 | 3,371,225 |
| Finished HS | 13.6* | 11.5-15.6 | 5.2* | 3.3-7.0 | 1.9 | 0.9-2.9 | 3.0 | 1.6-4.4 | 3.2 | 1.3-5.1 | 6.5 | 4.6-8.3 | 818 | 2,020,344 |
| Bachelor + | 7.7* | 6.1-9.3 | 2.3* | 1.0-3.6 | 1.3* | 0.3-2.4 | $1.7^{*}$ | 0.4-2.9 | 2.7 | 0.9-4.4 | 7.3 | 5.1-9.5 | 718 | 1,821,527 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Australia | 15.8 | 14.4-17.1 | 7.3 | 6.1-8.6 | 2.3 | 1.6-3.1 | 3.8 | 2.9-4.7 | 3.3 | 2.1-4.4 | 6.2 | 5.0-7.4 | 2,252 | 5,531,190 |
| Other Engl. spk. | 19.4* | 16.2-22.6 | $3.7 *$ | 1.8-5.6 | 3.3 | 1.6-4.9 | 1.7 | 0.3-3.1 | 1.3* | 0.2-2.4 | 7.5 | 5.2-9.8 | 513 | 1,194,813 |
| Non-Engl. spk. | 11.5* | 8.1-15.0 | 8.1 | 4.7-11.5 | 0.6* | 0.0-1.5 | 1.9 | 0.0-4.1 | 2.2 | 0.0-5.2 | 8.5 | 4.3-12.7 | 238 | 609,902 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital city | 14.0 | 12.6-15.4 | 6.2 | 4.9-7.6 | 1.7 | 1.0-2.4 | 2.2 | 1.4-3.0 | 2.6 | 1.4-3.7 | 6.3 | 5.1-7.6 | 1,834 | 4,498,688 |
| Other | 19.2* | 17.2-21.3 | 7.7 | 6.1-9.4 | $3.4 *$ | 2.2-4.5 | 5.0* | 3.5-6.5 | 3.3 | 1.8-4.8 | 7.1 | 5.3-8.9 | 1,173 | 2,846,349 |
| Personal income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 39.3 | 35.2-43.4 | 18.7 | 14.9-22.5 | 8.0 | 5.3-10.7 | 6.3 | 4.0-8.5 | 2.3 | 0.2-4.4 | 7.4 | 5.0-9.8 | 591 | 1,214,519 |
| \$20,001-\$36,400 | 21.5* | 18.0-24.9 | 11.0* | 7.4-14.7 | 3.3* | 1.6-5.0 | 5.4 | 3.1-7.6 | 6.3* | 3.1-9.5 | 9.5 | 6.5-12.4 | 480 | 1,141,674 |
| \$36,401-\$65,000 | 5.9* | 4.3-7.5 | 0.9* | 0.2-1.6 | 0.5* | 0.0-1.0 | 2.4* | 0.6-4.2 | 4.1 | 1.6-6.6 | 7.8 | 5.3-10.3 | 536 | 1,397,353 |
| \$65,001+ | 0.2* | 0.0-0.5 | 0.1* | 0.0-0.2 | 0.0 | - | 0.9* | 0.0-2.0 | 1.4 | 0.1-2.7 | 4.5 | 2.3-6.6 | 501 | 1,546,768 |
| Total | 16.0 | 14.9-17.2 | 6.8 | 5.8-7.8 | 2.3 | 1.7-3.0 | 3.3 | 2.5-4.0 | 2.9 | 1.9-3.8 | 6.6 | 5.6-7.7 | 3,007 | 7,345,037 |

Table A.71.1: Logistic regression results of type of Government income support receive, 2011-12

|  | Age Pension |  | DSP |  | Newstart Allowance |  | Carer Payment |  | Parenting Payment |  | Other |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z | Coef. | z | Coef. | z | Coef. | z |
| Female | -0.253* | -2.60 | -0.878* | -5.08 | -0.452 | -1.62 | 0.926* | 3.61 | 0.803* | 2.16 | -0.134 | -0.88 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | - | - | $0.578^{*}$ | 2.69 | -0.023 | -0.08 | -0.439 | -1.62 | -2.108* | -5.22 | 0.127 | 0.58 |
| 3 | - | - | -1.86* | -6.47 | - | - | $-0.812^{*}$ | -2.77 | - | - | 0.67* | 3.12 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Not married | $0.244^{*}$ | 2.42 | 1.191* | 6.88 | $1.434 *$ | 4.97 | -0.342 | -1.41 | 0.799* | 2.45 | 0.429* | 2.80 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | -0.29* | -2.57 | -0.5* | -2.43 | -0.188 | -0.56 | -0.248 | -0.95 | -0.126 | -0.33 | 0.117 | 0.66 |
| 3 | -0.652* | -4.73 | -1.319* | -4.42 | -0.492 | -1.16 | -0.741* | -1.99 | 0.118 | 0.28 | 0.198 | 1.04 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | $0.312^{*}$ | 2.45 | -0.481 | -1.70 | 0.96* | 2.90 | -0.634 | -1.66 | -0.017 | -0.04 | 0.353 | 1.92 |
| 3 | -0.206 | -1.07 | $0.683^{*}$ | 2.40 | -1.411 | -1.36 | -0.47 | -0.89 | -0.443 | -0.58 | 0.428 | 1.65 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Not capital city | 0.172 | 1.77 | 0.127 | 0.74 | $0.64 *$ | 2.29 | 0.46 ** | 2.07 | 0.281 | 0.85 | 0.076 | 0.50 |
| Personal income |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | -0.671* | -5.13 | -0.67* | -3.06 | $-0.81 *$ | -2.38 | -0.223 | -0.77 | 0.653 | 1.35 | 0.383 | 1.72 |
| 3 | -2.063* | -12.37 | -3.233* | -7.35 | -2.611* | -4.73 | -1.351* | -3.26 | -0.035 | -0.07 | 0.356 | 1.55 |
| 4 | -5.371* | -7.51 | -4.833* | -4.76 | - | - | -2.079* | -3.28 | -0.862 | -1.34 | -0.337 | -1.15 |
| 5 | -0.825* | -6.95 | -0.87* | -4.22 | -1.494* | -3.87 | -0.775* | -2.68 | -1.264 | -1.77 | -0.183 | -0.81 |
| Constant | 0.078 | 0.60 | -1.281* | -4.57 | -2.764* | -6.21 | -2.739* | -6.95 | $-3.588^{*}$ | -6.04 | $-3.256^{*}$ | -10.98 |

Table A.72: Type of activities of Newstart Allowance and Parenting Payment recipients (\% of Newstart Allowance recipients, \% of Parenting Payment recipients), 2011-12

|  | Newstart Allowance |  | Parenting Payment |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $\%$ | $95 \% \mathrm{CI}$ | $\%$ | $95 \% \mathrm{CI}$ |
| Working part-time (30 hours/ fortnight) | 23.6 | $12.8-34.4$ | 28.1 | $13.3-42.9$ |
| Working voluntarily (30 hours/ fortnight) | 10.7 | $4.0-17.5$ | 1.2 | $0.0-3.6$ |
| Working part-time \& voluntarily (30 hours/ fortnight) | 7.9 | $0.2-15.6$ | 0.0 |  |
| Range of activities | 39.7 | $26.0-53.3$ | 15.6 | $2.6-28.6$ |
| None | 18.1 | $8.1-28.2$ | 52.0 | $35.3-68.8$ |
| N Unw | 65 |  | 46 |  |
| N W | 172,348 |  | 209,547 |  |

Range of activities: incl. looking for work \& reporting job searches
Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.73: Reasons for Newstart Allowance or Parenting Payment recipients choosing voluntary work (\% of Newstart Allowance or Parenting Payment recipients working voluntarily for 30 hours per week), 2011-12

|  | $\%$ | $95 \% \mathrm{CI}$ |
| :--- | ---: | ---: |
| Skills and experience do not match with available work | 28.4 | $0.0-60.8$ |
| Feel discriminated against in searching for job | 26.0 | $0.0-56.7$ |
| Can't find appropriate work in my location | 16.1 | $0.0-40.9$ |
| Preferred option in lead up to retirement | 8.4 | $0.0-27.4$ |
| Financial adviser told me to choose this option | 0.0 |  |
| Don't want my benefit reduced | 0.0 |  |
| Prefer voluntary to paid work | 17.5 | $0.0-44.3$ |
| Other reason | 0.0 |  |
| N Unw | 11 |  |
| N W | 20,975 |  |
| Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |

Table A.74: Reasons for Newstart Allowance or Parenting Payment recipients choosing part-time work (\% of Newstart Allowance or Parenting Payment recipients working part-time for 30 hours per week), 2011-12

|  | $\%$ | $95 \% \mathrm{Cl}$ |
| :--- | ---: | ---: |
| Financial reasons | 32.9 | $12.7-53.2$ |
| Gain experience and develop my skills | 4.8 | $0.0-11.7$ |
| Be mentored | 2.4 | $0.0-7.4$ |
| Social aspect of work | 9.9 | $0.0-20.3$ |
| Other reason | 6.9 | $0.0-20.5$ |
| N Unw | 30 |  |
| N W | 99,517 |  |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.75: Withdrawal rate on Age Pension impacts desire to work or look for work (\% of people receiving Age Pension) and the maximum percentage of Age Pension people willing to lose to work as much as they want, by socio-economic and demographic characteristics, age 65-74, 2011-12

Withdrawal rate impact desire to work/ look for work

| $\%$ | $95 \%$ | Cl | N Unw | N W | Avg $\%$ | $95 \% ~ C I$ | N Unw |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | N W


| Sex | 20.2 | $15.9-24.4$ | 347 | 502,090 | 39.5 | $33.3-45.7$ | 153 | 218,851 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Male | 15.2 | $11.5-18.8$ | 379 | 607,489 | 31.5 | $25.7-37.4$ | 137 | 221,969 |
| Female |  |  |  |  |  |  |  |  |
| Marital status | 19.2 | $15.4-22.9$ | 440 | 669,748 | 35.0 | $29.6-40.4$ | 178 | 270,939 |
| Married | 14.8 | $10.7-18.9$ | 285 | 438,490 | 36.2 | $29.2-43.3$ | 112 | 169,881 |
| Not married |  |  |  |  |  |  |  |  |
| Education | 15.2 | $11.8-18.6$ | 436 | 667,192 | 38.3 | $32.8-43.7$ | 171 | 259,604 |
| Not finished HS | 18.0 | $12.2-23.8$ | 174 | 268,036 | $26.6^{*}$ | $18.3-34.8$ | 67 | 103,359 |
| Finished HS | $27.7^{*}$ | $18.5-36.9$ | 93 | 136,289 | 44.5 | $31.7-57.4$ | 44 | 63,938 |
| Bachelor + |  |  |  |  |  |  |  |  |
| Country of birth | 16.9 | $13.7-20.1$ | 537 | 816,052 | 33.9 | $29.2-38.6$ | 224 | 341,137 |
| Australia | 20.9 | $14.2-27.7$ | 143 | 223,865 | 36.1 | $25.9-46.4$ | 54 | 82,083 |
| Other Engl. spk. | 13.0 | $3.1-22.8$ | 45 | 68,261 | $63.4^{*}$ | $34.5-92.3$ | 12 | 17,600 |
| Non-Engl. spk. |  |  |  |  |  |  |  |  |


| Residence | 18.9 | $15.1-22.8$ | 405 | 613,843 | 32.4 | $27.1-37.7$ | 179 | 268,562 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capital city | 15.6 | $11.6-19.6$ | 321 | 495,736 | 40.3 | $33.1-47.4$ | 111 | 172,258 |
| Other | $\mathbf{1 7 . 4}$ | $\mathbf{1 4 . 6 - 2 0 . 2}$ | $\mathbf{7 2 6}$ | $\mathbf{1 , 1 0 9 , 5 7 9}$ | 35.6 | $31.4-39.8$ | 305 | 476,901 |
| Total | - |  |  | 5.0 | $4.4-5.6$ | 234 | 353,166 |  |
| Average extra years <br> work | - |  | 23.2 | $21.8-24.6$ | 245 | 370,582 |  |  |
| Average hours work per <br> week in extra years | - |  |  |  |  |  |  |  |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.75.1: Logistic regression results for withdrawal rate on Age Pension impacts desire to work or look for work, and linear regression results for the maximum percentage of Age Pension people willing to lose to work as much as they want, 2011-12

|  | Withdrawal rate impact desire to work/ look for work |  | Maximum \% of Age Pension willing to lose to work as much as you want |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | t |
| Female | -0.353 | -1.68 | -5.372 | -1.18 |
| Not married | -0.167 | -0.77 | 1.108 | 0.24 |
| Education |  |  |  |  |
| 2 | 0.158 | 0.65 | -13.768* | -2.59 |
| 3 | 0.739 | 2.69 | 4.440 | 0.73 |
| Country of birth |  |  |  |  |
| 2 | 0.273 | 1.09 | 7.232 | 1.26 |
| 3 | -0.410 | -0.87 | 33.320* | 3.09 |
| Not capital city | -0.196 | -0.95 | 7.092 | 1.61 |
| Constant | -1.309 | -6.57 | 35.283* | 8.46 |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |

[^75]Re-entry of the very long-term unemployed (VLTU)
Table A.76: Very long-term unemployed (\% of people not working and not retired, \% of people not retired), and average length of time since last worked and median length of time since last worked, 2011-12

|  | \% of those not working \& not retired |  |  |  | \% of people not retired |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 24.3 | 15.9-32.6 | 134 | 346,356 | 3.2 | 2.0-4.5 | 900 | 2,594,108 |
| Female | 21.3 | 13.7-28.8 | 154 | 467,024 | 4.0 | 2.4-5.5 | 827 | 2,487,310 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 22.6 | 13.6-31.6 | 96 | 435,086 | 3.4 | 1.9-4.9 | 660 | 2,911,267 |
| 55-64 | 27.4 | 19.8-35.0 | 140 | 300,420 | 4.6 | 3.2-6.1 | 799 | 1,787,184 |
| 65-74 | $3.4 *$ | 0.0-8.0 | 52 | 77,875 | 0.7* | 0.0-1.6 | 268 | 382,967 |


| Marital status | 22.8 | $15.5-30.1$ | 179 | 486,804 | 3.0 | $2.0-4.1$ | 1,218 | $3,647,601$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Married | 22.1 | $13.3-31.0$ | 109 | 326,576 | 5.1 | $2.8-7.4$ | 502 | $1,414,427$ |
| Not married |  |  |  |  |  |  |  |  |
| Education | 20.0 | $12.5-27.5$ | 134 | 397,102 | 3.8 | $2.2-5.3$ | 720 | $2,104,095$ |
| Not finished HS | 33.7 | $20.7-46.7$ | 77 | 220,889 | 4.9 | $2.6-7.2$ | 503 | $1,524,946$ |
| Finished HS | 15.8 | $7.2-24.4$ | 73 | 186,212 | 2.1 | $0.9-3.2$ | 496 | $1,430,043$ |
| Bachelor + |  |  |  |  |  |  |  |  |

Country of birth

| Australia | 21.8 | $15.2-28.4$ | 217 | 620,290 | 3.5 | $2.3-4.7$ | 1,298 | $3,843,737$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Other Engl. spk. | 20.9 | $8.6-33.2$ | 43 | 104,663 | 2.7 | $1.0-4.4$ | 289 | 805,271 |
| Non-Engl. spk. | 29.7 | $11.1-48.4$ | 28 | 88,428 | 6.1 | $2.2-10.1$ | 139 | 429,612 |


| Residence | 24.3 | $16.7-32.0$ | 175 | 513,864 | 3.9 | $2.6-5.3$ | 1,083 | $3,182,201$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capital city | 19.5 | $11.6-27.3$ | 113 | 299,516 | 3.1 | $1.7-4.4$ | 644 | $1,899,217$ |
| Other | 22.5 | $\mathbf{1 6 . 9 - 2 8 . 2}$ | 288 | 813,380 | 3.6 | $\mathbf{2 . 6 - 4 . 6}$ | $\mathbf{1 , 7 2 7}$ | $\mathbf{5 , 0 8 1 , 4 1 8}$ |
| Total | 6.4 | $5.0-\mathbf{7 . 8}$ | 64 | $\mathbf{1 8 3 , 3 7 3}$ |  |  |  |  |
| Average length of time <br> since last worked | 4.0 |  |  |  |  |  |  |  |
| Median length of time <br> since last worked |  |  |  |  |  |  |  |  |

* p<0.05, VLTU: defined as currently not working \& not retired, and have not worked for 24 months but have worked before; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.76.1: Logistic regression results for very long-term unemployed (\% of people not working and not retired, \% of people not retired), 2011-12

|  | \% of those not working \& not retired | \% of those not retired |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Coef. | $\mathbf{z}$ | Coef. | z |
| Female | 0.134 | 0.52 | -0.114 | -0.38 |
| Age |  |  |  |  |
| 2 | 0.335 | 1.24 | 0.126 | 0.39 |
| 3 | $-1.549^{*}$ | -2.08 | $-2.036^{\star}$ | -2.64 |
| Not married | 0.422 | 1.57 | -0.016 | -0.05 |
| Education |  |  |  | 0.96 |
| 2 | 0.098 | 0.33 | -0.336 | -0.55 |
| 3 | -0.493 | -1.42 |  |  |
| Country of birth |  |  | 0.147 | 0.35 |
| 2 | 0.166 | 0.47 | 0.725 | 1.58 |
| 3 | $0.882^{*}$ | -0.139 | -0.50 | -0.245 |
| Not capital city | -3.5 | -10.25 | -1.089 | -0.78 |
| Constant |  |  | -2.71 |  |

* p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.77: Very long-term unemployed (\% of people not retired) by other characteristics, 2011-12

|  | $\%$ | $95 \% \mathrm{CI}$ | N Unw | N W |
| :--- | :---: | :---: | :---: | ---: |
| Experienced exclusion in job search (looked for job in last 5 years) |  |  |  |  |
| Yes | 9.6 | $6.6-12.6$ | 449 | $1,461,945$ |
| No | 7.1 | $3.3-10.9$ | 191 | 599,729 |

Experienced exclusion in job search \& attributed to age (looked for job in last 5 years)

| Yes | 13.3 | $8.6-18.1$ | 244 | 731,667 |
| :--- | ---: | ---: | ---: | ---: |
| No | $6.4^{*}$ | $3.8-9.1$ | 396 | $1,330,006$ |

Age discrimination an issue in looking for job in Australia (looked for job in last 5 years)

| Yes | 10.1 | $7.3-12.9$ | 530 | $1,712,329$ |
| :--- | ---: | ---: | ---: | ---: |
| No | $2.4^{*}$ | $0.0-5.2$ | 105 | 333,491 |
| III for 2 months in last 5 years |  |  |  |  |
| Yes | 7.1 | $4.7-9.6$ | 515 | $1,471,373$ |
| No | $2.2^{*}$ | $1.1-3.2$ | 1,211 | $3,606,349$ |

III for 2 months in last 5 years prevented working/ looking for work

| Yes | 10.9 | $6.9-15.0$ | 278 | 804,634 |
| :--- | ---: | ---: | ---: | ---: |
| No | $2.2^{*}$ | $1.4-3.1$ | 1,449 | $4,276,785$ |
| Currently ill |  |  |  |  |
| Yes | 7.1 | $4.4-9.9$ | 419 | $1,219,354$ |
| No | $2.5^{*}$ | $1.5-3.5$ | 1,305 | $3,851,481$ |

Currently ill prevents from working/looking for work

| Yes | 21.9 | $11.5-32.3$ | 278 | 804,634 |
| :--- | ---: | ---: | ---: | ---: |
| No | $2.7^{*}$ | $1.8-3.6$ | 1,449 | $4,276,785$ |

Flexible work arrangement would help currently ill work

| Yes | 100.0 | - | 9 | 28,543 |
| :--- | ---: | ---: | ---: | ---: |
| No | $62.5^{\star}$ | $41.9-83.2$ | 30 | 113,145 |

[^76]Table A. 77 continues

|  | $\%$ | $95 \% \mathrm{CI}$ | N Unw | N W |
| :--- | :---: | :---: | :---: | ---: |
| Changed working condition would help currently ill work |  |  |  |  |
| Yes | 29.6 | $0.0-65.7$ | 10 | 27,321 |
| No | 14.1 | $1.7-26.5$ | 33 | 114,836 |

Used Australian Government employment service provider (looked for job in last 5 years)

| Yes | 18.3 | $10.2-26.4$ | 98 | 304,323 |
| :--- | ---: | ---: | ---: | ---: |
| No | $7.1^{*}$ | $4.7-9.5$ | 540 | $1,749,486$ |

Found Australian Government employment service provider helpful

| Yes | 19.7 | $8.2-31.2$ | 53 | 186,697 |
| :--- | :--- | :--- | :--- | :--- |
| No | 16.8 | $5.4-28.3$ | 43 | 113,178 |

Used private recruitment firm(looked for job in last 5 years)

| Yes | 9.1 | $4.5-13.8$ | 155 | 522,543 |
| ---: | ---: | ---: | ---: | ---: |
| No | 8.8 | $6.0-11.6$ | 484 | $1,537,716$ |

Rating of private recruitment firm support

| Very good/ good | 7.6 | $0.0-15.4$ | 57 | 183,728 |
| :--- | ---: | ---: | ---: | ---: |
| Fair/ poor/ very poor | 10.0 | $4.1-16.0$ | 96 | 334,531 |

No jobs in line of work in local area (worked or looked for work in last 5 years)

| Agree/strongly agree | 6.3 | $4.0-8.6$ | 429 | $1,486,095$ |
| :--- | ---: | ---: | ---: | ---: |
| Strongly disagree/ disagree/neither | $2.4^{\star}$ | $1.3-3.5$ | 1,036 | $3,176,663$ |

No jobs at all in local area(worked or looked for work in last 5 years)

| Agree/strongly agree | 10.7 | $4.2-17.2$ | 117 | 322,709 |
| :--- | ---: | ---: | ---: | ---: |
| Strongly disagree/ disagree/neither | $3.1^{*}$ | $2.1-4.1$ | 1,516 | $4,507,952$ |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Job search assistance
Table A.78: Used Australian Government employment service provider to help job search (\% of people who looked for a job in last 5 years) and if found service helpful (\% of people who used Australian Government employment service provider to help job search in last 5 years) by socio-economic and demographic characteristics, 2011-12

|  | Used Australian Government employment service provider in last 5 years |  |  |  | Found Australian Government employment service provider helpful |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 15.9 | 11.8-19.9 | 390 | 1,152,385 | 63.1 | 50.1-76.1 | 66 | 182,761 |
| Female | 14.9 | 10.6-19.3 | 354 | 1,108,140 | 62.4 | 48.0-76.8 | 55 | 165,501 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 14.9 | 10.6-19.3 | 301 | 1,348,529 | 71.1 | 57.5-84.7 | 46 | 201,269 |
| 55-64 | 16.2 | 12.3-20.1 | 344 | 770,653 | 51.8* | 38.6-65.0 | 59 | 124,562 |
| 65-74 | 15.9 | 8.7-23.1 | 99 | 141,343 | 49.0 | 24.0-74.0 | 16 | 22,430 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 10.0 | 7.0-13.0 | 526 | 1,626,789 | 65.1 | 50.8-79.3 | 55 | 162,858 |
| Not married | 29.6* | 22.8-36.4 | 216 | 626,246 | 60.8 | 47.8-73.8 | 66 | 185,404 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 21.0 | 15.7-26.4 | 289 | 890,858 | 63.9 | 50.8-77.0 | 61 | 187,475 |
| Finished HS | 14.6 | 9.1-20.0 | 222 | 691,476 | 77.7 | 63.4-92.0 | 35 | 100,635 |
| Bachelor + | 8.9* | 5.1-12.6 | 233 | 678,191 | 34.4* | 14.0-54.8 | 25 | 60,152 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 14.4 | 11.1-17.7 | 532 | 1,641,242 | 62.5 | 51.0-74.0 | 84 | 236,148 |
| Other Engl. spk. | 13.0 | 6.5-19.5 | 140 | 408,505 | 40.7 | 12.3-69.1 | 19 | 53,053 |
| Non-Engl. spk. | 28.0* | 15.2-40.9 | 72 | 210,777 | 83.7* | 68.4-99.1 | 18 | 59,061 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 15.1 | 11.3-18.8 | 471 | 1,448,066 | 57.2 | 44.2-70.3 | 73 | 218,282 |
| Other | 16.0 | 11.2-20.8 | 273 | 812,459 | 72.1 | 58.7-85.5 | 48 | 129,980 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 37.9 | 28.1-47.7 | 129 | 334,998 | 57.5 | 40.9-74.0 | 47 | 127,028 |
| \$20,001-\$36,400 | 21.7* | 12.8-30.5 | 116 | 346,506 | 62.1 | 40.8-83.4 | 25 | 75,019 |
| \$36,401-\$65,000 | 11.6* | 5.7-17.4 | 151 | 476,232 | 67.9 | 43.9-91.8 | 17 | 55,142 |
| \$65,001+ | 3.0* | 0.3-5.7 | 159 | 520,253 | 50.1 | 4.2-96.0 | 5 | 15,745 |
| Total | 15.4 | 12.5-18.4 | 744 | 2,260,525 | 62.8 | 53.1-72.4 | 121 | 348,262 |

[^77]Table A.78.1: Logistic regression results for used Australian Government employment service provider to help job search and if found service helpful, 2011-12

|  | Used Australian Government <br> employment service in last 5 years | Found Australian Government <br> employment service helpful |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Coef. | $\mathbf{z}$ | Coef. | z |
| Female | $-0.646^{*}$ | -2.73 | -0.386 | -0.84 |
| Age |  |  |  |  |
| 2 | -0.01 | -0.04 | $-1.007^{*}$ | -2.03 |
| 3 | -0.614 | -1.68 | -1.137 | -1.61 |
| Not married | $1.371^{*}$ | 5.86 | 0.232 | 0.51 |
| Education |  |  |  |  |
| 2 | -0.005 | -0.02 | $1.35^{*}$ | 2.43 |
| 3 | -0.483 | -1.64 | -0.798 | -1.30 |
| Country of birth |  |  |  | -1.84 |
| 2 | -0.065 | -0.21 | -1.164 | 1.90 |
| 3 | $0.754^{*}$ | 2.08 | 1.566 | 2.00 |
| Not capital city | -0.021 | -0.09 | $0.981^{*}$ |  |
| Personal income |  |  |  | -0.03 |
| 2 | $-0.674^{*}$ | -2.16 | -0.021 | -0.16 |
| 3 | $-1.587^{*}$ | -4.65 | -0.111 | -0.65 |
| 4 | $-2.872^{*}$ | -5.55 | -0.798 | 0.98 |
| 5 | $-1.099^{*}$ | -3.42 | 0.633 | 0.59 |
| Constant | -0.662 | -1.89 | 0.387 |  |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Table A.79: Reasons Australian Government employment service provider not helpful (\% of people who found Australian Government employment service not helpful) by socio-economic and demographic characteristics, 2011-12

|  | Did not match to appropriate job |  | Not enough help preparing job applications |  | Did not assist enough for job interview |  | Other reason |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% Cl | \% | 95\% CI | \% | 95\% CI |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 55.8 | 34.1-77.4 | 38.3 | 15.6-61.0 | 35.2 | 12.8-57.5 | 65.9 | 45.2-86.5 | 25 | 62,980 |
| Female | 63.8 | 41.6-86.0 | 43.8 | 22.5-65.1 | 37.4 | 15.6-59.2 | 60.1 | 38.5-81.6 | 26 | 62,194 |
| Age |  |  |  |  |  |  |  |  |  |  |
| 45-54 | 63.9 | 37.5-90.4 | 45.0 | 18.2-71.8 | 44.5 | 17.3-71.7 | 71.3 | 45.9-96.6 | 15 | 58,180 |
| 55-64 | 57.1 | 37.9-76.4 | 42.4 | 23.0-61.8 | 32.6 | 14.3-50.8 | 54.7 | 35.5-74.0 | 28 | 55,559 |
| 65-74 | 51.4 | 15.4-87.4 | 14.1 | 0.0-40.4 | 12.4 | 0.0-35.9 | 61.0 | 25.6-96.3 | 8 | 11,435 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Married | 54.4 | 30.7-78.0 | 34.4 | 10.7-58.2 | 48.4 | 24.3-72.4 | 55.6 | 31.8-79.4 | 23 | 54,719 |
| Not married | 64.0 | 44.0-83.9 | 46.2 | 25.7-66.7 | 26.9 | 9.0-44.7 | 68.7 | 50.3-87.2 | 28 | 70,455 |
| Education |  |  |  |  |  |  |  |  |  |  |
| Not finished HS | 68.5 | 49.2-87.8 | 35.2 | 14.1-56.2 | 27.3 | 7.6-47.0 | 74.8 | 58.0-91.7 | 26 | 65,461 |
| Finished HS | 57.1 | 21.9-92.4 | 83.7* | 61.3-100.0 | 57.1 | 21.9-92.4 | 60.6 | 27.0-94.3 | 9 | 20,242 |
| Bachelor + | 46.6 | 17.9-75.3 | 28.8 | 2.3-55.3 | 40.5 | 10.1-70.8 | 44.5 | 16.3-72.8 | 16 | 39,472 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |
| Australia | 57.5 | 38.2-76.7 | 34.5 | 16.1-53.0 | 31.7 | 12.4-51 | 63.6 | 45.3-81.9 | 34 | 84,113 |
| Other Engl. spk. | 62.4 | 32.8-91.9 | 56.8 | 26.3-87.2 | 45.4 | 14.1-76.6 | 64.3 | 33.6-94.9 | 12 | 31,462 |
| Non-Engl. spk. | 71.4 | 33.4-100.0 | 46.5 | 0.0-93.4 | 46.5 | 0.0-100.0 | 53.5 | 6.6-100.0 | 5 | 9,599 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Capital city | 65.3 | 47.3-83.4 | 43.8 | 24.7-62.8 | 37.1 | 17.6-56.6 | 59.1 | 40.4-77.8 | 35 | 88,886 |
| Other | 46.2 | 19.7-72.7 | 34.3 | 9.8-58.7 | 34.2 | 9.8-58.7 | 72.5 | 49.9-95.1 | 16 | 36,288 |
| Personal income |  |  |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 46.0 | 20.3-71.6 | 27.6 | 4.8-50.4 | 32.4 | 6.4-58.4 | 60.3 | 34.3-86.4 | 20 | 51,789 |
| \$20,001-\$36,400 | 61.5 | 29.9-93.1 | 52.2 | 19.9-84.5 | 29.5 | 2.1-56.8 | 81.1 | 59.7-100.0 | 11 | 28,444 |
| \$36,401-\$65,000 | 51.4 | 4.5-98.2 | 63.0 | 21.2-100.0 | 51.4 | 4.5-98.2 | 84.5 | 54.4-100.0 | 6 | 15,509 |
| \$65,001+ | 71.3 | 19.9-100.0 | 40.8 | 0.0-100.0 | 40.8 | 0.0-100.0 | 59.2 | 0.0-100.0 | 3 | 7,855 |
| Total | 59.8 | 44.4-75.1 | 41.0 | 25.6-56.5 | 36.3 | 20.7-51.9 | 63.0 | 48.0-78.0 | 51 | 125,174 | * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.79.1: Logistic regression results for reasons Australian Government employment service provider not helpful, 2011-12

|  | Did not match to appropriate job |  | Not enough help preparing job applications |  | Did not assist enough for job interview |  | Other reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z | Coef. | z |
| Female | 1.756 | 1.78 | 1.556 | 1.42 | 1.154 | 1.27 | -0.014 | -0.01 |
| Age |  |  |  |  |  |  |  |  |
| 2 | -1.00 | -1.06 | -0.717 | -0.80 | -0.643 | -0.75 | -1.007 | -1.02 |
| 3 | -1.668 | -1.25 | -3.599 | -1.93 | -1.808 | -1.29 | 0.426 | 0.33 |
| Not married | 1.19 | 1.40 | 1.399 | 1.37 | -0.831 | -1.00 | -0.214 | -0.25 |
| Education |  |  |  |  |  |  |  |  |
| 2 | -1.561 | -1.29 | 3.04* | 2.12 | 1.112 | 1.13 | -1.472 | -1.34 |
| 3 | -2.631* | -1.98 | -0.465 | -0.42 | -0.211 | -0.22 | -1.691 | -1.56 |
| Country of birth |  |  |  |  |  |  |  |  |
| 2 | 1.588 | 1.46 | 1.095 | 0.98 | 1.078 | 1.11 | 0.573 | 0.51 |
| 3 | 2.173 | 1.11 | -0.948 | -0.44 | 0.842 | 0.52 | 2.458 | 1.48 |
| Not capital city | -0.815 | -0.88 | 0.963 | 1.02 | 0.789 | 0.94 | 1.519 | 1.58 |
| Personal income |  |  |  |  |  |  |  |  |
| 2 | -1.072 | -0.91 | 0.029 | 0.03 | -0.052 | -0.05 | 1.069 | 0.97 |
| 3 | -0.423 | -0.34 | 2.788 | 1.89 | 1.009 | 0.85 | 2.011 | 1.43 |
| 4 | 1.472 | 0.97 | 2.674 | 1.34 | 0.877 | 0.55 | 0.592 | 0.38 |
| 5 | 3.73* | 2.36 | 1.078 | 0.76 | 0.146 | 0.12 | -1.889 | -1.46 |
| Constant | 0.014 | 0.01 | -3.153* | -2.28 | -1.444 | -1.33 | 0.976 | 0.89 |

Table A.80: Job search success and satisfaction (\% of people who received help from Australian Government employment service provider), 2011-12

|  | $\%$ | $95 \% \mathrm{Cl}$ | N Unw | N W |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Successful in most recent job search | 46.4 | $35.8-56.9$ | 121 | 348,262 |
| If successful in most recent job search |  |  |  |  |
| Satisfied with job (Very satisfied or satisfied) | 77.7 | $63.4-92.0$ | 52 | 161,563 |
| How long looked for job (average years) | 0.65 | $0.39-0.91$ | 51 | 156,643 |
| Would more helpful assistance helped find job faster | 35.4 | $20.4-50.3$ | 52 | 161,563 |
| Would more helpful assistance helped find better paid job | 24.0 | $11.1-36.9$ | 52 | 161,563 |
| If unsuccessful in most recent job search |  |  |  |  |
| Would more helpful assistance helped find job | 40.6 | $26.4-54.8$ | 69 | 186,699 |
| How long been looking for job (average years) | 2.41 | $1.56-3.25$ | 67 | 178,346 |

Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.81: More helpful assistance would help discouraged worker look for job (\% of discouraged workers), 2011-12

|  | $\%$ | $95 \% \mathrm{Cl}$ |
| :--- | ---: | ---: |
| Sex |  |  |
| Male | 44.0 | $23.8-64.0$ |
| Female | $78.6^{*}$ | $60.7-96.5$ |
| Total | 65.5 | $52.0-79.1$ |
| N Unw | 72 |  |
| N W | 187,891 |  |
| " p $<0.05 ;$ Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |

Leisure time trade-off
Table A.82: Average age intend to retire (not retired who have worked in past 20 years or looked for work in past 5 years) and average age did retire (retired who have worked in past 20 years or looked for work in past 5 years) by socio-economic and demographic characteristics, 2011-12

|  | Average age intend to retire (not retired) |  |  |  | Average age did retire (already retired) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Years | 95\% CI | N Unw | N W | Years | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 65.9 | 65.4-66.3 | 720 | 2,120,549 | 59.0 | 58.4-59.6 | 553 | 938,024 |
| Female | 64.8* | 64.4-65.3 | 650 | 1,979,163 | 58.0* | 57.5-58.5 | 522 | 958,991 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 64.3 | 63.8-64.8 | 542 | 2,389,729 | 46.6 | 44.4-48.9 | 34 | 125,334 |
| 55-64 | 65.9 * | 65.6-66.3 | 638 | 1,439,134 | 55.5* | 54.9-56.0 | 341 | 710,252 |
| 65-74 | 72.1* | 71.4-72.8 | 190 | 270,849 | $61.9^{*}$ | 61.5-62.2 | 700 | 1,061,428 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 65.0 | 64.6-65.3 | 995 | 3,017,740 | 58.7 | 58.3-59.2 | 717 | 1,250,351 |
| Not married | $66.5^{*}$ | 65.9-67.1 | 371 | 1,072,441 | 58.3 | 57.6-59.0 | 354 | 634,003 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 65.6 | 65.1-66.1 | 570 | 1,699,415 | 58.0 | 57.5-58.5 | 570 | 1,008,807 |
| Finished HS | 65.1 | 64.5-65.6 | 394 | 1,205,009 | 58.8 | 58.0-59.6 | 275 | 486,878 |
| Bachelor + | 65.5 | 64.9-66.1 | 402 | 1,183,910 | 59.1* | 58.2-59.6 | 213 | 375,028 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 65.2 | 64.8-65.5 | 1,025 | 3,087,704 | 58.2 | 57.7-58.6 | 801 | 1,419,780 |
| Other Engl. spk. | 66.0 | 65.2-66.8 | 236 | 671,791 | 59.6* | 58.6-60.6 | 193 | 335,296 |
| Non-Engl. spk. | 66.1 | 64.9-67.3 | 108 | 337,419 | 59.2 | 57.7-60.8 | 79 | 136,987 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 65.5 | 65.1-65.9 | 857 | 2,555,761 | 58.7 | 58.2-59.1 | 639 | 1,109,293 |
| Other | 65.2 | 64.7-65.7 | 513 | 1,543,951 | 58.2 | 57.6-58.9 | 436 | 787,722 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 65.9 | 64.9-67.0 | 135 | 364,114 | 58.7 | 57.8-59.5 | 304 | 534,030 |
| \$20,001-\$36,400 | 66.0 | 65.1-66.9 | 207 | 582,757 | 58.7 | 57.8-59.7 | 183 | 323,500 |
| \$36,401-\$65,000 | 65.6 | 65.0-66.1 | 338 | 1,000,578 | 58.5 | 57.6-59.5 | 136 | 231,893 |
| \$65,001+ | $64.5 *$ | 63.9-65.0 | 389 | 1,252,441 | 57.0 | 55.2-58.9 | 53 | 109,998 |
| Total | 65.4 | 65.1-65.7 | 1,370 | 4,099,712 | 58.5 | 58.1-58.9 | 1,075 | 1,897,015 |

* $\mathrm{p}<0.05$; Note: A total of 562 did not answer, refused to answer or answered 'don't know'. Source: Authors' calculations from the 2011-12

Barriers to Employment for Mature Age Australians Survey.

Table A.82.1: Linear regression results for average age intend to retire and average age did retire, 2011-12

|  | Average age intend to retire (not retired) |  | Average age did retire (already retired) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | t | Coef. | t |
| Female | -1.375* | -4.72 | -1.126* | -3.6 |
| Age |  |  |  |  |
| 2 | 1.457* | 4.85 | 8.513* | 9.23 |
| 3 | 7.174* | 16.28 | 14.496* | 16.08 |
| Not married | 1.561* | 4.89 | -0.159 | -0.49 |
| Education |  |  |  |  |
| 2 | -0.077 | -0.23 | 0.715* | 1.99 |
| 3 | 0.39 | 1.120 | 1.178* | 2.89 |
| Country of birth |  |  |  |  |
| 2 | 0.704 | 1.88 | 0.491 | 1.23 |
| 3 | 1.059* | 1.98 | 0.698 | 1.19 |
| Not capital city | -0.045 | -0.15 | -0.42 | -1.37 |
| Personal income |  |  |  |  |
| 2 | 0.125 | 0.22 | -0.162 | -0.36 |
| 3 | -0.458 | -0.88 | -0.512 | -1.01 |
| 4 | -1.452* | -2.76 | -0.487 | -0.66 |
| 5 | -0.339 | -0.63 | -0.306 | -0.81 |
| Constant | 65.006* | 116.40 | 47.822* | 49.21 |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |

Table A.83: Reasons stated (\% stating very or somewhat important) for when intend to retire and when did retire (\% of not retired or retired population who have worked in past 20 years or looked for work in past 5 years), 2011-12

|  | Reason for when intend retire <br> (not retired) | Reason for when did retire <br> (retired) |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Re |  |  |  |
| Leisure time | 83.3 | $81.4-85.3$ | 61.3 | $58.2-64.4$ |
| Financial security | 93.4 | $92.1-94.6$ | 69.8 | $66.9-72.7$ |
| Personal illness/injury/disability | 88.5 | $86.8-90.1$ | 45.8 | $42.6-49.0$ |
| Eligibility for Age Pension | 55.2 | $52.5-57.9$ | 26.8 | $24.1-29.5$ |
| Access to super | 79.1 | $76.9-91.1$ | 56.4 | $53.3-59.6$ |
| Spouse/partner having retired | 50.5 | $47.8-53.3$ | 30.6 | $27.7-33.5$ |
| Having lost interest in work | 66.1 | $63.6-68.7$ | 39.8 | $36.7-43.0$ |
| Care for family/ other | 78.6 | $76.5-80.7$ | 31.2 | $28.2-34.1$ |
| Need to financially support other people | 60.7 | $58.1-63.3$ | 27.4 | $24.5-30.2$ |
| N Unw | 1,709 |  | 1,076 |  |
| N W | $5,030,659$ |  | $1,899,895$ |  |

[^78]Table A.84: Reasons for decision about when intend to retire (\% stating very or somewhat important) (\% of not retired population who have worked in past 20 years or looked for work in past 5 years) by socio-economic and demographic characteristics, 2011-12
Table A． 84 continues

Table A．84．1：Logistic regression results for reasons for decision about when intend to retire（stating very or somewhat important），2011－12 Personal illness／Eligibility for Age injury／disability Pension

are for family／other | Coef． |  |
| :--- | :--- |

| $\infty$ | 0 |
| :--- | :--- |
| $\stackrel{0}{2}$ | $ल$ |
| $\dot{i}$ | $ल$ |

10
$o$
$\underset{\sim}{2}$
$\infty$
1


$\stackrel{\circ}{\circ}$
 Access to super z＇ృə૦う とガを＊てカガ○

| -1.89 |
| ---: |
| -3.80 |
| -3.39 |
| -1.67 |
| -1.16 |

-0.11
-0.85
-1.90

-0.018
-0.198
-0.243


| Eligibility for Age <br> Pension |  |
| :---: | ---: |
| Coef． | z |
| $0.227^{\star}$ | 2.04 |
| -0.152 | -1.32 |
| $-1.348^{\star}$ | -7.79 |
| 0.14 | 1.17 |
| $-0.355^{\star}$ | -2.76 |
| $-0.828^{\star}$ | -6.23 |
| 0.096 | 0.67 |
| 0.355 | 1.72 |
| $0.391^{\star}$ | 3.49 |
|  |  |
| -0.273 | -1.25 |
| -0.367 | -1.82 |
| $-0.78^{\star}$ | -3.81 |
| $-0.683^{\star}$ | -3.34 |
| $0.913^{\star}$ | 4.19 |

Personal illness／
Coef．z

| Coef． |
| :---: |
| $0.505^{*}$ |


| $-0.376^{\star}$ |
| ---: |
| -0.153 |
| -0.008 |
|  |
| 0.095 |
| -0.118 |

-0.223
0.425
0.095
$-0.101$

| $\infty$ | $\frac{2}{\square}$ |
| :---: | :---: |
|  | $\frac{N}{5}$ |

$\begin{array}{ll}0 & * \\ 0 & \\ 0 & \\ 0 & -\end{array}$

＊ $\mathrm{p}<0.05$ ；Source：Authors＇calculations from the 2011－12 Barriers to Employment for Mature Age Australians Survey．
Table A.85: Reasons for decision about when did retire (\% stating very or somewhat important) (\% of not retired population who have worked in past 20 years or looked for work in past 5 years) by socio-economic and demographic characteristics, 2011-12

| Leisure time |  | Financial security |  | Personal illness/ injury/ disability |  | Eligibility for Age Pension |  | Access to super |  | Care for family/ other |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| 58.8 | 54.3-63.2 | 73.5 | 69.5-77.4 | 47.3 | 42.8-51.8 | 27.9 | 24.0-31.7 | 63.0 | 58.5-67.5 | 25.2 | 21.2-29.1 | 553 | 938,024 |
| 63.7 | 59.4-68.0 | $66.3^{*}$ | 62.1-70.5 | 44.3 | 39.9-48.8 | 25.8 | 22.0-29.6 | 50.0* | 45.6-54.5 | 37.0* | 32.6-41.4 | 523 | 961,871 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 62.3 | 45.0-79.6 | 70.5 | 54.1-86.8 | 68.9 | 51.4-86.3 | 3.0 | 0.0-8.7 | 24.7 | 10.5-38.9 | 36.8 | 20.1-53.4 | 34 | 125,334 |
| 60.6 | 55.2-65.9 | 71.3 | 66.3-76.2 | 51.2 | 45.8-56.7 | 15.1* | 11.0-19.1 | 59.8* | 54.4-65.2 | 33.0 | 27.8-38.2 | 342 | 713,133 |
| 61.6 | 58.0-65.3 | 68.8 | 65.3-72.3 | 39.5* | 35.6-43.1 | 37.5* | 33.9-41.2 | 57.9* | 54.2-61.6 | 29.3 | 25.8-32.7 | 700 | 1,061,429 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65.0 | 61.3-68.6 | 72.4 | 69.0-75.8 | 40.8 | 36.9-44.6 | 26.2 | 22.9-29.4 | 60.5 | 56.7-64.4 | 31.5 | 27.9-35.2 | 717 | 1,250,351 |
| 55.0* | 49.6-60.5 | 65.4* | 60.2-70.9 | 54.9* | 49.5-60.3 | 28.6 | 23.9-33.4 | 49.3* | 43.8-54.8 | 30.8 | 26.7-36.0 | 355 | 636,883 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 57.9 | 53.6-62.2 | 67.3 | 63.2-71.4 | 53.3 | 49.0-57.6 | 30.1 | 26.2-34.0 | 51.8 | 47.5-56.2 | 33.3 | 29.1-37.4 | 571 | 1,011,687 |
| 62.7 | 56.7-68.8 | 71.2 | 65.5-76.9 | 40.7* | 34.6-46.9 | 28.5 | 23.1-33.9 | 61.1* | 55.0-67.2 | 30.2 | 24.5-35.9 | 275 | 486,878 |
| 69.0* | 62.5-75.6 | 75.5* | 69.6-81.3 | 32.4* | 25.6-39.3 | 14.4* | 9.9-19.0 | 64.3* | 57.0-71.7 | 26.6 | 20.2-33.0 | 213 | 375,028 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60.7 | 57.1-64.2 | 69.5 | 66.1-72.8 | 47.6 | 43.9-51.2 | 25.1 | 22.1-28.2 | 58.1 | 54.4-61.7 | 32.0 | 28.5-35.4 | 801 | 1,419,800 |
| 66.5 | 59.3-73.6 | 68.9 | 61.8-76.0 | 35.4* | 28.1-42.6 | 30.5 | 23.7-37.3 | 50.6 | 42.9-58.4 | $22.7 *$ | 16.4-29.1 | 194 | 338,176 |
| 55.1 | 43.6-66.5 | 76.0 | 66.3-85.7 | 54.9 | 43.4-66.4 | 36.1 | 25.2-47.0 | 55.8 | 44.3-67.3 | 44.5* | 32.9-56.1 | 79 | 136,987 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 64.7 | 60.7-68.6 | 71.3 | 67.6-75.0 | 41.9 | 37.8-46.0 | 23.1 | 19.8-26.4 | 59.0 | 54.9-63.1 | 30.8 | 27.0-34.7 | 640 | 1,112,173 |
| 56.5* | 21.6-61.4 | 67.7 | 63.1-72.3 | 51.3* | 46.3-56.3 | 32.0* | 27.5-36.6 | 52.9 | 47.8-57.8 | 31.6 | 26.9-36.3 | 436 | 787,722 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55.1 | 49.2-61.1 | 63.3 | 57.4-69.1 | 58.2 | 52.4-64.0 | 33.0 | 27.7-38.4 | 42.2 | 36.3-48.0 | 35.9 | 30.1-41.7 | 305 | 536,911 |
| 68.6* | 61.4-75.9 | 73.8* | 67.1-80.6 | 39.0* | 31.3-46.6 | 30.0 | 23.3-36.7 | 67.8* | 60.3-75.3 | 29.8 | 22.5-37.1 | 183 | 323,500 |
| 65.1* | 56.7-73.5 | 78.7* | 71.4-86.1 | 39.5* | 30.7-48.3 | 18.0* | 11.2-24.8 | 78.8* | 71.7-85.8 | 18.5* | 11.7-25.4 | 136 | 231,893 |
| 72.4* | 59.7-85.1 | 78.2* | 67.1-89.3 | 19.4* | 7.1-31.7 | 18.4* | 7.2-29.6 | 62.8* | 46.4-79.1 | 22.0 | 9.1-34.9 | 53 | 109,998 |
| 61.3 | 58.1-64.3 | 69.8 | 66.9-72.7 | 45.8 | 42.6-49.0 | 26.8 | 24.1-29.5 | 56.4 | 53.3-59.6 | 31.2 | 28.2-34.1 | 1,076 | 1,899,895 | * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.85.1: Logistic regression results for reasons for decision about when did retire (stating very or somewhat important), 2011-12

|  | Leisure time |  | Financial security |  | Personal illness/ injury/disability |  | Eligibility for Age Pension |  | Access to super |  | Care for family/ other |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z | Coef. | z | Coef. | z | Coef. | z | Coef. | z |
| Female | 0.411* | 2.87 | -0.211 | -1.40 | -0.445* | -3.06 | -0.091 | -0.58 | -0.38* | -2.67 | 0.565* | 3.75 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | -0.496 | -1.15 | 0.242 | 0.56 | -0.828 | -1.82 | 1.683 | 1.62 | 1.272* | 2.91 | -0.478 | -1.15 |
| 3 | -0.292 | -0.69 | 0.142 | 0.34 | -1.430* | -3.19 | 2.859* | 2.79 | 1.281* | 2.99 | -0.609 | -1.50 |
| Not married | -0.501* | -3.45 | -0.251 | -1.65 | $0.601^{*}$ | 4.06 | 0.089 | 0.56 | -0.349* | -2.39 | -0.116 | -0.74 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 0.143 | 0.87 | 0.043 | 0.25 | -0.431* | -2.61 | -0.114 | -0.65 | 0.308 | 1.86 | -0.031 | -0.18 |
| 3 | 0.254 | 1.35 | 0.027 | 0.13 | -0.512* | -2.69 | -0.827* | -3.68 | 0.335 | 1.75 | -0.175 | -0.86 |
| Country of birth |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 0.274 | 1.47 | 0.183 | 0.93 | -0.356 | -1.90 | 0.225 | 1.15 | -0.299 | -1.64 | -0.515* | -2.46 |
| 3 | -0.361 | -1.38 | 0.238 | 0.80 | 0.471 | 1.77 | $0.876^{*}$ | 3.10 | -0.11 | -0.40 | 0.569* | 2.13 |
| Not capital city | -0.372* | -2.69 | -0.12 | -0.81 | 0.408* | 2.91 | 0.397* | 2.62 | -0.306* | -2.18 | 0.046 | 0.31 |
| Personal income |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | $0.712^{*}$ | 3.39 | 0.352 | 1.60 | -0.828* | -4.01 | 0.023 | 0.11 | 1.038* | 4.92 | -0.229 | -1.06 |
| 3 | 0.366 | 1.59 | 0.453 | 1.78 | -0.784* | -3.37 | -0.593* | -2.21 | 1.206* | 4.83 | -0.663* | -2.49 |
| 4 | 0.613 | 1.76 | 0.237 | 0.66 | -1.826* | -4.45 | -0.281 | -0.69 | 0.789* | 2.26 | -0.614 | -1.57 |
| 5 | 0.081 | 0.48 | 0.098 | 0.55 | -0.399* | -2.33 | -0.283 | -1.53 | 0.346* | 2.07 | -0.043 | -0.25 |
| Constant | 0.648 | 1.43 | 0.775 | 1.71 | 1.508* | 3.15 | -3.296* | -3.16 | -0.989* | -2.16 | -0.315 | -0.71 |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |  |  |  |  |  |  |  |  |

## Workplace barriers

Table A.86: Changed working condition to accommodate illness, injury or disability in last 5 years (\% of ill in last 5 years who worked in last 5 years but are not self-employed) by socio-economic and demographic characteristics, 2011-12

|  | Changed working condition in last 5 years |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W |
| Sex |  |  |  |  |
| Male | 25.9 | 19.7-32.1 | 280 | 719,500 |
| Female | 29.4 | 23.7-35.2 | 290 | 775,967 |
| Age |  |  |  |  |
| 45-54 | 32.1 | 24.8-39.4 | 171 | 733,322 |
| 55-64 | 25.9 | 20.3-31.5 | 252 | 551,108 |
| 65-74 | 17.4* | 11.0-23.8 | 147 | 211,037 |
| Marital status |  |  |  |  |
| Married | 28.0 | 22.6-33.4 | 357 | 946,440 |
| Not married | 26.8 | 20.2-33.5 | 212 | 546,115 |
| Education |  |  |  |  |
| Not finished HS | 26.8 | 20.6-33.0 | 272 | 713,439 |
| Finished HS | 29.4 | 21.6-37.2 | 160 | 417,531 |
| Bachelor + | 28.2 | 19.6-36.8 | 133 | 356,759 |
| Country of birth |  |  |  |  |
| Australia | 28.2 | 23.2-33.1 | 421 | 1,116,506 |
| Other Engl. spk. | 29.3 | 18.7-39.8 | 94 | 235,738 |
| Non-Engl. spk. | 21.6 | 10.0-33.1 | 55 | 143,223 |
| Residence |  |  |  |  |
| Capital city | 25.2 | 20.0-30.4 | 358 | 934,034 |
| Other | 31.9 | 24.8-39.0 | 212 | 561,433 |
| Personal income |  |  |  |  |
| Up to \$20,000 | 27.1 | 17.4-36.8 | 100 | 228,886 |
| \$20,001-\$36,400 | 30.2 | 19.5-40.9 | 101 | 269,224 |
| \$36,401-\$65,000 | 37.5 | 28.0-46.9 | 129 | 345,244 |
| \$65,001+ | 24.6 | 14.5-34.7 | 91 | 279,779 |
| Public servant |  |  |  |  |
| Yes | 29.3 | 22.0-36.7 | 202 | 530,407 |
| No | 27.0 | 21.9-32.2 | 365 | 958,684 |
| Total | 27.7 | 23.5-31.9 | 570 | 1,495,467 |

[^79]Table A.86.1: Logistic regression results for changed working condition to accommodate illness, injury or disability in last 5 years, 2011-12

|  | Coef. | z |
| :--- | ---: | ---: |
| Female | 0.352 | 1.63 |
| Age |  |  |
| 2 | $-0.583^{*}$ | -2.52 |
| 3 | $-0.987^{*}$ | -3.36 |
| Not married | 0 | 0.00 |
| Education |  |  |
| 2 | 0.184 | 0.74 |
| 3 | 0.318 | 1.13 |
| Country of birth |  |  |
| 2 | 0.061 | 0.22 |
| 3 | 0.009 | 0.02 |
| Not capital city | 0.416 | 1.96 |
| Personal income |  | 0.68 |
| 2 | 0.224 | 0.87 |
| 3 | 0.277 | -0.94 |
| 4 | -0.359 | -1.38 |
| 5 | -0.477 | 0.13 |
| Public servant | 0.028 | -2.51 |
| Constant | $-1.006^{*}$ |  |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.87: Changed working condition would help work or work more hours (\% of currently ill, injured or with disability who have not changed working condition, and 1. not employed, or 2. employed) by socio-economic and demographic characteristics, and average (more) hours could work if changed working condition, 2011-12

|  | Changed working condition would help work (not employed) |  |  |  | Changed working condition would help work more hours (employed) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% Cl | N Unw | N W |
| Sex |  |  |  |  |  |  |  |  |
| Male | 61.4 | 47.1-75.8 | 65 | 144,721 | 21.7 | 10.5-32.8 | 81 | 223,942 |
| Female | 65.9 | 53.0-78.8 | 60 | 141,272 | 28.6 | 16.2-41.0 | 80 | 235,843 |
| Age |  |  |  |  |  |  |  |  |
| 45-54 | 76.9 | 57.5-96.4 | 20 | 99,371 | 30.1 | 16.6-43.6 | 56 | 251,525 |
| 55-64 | 62.1 | 48.6-75.6 | 53 | 112,079 | 22.9 | 12.8-33.0 | 76 | 169,617 |
| 65-74 | 48.3* | 34.4-62.2 | 52 | 74,543 | 3.5* | 0.0-10.2 | 29 | 38,643 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 68.2 | 56.8-79.5 | 75 | 175,716 | 22.7 | 13.3-32.1 | 96 | 259,470 |
| Not married | 56.5 | 40.1-72.9 | 50 | 110,277 | 28.5 | 13.8-43.2 | 65 | 200,315 |
| Education |  |  |  |  |  |  |  |  |
| Not finished HS | 61.6 | 48.4-74.8 | 64 | 138,633 | 22.8 | 11.0-34.5 | 75 | 207,550 |
| Finished HS | 57.9 | 38.0-77.8 | 34 | 77,339 | 40.9 | 23.4-58.4 | 45 | 132,009 |
| Bachelor + | 72.6 | 52.0-93.3 | 25 | 66,212 | 12.4 | 0.0-25.3 | 40 | 118,867 |
| Country of birth |  |  |  |  |  |  |  |  |
| Australia | 61.3 | 50.3-72.4 | 96 | 217,203 | 27.6 | 17.5-37.7 | 117 | 346,606 |
| Other Engl. spk. | 70.8 | 48.4-93.1 | 20 | 44,037 | 23.3 | 4.1-42.5 | 30 | 76,266 |
| Non-Engl. spk. | 71.4 | 38.1-100.0 | 9 | 24,753 | 6.5* | 0.0-19.0 | 14 | 36,913 |
| Residence |  |  |  |  |  |  |  |  |
| Capital city | 65.7 | 54.0-77.5 | 83 | 190,258 | 27.5 | 16.5-38.4 | 100 | 286,257 |
| Other | 59.5 | 42.2-76.9 | 42 | 95,735 | 21.5 | 8.7-34.4 | 61 | 173,528 |
| Personal income |  |  |  |  |  |  |  |  |
| Up to \$20,000 | 73.9 | 58.5-89.3 | 33 | 73,988 | 35.6 | 13.9-57.4 | 22 | 51,035 |
| \$20,001-\$36,400 | 58.7 | 31.0-86.4 | 20 | 49,516 | 28.5 | 7.1-49.9 | 28 | 78,002 |
| \$36,401-\$65,000 | 69.2 | 44.2-94.2 | 14 | 28,487 | 32.8 | 13.8-51.9 | 41 | 124,469 |
| \$65,001+ | 59.7 | 17.6-100.0 | 6 | 9,987 | 23.8 | 8.7-39.0 | 38 | 127,424 |
| Public servant |  |  |  |  |  |  |  |  |
| Yes | 52.4 | 35.4-69.3 | 49 | 113,254 | 28.8 | 11.6-46.0 | 50 | 141,070 |
| No | 70.7 | 59.2-82.0 | 75 | 170,331 | 23.6 | 14.4-32.9 | 111 | 318,716 |
| Total | 63.7 | 53.9-73.4 | 125 | 285,993 | 25.2 | 16.8-33.6 | 161 | 459,785 |
| Average number (more) hours could work per week | 26.4 | 23.8-28.9 | 67 | 162,549 | 10.4 | 8.6-12.2 | 28 | 104,290 |

[^80]Table A.87.1: Logistic regression results for changed working condition would help work or work more hours, 2011-12

|  | Changed working condition would help work (not employed) |  | Changed working condition would help work more hours (employed) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Coef. | z | Coef. | z |
| Female | -0.502 | -1.02 | 0.54 | 1.07 |
| Age |  |  |  |  |
| 2 | -1.656 | -1.90 | -0.286 | -0.61 |
| 3 | -2.175* | -2.46 | -2.386* | -2.15 |
| Not married | 0.201 | 0.41 | -0.064 | -0.13 |
| Education |  |  |  |  |
| 2 | -0.646 | -1.07 | 0.729 | 1.43 |
| 3 | 0.866 | 1.11 | -1.182 | -1.63 |
| Country of birth |  |  |  |  |
| 2 | 1.591* | 2.04 | -0.569 | -0.92 |
| 3 | 0.038 | 0.04 | -1.489 | -1.30 |
| Not capital city | -0.212 | -0.41 | -0.598 | -1.24 |
| Personal income |  |  |  |  |
| 2 | -0.767 | $-1.13$ | -0.927 | -1.19 |
| 3 | -0.101 | -0.12 | -0.875 | -1.17 |
| 4 | -0.145 | -0.13 | -0.413 | -0.49 |
| 5 | -0.309 | -0.51 | -2.347* | -2.43 |
| Public servant | 0.492 | 0.97 | -0.004 | -0.01 |
| Constant | 2.194* | 2.03 | 0.023 | 0.02 |

[^81]
## Interaction of barriers

Table A.88: III for 2 months in last 5 years and if prevented from working ( $\%$ of total population): interaction with other factors, 2011-12

|  | III for 2 months in last 5 years |  | Prevented from working/ looking for work |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Discouraged worker (not working \& not retired) |  |  |  |  |  |  |
| Yes | 51.5 | 43.1-58.5 | 39.8 | 25.3-54.4 | 72 | 187,891 |
| No | 50.8 | 37.4-65.7 | 41.0 | 33.4-48.6 | 222 | 647,530 |
| Care for person with long-term illness/ disability |  |  |  |  |  |  |
| Yes | 43.9 | 38.0-49.8 | 25.3 | 20.2-30.5 | 379 | 1,011,607 |
| No | 34.0* | 32.0-36.1 | 19.7* | 18.0-21.3 | 2,628 | 6,333,431 |
| Care-giving prevents from working (not working) |  |  |  |  |  |  |
| Yes | 50.0 | 47.1-53.0 | 33.5 | 30.6-36.4 | 135 | 315,901 |
| No | 51.8 | 42.1-61.6 | 32.6 | 23.7-41.4 | 1,433 | 2,761,098 |
| Age intend to retire (not retired, average years) |  |  |  |  |  |  |
| III for 2 months in last 5 years/ prevented from working or looking for work | 65.5 | 64.9-66.1 | 65.6 | 64.8-66.4 | 312 | 921,199 |
| Not ill for 2 months in last 5 years | 65.3 | 65.0-65.7 | 65.3 | 65.0-65.7 | 1,055 | 3,167,929 |
| Leisure time reason intend to retire (not retired) |  |  |  |  |  |  |
| Very/somewhat important | 27.5 | 24.8-30.1 | 14.5 | 12.5-16.6 | 1,407 | 4,191,730 |
| Not important at all | 34.5* | 28.2-40.8 | 19.9 | 14.4-25.4 | 295 | 819,412 |
| Leisure time reason for retiring (retired) |  |  |  |  |  |  |
| Very/somewhat important | 44.6 | 40.5-48.7 | 24.4 | 20.8-28.0 | 657 | 1,164,207 |
| Not important at all | 57.1* | 52.0-62.1 | 40.1* | 35.0-45.3 | 407 | 712,813 |
| Intend to receive super in r/ment (not retired) |  |  |  |  |  |  |
| Yes | 25.8 | 23.2-28.5 | 12.5 | 10.5-14.4 | 1,378 | 4,093,215 |
| No | 40.3* | 34.2-46.4 | 28.1* | 22.5-33.8 | 331 | 937,443 |
| Receive super in r/ment (retired) |  |  |  |  |  |  |
| Yes | 40.2 | 57.0-65.7 | 18.8 | 15.3-22.2 | 531 | 893,621 |
| No | 61.3* | 35.7-44.6 | 40.9* | 36.4-45.4 | 545 | 1,006,274 |


| How long employer contributed to super (average years) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| III for 2 months in last 5 years | 19.3 | $18.6-20.0$ | 18.3 | $17.4-19.2$ | 735 | $1,723,074$ |
| Not ill for 2 months in last 5 years | 20.1 | $19.6-20.6$ | 20.2 | $19.7-20.6$ | 1,765 | $4,561,352$ |
| Confident have enough super to retire on (have super, not retired) |  |  |  |  |  |  |
| Extremely/somewhat confident | 20.4 | $17.2-23.8$ | 9.1 | $6.8-11.4$ | 704 | $2,017,744$ |
| Not very/not at all confident | $33.3^{\star}$ | $29.8-36.8$ | 18.7 | $15.9-21.6$ | 920 | $2,760,553$ |

Did GFC decrease super balance (have super)

| Yes | 30.4 | $28.0-32.8$ | 17.0 | $15.0-18.9$ | 1,744 | $4,360,597$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $39.0^{*}$ | $34.9-43.0$ | $21.3^{*}$ | $18.0-24.5$ | 752 | $1,853,031$ |

How access to super as tax-free income source while work after 60 will affect retirement plans (not retired, 45-59)

| No impact | 26.1 | $22.7-29.6$ | 18.2 | $11.5-24.8$ | 719 | $2,651,665$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Put off retirement | 32.7 | $24.8-40.5$ | 14.9 | $6.3-23.5$ | 179 | 662,706 |
| Retire earlier | 25.6 | $14.3-36.9$ | 13.3 | $10.7-15.9$ | 61 | 226,367 |

## Table A. 88 continues

|  | III for <br> las | 2 months in 5 years | Prevented from working/ looking for work |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% Cl | \% | 95\% CI |  |  |
| How access to super as tax-free income source while work after 60 will affect hours worked (currently working, 45-59) |  |  |  |  |  |  |
| No impact | 22.6 | 18.6-26.7 | - | - | 527 | 1,918,685 |
| Work more hours | 25.9 | 7.3-44.5 | - | - | 91 | 71,614 |
| Work less hours | 26.3 | 20.9-31.6 | - | - | 297 | 1,120,877 |
| No jobs in line of work in local area (worked or looked for job in last 5 years) |  |  |  |  |  |  |
| Agree/strongly agree | 36.4 | 32.3-40.5 | 20.9 | 17.5-24.4 | 700 | 1,797,887 |
| Strongly disagree/ disagree/neither | 26.2* | 23.5-29.0 | 13.9* | 11.8-15.9 | 1,249 | 3,566,197 |
| No jobs at all in local area (worked or looked for job in last 5 years) |  |  |  |  |  |  |
| Agree/strongly agree | 49.7 | 40.8-58.7 | 30.4 | 22.1-38.6 | 162 | 403,961 |
| Strongly disagree/ disagree/neither | 27.8* | 25.5-30.1 | 15.0 | 13.2-16.8 | 1,887 | 5,187,047 |
| Attended training in last 5 years (worked in last 5 years) |  |  |  |  |  |  |
| Yes | 26.6 | 24.0-29.2 | 14.1 | 12.1-16.1 | 1,367 | 3,946,694 |
| No | 35.0* | 30.7-39.3 | 19.5* | 16.0-22.9 | 654 | 1,566,415 |
| How useful was training |  |  |  |  |  |  |
| Very/ somewhat useful | 25.1 | 22.4-27.8 | 13.0 | 11.0-15.1 | 1,223 | 3,551,976 |
| Not very/ not at all | 42.4* | 32.5-52.4 | 24.1* | 15.8-32.4 | 129 | 360,615 |
| Any training wanted to attend in last 5 years but couldn't (worked in last 5 years) |  |  |  |  |  |  |
| Yes | 33.5 | 29.5-37.6 | 18.1 | 14.9-21.4 | 676 | 2,046,412 |
| No | 26.2* | 23.5-28.8 | 14.1* | 12.1-16.2 | 1,326 | 3,420,091 |
| Receive Government income support |  |  |  |  |  |  |
| Yes | 52.5 | 49.3-55.7 | 34.2 | 31.2-37.3 | 1,279 | 2,574,632 |
| No | 26.1* | 23.8-28.5 | 13.0* | 11.2-14.8 | 1,724 | 4,764,846 |
| Used Aust Govt employment service (looked for job in last 5 years) |  |  |  |  |  |  |
| Yes | 52.3 | 41.9-62.6 | 36.5 | 26.6-46.5 | 121 | 348,262 |
| No | 28.0 | 24.1-31.9 | 17.1* | 13.9-20.3 | 621 | 1,904,398 |
| Was Aust Govt employment service helpful |  |  |  |  |  |  |
| Yes | 54.1 | 39.9-68.3 | 40.2 | 26.5-54.0 | 68 | 218,640 |
| No | 49.1 | 33.8-64.4 | 31.3 | 16.9-45.8 | 51 | 125,174 |
| Used private recruitment firm (looked for job in last 5 years) |  |  |  |  |  |  |
| Yes | 37.4 | 28.9-45.9 | 25.0 | 17.5-32.5 | 171 | 552,718 |
| No | 29.7 | 25.6-33.8 | 18.5 | 15.1-21.9 | 572 | 1,706,392 |
| Reducing hours help delay r/ment (currently working) |  |  |  |  |  |  |
| Yes | 24.4 | 20.8-28.1 | - | - | 660 | 2,063,659 |
| No | 26.0 | 21.1-30.8 | - | - | 403 | 1,124,637 |
| * p $<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |  |  |

Table A.89: Currently ill and if prevents from working (\% of total population): interaction with other factors, 2011-12

|  | Currently ill |  | Prevents from working |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI |  |  |
| Discouraged worker (not working \& not retired) |  |  |  |  |  |  |
| Yes | 41.3 | 26.8-55.7 | 32.5 | 18.1-46.8 | 72 | 187,891 |
| No | 45.6 | 37.9-53.4 | 29.7 | 22.4-36.9 | 222 | 647,530 |
| Care for person with long-term illness/ disability |  |  |  |  |  |  |
| Yes | 40.6 | 34.7-46.4 | 12.4 | 8.3-16.5 | 379 | 1,011,607 |
| No | 29.2* | 27.2-31.1 | 11.4 | 10.1-12.8 | 2,628 | 6,333,431 |
| Care-giving prevents from working (not employed \& retired) |  |  |  |  |  |  |
| Yes | 44.9 | 42.0-47.8 | 24.6 | 16.6-32.7 | 135 | 315,901 |
| No | 49.6 | 39.9-59.3 | 28.0 | 25.2-30.7 | 1,433 | 2,761,098 |
| Age intend to retire (not retired, average years) |  |  |  |  |  |  |
| Currently il/ prevents from working | 65.7 | 65.0-66.3 | 65.0 | 63.8-66.2 | 312 | 921,199 |
| Not currently ill | 65.3 | 64.9-65.6 | 65.4 | 65.1-65.7 | 1,055 | 3,167,929 |
| Leisure time reason intend to retire (not retired) |  |  |  |  |  |  |
| Very/somewhat important | 22.6 | 20.1-25.1 | 3.4 | 2.3-4.6 | 1,407 | 4,191,730 |
| Not important at all | 29.0 | 23.0-35.0 | 8.3* | 4.1-12.5 | 295 | 819,412 |
| Leisure time reason for retiring (retired) |  |  |  |  |  |  |
| Very/somewhat important | 37.3 | 33.4-41.3 | 20.0 | 16.6-23.4 | 657 | 1,164,207 |
| Not important at all | 54.1* | 49.0-59.1 | 36.2* | 31.1-41.2 | 407 | 712,813 |
| Intend to receive super in $\mathrm{r} /$ ment (not retired) |  |  |  |  |  |  |
| Yes | 20.9 | 18.4-23.3 | 2.6 | 1.6-3.6 | 1,378 | 4,093,215 |
| No | $35.2^{*}$ | 29.3-41.1 | 11.3* | 7.1-15.5 | 331 | 937,443 |
| Receive super in $\mathrm{r} / \mathrm{ment}$ (retired) |  |  |  |  |  |  |
| Yes | 31.3 | 27.2-35.4 | 13.0 | 9.9-16.2 | 531 | 893,621 |
| No | 55.3* | 50.8-59.8 | 38.2* | 33.7-42.6 | 545 | 1,006,274 |
| How long employer contributed to super (have super, average years) |  |  |  |  |  |  |
| Currently ill/ prevents from working | 19.3 | 18.5-20.1 | 17.5 | 16.1-18.8 | 735 | 1,723,074 |
| Not currently ill | 20.0 | 19.5-20.5 | 20.1* | 19.6-20.5 | 1,765 | 4,561,352 |

Confident have enough super to retire on (have super, not retired)

| Extremely/somewhat confident | 17.9 | $14.6-21.1$ | 5.5 | $3.7-7.3$ | 704 | $2,017,744$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Not very/not at all confident | $26.9^{*}$ | $23.7-30.2$ | $12.5^{*}$ | $0.4-20.8$ | 920 | $2,760,553$ |


| Did GFC decrease super balance (have super) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Yes | 25.3 | $22.9-27.6$ | 7.0 | $5.7-8.3$ | 1,744 | $4,360,597$ |
| No | $33.8^{\star}$ | $29.9-37.7$ | $13.8^{\star}$ | $11.1-16.5$ | 752 | $1,853,031$ |

How access to super as tax-free income source while work after 60 will affect r/ment plans
(not retired, 45-59)

| No impact | 21.5 | $18.2-24.8$ | 6.4 | $1.4-11.4$ | 719 | $2,651,665$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Would put off retirement | 27.5 | $19.9-35.1$ | 4.2 | $0.0-8.9$ | 179 | 662,706 |
| Would retire earlier | 24.5 | $18.2-24.8$ | 2.5 | $1.3-3.7$ | 61 | 226,367 |

[^82]| Currently ill |  | Prevents from working |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \% | 95\% CI | \% | 95\% CI |  |  |

No jobs in line of work in local area (worked or looked for job in last 5 years)

| Agree/strongly agree | 30.2 | $26.2-34.2$ | 8.8 | $6.4-11.2$ | 700 | $1,797,887$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Strongly disagree/ disagree/neither | $21.0^{*}$ | $18.5-23.5$ | $4.3^{\star}$ | $3.1-5.5$ | 1,249 | $3,566,197$ |

No jobs at all in local area (worked or looked for job in last 5 years)

| Agree/strongly agree | 39.9 | $31.3-48.4$ | 14.3 | $8.4-20.2$ | 162 | 403,961 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Strongly disagree/ disagree/neither | $22.6^{*}$ | $20.4-24.8$ | $5.2^{*}$ | $4.1-6.3$ | 1,887 | $5,187,047$ |


| Attended training in last $\mathbf{5}$ years (worked in last $\mathbf{5}$ years) |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Yes | 20.7 | $18.3-23.1$ | 3.8 | $2.6-4.9$ | 1,367 | $3,946,694$ |
| No | $30.7^{*}$ | $26.4-34.9$ | $8.6^{\star}$ | $6.2-11.1$ | 654 | $1,566,415$ |


| How useful was training | 20.0 | $17.5-22.5$ | 3.5 | $2.3-4.6$ | 1,223 | $3,551,976$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| Very useful/ somewhat | 27.3 | $18.8-35.7$ | 6.3 | $1.6-11.0$ | 129 | 360,615 |
| Not very/ not at all |  |  |  |  |  |  |

Any training wanted to attend in last 5 years but couldn't (worked in last 5 years)

| Yes | 26.3 | $22.6-30.1$ | 5.4 | $3.4-7.5$ | 676 | $2,046,412$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| No | 21.8 | $19.2-24.3$ | 5.0 | $3.8-6.3$ | 1,326 | $3,420,091$ |

Receive Government income support

| Yes | 50.2 | $47.0-53.4$ | 26.9 | $24.1-29.8$ | 1,279 | $2,574,632$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $20.3^{*}$ | $18.1-22.5$ | $3.3^{*}$ | $2.3-4.2$ | 1,724 | $4,764,846$ |

Used Aust Govt employment service (looked for job in last 5 years)

| Yes | 45.3 | $35.0-55.6$ | 19.3 | $10.9-27.7$ | 121 | 348,262 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $22.9^{*}$ | $19.2-26.5$ | $5.4^{*}$ | $3.6-7.2$ | 621 | $1,904,398$ |

Was Aust Govt employment service helpful (if used Aust Govt employment service)

| Yes | 45.1 | $31.1-59.1$ | 22.6 | $10.8-34.4$ | 68 | 218,640 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No | 45.4 | $30.0-60.8$ | 14.3 | $3.0-26.7$ | 51 | 125,174 |


| Used private recruitment firm (looked for job in last 5 years) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Yes | 28.1 | $20.1-36.2$ | 8.0 | $3.0-13.0$ | 171 | 552,718 |
| No | 25.7 | $21.9-29.6$ | 7.4 | $5.2-9.6$ | 572 | $1,706,392$ |

Reducing hours help delay $\mathrm{r} /$ ment (currently working)

| Yes | 20.3 | $16.8-23.7$ | - | - | 660 | $2,063,659$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| No | 18.4 | $14.3-22.5$ | - | - | 403 | $1,124,637$ |
| * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |  |  |

Table A.90: Reported workplace exclusion in last 5 years attributed to age (\% of people who have worked in last 5 years excluding self-employed): interaction with other factors, 2011-12

|  | \% | 95\% CI | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: |
| Illness/injury for 2 months in last 5 years |  |  |  |  |
| Yes | 16.1 | 12.6-19.6 | 491 | 1,270,557 |
| No | 12.1* | 10.0-14.3 | 1,072 | 3,049,952 |
| Currently have illness/injury |  |  |  |  |
| Yes | 16.6 | 12.5-20.7 | 390 | 1,019,642 |
| No | 12.3* | 10.2-14.3 | 1,173 | 3,302,155 |
| No jobs in line of work in local area (worked or looked for work in last 5 years) |  |  |  |  |
| Agree/strongly agree | 19.6 | 15.7-23.6 | 507 | 1,317,132 |
| Strongly disagree/ disagree/neither | 10.5** | 8.4-12.6 | 959 | 2,787,144 |
| No jobs at all in local area (worked or looked for work in last 5 years) |  |  |  |  |
| Agree/strongly agree | 31.5 | 21.4-41.6 | 116 | 294,303 |
| Strongly disagree/ disagree/neither | 12.0** | 10.1-13.8 | 1,414 | 3,961,846 |
| Any training wanted to attend in last 5 years but couldn't |  |  |  |  |
| Yes | 15.7 | 12.3-19.0 | 538 | 1,657,302 |
| No | 11.7** | 9.5-13.8 | 1,012 | 2,631,261 |

[^83]Table A.91: Reported job search exclusion in last 5 years attributed to age (\% of people who have looked for job in last 5 years): interaction with other factors, 2011-12

|  | \% | 95\% CI | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: |
| Unemployed (working/unemployed) |  |  |  |  |
| Yes | 60.9 | 49.3-72.5 | 87 | 261,361 |
| No | 31.0 ** | 26.5-35.6 | 486 | 1,609,328 |
| Very long-term unemployed (not retired) |  |  |  |  |
| Yes | 53.3 | 39.2-67.3 | 64 | 183,373 |
| No | $33.8{ }^{* *}$ | 29.4-38.1 | 576 | 1,878,301 |
| Currently have illness/injury |  |  |  |  |
| Yes | 43.0 | 35.5-50.6 | 211 | 596,141 |
| No | 34.0** | 29.5-38.6 | 532 | 1,660,296 |
| Current illness/injury prevents working/ looking for work (not working) |  |  |  |  |
| Yes | 53.2 | 45.0-61.3 | 61 | 170,013 |
| No | 39.0* | 24.9-53.0 | 197 | 481,183 |
| Age intend to retire (average) |  |  |  |  |
| Job search exclusion attributed to age | 66.3 | 65.5-67.2 | 210 | 640,616 |
| No job search exclusion attributed to age | $65.2{ }^{* *}$ | 64.6-65.8 | 316 | 1,075,993 |
| No jobs in line of work in local area (worked or looked for job in last 5 years) |  |  |  |  |
| Agree/strongly agree | 46.2 | 39.5-52.9 | 278 | 814,739 |
| Strongly disagree/ disagree/neither | 31.4 ** | 26.6-36.3 | 443 | 1,390,276 |
| No jobs at all in local area(worked or looked for job in last 5 years) |  |  |  |  |
| Agree/strongly agree | 51.2 | 37.8-64.5 | 74 | 206,317 |
| Strongly disagree/ disagree/neither | 34.9 ** | 30.8-39.0 | 659 | 2,027,761 |
| How useful was training (attended training in last 5 years) |  |  |  |  |
| Very useful/ somewhat | 33.5 | 28.7-38.2 | 462 | 1,467,976 |
| Not very/ not at all | $56.4{ }^{* *}$ | 41.1-71.6 | 53 | 162,817 |
| Used Aust Govt employment service (looked for job in last 5 years) |  |  |  |  |
| Yes | 59.3 | 49.0-69.5 | 121 | 348,262 |
| No | 32.1** | 28.0-36.2 | 621 | 1,904,398 |
| Used private recruitment firm (looked for job in last 5 years) |  |  |  |  |
| Yes | 48.4 | 39.8-57.1 | 171 | 552,718 |
| No | $32.4{ }^{* *}$ | 28.1-36.7 | 572 | 1,706,392 |

${ }^{* *} \mathrm{p}<0.05$ * $\mathrm{p}<0.10$; Note: Non-significant interactions not shown. Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.92: Number of discriminations (1: either reported exclusion in workplace or job search attributed to age, 2: report being told directly or indirectly too old for job, 3: think age discrimination is an issue in Australia in the workplace or looking for job, \% of people who have worked last 5 years excluding self-employed, or looked for job in last 5 years): interaction with other factors, 2011-12

|  | 0 |  | $1-2$ |  | 3 |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\%$ | $95 \%$ CI | $\%$ | $95 \%$ CI | $\%$ | $95 \%$ CI | N Unw | N W |
| Yes | 4.4 | $0.4-8.4$ | 57.1 | $45.4-68.8$ | 38.5 | $27.1-49.9$ | 87 | 261,361 |
| No | $26.4^{* *}$ | $23.6-29.2$ | 61.7 | $58.6-64.8$ | $11.9^{* *}$ | $9.9-13.9$ | 1,184 | $3,581,217$ |

Very long-term unemployed (not retired)

| Yes | 2.4 | $-1.0-5.8$ | 61.8 | $58.8-64.8$ | 35.7 | $23.1-48.4$ | 64 | 183,373 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $24.9^{* *}$ | $22.2-27.5$ | 61.8 | $48.9-74.7$ | $13.3^{* *}$ | $11.3-15.3$ | 1,322 | $3,979,372$ |

Care for person with long-term illness/ disability

| Yes | 24.2 | $17.7-30.8$ | 57.3 | $49.8-64.9$ | 18.4 | $12.9-24.0$ | 214 | 622,437 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | 24.0 | $21.6-26.5$ | 62.5 | $59.7-65.3$ | $13.5^{*}$ | $11.6-15.4$ | 1,532 | $4,207,117$ |

Illness/injury for 2 months in last 5 years

| Yes | 19.8 | $16.0-23.6$ | 60.9 | $56.3-65.5$ | 19.2 | $15.6-22.8$ | 564 | $1,452,685$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $25.9^{* *}$ | $23.0-28.7$ | 62.2 | $59.0-65.3$ | $12.0^{* *}$ | $9.9-14.0$ | 1,181 | $3,373,172$ |

Illness/injury in last 5 years prevented working/ looking for work

| Yes | 16.8 | $12.3-21.3$ | 61.9 | $59.1-64.9$ | 22.1 | $17.0-27.3$ | 313 | 808,738 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $25.5^{* *}$ | $22.9-28.1$ | 61.0 | $55.0-67.1$ | $12.5^{* *}$ | $10.6-14.4$ | 1,433 | $4,020,816$ |

Currently have illness/injury

| Yes | 16.5 | $12.7-20.4$ | 62.6 | $57.5-67.8$ | 20.8 | $16.6-25.1$ | 451 | $1,174,941$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $26.5^{* *}$ | $23.8-29.3$ | 61.5 | $58.5-64.5$ | $12.0^{* *}$ | $10.1-13.9$ | 1,293 | $3,648,117$ |

Current illness/injury prevents working/ looking for work (not working)

| Yes | 11.8 | $5.7-17.9$ | 59.8 | $54.6-65.0$ | 21.2 | $16.8-25.6$ | 119 | 300,343 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $19.0^{*}$ | $15.1-22.9$ | $69.6^{*}$ | $60.7-78.6$ | 18.6 | $11.3-25.9$ | 443 | 947,993 |
| Age intend to retire <br> (average years) | 64.5 | $63.9-65.2$ | 65.1 | $64.7-65.5$ | $66.0^{*}$ | $65.1-66.9$ | 1,149 | $3,480,081$ |

No jobs in line of work in local area

| Agree/strongly agree | 14.0 | $10.9-17.2$ | 63.7 | $59.3-68.1$ | 22.3 | $18.4-26.1$ | 580 | $1,518,070$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Strongly disagree/ <br> disagree/neither | $27.7^{* *}$ | $24.6-30.8$ | 61.6 | $58.3-64.9$ | $10.7^{* *}$ | $8.7-12.7$ | 1,063 | $3,079,174$ |

No jobs at all in local area (worked or looked for work in last 5 years)

| Agree/strongly agree | 5.7 | $2.2-9.2$ | 58.2 | $48.7-67.7$ | 36.1 | $26.8-45.5$ | 137 | $4,413,934$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Strongly disagree/ <br> disagree/neither | $25.4^{* *}$ | $23.0-27.9$ | 62.1 | $59.3-64.8$ | $12.5^{* *}$ | $10.7-14.3$ | 1,574 | 345,794 |

How useful was training

| Very useful/ somewhat | 25.9 | $22.9-28.9$ | 61.3 | $58.0-64.6$ | 12.8 | $10.6-14.9$ | 1,082 | $3,179,377$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| Not very/ not at all | 19.3 | $11.3-27.2$ | 55.9 | $45.7-66.2$ | $24.8^{* *}$ | $16.1-33.5$ | 116 | 320,109 |

Any training wanted to attend in last 5 years but couldn't (worked in last 5 years)

| Yes | 19.7 | $16.0-23.4$ | 62.3 | $57.9-66.7$ | 18.0 | $14.6-21.3$ | 589 | $1,810,773$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No | $27.9^{* *}$ | $24.8-30.9$ | 61.6 | $58.2-64.9$ | $10.6^{* *}$ | $8.5-12.6$ | 1,072 | $2,816,197$ |

[^84]Table A. 92 continues

|  | 0 |  | 1-2 |  | 3 |  | N Unw | N W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |  |  |
| Receive Government income support |  |  |  |  |  |  |  |  |
| Yes | 18.8 | 14.6-23.0 | 63.8 | 58.7-68.9 | 17.4 | 13.5-21.2 | 474 | 1,113,987 |
| No | 25.6 ** | 22.9-28.3 | 61.2 | 58.2-64.2 | 13.2* | 11.1-15.2 | 1,272 | 3,715,567 |
| Used Aust Govt employment service (looked for job in last 5 years) |  |  |  |  |  |  |  |  |
| Yes | 4.8 | 0.5-9.0 | 56.1 | 45.9-66.2 | 39.2 | 29.3-49.0 | 121 | 348,262 |
| No | 13.5** | 10.5-16.6 | 64.3 | 60.1-68.5 | 22.2** | 18.7-25.7 | 621 | 1,904,398 |
| Was Aust Govt employment service helpful |  |  |  |  |  |  |  |  |
| Yes | 3.5 | -1.4-8.4 | 66.8 | 54.2-79.5 | 29.6 | 17.5-41.8 | 68 | 218,640 |
| No | 5.3 | -2.2-12.7 | 37.5** | 22.9-52.0 | 57.3** | 42.2-72.3 | 51 | 125,174 |
| Used private recruitment firm (looked for job in last 5 years) |  |  |  |  |  |  |  |  |
| Yes | 9.2 | 4.1-14.2 | 58.9 | 50.5-67.2 | 32.0 | 24.3-39.6 | 171 | 552,718 |
| No | 13.1 | 10.0-16.2 | 64.5 | 60.1-68.9 | 22.4** | 18.7-26.1 | 572 | 1,706,392 |

[^85] of average age intend to retire. Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
Table A.93: Care for person with long-term illness or disability (total population) and care-giving prevents from working (\% of not employed population): interaction with other factors, 2011-12

|  | Care for person with long-term illness or disability (total population) |  |  |  | Care-giving prevents from working (not employed population) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | N Unw | N W | \% | 95\% CI | N Unw | N W |
| Did GFC decrease super balance (have super) |  |  |  |  |  |  |  |  |
| Yes | 12.3 | 10.4-14.2 | 1,744 | 4,360,597 | 9.6 | 7.0-12.3 | 770 | 1,475,153 |
| No | 15.2 | 12.2-18.3 | 752 | 1,853,031 | 9.7 | 6.0-13.4 | 393 | 784,201 |
| How access to super as tax-free income source while work after 60 will affect r/ment plans (not retired, 45-59) |  |  |  |  |  |  |  |  |
| No impact | 12.8 | 10.0-15.6 | 719 | 2,651,665 | 13.4 | 3.7-23.0 | 77 | 281,240 |
| Put off retirement | 18.6 | 12.1-25.1 | 179 | 662,706 | 19.2 | 3.7-34.6 | 27 | 111,086 |
| Retire earlier | 14.1 | 5.1-23.2 | 61 | 226,367 | 9.7 | 0.0-28.4 | 8 | 26,877 |
| How access to super as tax-free income source while work after 60 will affect hours worked (currently working, 45-59) |  |  |  |  |  |  |  |  |
| No impact | 13.3 | 9.9-16.7 | 527 | 1,918,685 | - |  | - | - |
| Work more hours | 16.9 | 0.0-35.0 | 91 | 71,614 | - | - | - | - |
| Work less hours | 13.5 | 9.3-17.6 | 297 | 1,120,877 | - | - | - | - |
| No jobs in line of work in local area (worked or looked for job in last 5 years) |  |  |  |  |  |  |  |  |
| Agree/strongly agree | 17.4 | 13.9-20.8 | 700 | 1,797,887 | 8.1 | 4.3-12.0 | 266 | 575,304 |
| Strongly disagree/ disagree/neither | $10.2{ }^{*}$ | 8.2-12.2 | 1,249 | 3,566,197 | 9.9 | 5.5-14.2 | 328 | 722,524 |
| No jobs at all in local area (worked or looked for job in last 5 years) |  |  |  |  |  |  |  |  |
| Agree/strongly agree | 21.3 | 12.9-30.0 | 162 | 403,961 | 13.9 | 4.0-23.9 | 73 | 155,161 |
| Strongly disagree/ disagree/neither | 11.8* | 10.1-13.6 | 1,887 | 5,187,047 | 9.6 | 6.5-12.6 | 558 | 1,216,745 |
| Attended training in last 5 years(worked in last 5 years) |  |  |  |  |  |  |  |  |
| Yes | 12.8 | 10.7-14.8 | 1,367 | 3,946,694 | 10.1 | 6.3-13.9 | 293 | 668,622 |
| No | 11.8 | 8.7-14.9 | 654 | 1,566,415 | 7.7 | 4.1-11.4 | 289 | 576,449 |
| How useful was training |  |  |  |  |  |  |  |  |
| Very/ somewhat useful | 12.3 | 10.2-14.5 | 1,223 | 3,551,976 | 9.4 | 5.3-13.4 | 250 | 562,724 |
| Not very/ not at all | 17.1 | 9.9-24.3 | 129 | 360,615 | 11.3 | 1.1-21.4 | 40 | 97,661 |

Table A. 93 continues
Any training wanted to attend in last 5 years but couldn't (worked in last 5 years)

| Yes |
| :--- |
| No |

Receive Government income support
Yes
Used Aust Govt employment service (looked for job in last 5 years)
Yes
Was Aust Govt employment service helpful
Yes
Used private recruitment firm (looked for job in last 5 years)
Yes
Reducing hours help delay $\mathrm{r} /$ ment (currently working)
Yes

* $p<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.


Table A.94: Reducing hours would help delay retirement (\% of currently employed): interaction with other factors, 2011-12

|  | $\%$ | $95 \% ~ C l$ | N Unw | N W |
| :--- | ---: | ---: | ---: | ---: |
| Age intend to retire (average years) |  |  |  |  |
| Reducing hours would help delay retirement | 65.0 | $64.6-65.4$ | 570 | $1,781,583$ |
| Reducing hours would not help delay retirement | 64.5 | $63.9-65.0$ | 343 | 971,855 |
| Leisure time reason intend to retire (not retired) |  |  |  |  |
| Very/somewhat important | 64.0 | $60.5-67.4$ | 932 | $2,813,870$ |
| Not important at all | $54.4^{*}$ | $45.9-63.0$ | 163 | 472,151 |
| Intend to receive super in r/ment (not retired) |  |  |  |  |
| Yes | 63.4 | $60.0-66.8$ | 975 | $2,953,855$ |
| No | 55.2 | $45.2-65.1$ | 124 | 345,448 |
| How long employer contributed to super (have super, average years) |  |  |  |  |
| Reducing hours would help delay retirement | 19.8 | $19.1-20.6$ | 638 | $1,994,529$ |
| Reducing hours would not help delay retirement | 20.1 | $19.0-21.1$ | 392 | $1,091,441$ |
| Confident have enough super to retire on (have super) |  |  |  |  |
| Extremely/somewhat confident | 59.0 | $54.0-64.0$ | 474 | $1,399,772$ |
| Not very/not at all confident | $66.2^{*}$ | $62.0-70.4$ | 597 | $1,805,402$ |
| Did super balance decrease in recent years (have super) |  |  |  |  |
| Yes | 65.8 | $62.1-69.6$ | 768 | $2,295,137$ |
| No | $55.4^{*}$ | $48.7-62.1$ | 269 | 803,996 |

* $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

Table A.95: Marginal effect calculation: physical illness - measure 1 (2011-12)

|  | Workers foregone (2011) |  | Hours foregone (per week 2011) |  |  |  | Total | Prevalence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | UNEMP | NILF | UNEMP | PT | FT |  | NILF | UNEMP | PT | FT |
| Males |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 60,762 | 747 | 60,762 | 747 | 0 | 0 | 61,509 | 0.6921 | 0.0339 | 0.0000 | 0.0000 |
| 50-54 | 57,831 | 711 | 57,831 | 711 | 0 | 0 | 58,543 | 0.6921 | 0.0339 | 0.0000 | 0.0000 |
| 55-59 | 47,421 | 2,521 | 47,421 | 2,521 | 0 | 0 | 49,942 | 0.3700 | 0.1558 | 0.0000 | 0.0000 |
| 60-64 | 87,196 | 1,969 | 87,196 | 1,969 | 0 | 0 | 89,164 | 0.3700 | 0.1558 | 0.0000 | 0.0000 |
| 65-69 | 78,367 | 0 | 78,367 | 0 | 0 | 0 | 78,367 | 0.1976 | 0.0000 | 0.0000 | 0.0000 |
| 70-74 | 58,755 | 0 | 58,755 | 0 | 0 | 0 | 58,755 | 0.1976 | 0.0000 | 0.0000 | 0.0000 |
| Total | 390,333 | 5,948 | 390,333 | 5,948 | 0 | 0 | 396,282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Females |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 65,081 | 1,952 | 65,081 | 1,952 | 0 | 0 | 67,032 | 0.3833 | 0.0851 | 0.0000 | 0.0000 |
| 50-54 | 62,605 | 1,877 | 62,605 | 1,877 | 0 | 0 | 64,483 | 0.3833 | 0.0851 | 0.0000 | 0.0000 |
| 55-59 | 78,241 | 1,701 | 78,241 | 1,701 | 0 | 0 | 79,942 | 0.3341 | 0.1307 | 0.0000 | 0.0000 |
| 60-64 | 115,252 | 963 | 115,252 | 963 | 0 | 0 | 116,215 | 0.3341 | 0.1307 | 0.0000 | 0.0000 |
| 65-69 | 73,703 | 0 | 73,703 | 0 | 0 | 0 | 73,703 | 0.1651 | 0.0000 | 0.0000 | 0.0000 |
| 70-74 | 57,809 | 0 | 57,809 | 0 | 0 | 0 | 57,809 | 0.1651 | 0.0000 | 0.0000 | 0.0000 |
| Total | 452,691 | 6,493 | 452,691 | 6,493 | 0 | 0 | 459,184 |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |
| Total | 843,025 | 12,441 | 843,025 | 12,441 | 0 | 0 | 855,466 |  |  |  |  |

[^86]Table A.96: Marginal effect calculation: physical illness - measure 2 (2011-12)

|  | Workers foregone (2011) |  | Hours foregone (per week 2011) |  |  |  | Total | Prevalence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | UNEMP | NILF | UNEMP | PT | FT |  | NILF | UNEMP | PT | FT |
| Males |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 62,255 | 8,551 | 62,255 | 8,551 | 12,251 | 71,540 | 154,596 | 0.7091 | 0.3878 | 0.1821 | 0.1193 |
| 50-54 | 59,252 | 8,138 | 59,252 | 8,138 | 11,660 | 68,089 | 147,139 | 0.7091 | 0.3878 | 0.1821 | 0.1193 |
| 55-59 | 59,653 | 5,945 | 59,653 | 5,945 | 9,696 | 37,213 | 112,507 | 0.4655 | 0.3674 | 0.1462 | 0.0815 |
| 60-64 | 109,687 | 4,642 | 109,687 | 4,642 | 11,444 | 23,781 | 149,554 | 0.4655 | 0.3674 | 0.1462 | 0.0815 |
| 65-69 | 122,365 | 401 | 122,365 | 401 | 2,604 | 5,251 | 130,622 | 0.3085 | 0.6636 | 0.0779 | 0.1265 |
| 70-74 | 91,743 | 301 | 91,743 | 301 | 1,952 | 3,937 | 97,933 | 0.3085 | 0.6636 | 0.0779 | 0.1265 |
| Total | 504,954 | 27,977 | 504,954 | 27,977 | 49,607 | 209,812 | 792,350 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Females |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 81,564 | 6,441 | 81,564 | 6,441 | 27,339 | 27,406 | 142,750 | 0.4804 | 0.2808 | 0.1094 | 0.0789 |
| 50-54 | 78,462 | 6,196 | 78,462 | 6,196 | 26,299 | 26,364 | 137,321 | 0.4804 | 0.2808 | 0.1094 | 0.0789 |
| 55-59 | 94,319 | 2,648 | 94,319 | 2,648 | 23,647 | 26,618 | 147,233 | 0.4027 | 0.2036 | 0.1159 | 0.1149 |
| 60-64 | 138,936 | 1,500 | 138,936 | 1,500 | 17,335 | 14,539 | 172,310 | 0.4027 | 0.2036 | 0.1159 | 0.1149 |
| 65-69 | 112,880 | 0 | 112,880 | 0 | 3,415 | 2,122 | 118,417 | 0.2528 | 0.0000 | 0.1523 | 0.1825 |
| 70-74 | 88,537 | 0 | 88,537 | 0 | 2,679 | 1,664 | 92,880 | 0.2528 | 0.0000 | 0.1523 | 0.1825 |
| Total | 594,698 | 16,786 | 594,698 | 16,786 | 100,715 | 98,713 | 810,911 |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,099,652 | 44,763 | 1,099,652 | 44,763 | 150,322 | 308,525 | 1,603,262 |  |  |  |  |
| Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey. |  |  |  |  |  |  |  |  |  |  |  |

Table A.97: Marginal effect calculation: care-giving (2011-12)

|  | Workers foregone (2011) |  | Hours foregone (per week 2011) |  |  |  | Total | Prevalence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | UNEMP | NILF | UNEMP | PT | FT |  | NILF | UNEMP | PT | FT |
| Males |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 17,640 | 0 | 17,640 | 0 | 3,869 | 49,211 | 70,720 | 0.2009 | 0.0000 | 0.0575 | 0.0820 |
| 50-54 | 16,790 | 0 | 16,790 | 0 | 3,682 | 46,837 | 67,309 | 0.2009 | 0.0000 | 0.0575 | 0.0820 |
| 55-59 | 6,706 | 581 | 6,706 | 581 | 4,138 | 23,140 | 34,566 | 0.0523 | 0.0359 | 0.0624 | 0.0507 |
| 60-64 | 12,331 | 454 | 12,331 | 454 | 4,884 | 14,788 | 32,457 | 0.0523 | 0.0359 | 0.0624 | 0.0507 |
| 65-69 | 12,328 | 0 | 12,328 | 0 | 500 | 0 | 12,827 | 0.0311 | 0.0000 | 0.0150 | 0.0000 |
| 70-74 | 9,242 | 0 | 9,242 | 0 | 375 | 0 | 9,617 | 0.0311 | 0.0000 | 0.0150 | 0.0000 |
| Total | 75,038 | 1,035 | 75,038 | 1,035 | 17,449 | 133,976 | 227,497 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Females |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 49,935 | 0 | 49,935 | 0 | 41,401 | 36,036 | 127,372 | 0.2941 | 0.0000 | 0.1657 | 0.1038 |
| 50-54 | 48,036 | 0 | 48,036 | 0 | 39,826 | 34,666 | 122,528 | 0.2941 | 0.0000 | 0.1657 | 0.1038 |
| 55-59 | 36,557 | 948 | 36,557 | 948 | 27,200 | 11,639 | 76,343 | 0.1561 | 0.0728 | 0.1334 | 0.0502 |
| 60-64 | 53,849 | 537 | 53,849 | 537 | 19,939 | 6,357 | 80,683 | 0.1561 | 0.0728 | 0.1334 | 0.0502 |
| 65-69 | 40,776 | 0 | 40,776 | 0 | 350 | 0 | 41,126 | 0.0913 | 0.0000 | 0.0156 | 0.0000 |
| 70-74 | 31,982 | 0 | 31,982 | 0 | 275 | 0 | 32,257 | 0.0913 | 0.0000 | 0.0156 | 0.0000 |
| Total | 261,135 | 1,485 | 261,135 | 1,485 | 128,991 | 88,698 | 480,309 |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |
| Total | 336,173 | 2,519 | 336,173 | 2,519 | 146,440 | 222,674 | 707,807 |  |  |  |  |

Table A.98: Marginal effect calculation: flexibility (2011-12)

|  | Workers foregone (2011) |  | Hours foregone (per week 2011) |  |  |  | Total | Prevalence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | UNEMP | NILF | UNEMP | PT | FT |  | NILF | UNEMP | PT | FT |
| Males |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 15,553 | 7,033 | 15,553 | 7,033 | 2,503 | 23,497 | 48,586 | 0.1772 | 0.3189 | 0.0372 | 0.0392 |
| 50-54 | 14,803 | 6,694 | 14,803 | 6,694 | 2,382 | 22,364 | 46,242 | 0.1772 | 0.3189 | 0.0372 | 0.0392 |
| 55-59 | 8,095 | 3,102 | 8,095 | 3,102 | 4,154 | 13,787 | 29,139 | 0.0632 | 0.1917 | 0.0626 | 0.0302 |
| 60-64 | 14,885 | 2,422 | 14,885 | 2,422 | 4,903 | 8,811 | 31,021 | 0.0632 | 0.1917 | 0.0626 | 0.0302 |
| 65-69 | 18,624 | 0 | 18,624 | 0 | 1,085 | 697 | 20,406 | 0.0470 | 0.0000 | 0.0325 | 0.0168 |
| 70-74 | 13,963 | 0 | 13,963 | 0 | 813 | 522 | 15,299 | 0.0470 | 0.0000 | 0.0325 | 0.0168 |
| Total | 85,924 | 19,251 | 85,924 | 19,251 | 15,840 | 69,678 | 190,692 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Females |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 57,562 | 4,585 | 57,562 | 4,585 | 28,634 | 19,174 | 109,956 | 0.3390 | 0.1999 | 0.1146 | 0.0552 |
| 50-54 | 55,373 | 4,411 | 55,373 | 4,411 | 27,545 | 18,445 | 105,774 | 0.3390 | 0.1999 | 0.1146 | 0.0552 |
| 55-59 | 24,551 | 1,864 | 24,551 | 1,864 | 20,662 | 9,757 | 56,835 | 0.1048 | 0.1433 | 0.1013 | 0.0421 |
| 60-64 | 36,164 | 1,056 | 36,164 | 1,056 | 15,147 | 5,329 | 57,697 | 0.1048 | 0.1433 | 0.1013 | 0.0421 |
| 65-69 | 21,411 | 0 | 21,411 | 0 | 360 | 0 | 21,770 | 0.0480 | 0.0000 | 0.0160 | 0.0000 |
| 70-74 | 16,794 | 0 | 16,794 | 0 | 282 | 0 | 17,076 | 0.0480 | 0.0000 | 0.0160 | 0.0000 |
| Total | 211,855 | 11,917 | 211,855 | 11,917 | 92,630 | 52,706 | 369,108 |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |
| Total | 297,779 | 31,168 | 297,779 | 31,168 | 108,470 | 122,384 | 559,800 |  |  |  |  |

Table A.99: Marginal effect calculation: retraining (2011-12)

|  | Workers foregone (2011) |  | Hours foregone (per week 2011) |  |  |  | Total | Prevalence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | UNEMP | NILF | UNEMP | PT | FT |  | NILF | UNEMP | PT | FT |
| Males |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 7,153 | 8,317 | 7,153 | 8,317 | 6,934 | 0 | 22,404 | 0.0815 | 0.3772 | 0.1031 | 0.0000 |
| 50-54 | 6,808 | 7,916 | 6,808 | 7,916 | 6,599 | 0 | 21,323 | 0.0815 | 0.3772 | 0.1031 | 0.0000 |
| 55-59 | 1,985 | 4,742 | 1,985 | 4,742 | 11,063 | 0 | 17,790 | 0.0155 | 0.2931 | 0.1668 | 0.0000 |
| 60-64 | 3,649 | 3,703 | 3,649 | 3,703 | 13,057 | 0 | 20,410 | 0.0155 | 0.2931 | 0.1668 | 0.0000 |
| 65-69 | 4,353 | 0 | 4,353 | 0 | 4,259 | 0 | 8,612 | 0.0110 | 0.0000 | 0.1274 | 0.0000 |
| 70-74 | 3,264 | 0 | 3,264 | 0 | 3,193 | 0 | 6,457 | 0.0110 | 0.0000 | 0.1274 | 0.0000 |
| Total | 27,212 | 24,679 | 27,212 | 24,679 | 45,105 | 0 | 96,996 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Females |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 30,528 | 12,499 | 30,528 | 12,499 | 55,036 | 0 | 98,062 | 0.1798 | 0.5449 | 0.2203 | 0.0000 |
| 50-54 | 29,367 | 12,024 | 29,367 | 12,024 | 52,942 | 0 | 94,333 | 0.1798 | 0.5449 | 0.2203 | 0.0000 |
| 55-59 | 5,685 | 2,310 | 5,685 | 2,310 | 42,893 | 0 | 50,888 | 0.0243 | 0.1775 | 0.2103 | 0.0000 |
| 60-64 | 8,375 | 1,308 | 8,375 | 1,308 | 31,444 | 0 | 41,127 | 0.0243 | 0.1775 | 0.2103 | 0.0000 |
| 65-69 | 2,854 | 68 | 2,854 | 68 | 5,311 | 0 | 8,233 | 0.0064 | 1.0000 | 0.2368 | 0.0000 |
| 70-74 | 2,239 | 54 | 2,239 | 54 | 4,166 | 0 | 6,458 | 0.0064 | 1.0000 | 0.2368 | 0.0000 |
| Total | 79,048 | 28,262 | 79,048 | 28,262 | 191,791 | 0 | 299,101 |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |
| Total | 106,259 | 52,942 | 106,259 | 52,942 | 236,897 | 0 | 396,097 |  |  |  |  |

Table A.100: Marginal effect calculation: care-giving (M1) (2011-12)

|  | Workers foregone (2011) |  | Hours foregone (per week 2011) |  |  |  | Total | Prevalence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | UNEMP | NILF | UNEMP | PT | FT |  | NILF | UNEMP | PT | FT |
| Males |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 11,401 | 0 | 11,401 | 0 | 3,869 | 29,990 | 45,260 | 0.1299 | 0.0000 | 0.0575 | 0.0500 |
| 50-54 | 10,851 | 0 | 10,851 | 0 | 3,682 | 28,544 | 43,077 | 0.1299 | 0.0000 | 0.0575 | 0.0500 |
| 55-59 | 2,659 | 581 | 2,659 | 581 | 3,367 | 12,248 | 18,855 | 0.0207 | 0.0359 | 0.0508 | 0.0268 |
| 60-64 | 4,889 | 454 | 4,889 | 454 | 3,974 | 7,827 | 17,144 | 0.0207 | 0.0359 | 0.0508 | 0.0268 |
| 65-69 | 6,895 | 0 | 6,895 | 0 | 500 | 0 | 7,395 | 0.0174 | 0.0000 | 0.0150 | 0.0000 |
| 70-74 | 5,169 | 0 | 5,169 | 0 | 375 | 0 | 5,544 | 0.0174 | 0.0000 | 0.0150 | 0.0000 |
| Total | 41,863 | 1,035 | 41,863 | 1,035 | 15,767 | 78,609 | 137,274 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Females |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 20,723 | 0 | 20,723 | 0 | 20,902 | 3,948 | 45,573 | 0.1221 | 0.0000 | 0.0837 | 0.0114 |
| 50-54 | 19,935 | 0 | 19,935 | 0 | 20,107 | 3,798 | 43,839 | 0.1221 | 0.0000 | 0.0837 | 0.0114 |
| 55-59 | 16,301 | 948 | 16,301 | 948 | 13,086 | 7,952 | 38,288 | 0.0696 | 0.0728 | 0.0642 | 0.0343 |
| 60-64 | 24,012 | 537 | 24,012 | 537 | 9,593 | 4,344 | 38,486 | 0.0696 | 0.0728 | 0.0642 | 0.0343 |
| 65-69 | 15,884 | 0 | 15,884 | 0 | 0 | 0 | 15,884 | 0.0356 | 0.0000 | 0.0000 | 0.0000 |
| 70-74 | 12,458 | 0 | 12,458 | 0 | 0 | 0 | 12,458 | 0.0356 | 0.0000 | 0.0000 | 0.0000 |
| Total | 109,314 | 1,485 | 109,314 | 1,485 | 63,688 | 20,042 | 194,528 |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |
| Total | 151,177 | 2,519 | 151,177 | 2,519 | 79,455 | 98,651 | 331,802 |  |  |  |  |

Table A.101: Marginal effect calculation: workplace barriers (2011-12)

|  | Workers foregone (2011) |  | Hours foregone (per week 2011) |  |  |  | Total | Prevalence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NILF | UNEMP | NILF | UNEMP | PT | FT |  | NILF | UNEMP | PT | FT |
| Males |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 7,753 | 4,641 | 7,753 | 4,641 | 2,503 | 14,896 | 29,793 | 0.0883 | 0.2105 | 0.0372 | 0.0248 |
| 50-54 | 7,379 | 4,417 | 7,379 | 4,417 | 2,382 | 14,177 | 28,356 | 0.0883 | 0.2105 | 0.0372 | 0.0248 |
| 55-59 | 6,814 | 3,170 | 6,814 | 3,170 | 1,563 | 7,816 | 19,363 | 0.0532 | 0.1959 | 0.0236 | 0.0171 |
| 60-64 | 12,530 | 2,475 | 12,530 | 2,475 | 1,844 | 4,995 | 21,844 | 0.0532 | 0.1959 | 0.0236 | 0.0171 |
| 65-69 | 14,939 | 0 | 14,939 | 0 | 0 | 0 | 14,939 | 0.0377 | 0.0000 | 0.0000 | 0.0000 |
| 70-74 | 11,201 | 0 | 11,201 | 0 | 0 | 0 | 11,201 | 0.0377 | 0.0000 | 0.0000 | 0.0000 |
| Total | 60,617 | 14,704 | 60,617 | 14,704 | 8,292 | 41,883 | 125,495 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Females |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 | 21,325 | 3,524 | 21,325 | 3,524 | 8,857 | 12,133 | 45,840 | 0.1256 | 0.1537 | 0.0354 | 0.0350 |
| 50-54 | 20,514 | 3,390 | 20,514 | 3,390 | 8,520 | 11,672 | 44,096 | 0.1256 | 0.1537 | 0.0354 | 0.0350 |
| 55-59 | 12,381 | 1,406 | 12,381 | 1,406 | 11,352 | 1,748 | 26,888 | 0.0529 | 0.1081 | 0.0557 | 0.0075 |
| 60-64 | 18,237 | 797 | 18,237 | 797 | 8,322 | 955 | 28,311 | 0.0529 | 0.1081 | 0.0557 | 0.0075 |
| 65-69 | 7,220 | 0 | 7,220 | 0 | 373 | 0 | 7,593 | 0.0162 | 0.0000 | 0.0166 | 0.0000 |
| 70-74 | 5,663 | 0 | 5,663 | 0 | 292 | 0 | 5,956 | 0.0162 | 0.0000 | 0.0166 | 0.0000 |
| Total | 85,340 | 9,118 | 85,340 | 9,118 | 37,717 | 26,508 | 158,683 |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |
| Total | 145,956 | 23,822 | 145,956 | 23,822 | 46,009 | 68,391 | 284,178 |  |  |  |  |

## APPENDIX B: MEASURES OF THE BACKGROUND CHARACTERISTICS AND THE PREVALENCE OF EACH BARRIER

## Socio-economic, demographic and employment status

The following variables are used for in the analysis by socio-economic and demographic status:

- age
- sex
- current marital status
- married
- not married
- highest educational qualification obtained
- not finished high school
- finished high school
- completed Bachelor degree or higher (i.e. Master's degree, Postgraduate degree, Postgraduate Diploma, Doctorate)
- country of birth - respondents asked if country of birth an English speaking country
- Australia
- Other English speaking country
- Non-English speaking country
- place of residence
- capital city - Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Darwin and Canberra
- other
- personal income
- Up to \$20 000
- \$20 001-\$36 400
- \$36 401-\$65 000
- \$65001+
- employment status
- currently working (part-time or full-time)
- not employed and not retired
- fully retired
- public servant (ever been public servant or are public servant presently)
- occupation (current occupation if currently employed, previous occupation if not currently employed and have ever worked)
- machinery operator/driver, labourer
- technician/trades, community/personal services worker
- manager/ professional
- clerical/ administrative/ sales worker
- student/other
- industry of employment (current industry if currently employed, previous industry if not currently employed and have ever worked)
- construction, manufacturing, mining
- agriculture, forestry and fishing, transport and storage, electricity/gas/water supply
- government, education, communication, finance and insurance services
- wholesale/retail trade, hospitality/tourism/ accommodation, property and business services
- cultural/ recreational/ personal/ health and community services
- other
- unemployed (looked for paid work in past 4 weeks and available to work)
- average and median length of time since last worked
- discouraged workers (not employed and not retired who want to work but are not looking).


## Physical illness, injury and disability / mental health

- had illness, injury or disability for at least 2 months in last 5 years (physical or psychological conditions)
- average number of years ill, injured or disabled
- illness, injury or disability in last 5 years prevented from working or looking for work for period of at least 2 months
- currently have illness, injury or disability (physical or psychological conditions)
- current illness, injury or disability prevents from working or looking for work.


## Care-giving responsibilities

- currently provide care-giving responsibilities to anyone
- average hours per week provide care
- type of person currently provide care for
- currently provide care for person with long-term illness or disability
- care-giving prevents from working (currently employed)
- average hours per week could work
- care-giving prevents from working more hours (not currently employed)
- average more hours per week could work
- whether suitable external care would help care-giver work (not currently employed)
- whether suitable external care would help care-giver work more hours (currently employed)
- whether care-giving responsibilities have impacted upon ability to accumulate superannuation.


## Discrimination in employment on the basis of age

- leading types of workplace exclusion reported to be experienced in last 5 years
- been unfairly excluded from work-related training or education opportunities
- been denied a job promotion
- been given lesser responsibilities
- been paid less than other workers in similar roles
- received an unfair job evaluation
- been denied work-related benefits
- felt as though you were being either forced out, forced to retire or targeted in restructures
- received insulting jokes or comments
- reported to have experienced any workplace exclusion in last 5 years and what attributed exclusion to
- age
- gender
- race
- health/ disability
- other
- reported workplace exclusion in last 5 years that is attributed to age influenced desire to work (not currently employed) or work more hours (currently employed)
- leading types of job search exclusion reported to have experienced in last 5 years
- been passed over for a job interview when qualified for that job
- been unsuccessful at the job interview stage when qualified for that job
- been told "too qualified" for job
- been asked your age during the job application process
- put off applying for a job because the job because job advertisement asked for 'dynamic worker' or similar
- reported to have experienced any job search exclusion in last 5 years and what attributed exclusion to (including age)
- age
- gender
- race
- health/ disability
- other
- Job search exclusion reported to have experienced in last 5 years that is attributed to age influenced desire to work (not currently employed) or work more hours (currently employed)
- if directly told too old for job by any source in last 5 years, and person who directly told respondent too old for job
- employer
- work colleague
- potential employer
- Australia Government service provider
- private recruitment agency
- family friend or member
- indirectly indicated too old for job by any source in last 5 years
- either directly or indirectly told too old for job by any source in last 5 years
- agreement with statement that age discrimination is an issue in workplace in Australia
- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree
- agreement with statement that age discrimination is an issue in looking for job in Australia
- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree
- importance of employers thinking you are too old reason in decision to be retired
- extremely important factor
- somewhat important factor
- not much of a factor
- not a factor at all
- importance of employers thinking you are too old reason for discouraged workers in decision to not look for work
- extremely important factor
- somewhat important factor
- not much of a factor
- not a factor at all
- number of discriminations experienced or perceived
- 1: either reported exclusion in workplace or job search that is attributed to age,
- 2: told directly or indirectly too old for job,
- 3: think age discrimination is an issue in Australia in the workplace or looking for job)
- no discriminations, 1-2 discriminations, 3 discriminations.


## Issues around private recruitment firm practices

- used private recruitment firm in job search in last 5 years (i.e., organisations not funded by Government, and which job seekers approach to find a job or are used by employers to find potential employees)
- rating of support of private recruitment firm in helping find job
- very good, good, fair, poor, very poor
- rating of effort
- a great deal, a good deal, a fair amount, not very much, no effort at all
- reported lack of effort of private recruitment firm attributed to own age
- if reported lack of effort of private recruitment firm influenced desire to work (not currently employed) or work more hours (currently employed).


## Job search assistance

- used Australian Government employment service provider (i.e., a Job Services Australia provider or a Disability Employment Services provider) to help job search in last 5 years
- found support from Australian Government employment service provider helpful
- reasons Australian Government employment service provider not helpful
- did not match to appropriate job
- not enough help preparing job applications
- did not assist enough for job interview
- other reason
- successful in most recent job search with Australian Government employment service provider
- satisfaction with job found in most recent job search with Australian Government employment service provider
- very satisfied
- satisfied
- neither satisfied nor dissatisfied
- dissatisfied
- very dissatisfied
- average years long looked (if successful) or looking (if not successful) for work in most recent job search with Australian Government employment service provider
- whether more helpful job search support were available in most recent job search, would have found job (if not successful) or job faster (if successful) or better paid job (if successful)
- whether more helpful job search support was available would help look for job (discouraged worker).


## Mismatch of skills and experience with industry demands

- agreement with statement that in local area there are no jobs available in your line of work
- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree
- agreement with statement that in local area there are no jobs available in your line of any type
- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree


## Re-training and up-skilling barriers

- respondent perception which type of training or up-skilling would help do job better
- training in IT or using computers
- improving other skills
- attending other training or education to improve your skills
- respondent perception which type of training or up-skilling would help gain promotion/get better job elsewhere/get better paid job
- training in IT or using computers
- improving other skills
- attending other training or education to improve your skills
- respondent perception which type of training or up-skilling would help find more hours
- training in IT or using computers
- improving other skills
- attending other training or education to improve your skills
- average more hours would like to work
- respondent perception which type of training or up-skilling would help find a job
- training in IT or using computers
- improving other skills
- attending other training or education to improve your skills
- Average hours would like to work
- type of work-related training or education attended in past 5 years
- off-the-job education/ training paid for by employer
- off-the-job education/ training paid for by yourself
- on-the-job education/ training
- Other work-related education/ training
- rating of work-related training or education
- very useful
- somewhat useful
- not very useful
- not useful at all
- any training wanted to attend in last 5 years but unable to
- reasons given for not being able to attend training
- employer wouldn't fund/ allow attendance
- could not afford it
- could not fit in with other work commitments
- training inappropriate for their skills/experience
- training inappropriate for language ability.


## Flexibility of employment arrangements

- whether more flexible work arrangements (e.g., flexible hours or working from home) would help care-givers work (it not currently working)
- average hours per week care-giver could work if more flexible work arrangements would help work
- whether more flexible work arrangements (e.g., flexible hours or working from home) would help care-givers work more hours (if currently working)
- average more hours per week care-giver could work if more flexible work arrangement would help work more hours
- whether used flexible work arrangement if been ill, injured or had disability in last 5 years
- whether flexible work arrangements (e.g., flexible hours or working from home) would help currently ill person work (it not currently working)
- average hours per week currently ill person could work if more flexible work arrangement would help work
- whether flexible work arrangements (e.g., flexible hours or working from home) would help currently ill person work more hours (if currently working)
- average more hours per week currently ill person could work if more flexible work arrangement would help work more hours
- whether the ability to reduce hours as transition to retirement would help put off full retirement until later
- average years would delay retirement if could reduce hours
- average hours per week would work in additional years of work
- whether the ability to mentor for younger workers would help put off full retirement until later
- average years would delay retirement if could mentor younger workers
- average hours per week would work in additional years of work.


## Superannuation

- whether had contributions to superannuation made on person's behalf
- average number of years had superannuation contributions made
- income intend to receive at retirement (not retired)
- superannuation
- Government pension
- other government benefits
- business/investment income
- using your savings
- spouse/partner's superannuation
- spouse/partner's other income
- other
- income receive at retirement (retired)
- superannuation
- Government pension
- other government benefits
- business/investment income
- using your savings
- spouse/partner's superannuation
- spouse/partner's other income
- other
- confidence that will have enough super for retirement (not retired)
- extremely confident
- somewhat confident
- not very confident
- not confident at all
- confidence that have enough super for retirement (retired)
- extremely confident
- somewhat confident
- not very confident
- not confident at all
- whether superannuation balance decreased due to financial events in recent years
- impact of decrease in superannuation balance in recent years on retirement plans (not retired)
- putting of retirement until later
- will retire earlier
- have come out of retirement and are working
- came out of retirement but could not find a job
- no impact
- average years will delay retirement by or bring retirement forward, average additional years will work
- impact of decrease in superannuation balance in recent years on retirement status (retired)
- came out of retirement but could not find a job
- will come out of retirement
- retired early
- no impact
- average years did bring retirement forward by, average additional years will work
- impact of decrease in superannuation balance in recent years on working hours (currently working)
- are working longer hours
- are working less hours
- has had no impact
- average more or less hours now work
- self-rating of knowledge of superannuation rules
- a great deal
- a fair amount
- not very much
- nothing at all
- agreement with statement 'Superannuation rules change too frequently too adequately plan your retirement' (if know something about superannuation rules)
- strongly agree
- agree
- neither agree nor disagree
- disagree
- strongly disagree
- whether lack of certainty of superannuation rules has affected retirement plans (not retired and agree or strongly agree that superannuation rules change too frequently))
- if lack of certainty of superannuation rules has affected retirement (retired and agree or strongly agree that superannuation rules change too frequently).


## Tax transfer system

- whether aware that from the age of 60 can access superannuation as a tax-free income source while you work
- how being able to access superannuation as a tax-free income source while you work would affect retirement plans (if not aware of access, not retired, 60-74)
- would put off retirement until later
- would retire earlier
- no impact
- average years delay retirement or retire earlier
- how being able to access superannuation as a tax-free income source while you work would affect retirement status (if not aware of access, retired, 60-74)
- would come out of retirement
- no impact
- average more years would work
- how being able to access superannuation as a tax-free income source while you work would affect hours worked (if not aware of access, currently working, 60-74)
- seek to work longer hours
- seek to work less hours
- no impact
- average more or less hours seek to work
- how being able to access superannuation as a tax-free income source while you work has affected retirement plans (aware of access, not retired, 60-74)
- are putting off retirement until later
- will retire earlier
- have come out of retirement and are working
- came out of retirement but could not find a job
- no impact
- average years will delay retirement or bring retirement forward or average more years will you work
- how being able to access superannuation as a tax-free income source while you work has affected retirement status (aware of access, retired, 60-74)
- came out of retirement but could not find a job
- will come out of retirement
- retired early
- no impact
- average years did bring retirement forward by or average more years will you work
- how being able to access superannuation as a tax-free income source while you work has affected hours worked (if not aware of access, currently working, 60-74)
- working longer hours
- working less hours
- no impact
- average more or less hours are working
- how being able to access superannuation as a tax-free income source from the age of 60 while you work would affect retirement plans (if not aware of access, not retired, 45-59)
- would put off retirement until later
- would retire earlier
- no impact
- average years delay retirement or retire earlier
- how being able to access superannuation as a tax-free income source from the age of 60 while you work would affect retirement status (if not aware of access, retired, 45-59)
- would come out of retirement
- no impact
- average more years would work
- how being able to access superannuation as a tax-free income source from the age of 60 while you work would affect hours worked (if not aware of access, currently working, 45-59)
- seek to work longer hours from the age of 60
- seek to work less hours from the age of 60
- no impact
- average more or less hours seek to work
- whether currently receive Government income support
- type of current Government income support
- Age Pension
- Disability Support Pension
- Newstart Allowance
- Carer Payment
- Parenting Payment
- other
- type of activities of people receiving Newstart Allowance or Parenting Payment
- working part-time (30 hours/ fortnight)
- working voluntarily (30 hours/ fortnight)
- working part-time and voluntarily (30 hours/ fortnight)
- range of activities, including looking work and reporting job searched to Centrelink
- none
- why choosing voluntary work
- skills and experience do not match with available work
- I feel I am discriminated against in searching for a job
- I can't find appropriate work in my location
- my preferred option in lead up to retirement
- financial adviser told me to choose this option
- don't want my benefit reduced
- prefer voluntary to paid work
- other reason
- why choosing part-time work
- financial reasons
- gain experience and develop skills
- be mentored
- social aspect of work
- other reason
- comfortable with balance between working part-time and volunteering
- yes
- no, too much part-time work
- no, too much volunteering
- whether withdrawal rate on Age Pension impacts desire to work or look for work
- average maximum percentage of Age Pension would be willing to lose to work as much as you want
- average number of hours per week would work if could work as much as you want and lose stated percentage of Age Pension
- average number of extra years would work under these conditions.


## Re-entry barriers of the very long-term unemployed (VLTU)

- VLTU (have not worked for 24 months but have worked before and have looked for work in the last 5 years)
- average and median length of time since last worked


## Leisure time trade-off

- average age intend to retire (if not retired)
- average age did retire (if retired)
- importance of reason for decision about when to retire (if not retired)-very important, somewhat important, not important at all
- wanting more leisure time with family and friends
- financial security
- personal illness/injury/disability
- eligibility for Age Pension
- access to super
- spouse/partner having retired
- having lost interest in work
- care for family/ other
- number of people need to financially support
- importance of reason for decision about when did retire (if retired)-very important, somewhat important, not important at all
- wanting more leisure time with family and friends
- financial security
- personal illness/injury/disability
- eligibility for Age Pension
- access to super
- spouse/partner having retired
- having lost interest in work
- are for family/ other
- number of people need to financially support.


## Workplace barriers

- whether in past 5 years has changed working condition to accommodate injury, illness or disability, such as undertaking a role that is less physically demanding, that enable person to sit down, or allows more breaks
- whether such changed working conditions were available, would person who has never used them and it currently ill would work (if not currently working)
- average more hours per week currently ill person could work if changed working conditions would help work
- whether such changed working conditions were available, would person who has never used them and it currently ill would work more hours (if currently working)
- average more hours per week currently ill person could work if changed working conditions would help work more hours.


## APPENDIX C: MEMBERSHIP OF THE

## CONSULTATIVE FORUM ON MATURE AGE PARTICIPATION

Members of the Consultative Forum on Mature Age Participation:
Mr Everald Compton AM,
Chair of the Consultative Forum on Mature Age Participation
Mr Michael O'Neill,
Chief Executive Officer, National Seniors Australia
Mr lan Yates AM,
Chief Executive Officer, Council on the Ageing Australia
Ms Val French AM,
President, Older People Speak Out
Mr Stephen Bolton,
Senior Advisor, Employment, Education and Training, Australian Chamber of Commerce and Industry

Ms Jennifer Westacott,
Chief Executive, Business Council of Australia
Ms Patricia Neden,
Chief Executive Officer, Innovation and Business Industry Skills Australia
Mr Jeff Lawrence,
Secretary, Australian Council of Trade Unions
Ms Sally Sinclair,
Chief Executive Officer, National Employment Services Association
Mr Innes Willox,
Chief Executive Officer, Australian Industry Group
The Hon Susan Ryan AO,
Age Discrimination Commissioner, Australian Human Rights Commission
Ms Lee-Anne Fisher (Independent)
Members' representatives
Mr Michael Fisher,
Australian Council of Trade Unions
Mr Michael Taylor,
Australian Industry Group
Ms Megan Lilly,
Australian Industry Group
Ms Ruth Rosen,
Manager Corporate Governance and Communications, Innovation and Business Skills Australia
Mr Ewan Brown,
Manager, Mature Age Engagement Project, Australian Chamber of Commerce and Industry
Ms Claire Thomas,
Director, Policy for Education and Skills, Business Council of Australia

## REFERENCES

## (Endnotes)

i Commonwealth Government (2010) Australia to 2050: Future Challenges Intergenerational Report 2010. Australian Treasury-http://www.treasury.gov.au/igr/igr2010/report/pdf/IGR_2010.pdf
ii Commonwealth Government (2010) op cit.
iii Healy, E. (2009) Population ageing and the employment surge among older Australian workers People and Place 17(2): 1-16
iv National Seniors Productive Ageing Centre (2011) Ageing and the Barriers to Labour Force Participation in Australia, Report prepared on behalf of the Consultative Forum on Mature Age Participation, Canberra: National Seniors Productive Ageing Centre.
v National Seniors Productive Ageing Centre (2011) Ageing and the Barriers to Labour Force Participation in Australia, Report prepared on behalf of the Consultative Forum on Mature Age Participation, Canberra: National Seniors Productive Ageing Centre.
vi Bennington, L. (2004) Prime age recruitment: the challenges for age discrimination legislation Elder Law Review 3: 1-15-http://kirra.austlii.edu.au/au/journals/ElderLawRw/2004/8.html
vii AHRC (2010) Age Discrimination-Exposing the Hidden Barrier for Mature Age Workers Australian Human Rights Commission-http://www.hreoc.gov.au/pdf/age/hiddenbarrier2010.pdf
viii CDAA (2010) ‘Survey \#1: Older Workers‘ The Career Development Association of Australia-http://www.cdaa. org.au/sites/aacc.webprophets.net.au/files/u3/CDAA-career-snapshot-101006.pdf
ix Spoehr, J., K. Barnett and E. Parnis (2009) Experience Works: The Mature Age Employment Challenge, Adelaide: The Australian Institute for Social Research/National Seniors Australia.
x Gray, M., B. Edwards, B., and N. Zmijewksi (2008). Caring and women’s labour market participation. Family Matters 78, 28-35.
xi ABS (2010), Multipurpose Household Survey, Expanded CURF, Australia, 2008-09, Cat. No. 4100.0, Canberra: Australian Bureau of Statistics.
xii NSW MACA (2009) Work and Older People Roundtable Discussion Report Tweed Heads: NSW Ministerial Advisory Committee on Ageing
xiii Smeaton, D., S. Vegeris and M. Sahin-Dikmen (2009) Older Workers: Employment Preferences, Barriers and Solutions Equality and Human Rights Commission Research Report Series. London: Policy Studies Institute
xiv AHRC (2010) op cit.
xv NSW MACA (2009) op cit.
xvi ACS (2010) Improving Age Diversity in the ICT Workforce Australian Computer Society-https://www.acs.org. au/attachments/2010/Improving\%20Age\%20Diversity\%20in\%20the\%20ICT\%20Workforce\%20FINAL.pdf
xvii Spoehr, J., K. Barnett and E. Parnis (2009) op cit.
xviii Berger, E. D. (2006) Aging identities: degradation and negotiation in the search for employment, Journal of Aging Studies 20: 303-16
xix Encel S (2003) Age Can Work: the case for older Australians staying in the workforce, A Report to the Australian Council of Trade Unions and the Business Council of Australia
xx Encel S (2003) op cit.
xxi Borland, J. and D. Warren (2005) Labour Force Outcomes for the Mature Age Population Project 05/2005, report prepared for the Australian Government Department of Employment and Workplace Relations under the Social Policy Research Services Agreement
xxii Cobb-Clark, D. and S. Stillman (2006) The Retirement Expectations of Middle-Aged Individuals IZA DP No. 2449-http://dspace-prod1.anu.edu.au/bitstream/1885/45260/1/DP540.pdf
xxiii LaMontagne, AD., Sanderson, K. \& Cocker, F. (2010). Estimating the economic benefits of eliminating job strain as a risk factor for depression: summary report. Melbourne: Victorian Health Promotion Foundation (VicHealth).
xxiv Cai, L. and G. Kalb (2007) Health status and labour force status of older working-age Australian men Australian Journal of Labour Economics 10(4): 227-52.
xxv Schofield D., Shrestha R., Passey, Earnest A. and S. Fletcher (2008) Chronic disease and labour force participation among older Australians. The Medical Journal of Australia, 189 (8): 447-450.
xxvi OECD (2006) Ageing and Employment Policies: Live Longer, Work Longer, Paris: Organisation for Economic Co-operation and Development
xxvii Cai, L. and G. Kalb (2007) op cit.
xxviii ABS (2010) op cit.
xxix Smeaton, D., S. Vegeris and M. Sahin-Dikmen (2009) op cit.
xxx DEEWR data, March 2011
xxxi ABS (2012), 6291.0.55.001 - Labour Force, Australia, Detailed - Electronic Delivery, June 2012, Canberra: Australian Bureau of Statistics.
xxxii Commonwealth Government (2010) op cit.
xxxiii Lundberg, D., \& Z. Marshallay (2007) Older Workers' Perspectives on Training and Retention of Older Workers, Adelaide: NCVER
xxxiv Spoehr, J., K. Barnett and E. Parnis (2009) op cit.
xxxv OECD (2006) Ageing and Employment Policies: Australia, Paris: Organisation for Economic Co-operation and Development
xxxvi Spoehr, J., K. Barnett and E. Parnis (2009) op cit.
xxxvii NSW MACA (2009) W op cit.
xxxviii Taylor (2011) ‘Australian Workability Survey’ Questionnaire. Melbourne: Monash University.
xxxix ABS (2011) Australian Demographic Statistics, June 2011, Cat. No. 3101.0, Canberra: Australian Bureau of Statistics.
xI ABS (2011) Labour Force, Australia, Detailed - Electronic Delivery, Jun 2011, Cat. No. 6291.0.55.001, Canberra: Australian Bureau of Statistics.
xli Productivity Commission (2005) Economic Implications of an Ageing Australia, Research Report, Canberra: Productivity Commission.
xlii Temple and McDonald (2008) Demographic and Labour Force Supply Futures for Australia' Report for the Department of Immigration and Citizenship. www.immi.gov.au
xliii Temple and McDonald (2006) ‘The Australian Population: A Background Primer’ in Hearps et al. Defence Personnel Environment Scan 2025. Department of Defence.
xliv ABS (2010), op cit.
xlv ABS (2008) 'Population Projections, Australia 2006 to 2101, Cat. No. 3220.0, Australian Bureau of Statistics: Canberra.
xlvi TNS Social Research (2012) Survey of Employers 2012-Data User Guide, Canberra: Department of Education, Employment and Workplace Relations.
xlvii National Seniors Productive Ageing Centre (2011) op cit.
A12-0349


[^0]:    1 The lower limit of 45 years was used for our sample to examine the experiences, attitudes and intentions of people approaching mature age (50 years and above).

[^1]:    2 For simplicity, the following formula are for a single year, single year of age projection. The model we adopt is a five year age group, five year model.

[^2]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^3]:    3 The activities are written, phoned or applied in person to an employer for work, answered an advertisement for a job, looked in newspapers, checked factory noticeboards or used the touch screens at Centrelink offices, been registered with Centrelink as a jobseeker, checked or registered with an employment agency, advertised or tendered for work, or contacted relatives/friend to find a job. ABS, 2004, 6232.0 Information Paper Questionnaires Used in the Labour Force Survey, 2004.

[^4]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^5]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^6]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^7]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^8]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.
    Note: See Table 13 for sub-population

[^9]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^10]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^11]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^12]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^13]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^14]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^15]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^16]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^17]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australian s Survey

[^18]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^19]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^20]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^21]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^22]:    Source: TNS Social Research, 2012, p. 5.

[^23]:    Source: 2010 DEEWR Survey of Employers. Note: "Don't Know" included in denominator. Total disagree $=0-3$ on scale. Neither $=4-6$ on scale. Total agree $=7-10$ on scale.

[^24]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^25]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^26]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^27]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^28]:    ** $\mathrm{p}<0.05^{*} \mathrm{p}<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services worker. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Transport and Storage, Electricity/ Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/ retail trade etc: Wholesale/ retail trade, Hospitality/ Tourism/ Accommodation, Property and business services. Cultural/ recreational/ personal etc: Cultural/ recreational/ personal/ health and community services.

[^29]:    ${ }^{* *} p<0.05$ * $p<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^30]:    ${ }^{* *} p<0.05$ * $p<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^31]:    ** $p<0.05$ * $p<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^32]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^33]:    ** $\mathrm{p}<0.05$ * $\mathrm{p}<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services worker. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Transport and Storage, Electricity/ Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/ retail trade etc: Wholesale/ retail trade, Hospitality/ Tourism/ Accommodation, Property and business services. Cultural/ recreational/ personal etc: Cultural/ recreational/ personal/ health and community services. Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^34]:    ** p<0.05 * $p<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^35]:    ** $p<0.05$ * $\mathrm{p}<0.10$; Note: Machinery operator etc: Machinery operator/driver, labourer. Technician/trades, community etc: Technician/trades, community/personal services worker. Agriculture, Forestry and Fishing etc: Agriculture, Forestry and Fishing, Transport and Storage, Electricity/ Gas/ Water Supply. Government, Education etc: Government, Education, Communication, Finance and Insurance Services. Wholesale/retail trade etc: Wholesale/ retail trade, Hospitality/Tourism/ Accommodation, Property and business services. Cultural/ recreational/ personal etc: Cultural/ recreational/ personal/ health and community services.

[^36]:    ** $p<0.05$ * $p<0.10$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^37]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey

[^38]:    Any reason: Age, gender, race, health/disability, other
    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^39]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^40]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^41]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^42]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^43]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^44]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^45]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^46]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^47]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^48]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^49]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^50]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^51]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^52]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^53]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^54]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^55]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^56]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^57]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^58]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^59]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^60]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^61]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^62]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^63]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^64]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^65]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^66]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^67]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^68]:    * p<0.05; + Numbers too small to compute reliable average hours per week for those who seek to work more. Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^69]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^70]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^71]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^72]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^73]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^74]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^75]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^76]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^77]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^78]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^79]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^80]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^81]:    * $\mathrm{p}<0.05$; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^82]:    * p<0.05; Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^83]:    ${ }^{* *} p<0.05$ * $p<0.10$; Note: Non-significant interactions not shown. Source: Authors' calculations from the 2011-12 Barriers to Employment for
    Mature Age Australians Survey.

[^84]:    ${ }^{* *} \mathrm{p}<0.05$ * $\mathrm{p}<0.01$; Note: Significance testing compares within prevalence of, e.g., 3 discriminations between each category, with the exception of average age intend to retire. Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

[^85]:    ${ }^{* *} p<0.05$ * $p<0.01$; Note: Significance testing compares within prevalence of, e.g., 3 discriminations between each category, with the exception

[^86]:    Source: Authors' calculations from the 2011-12 Barriers to Employment for Mature Age Australians Survey.

