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Youth Research Collective

Young Adults' Perceptions of The Future of Work

Examining Their Education and Employment Plans

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The views expressed in this report are those of the authors and are not necessarily those of the Melbourne Graduate School of Education, or the University of Melbourne.

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THE LIFE PATTERNS RESEARCH PROGRAM

The Life Patterns research program is designed to follow patterns in people's lives over time in order to gain a longitudinal and holistic understanding of the ways in which two generations of Australians are responding to our rapidly changing world. The program is based at the Youth Research Collective, in the Graduate School of Education at the University of Melbourne.

The generosity and ongoing support of the Life Patterns participants has meant that this study has built up a unique picture of the reality of the lives of two generations.

THE LIFE PATTERNS PROGRAM:

- follows two generations of Australians - one that left secondary school in 1991 (corresponding to the popular notion of 'Gen X') and another that left secondary school in 2006 (corresponding to the popular notion of 'Gen Y' or the 'Millennials'). Multiple comparisons can be made between the two cohorts across different points in their lives.
- explores the pathways through different areas of life taken by Australian young people including their experiences in education, the labour market, their family and personal relationships, attitudes to life, concerns, and health and wellbeing.

- provides a unique picture, very different from the stereotypes of smooth transitions from education to work, or of the narcissistic or complacent generation often described in public discourse. We have argued for the importance of paying attention to the diversity of experiences that characterise young people's lives.
- allows for insights to be drawn that feed into policy advice and also into public debate. Our work is often in the media disputing the simplistic claims about young people.
- was designed to follow patterns in young people's lives over time in order to gain more than a static glimpse. We are interested in developing a more dynamic picture of young people's lives rather than a single snapshot in time.

The Life Patterns project is ongoing, thanks to the continued engagement of the participants, and the support of the University of Melbourne and the Australian Research Council.

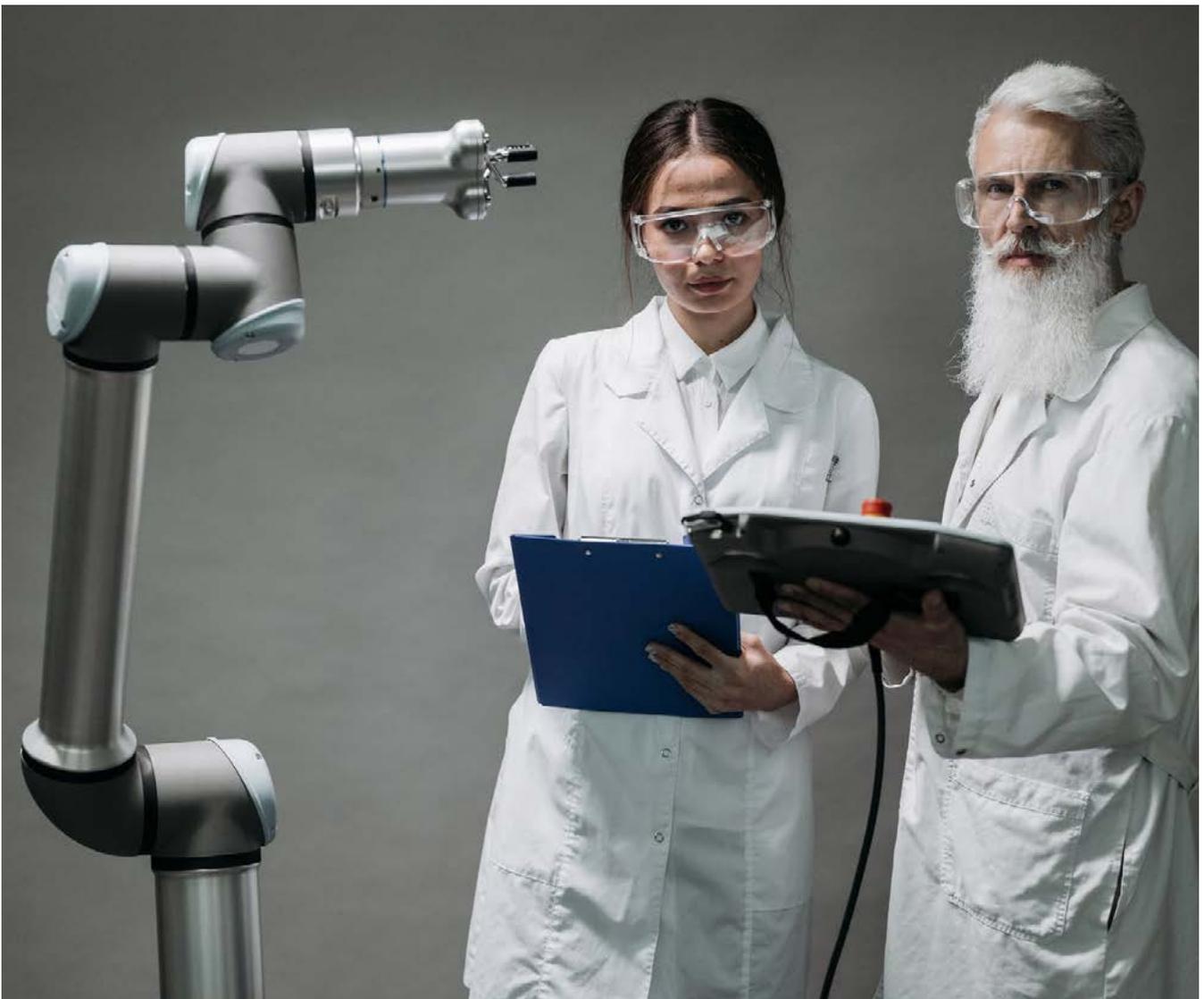


1. INTRODUCTION

1.1 THE FUTURE OF WORK: A BRIEF OVERVIEW

Society is about to undergo another significant and transformative change—a Fourth Industrial Revolution, according to Klaus Schwab (2016), founding director of the World Economic Forum and Professor of Economics: “we stand on the brink of a technological revolution that will fundamentally alter the way we live, work and relate to one another”. How the technological revolution of this forthcoming revolution will change the way we work, and the *future* of work more generally is becoming an increasing concern of governments, policymakers and the academic community writ large.

There is a pervading discourse surrounding the future of work that technology and in particular artificial intelligence, automation and robots will result in significant job losses into the future. There are estimates that technology will be capable of automating 44 percent of jobs in Australia (Edmonds and Bradley 2015), which is similar to estimates in the United States (Frey and Osborne 2013). Around third of all jobs in Australia have a low risk of automation susceptibility (Edmonds and Bradley 2015), which means they are relatively safe from being automated. These jobs tend to be high skilled, professional jobs whereas jobs in low skill industries like retail, transport and hospitality have the greatest susceptibility to automation (Edmonds and Bradley 2015).



Much of the extant literature on the future of work has been on the winners and losers of automation and artificial intelligence, for example men, especially those employed in manufacturing, are expected to lose out from technological advancements whereas women are likely to gain from an increase in demand in service-oriented jobs (Rubery and Howcroft 2019). It is anticipated that by 2030, one quarter of Australia's workforce will be dominated by professionals working in business, health, education or engineering as the shift towards non-routine, cognitive based tasks continue (Deloitte Access Economics 2020). Moreover, it is estimated that by the year 2030, 400,000 people will be employed in each of the following occupations: teaching, midwifery, nursing, personal care, administration and sales (Deloitte Access Economics 2020). These are occupations that are currently dominated by women who are over-represented in non-routine work whereas men are employed in more manual occupations which are more susceptible to automation (Deloitte Access Economics 2020).

Amid this backdrop of rapid change and uncertainty, the focus of this report is how young adults make plans and what expectations they have in relation to their working futures and lifelong learning. This research report draws upon quantitative and qualitative data from *Life Patterns*, a mixed methods longitudinal panel study of Australian youth who left school in 2006. The findings for this research report are drawn from survey data collected in 2020 from participants of Cohort 2 in the Life Patterns project, who were aged 32 years in that year.

1.2 YOUNG ADULTS AND THE FUTURE OF WORK

The potentially rapid social changes depicted above raise the question: what about young people? This current cohort of young people are amongst the most educated in history (Churchill 2020, Wyn et al. 2017), but how are they primed for the future of work? There is an emerging discourse that young people are not 'ready' for the future of work and are at high risk of being displaced by artificial intelligence and automation. This is certainly the view put forward by the Foundation for Young Australians (2017: 7) who argue that 70 percent of young people are currently in jobs that will be 'radically affected' by automation. They also contend that young people are 'getting educated for dying jobs' with 60 to 70 percent of students being trained in occupations which will be also affected by automation (FYA 2017: 7). Further, they assert that the future of work will be shaped by machines replacing more human-like tasks (automation); an increasing global labour market (globalisation); and young people working with multiple employers (collaboration).

This they argue will present young people with greater opportunities to become entrepreneurs, be more flexible, including working on digital platforms and enjoy the benefits of working in their area of speciality (FYA 2017). On the other side, there is a risk of greater unemployment, inequality and job insecurity. To counter these challenges, the Foundation advocates policy solutions which will 'boost digital literacy and infrastructure' and emphasise enterprise skills and entrepreneurship (FYA 2017).

But there is research to suggest that young people understand that technological change at work and in the workplace is not only the 'new normal' but is unstoppable (Honkatukia and Lahde 2020). In a study with young Finnish students across upper secondary and vocational educational settings aged between 16 and 18, Honkatukia and Lahde (2020) found that young people were largely accepting of the idea that low skilled jobs would disappear and that jobs for the future would require greater technological skills. Despite technological change, young Finns still regarded work as a central to their identity and some were worried that a reduction in low skilled work would have negative consequences on young people's early labour market experiences. Despite this, young people were confident and optimistic about their future. Many had internalised neoliberal ideas and sensibilities about education and work, such as self-reliance and a constant investment on the self by continuing to study and being a flexible worker (Honkatukia and Lahde 2020).

In a study of young Australian women and the future of work, Hill and colleagues (2020) found that almost all the women they surveyed understood the importance of having the right skills and qualifications to be successful at work, but only half believed that they had the necessary education and skills to remain in a good job and just under a third think they need more education or training. Just under 30 percent of women were concerned about losing their job to a machine or a computer, but overall, they were not too worried. In comparison to young men, young women were less worried about losing their job to someone else wanting to do it for less money; less concerned they would be technically proficient in the future to do the job; and less concerned that machines or computer programs will displace them (Hill et al. 2020).

1.3 HOW DO YOUNG PEOPLE PLAN FOR THE FUTURE (OF WORK)?

In recent decades, the markers that define ‘successful’ transitions to adulthood, such as completing formal education, leaving the family home, finding secure employment, entering marriage and becoming a parent (Furstenberg, Kennedy, McLoyd, Rumbaut, & Settersten, 2004; Wyn et al. 2020) have been increasingly difficult to reach in young adulthood. So much so that young adulthood itself has become an extended phase of the life course and the timing at which these markers are obtained has become slower and less expectable (Cobb-Clark, 2008; Furstenberg et al., 2004; Mandic, 2008; Raley, Crissey, & Muller, 2007; Tanner & Arnett, 2009). In part, the slowing down of these transitions and the extension of young adulthood is because the youth labour market has all but disappeared in recent times (Cuervo and Wyn 2011) and thus, they need to remain in education and training in order to ‘ready’ themselves for an increasingly uncertain and precarious labour market (Churchill 2020). Even young graduates face these conditions as tertiary qualifications increasingly offer young people fewer opportunities for security and social mobility (de Fontenay et al. 2020). Increasingly, they are turning to more and more education to attenuate cycles of un- and under-employment (Churchill and Khan 2021; Chesters and Wyn 2019). As a result, young people’s lives are replete with ‘uncertainties’ (Heggli, Haukanes and Tjomsland 2015: 916) and they are increasingly self-reliant, they must as youth scholars Biressi and Nunn (2013) observe:

look to themselves as the source of their own failure or success, whether in education or employment. Success is increasingly characterised as only achievable through the deployment of one’s personal, private resources of passion and drive.

In order to do this, they must plan to mitigate against these uncertainties. As Leccardi (2005: 126) observes, modern life means that young people need be adaptive: “to avoid long-term life projects, to elude fixity in favour of fluidity, to isolate the present as much as from the past as from the future”. Similarly, Wyn (2017) contends that young people need to be ‘self navigators’ in late modernity in order to maximise their opportunities. While some have suggested that young people find life planning ‘extremely difficult’ (Furlong and Cartmel 2007: 8) in ‘any meaningful sense’ because of these uncertainties, research has found that young people tend to be active and strategic life planners who not

only make detailed plans but also, plans with long timeframes (Anderson et al. 2005; Brooks and Evertt 2007). Indeed, a significant proportion of young people in Anderson et al.’s (2005) study made plans up to five years in advance and a ‘considerable’ proportion of young people had plans for the next 10 to 15 years. This does not mean all young people are planners; some young people are reluctant to make life plans at all. Anderson et al. (2005) found that it was the most disadvantaged who were least likely to make life plans, however, Brooks and Evertt (2007) found that it was the most privileged to make plans. In the case of the latter, it was attributed to the fact that planning had not been central to their successes to date and was not seen as integral to future successes.

Much of the literature in this space is on young people’s plans for the future with specific reference to partnerships and family (Hill et al. 2019) or more broadly ‘uncertain futures’ (MacDonald 2011). Less research focuses on life plans in terms of work futures and further education. There is increasing recognition that ‘work’ will become a scarcity, which will affect livelihoods and material well-being (Kelly 2017). Furthermore, there has been little focus on the role of technology and the increasingly technologization of work (Kelly 2017) and how it will affect the lives of young people. In Australia, talk about the future of work in relation to young people is at best ambiguous, referring to ‘jobs of the future’ and policy solutions are limited to teaching school aged children ‘code’. However, how do young people think about their future work and education plans and indeed the future of work and workplaces in the context of future of work debates?

The focus of this report is how young people make plans and expectations in relation to their working futures and plans for lifelong learning in the context of the future of work. It draws upon quantitative and qualitative data from *Life Patterns*, a mixed methods longitudinal panel study of Australian youth.

2. METHOD

The data from this report comes from the Life Patterns research program which has collected longitudinal quantitative and qualitative data from young Australians for over three decades. The findings for this research report are drawn from survey data collected in 2020 from participants of Cohort 2, who were aged 32 years in 2020. The total sample size was 485 respondents from the Australian Capital Territory, New South Wales, Victoria and Tasmania. Questions in the survey focus on education, employment, living arrangements, health and expectations for the future for their cohort. In this research report, we focus on issues related to the future of work.

2.1 SAMPLE

Two thirds of the participants in Life Patterns were women. Most participants in Cohort 2 were highly educated with almost all having completed at least one post-school qualification (94%) at either a university or had undertaken some form of vocational education and training (VET). Most of the participants (84%) were living in metropolitan centres or regional cities. Sixty percent of participants were working full time and a further 24% were employed on a part-time basis. Young adult men more likely to be working full-time (83%) compared to young adult women (49%) whereas women were more likely to be employed in part-time work (29%) than their male counterparts (13%).

2.2 MEASURES AND ANALYSIS

In the 2020 survey, participants were asked a battery of questions about the future of work across a Likert-scale from 0 to 10 with scores closer to 0 indicating that they *very strongly disagree* and 10 indicating that they *very strongly agree*:

Thinking about the future of work, to what extent do you agree or disagree with each of the following statements?

- A. In 10 years' time, I expect to be working in the same job I am now;
- B. In 10 years' time, I expect to be working in a different job in the same occupation I am now;
- C. I do not expect that my current job will exist in 10 years' time;
- D. I do not expect to be in paid work in 10 years' time;
- E. In the next 10 years, I expect to undertake study at University;
- F. In the next 10 years, I expect to undertake Vocational Education or Training; and
- G. In the next 10 years, I expect to undertake training arranged by my employer.

Participants were then asked a follow up question:

Please comment on how the future of work might impact on your work and study plans for the next 10 years.

Descriptive statistics are presented for the seven items along in the next section. We compare differences across several socio-demographic groups, including gender, educational attainment, workforce status and occupational risk. For occupational risk, we created our own indicator variable based on work by Edmonds and Bradley (2015) in which 0 indicates that the respondent is in an occupation that is not 'at risk' or has a low level of risk of their occupation being replaced by automation and 1 which indicates that their job is at a high or higher risk of being replaced by automation. We also undertook a thematic analysis of 435 qualitative comments.



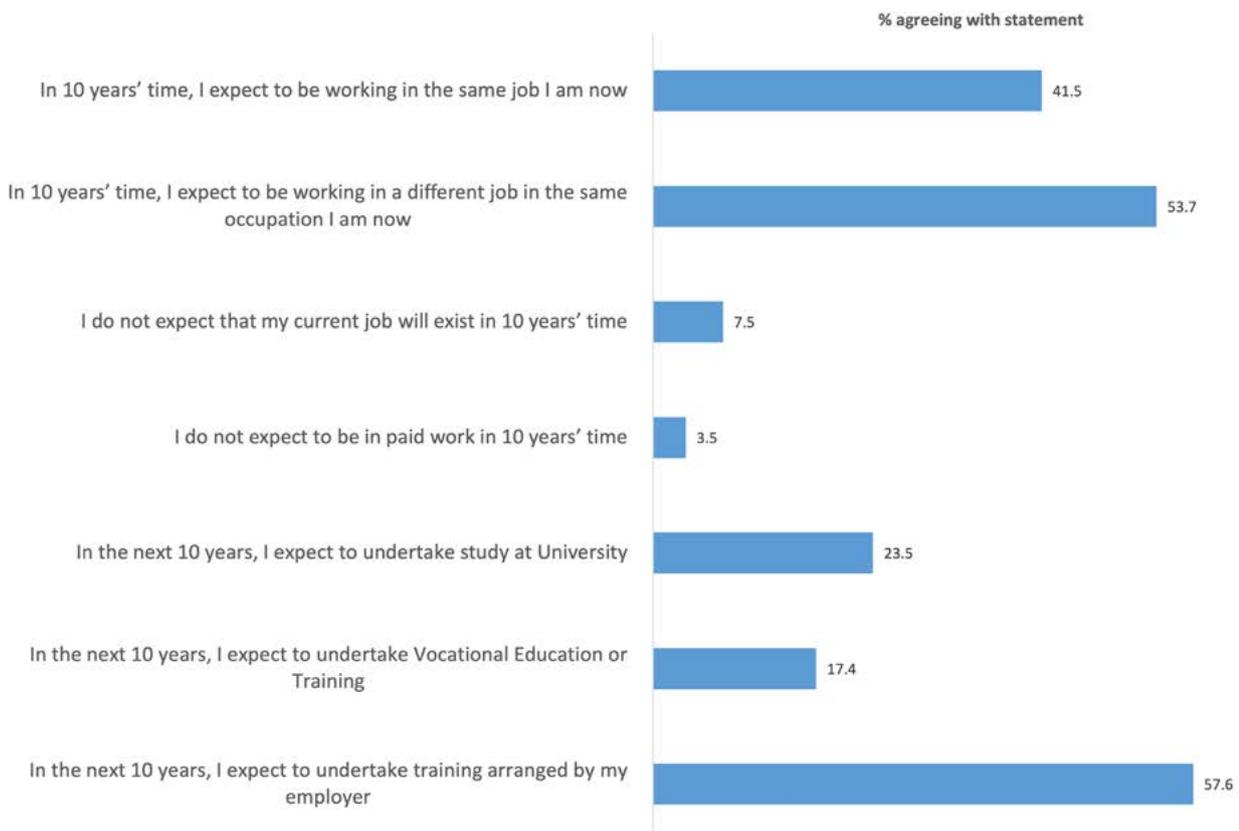
3. QUANTITATIVE ANALYSIS

3.1 FUTURE WORK AND STUDY PLANS

In Figure 1, the proportion of respondents who agree with the seven statements about their future plans for work and education are presented.

Over 41 percent of respondents expect to be working in the same job they are now and similarly, over 53 percent expect to work in the same occupation in 10 years' time. Very few respondents agree that their job won't exist in 10 years' time or that they will no longer be in paid work in 10 years' time. In terms of study plans in the future, young adults were more in favour of on-the-job training than formal study, however, a sizeable proportion expected to undertake some study at a university or some vocational education and training. Over 56 percent of respondents agreed with the statement that they would undertake training arranged by their employer. Just under a quarter of young people expected to study at university and over 17 percent expected to do some vocational education or training.

Figure 1 Future work and study plans, Cohort 2, aged 32, Wave 15, 2020 (%)

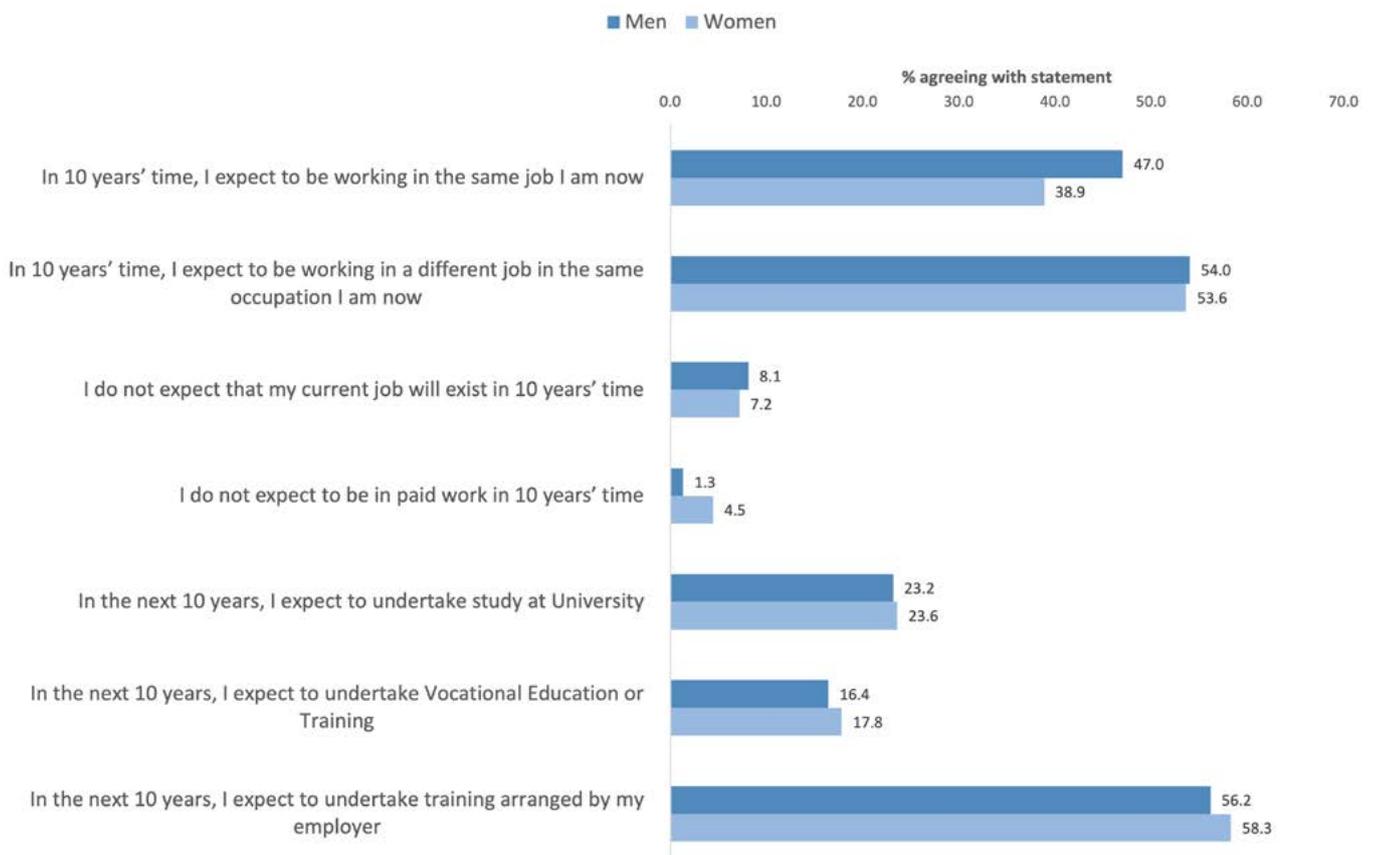


3.2 FUTURE WORK AND STUDY PLANS BY GENDER

In Figure 2, we looked at the same measures about young adult's future work and education plans by gender to see if there were any differences between young men and women.

Overall, young men and women share similar views about their work futures, however, there were some differences. A larger proportion of men expected to be in the same job in 10 years' time (47 percent) compared to women (39 percent), however, young men (54 percent) and women (53.6 percent) were more concordant in their views about staying in the same occupation in 10 years' time. While the proportion of men and women who agreed with the statement that they would not be in paid work in 10 years' time was small, women were more likely to report that they expected to be out of paid work (4.5 percent) than men (1.3 percent). There were similarities between men and women in terms of studying plans although women were slightly more likely to expect to undertake vocational education or training arranged by their employer than men.

Figure 2 Future work and study plans, men and women from Cohort 2, aged 32, Wave 15, 2020 (%)

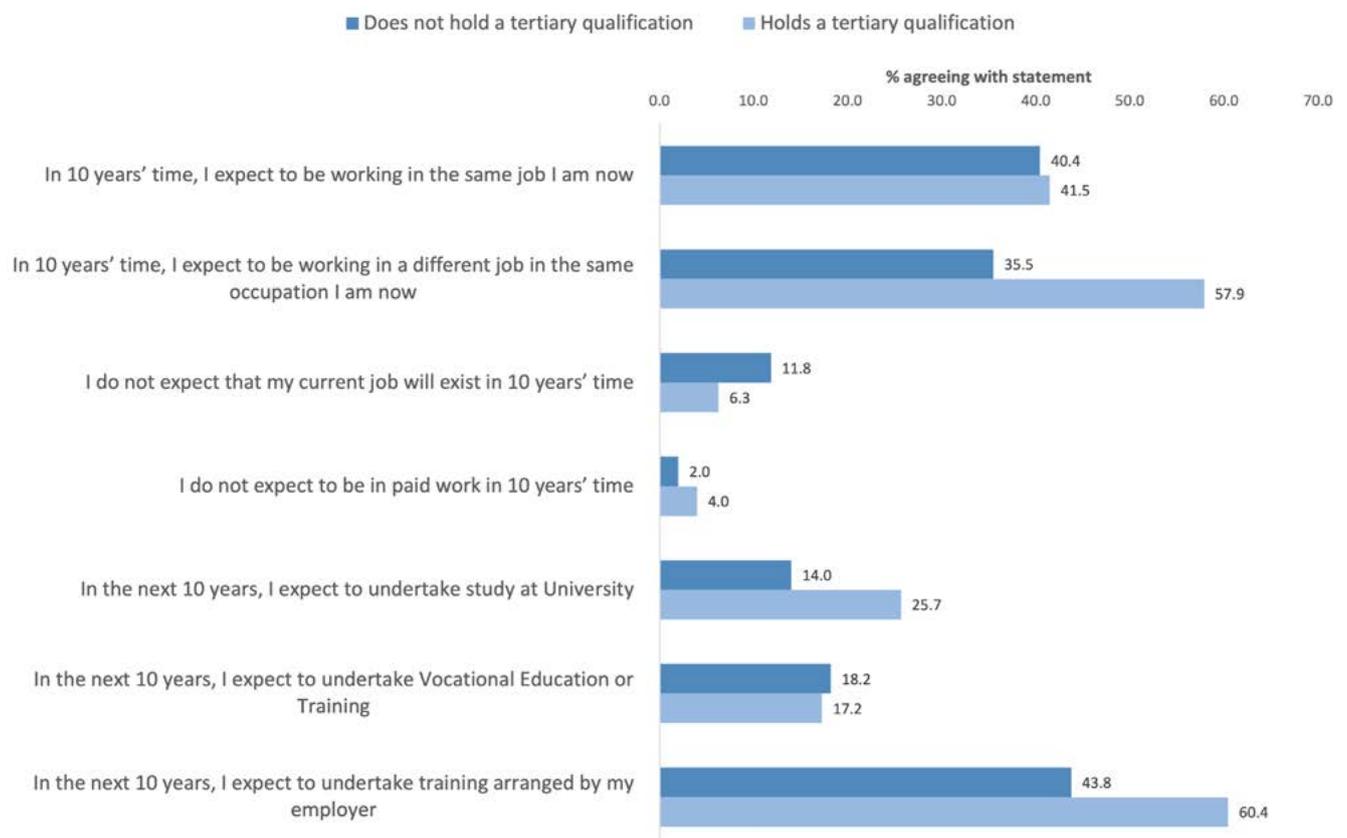


3.3 FUTURE WORK AND STUDY PLANS BY EDUCATIONAL ATTAINMENT

In Figure 3, we look at the differences between those who hold a degree (including a postgraduate degree) and those with qualifications than a degree (e.g., trade certificate, Year 12 or below) and their future work and study plans.

Overall, there was only a small difference between those with tertiary qualifications and those without on whether they expected to be in the same job in 10 years' time. There was, however, a significant difference in terms of whether they expect to be in the same occupation with 58 percent of tertiary qualification holders expecting to be working in a different occupation compared to 35.5 percent of those who do not hold a degree qualification. Those without tertiary qualifications were more likely to expect that their job will not exist in 10 years' time. Those with tertiary qualifications were more likely to expect to do further study at university and through training arranged by an employer.

Figure 3 Future work and study plans by educational attainment from Cohort 2, aged 32, Wave 15, 2020 (%)

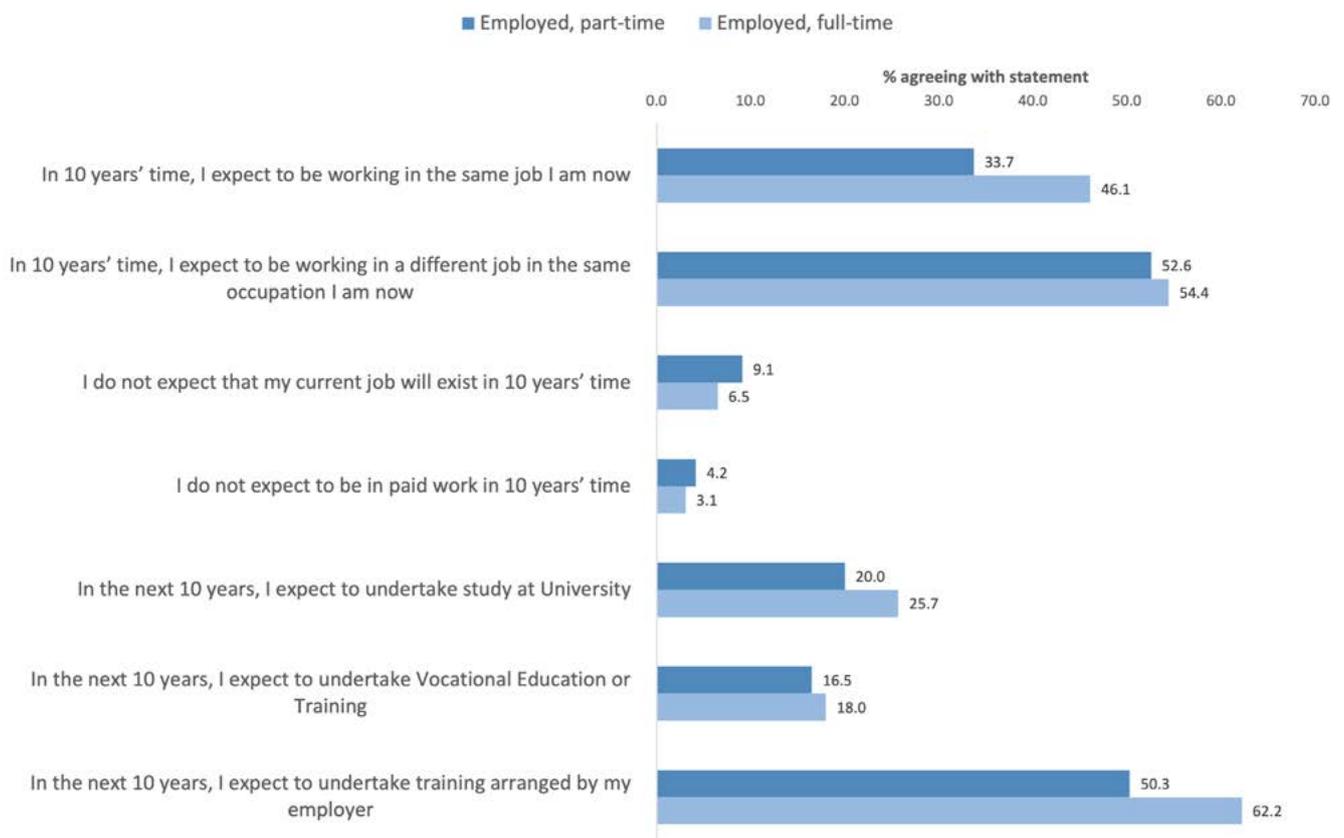


3.4 FUTURE WORK AND STUDY PLANS BY EMPLOYMENT STATUS

In Figure 4, these measures are presented across employment status – either employed in full-time work or part-time work.

Those in full-time employment (46 percent) were more likely to agree than those in part-time employment (33 percent) that they would be in the same job in 10 years’ time. There was only a slight difference between two groups in terms of expectations of working in a different job in the same occupation in 10 years’ time. Part-time employees were more likely to expect that their current job would not exist in 10 years’ time compared to full-timers. In terms of study plans, full-time employees were more likely expect to do undertake further study at university or vocational education and/or training. They were also significantly more likely to expect to do training arranged by their employer (62 percent) compared with part-timers (50 percent).

Figure 4 Future work and study plans by employment status from Cohort 2, aged 32, Wave 15, 2020 (%)

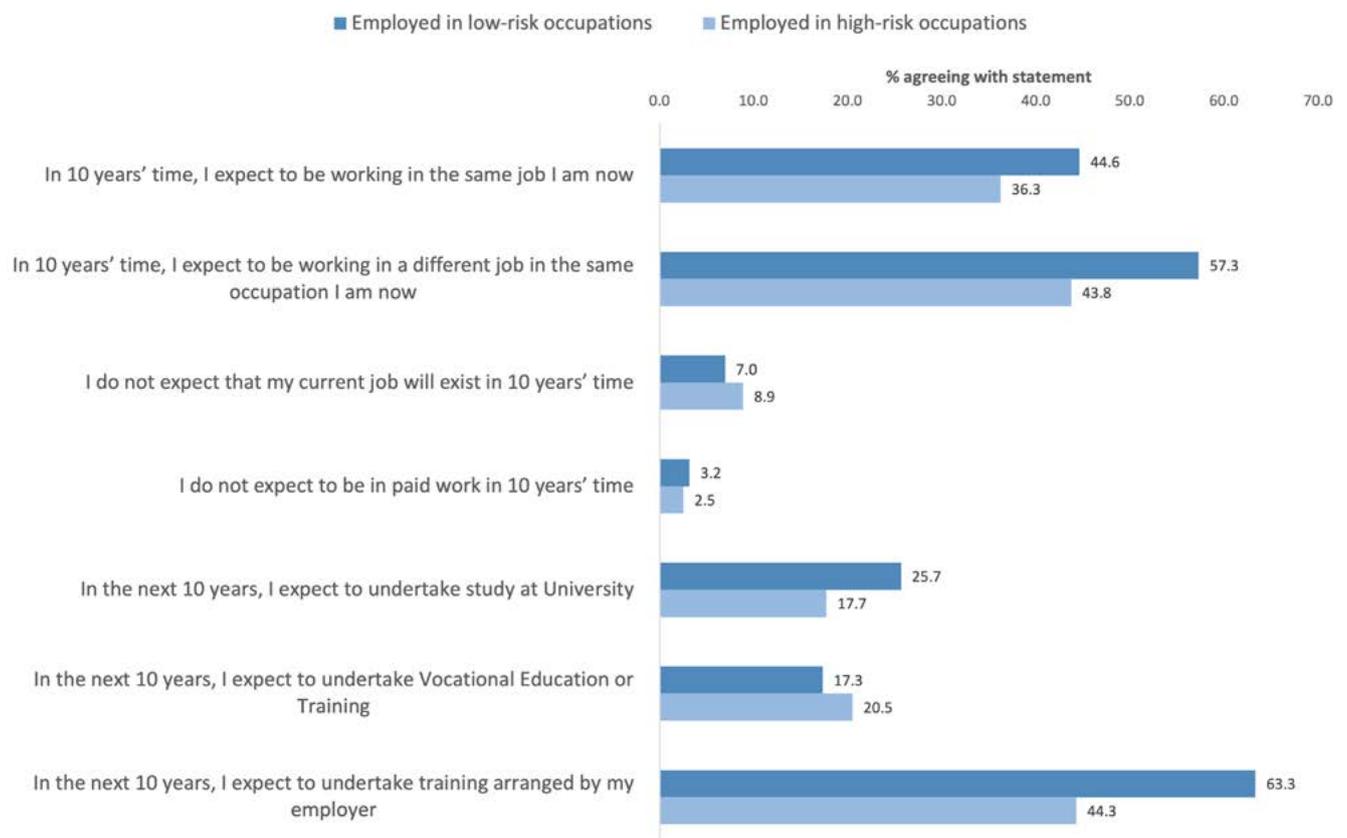


3.5 FUTURE WORK AND STUDY PLANS BY OCCUPATIONAL RISK

In Figure 5, the seven measures about young adult's future work and study plans are presented across two employment groups – the first are those who are employed in low-risk occupational groups, such as managerial and professional occupational groups (i.e., education, health) and those who are employed in high-risk occupational jobs or those jobs more susceptible of automation such as sales and service industries or manufacturing.

Those who are in low-risk occupations were more confident about their job prospects in 10 years' time than their counterparts in high-risk occupations. They were more likely to expect to be in the same job in 10 years (44 vs 36 percent) and expect to be in the same occupation (57 vs 43 percent). Interestingly, they were more likely to say that they would undertake future study at university or on-the-job training provided through their employer than those in high-risk groups.

Figure 5 Future work and study plans by occupational risk from Cohort 2, Wave 15, 2020 (%)



4. QUALITATIVE DATA

Respondents were asked to provide open-text comments in relation to the question: *Please comment on how the future of work might impact on your work and study plans for the next 10 years.* The comments revealed two distinct groups within this cohort of young adults: the first group were those who were not worried about the future work because they were ‘safe’ either because of the job they worked in or the skills they possessed; and the second group were less ‘safe’. Despite these differences, most of both groups expressed a desire to further study.

4.1 NOT WORRIED ABOUT THE FUTURE OF WORK

When asked to provide comments about the future of work, most young adults did not appear to be worried, nor did they expect any significant changes to their working lives. The main reason behind this was because this group of young adults felt that they were already working in a job or industry where there was a very low risk of automation or that it was highly unlikely that artificial intelligence would replace their job. Thus many, young adults talked about being in ‘safe’ jobs or a ‘safe’ industry.

Many participants were keenly aware that they were in jobs and/or industries which would be in demand regardless of the times. This was particularly true for respondents in the caring sector—nurses, childcare educators, teachers:

Nurses will always be required and hopefully the current pandemic highlights this need and increases funding for the sector, ensuring I have a job in the years ahead (Female nurse with a university degree living in a rural area)

As I work in healthcare, I don't think my job could be done by anything other than humans. My job is classified as essential and emergency work (Female midwife with a postgraduate degree living in a capital city)

Working as a teacher, in a Gov school, I expect that my job will be guaranteed (Female teacher with a university degree living in a capital city)

For others, they also did not have any significant concerns about the ‘future of work’, but this was less to do with the job or industry they were employed in but more to do with their own human capital. Many perceived themselves to possess the skills and experience that would guard them against any forthcoming changes:

There will always be work available for me across many fields as I have skills that can be interchanged. I always want to be progressing or having new experiences so there will be change (Female occupational therapist with a university degree living in a capital city)

I think I've developed the right sort of skills to remain flexible as the nature of work changes (Male public servant with a university degree living in a capital city)

Now I plan on being a career public servant - I am currently a policy officer. I have an adaptable set of skills (Male policy officer with a university degree living in a capital city)

Type of occupation, particularly being involved in “care” work and the level of educational self-investment seems to have an impact in the level of concern about the changes and challenges that automation and technology can bring to their labour situation.

4.2 SAFE BUT ALWAYS PLANNING TO STUDY

Even though many were in what might be considered ‘safe’ or ‘low risk’ jobs or employed in industries that were likely to withstand significant changes in the future, many participants still had plans to switch jobs or pursue further training. For example, one participant worked in the public service and despite being ‘highly confident about the future of this work’, they still had plans for further study:

I am currently studying to change my career and become a psychologist, and as mental health is of growing importance in the community I'm confident this is a good path to be on (Female policy officer with a university degree living in a capital city)

This sentiment was shared by other participants:

I expect to work in the same industry over the next 10 years. With that comes no requirement for additional study, however obtaining an MBA is something that people in my role commonly have. I expect that at some stage, if I wish to progress my seniority within my career that I would require an MBA (Female corporate banker with a university degree living in a capital city)

This was echoed by respondents who were employed in perceived as relatively 'safe' professions, such as teaching, nursing, mental health services, but they still expressed a desire to upskill:

As a teacher, I think I will be required to upskill within my profession, however, I would also consider undertaking more formal study if it was required (Female teacher with a university degree living in a regional city)

As a midwife I know that I will never be out of a job, but may need to consider upskilling with a nursing degree at some point (Female midwife with a university degree living in a capital city)

For some of the young adults who were in what they view as 'safe' jobs or 'safe' industries, they mentioned had future plans for study but this often this study was less formalized (i.e. at a university) and more workplace focussed:

I expect my job to still exist/remain necessary. The way in which service is delivered or how people access it may evolve continuously with technology. No plans for formal study but I will undertake on the job training (Female occupational therapist with a university degree living in a capital city)

I work in libraries and archives. While I don't expect these sectors to disappear, we will need to learn different skills and be adaptable to adjust to changes (Male librarian with a university degree living in a capital city)

Of course, not all participants were focused or had plans to invest in their educational capital. For many young people we surveyed, they had no plans to study in the future unless it led to some kind of career advancement:

I am in a stable ongoing position, I do not plan on studying in the future but perhaps if that helps me get a promotion then I will (Female finance manager with other tertiary level qualification living in a capital city)

I have no need to complete any additional study in order to stay in my current job. If I do, it'll be because I choose to for my own interest, career advancement or change of profession (Female teacher with a postgraduate degree living in a capital city)

Others chose their profession to avoid further training:

My employment government based and essentially guaranteed for life as well as not being dependent on external training, two reasons why I chose this as my career (Male police officer with a university degree living in a regional city)

While expectations to continue investing in their education differ between participants, it is clear that a good proportion expected to do some formal study (i.e. at higher education institutions) or in-the-job training to upskill their knowledge and qualifications. Some relied on their labour experience or in a security provided by its job sector to believe that immediate educational and training upskill was not needed.

4.3 NOT IN A 'SAFE' JOB OR INDUSTRY, PLANS FOR FUTURE STUDY

There was a smaller proportion of young adults in the sample who felt that they were not 'safe'. They had plans in the future to undertake further study and/or training. However, they talked about future plans to study in different ways.

For many of these respondents, they commented about further education and training as necessary for advancement:

I would like to be in the same industry as I am now, though I would expect to have progressed to a higher level in my career. I would expect to be doing training or Tafe as I always want to improve my skills however I wouldn't be considering going back to uni (Female marketing and events supervisor with a university degree living in a regional city)

There is almost no seafaring industry left in Australia. So I'll need to continue education in order to change my skills to another industry (Marine engineer with a university degree in a regional city)

I am always looking for new opportunities to upskill. I believe it is still important to do so to stay relevant and competitive in the job market (Male water treatment technician with other tertiary qualifications living in a capital city)

Some respondents were keenly aware that future training would be necessary given the technological change:

I am keen to do further study, to stay relevant in the ever-changing digital world I feel it is necessary (Female marketer with other tertiary qualification living in a capital city).

I expect to see a greater need for digital training (either self initiated or employer initiated) (Female administration assistant with a trade certificate living in a regional city)

Some would only do it if it lead to career advancement:

Any future study will likely to be to enhance what I am already doing. This may involve a change in role to a more managerial position. At this stage I hope not (Female with other tertiary qualification living in a capital city).

Some young people expressed no desire to undertake further education or training either formally or informally:

I have no plans to further study (Female customer service operator with other tertiary qualifications living in a country city)

For some of these people, there was an awareness that further study does not necessarily lead to better outcomes:

If work demands further education to seek job opportunities I will consider further study. Currently there is little economic incentive due to the cost of education and the very marginal wage increase if any (Female administrative assistant with other tertiary degree living in a country city)

While the circumstances of why these young adults would engage, or not, in further education is not homogeneous or simplistic, there is an awareness that technological disruption in the labour market might mean the need to re-skill and adapt to these changes. It is worrying to see, that for some the nexus between education and work is weak and has no impact on their labour prospects.

4.4 CHANGE IS COMING

Amongst the comments, both groups of respondents talked about what change they might expect in the workplace and their lives in relation to the future of work. Almost all of the respondents expected some kind of change. Technology was seen as a harbinger of change for many:

Automation of air traffic control will mean I am more of a system manager than hands on air traffic control (Male air traffic controller with a university degree living in a country city)

Work is constantly evolving at an incredibly pace. Working with technology as a learning designer has shown me that in the near future this role will be significantly different (Male learning designer with a postgraduate degree living in a capital city)

Roles are adapting and changing and so I will expect to be adapting myself. This likely means more autonomy, flexibility and operating in a more 'contractor' role (Female graphic designer with a postgraduate degree living in a capital city)

As technology advances, it will impact every job (Female barista with a university degree living in a capital city)

More generally, respondents talked about how working conditions will change:

There will be far fewer people working in the same/similar capacity to me in the next 5-10 years, although technological changes will be delayed by COVID-19 (Female hospital clerk with a university degree living in a capital city)

I work full time in a fully project funded, contracted position. Therefore job security is not that certain, and the role is often changing due to new research projects and funding opportunities. Due to the nature of research, it is unlikely that the work I do will be the same in 10 years time but it is likely I will still be working in a research position, just possibly for a different organisation and the focus/topic and nature of that research is likely to change. Constantly changing job roles, responsibilities and a lack of a longer term contract will prevent me from undertaking further study (Female researcher with a postgraduate degree living in a country city).

Some expressed a general uncertainty about the future of work, including the impact of the Covid-19 pandemic:

With COVID-19 pandemic, the future is very uncertain (Female client advisor with Year 12 certificate living in a regional city) .

With uncertain times around climate change, global pandemics etc. it feels really hard to plan far in advance for work and study because we don't know what will be viable. Currently we all need jobs where you have the capacity to work from home and have the equipment in order to do it. But we don't know if this will change so it makes it really hard to plan for the future and anticipate (Female speech pathologist with a postgraduate degree living in a capital city)

The continuing instability of permanent work and constantly changing workplace environment may lead to increasing difficulty attaining and maintaining permanent work. I am aiming to find a role that allows for greater work/life balance (Female hospital pharmacist with a university degree living in a capital city)



5. DISCUSSION

Drawing on quantitative and qualitative data from Cohort 2 of the *Life Patterns* project, this report provides an overview of young adults' future expectations regarding their work, study and training plans as well as their feelings about the future of work. These data come from young adults who were aged 32 in 2020. Almost 95 percent of them have completed a post-school qualification and have been in the labour market for some years. Thus, both data components provide unique insight into young adults' future plans at a critical time both in their lives but at a time when debates about automation, artificial intelligence and the future of work have become prominent in popular discourse (FYA 2017). The quantitative data relied upon seven items from the 2020 survey questionnaire, focussing on young adults' expectations about being in paid work, the same job and the same occupation in 10 years' time and whether they expect to expect to undertake further study either at university or VET-level and informal, on-the-job training. The qualitative data were sourced from open-text comments asking young adults about their feelings towards the future of work. Below we discuss the implications of these findings.

Young adults participating in the *Life Patterns* project were very much aware of the discourse surrounding the future of work and how technology might change work, working conditions and workplaces. In the qualitative comments, some young people described the future in more general terms (e.g., 'adaptation', 'change'), but for others they were able to be more specific about how technological change may affect their roles. For example, one participant, an air traffic controller expects to be a manager of an automated system rather than doing the manual traffic coordination in the future. A few participants expressed uncertainty about what the future would look like in terms of work and for many of these respondents it was tied up with the COVID-19 pandemic. Young adults did not talk about engaging in entrepreneurialism or starting their own business, which has been suggested as a way of responding to the future of work (see FYA 2017).

Although young adults seemed very much aware of how technological change may affect them, a significant number of young people were not immediately concerned about the future or the future of work. This reflects research by Hill and colleagues (2020) who examined how young women feel about the future of work, finding that most young Australian women were not worried. This finding is reflected in the quantitative data, which shows that the majority of young adults in *Life Patterns* expect to be in paid work in 10 years' time. Although we did note some differences, for example young women were a little less confident perhaps owing to their future fertility intentions (Hill et al. 2019). We also found that young adults without tertiary qualifications or those employed in occupations at high risk of automation were also less confident, suggesting they are aware of some of the future challenges in their current job or industry.

In contrast, young adults appeared to be less certain about working in the same job or occupation in 10 years' time. Only 43 percent of young people agreed with the statement that they will be in the same job they are in now in 10 years' time and 53 percent agreed that they will be in the same occupation in 10 years' time. Interestingly, young adults with tertiary qualifications in particular were more likely to expect to be in a different occupation in 10 years' time. This likely reflects their expectations of career advancement, which is a theme throughout the qualitative comments.

In the qualitative comments, we identified two groups: those who deemed themselves 'safe' from future technological change and those who were 'less safe'. A majority of young adults in the *Life Patterns* project felt 'safe' because they were employed in what they deemed 'low risk' jobs or industries like education or health where the chances of their job being replaced by automation or artificial intelligence are very low. Indeed, these are the industries that will experience significant employment growth in the coming years (Deloitte Access Economics 2020). This suggests that young adults and this group are keenly aware of what the future of work means for them and their prospects. They also talked about having the right skills and qualifications which would protect them for any forthcoming technological change. This is perhaps because of the high proportion of young people with tertiary qualifications in the sample. There was however, a smaller but significant proportion of young people who were not 'safe' from the risks of automation and artificial intelligence.

Despite these differences, the majority of young adults across both groups of plans for further education and training. In this way, the young adults in the *Life Patterns* project were similar to those in Anderson et al.'s (2005) study, actively planning for the short to medium term. Over half of the young people in the project expected to undertake on-the-job training arranged by their employer and 40 percent expected to undertake further study at either university or vocational education and training (VET) in the next 10 years. This resonates with research by Hill et al. (2020) who found that a third of young Australian women thought they needed more education and training. In this way, the young people in *Life Patterns* are just like the young Finns in Honkatukia and Lahde's (2020) study who had internalised the tenets of neoliberalism by continuing to pursue (further) education credentials.

However, there were differences between the two groups in the reasons why they were pursuing (further) education. For those young adults in the 'safe' group, further education and training was largely about career advancement. This was particularly true even for those who were in very stable industries that already required higher level qualifications, like education or health. This suggests that these young people are at risk of credentialism (Chesters and Wyn 2019). For those young people in the group that were 'less

safe', their plans for further education were driven by advancement too, but a significant proportion also noted that forthcoming technological change was a motivation for undertaking further study. A smaller proportion of participants in both groups were hesitant about further study, but again there were differences behind these reasons. For the 'safe' group, they did not want to undertake further training or education unless it was linked to advancement. For the 'less safe' group, they had doubts it would lead to advancement. What is certain from the variety of views and expectation from these young adults, is that the education will continue to occupy a central role in debates about young adults' future in the labour market.

5.1 CONCLUSION

The world of work is currently undergoing significant changes. The increased use of artificial intelligence and automation which will continue to impact upon the working lives of many. The exact nature and form of this change remains unclear. However, the young people in the *Life Patterns* research project are mostly confident about their future work prospects and the impact of the future of work. Underlying this confidence is young people's reliance on their education credentials but also a strong belief that further education can either help advance them and their careers or save them from future technological change. In some ways, this reliance on acquiring further education and investing in lifelong learning to negotiate new labour market landscapes was prevalent on their *Life Patterns*' peers from Cohort 1 (who left school in 1991 amid a severe financial recession and the restructuring of the Australian economy from manufacturing and agriculture to the dominance of the service sector as a source of employment growth – albeit part-time, casual and precarious – see Cuervo & Wyn 2011; Cuervo et al. 2013). If indeed young people are 'self-navigators' in this modern era, as put by Wyn (2017), then education is their compass in navigating the future of work terrain. Future research, however, is needed to test the 'success' of these journeys.

REFERENCES

- Anderson, M., F. Bechhofer, D. McCrone, L. Jamieson, Y. Li & R. Stewart (2005). Timespans and Plans Among Young Adults. *Sociology* 39(1), 139–155.
- Bioresi, A. & Nunn, H. (2013). *Young Entrepreneurs: Making Money for the Nation's Benefit*. Available at: <http://www.celebyouth.org/young-entrepreneurs-money-making-for-the-nations-benefit/>
- Brooks, R. & Everett, G. (2008). The Prevalence of “Life Planning”: Evidence from UK Graduates. *British Journal of Sociology of Education* 29(3), 325 - 337.
- Leccardi, C. (2005). Facing uncertainty: Temporality and biographies in the new century. *Young* 13(2), 123-146.
- Chesters, J., & Wyn, J. (2019). Chasing rainbows: How many educational qualifications do young people need to acquire meaningful, ongoing work? *Journal of Sociology*, 55(4), 670–688. doi: 10.1177/1440783319888285
- Churchill, B. (2020). COVID-19 and the immediate impact on young people and employment in Australia: A gendered analysis. *Gender, Work & Organization*, 28(2), 783-794.
- Churchill, C. & Khan, C. (2021). Youth underemployment: a review of research on young people and the problems of less(er) employment in an era of mass education, *Sociology Compass*, 1-18. doi:10.1111/soc4.12921
- Cobb-Clark, D. (2008). Leaving Home: What Economics Has to Say about the Living Arrangements of Young Australians. *Australian Economic Review*, 41(2), 160-176.
- Cuervo, H. & Wyn, J. (2011). *Rethinking youth transitions in Australia: A historical and multidimensional approach*. Youth Research Centre, University of Melbourne, Melbourne.
- Cuervo, H., Crofts, J. & Wyn, J. (2013). *Generational insights into new labour market landscapes for youth*. Youth Research Centre, University of Melbourne, Melbourne.
- de Fontenay, C., Lampe, B., Nugent, J. & Jomini, P. (2020) *Climbing the jobs ladder slower: Young people in a weak labour market*. Productivity Commission Staff Working Paper, July, Canberra.
- Edmonds, D. & Bradley, T. (2015). *Mechanical boon: will automation advance Australia?* Office of the Chief Economist, Department of Industry, Innovation and Science, Canberra.
- Deloitte Access Economics (2020). *The path to prosperity: why the future of work is human*. Sydney.
- Foundation for Young Australians (FYA). (2017). *The New Work Order: Ensuring young Australians have skills and experience for the jobs of the future, not the past*. Melbourne.
- Frey, C. & Osborne M. (2013). *The future of employment: how susceptible are jobs to computerisation*. Oxford Martin School, Oxford.
- Furlong, A., & Cartmel, F. (2007). *Young people and social change*. McGraw-Hill: London.
- Furstenberg, F., Kennedy, S., McLoyd, V., Rumbaut, R. & Settersten, R. (2004). Growing Up is Harder to do. *Contexts*, 3(3), 33-41.
- Heggli, G. & Haukanes, H. (2013). Fearing the future? Young people envisioning their working lives in the Czech Republic, Norway and Tunisia. *Journal of Youth Studies* 16 (7), 916–931.
- Hill, E., Cooper, R., Baird, M., Vromen, A. & Probyn, E. (2020). *Australian Women's Working Futures: Are we ready?* Australian Women's Working Futures, University of Sydney, Sydney.
- Hill, E., Baird, M., Vromen, A., Cooper, R., Meers, Z. & Probyn, E. (2019). Young women and men: imagined futures of work and family formation in Australia. *Journal of Sociology* 55(4), 778-798.
- Honkatukia, P. & Lahde, M. (2020). Navigating towards sustainable working life – young people imagining the technologized future of work. *Journal of Youth Studies*, 1-16. doi: 10.1080/13676261.2020.1820971

- Kelly, P. (2017). "Young People and the Coming of the Third Industrial Revolution." In A. Furlong (Ed.). *Routledge Handbook on Youth and Young Adults. Second Edition*, pp. 391–399. Abington & New York: Routledge.
- MacDonald, R. (2011). Youth transitions, unemployment and underemployment. *Journal of Sociology*, 47(4), 427–444.
oi: 10.1177/1440783311420794
- Mandic, S. (2008). Home-Leaving and its Structural Determinants in Western and Eastern Europe: An Exploratory Study. *Housing Studies*, 23(4), 615-637.
- Raley, K., Crissey, S., & Muller, C. (2007). Of Sex and Romance: Late Adolescent Relationships and Young Adult Union Formation. *Journal of Marriage and Family*, 69(5), 1210-1226
- Rubery, J. & Howcroft, D. (2019). 'Bias in, Bias out': gender equality and the future of work debate. *Labour & Industry*, 29(2): 213-227.
- Schwab, K. (2016). *The Fourth Industrial Revolution*. London: Penguin.
- Tanner, J., & Arnett, J. (2009). The emergence of 'emerging adulthood'. In A. Furlong (Ed.), *Handbook of Youth and Young Adulthood*, pp. 39-45. New York: Routledge.
- Wyn, J. (2017). "Educating for Late Modernity." In A. Furlong (Ed.). *Routledge Handbook on Youth and Young Adults*. 2nd ed., pp. 91–98. Abington & New York: Routledge.
- Wyn, J., Cahill, H., Woodman, D., Cuervo, H., Leccardi, C., & Chesters, J. (Eds.). (2020). *Youth and the new adulthood: generations of change*. Singapore: Springer.
- Wyn, J., Cuervo, H., Crofts, J., & Woodman, D. (2017). Gendered transitions from education to work: The mysterious relationship between the fields of education and work. *Journal of Sociology*, 53(2), 492-506. doi: 10.1177/1440783317700736



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