Bright Futures
Megatrends impacting the mental wellbeing of young Victorians over the coming 20 years

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Foreword

It is with great pleasure that I introduce *Bright Futures: Megatrends impacting the mental wellbeing of young people in Victoria over the coming 20 years*. This outstanding report is the outcome of a rich partnership between VicHealth and CSIRO that will both inform and influence the issues we need to consider and the ways in which we work with young people to better prepare them for the future.

This report is an important component of VicHealth's work in preparing for its new strategy *Promoting Mental Wellbeing 2015-2019*, with a specific focus on resilience and social connection for young people.

The report identifies that resilience is an important asset required for all young people to be successful into the future. The capacity to be autonomous, regulate our emotions, have self-confidence and empathy, and be able to problem solve, are all resilience assets that the community as a whole should have. For young people, the millennials in particular, these skills and assets will be essential to navigate a rapidly changing economic, technological, social and global environment.

Most young people will do this successfully and experience great life satisfaction from their engagement with a much bigger world. For a currently small but growing group however, the challenges are already being felt. Limited opportunities to succeed in education and employment, limited literacy, lack of stability in family and among friends and absence of positive identity and self-esteem are being experienced by young people now. The impact on their mental and physical wellbeing is devastating.

VicHealth believes that providing appropriate and relevant support to young people early is everyone's responsibility. Central to this is co-designing solutions with young people.

VicHealth's partnership with CSIRO provided the innovative opportunity to mix empirical data from horizon scanning and trends analysis with expert consultation, to enable a broader reflection on what the future may hold and what our actions might be.

I would personally like to thank Stefan Hakjwocicz as the lead of the CSIRO team for his enthusiasm and remarkable capacity to bring aspects of both science and the social together, to enable us to envision the future. I also thank the key stakeholders and mental health and wellbeing experts who contributed their valuable time to consultations on the trends.

I hope you enjoy this wonderful report and that it informs your work, as it will VicHealth's.

Jerril Rechter
VicHealth CEO

Executive summary

In developing its Mental Wellbeing Strategy 2015–2019 (VicHealth 2015) with a focus on building the resilience and social connection of young people, VicHealth commissioned CSIRO to provide an analysis of new and emerging trends in society and their resulting influences on young people's mental wellbeing. VicHealth will use these findings to inform our work, and engage with young people and new partners.

Young people are the future, and the mental health and wellbeing of Victoria's young people are vital for achieving vibrant and cohesive communities, enjoying a good quality of life and developing a prosperous economy. A wide and diverse range of public and private sector organisations are actively engaged in research, preventative measures and solutions to address this issue. However, the factors which influence the mental health and wellbeing of young Victorians will change over the coming decades.

Trends such as digital technology advances, online communication, cultural diversification, demographic change and globalisation may reshape the landscape. These changes may create new and potentially overwhelming challenges, as well as exciting opportunities for young people in Victoria.

In order to understand these changes and identify pathways towards better outcomes for future generations of young Victorians, VicHealth commissioned the Commonwealth Scientific and Industrial Research Organisation (CSIRO) to deliver a strategic foresight project. Through a combined process of stakeholder and expert consultation, along with horizon scanning and trends analysis, this project has identified five 'megatrends', which are outlined on page 4 and discussed in detail in Section 3.

What is a megatrend?

A megatrend is a long-term change that affects societies, governments and economies permanently over a long period of time. Megatrends occur at the intersection of multiple smaller trends, including geopolitical, economic, environmental, social and technological change, and have implications for current day decision making.

In this study, five megatrends have been identified, and their interconnectedness and overlap are illustrated in Figure 1. These five megatrends provide a succinct narrative of the challenges and opportunities for young people in Victoria over the coming 20 years. Questions for deeper consideration of the implications of each megatrend have been added in Section 3. It is hoped that these megatrends will inform government, private and community sector efforts to improve the status of young people's mental wellbeing in the years and decades ahead.

How were the five megatrends identified?

The five megatrends were identified via a strategic foresight process developed by CSIRO. This involved structured interviews with stakeholders and experts; a horizon scanning process to identify trends, screening and validation of those trends; clustering to form megatrends; and a consultative workshop to review and refine the megatrends.

In the CSIRO approach, a trend is defined as a pattern of change impacting an organisation or societal group in the future. Trends are distinct from background issues because they have directionality; they involve some shift in the status quo.

Trends must pass the tests of relevance and evidence to be included in the analysis. This means they must have a significant impact on the organisation or societal group. It also means there must be a qualitative or quantitative dataset, which provides sufficient proof the trend is happening.

Detailed information about the strategic foresight process and methodology for this report is provided in Section 4.

Figure 1. Megatrends with the potential to impact on youth mental wellbeing.

The rising bar
Rising skills and education levels in emerging economies plus the rise of computing power, device connectivity and artificial intelligence are creating a more competitive jobs market.

Global reach
Digital technology and globalisation are breaking down traditional barriers and changing the way organisations, societies, governance structures and individuals operate.

Out of the shadows
Scientific research will improve understanding and awareness of mental health and wellbeing, and service delivery models will change.

Overexposure online
Young people will be increasingly exposed to wide-ranging online content, privacy breaches and virtual relationships.

Life's richer tapestry
A more diverse culture, society and consumer market where identifying what's mainstream is increasingly difficult.

1. The rising bar

Rising skills and education levels in emerging economies, plus the rise of computing power, device connectivity and artificial intelligence, are creating a more competitive jobs market.

Three main driving forces are combining to create this megatrend. First, skills and educational levels are rising rapidly in both advanced and emerging economies, with much steeper growth rates in emerging economies. For example, if current trends continue, India and China will hold 40 per cent of all young people with a tertiary qualification in both G20 and The Organisation for Economic Co-operation and Development (OECD) countries by 2020 (OECD 2012). Second, information technology is creating increased connectedness of global and regional labour markets. Skill sets in one location can increasingly compete with skill sets in another, as work can be done remotely. Third, advances in technology and increased task automation are placing many low-skilled, routine and structured manual or cognitive job tasks at risk. Many of the jobs currently held by young people, which do not require qualifications, experience or special talents, may not exist in the future.

These driving forces create a plausible future where entry into tertiary educational institutions and the labour market, which is a ticket to broader participation in society, is more competitive and demanding of higher standards.

Will young people enjoy broad-based participation in the economy and society of tomorrow, or will only a shrinking group clear the bar?

2. Global reach

Digital technology and globalisation are breaking down traditional barriers and changing the way organisations, societies, governance structures and individuals operate.

This is creating both opportunities and challenges for young people. The online world is associated with the rise of the start-up culture and the era of entrepreneurs. Existing business models are being challenged by agile, digitally-enabled start-up companies. The costs of trialling a new business model in the online world are reducing and the tools to support rapid scale-up of operations are improving. The peer-to-peer (P2P) economy taking hold in taxi markets (e.g. Uber), accommodation markets (e.g. Airbnb), office markets (e.g. Liquid Space) and banking and finance (e.g. Pozible, ThinCats) may also take hold in labour markets (e.g. Freelancer, Upwork).

The future may see a new breed of portfolio workers who have no fixed abode and sell their skills and knowledge to multiple employers. Online education and training resources allow just about anyone to learn just about any skill at much lower cost than historic models. Culture, talent, ideas and goods are all flowing at greater speed and volume across national borders. Young people who learn to operate in the new, agile and connected markets and contexts of the future are likely to have exciting careers and lifestyles.

How will young people transition to new models of working and living successfully?

3. Life's richer tapestry

A more diverse culture, society and consumer market where identifying what's mainstream is increasingly difficult.

In the past half-century, Australia has become an increasingly multicultural society. Fifty years ago, country of birth for residents was overwhelmingly dominated by Australia, the United Kingdom, New Zealand, the United States and European countries. However, today there is a more even spread across many nationalities from Asia and other countries. Forecasts suggest there will be a much greater spread across these nationalities by midway through the current century. In addition

to cultural diversification, Victoria, along with the whole of Australia, will experience demographic change with an ageing population. The future will also see the continued explosion of consumer, societal and lifestyle choices for young people.

How will young people adapt to a world with limitless choice and wide diversity of cultures, value systems and demographic groupings?

4. Overexposure online

Young people will be increasingly exposed to wide-ranging online content, privacy breaches and virtual relationships.

While digital technology creates exciting new opportunities for young people, it also presents new risks and challenges. In the coming decades, young people will face increased issues associated with cybercrime, identity theft, privacy breaches and various forms of online victimisation (e.g. trolling, harassment, intimidation, bullying). These issues are growing in prevalence in line with growing rates of social media use, e-commerce and overall online communication.

Young people will also be exposed to a wide range of online content that is not vetted to the same extent as conventional television, print and screen media. Young people have an evolving view of privacy that allows them to upload

personal information and images to social media sites, either purposefully or inadvertently, which may have implications for the way in which they conduct future relationships. This material can be persistent and widely distributed by others, with damaging psychological consequences for the individual. Young people will have virtual resumes, which are beyond their direct control to edit, and there will be an increase in the amount of discoverable personal information relating to individuals. However, as new risks emerge, so too will solutions in the form of software tools, training and raised awareness.

Will young people adapt to, and successfully manage, the possibilities and dangers of the virtual world?

5. Out of the shadows

Scientific research will improve understanding and awareness of mental health and wellbeing, and service delivery models will change.

Over time, our understanding of mental health and illness has vastly improved at all levels, from researchers and clinicians to the general population. This is partly reflected in revisions of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) used by psychiatrists to classify the complete range of known disorders. Scientific research will continue to lead to improved insights into the causes, symptoms, treatments and preventative measures over the decades ahead.

Additionally, global recognition that socioeconomic factors external to the individual, such as poverty, poor education, homelessness, and cultural background contributing

to poor mental health and mental illness, continue to grow. Consequently, mental illness is likely to continue down a pathway of destigmatisation into the future and be complemented by a stronger focus on preventative measures. This will be led by, and associated with, programs, policies and strategies by governments, companies and community organisations aiming to improve mental wellbeing.

Will our society assume responsibility for youth mental wellbeing and help to build a socioeconomic, political and cultural environment in which mental wellbeing can flourish?

Contents

1 Introduction

Over the past decade, VicHealth has paid significant attention to tackling some of the key social and economic determinants of mental health and wellbeing, including social and economic participation, race-based discrimination and prevention of violence against women. VicHealth's Action Agenda in Mental Wellbeing sets out the three-year priority to build stronger approaches to resilience focusing on young people, and the 10-year goal to have more Victorians resilient and connected.

However, the nature of young people's developmental environment is constantly changing. The rapid pace of demographic, technological and other change in Victoria is a major challenge in planning for an integrated system that can better promote mental wellbeing and prevent mental illness in coming decades.

To address this challenge, there is a requirement to better understand the trends impacting mental wellbeing in young people. These trends include geopolitical, economic, environmental, social and technological changes likely to take place over the coming decades.

As a consequence, VicHealth commissioned CSIRO to deliver the Megatrends Impacting the Mental Wellbeing of Young People project. The megatrends identified in this project followed an intensive strategic foresight process involving background research, in-depth interviews and robust tests of relevance and evidence. The result of this process led to the combination of several individual trends to create five megatrends, which are predicted to cause long-term change affecting the mental wellbeing of young Victorians over the next 20 years.

The aim of this project is to build a clearer picture of the challenges and opportunities ahead for VicHealth and the many partner agencies interested in promoting mental wellbeing and preventing mental illness in the Victorian population.

The document describes a plausible future, but it does not seek to prescribe actions nor make specific recommendations to government, industry or community groups. Foresight studies are primarily concerned with identifying and communicating what the future may hold. The next step involves choices about desirable futures by relevant stakeholders, and the subsequent design and implementation of strategies designed to achieve those desired futures.

The report initially describes the current issues surrounding young people and their mental wellbeing in Victoria. This is followed by a description of the five megatrends and the emerging questions these raise, and concludes with detail about the strategic foresight process and a final summary of the challenges and opportunities facing young Victorians in the future.

2 The importance of mental wellbeing in young people

The future health and prosperity of Victorians are dependent on the mental wellbeing of young people. In simple terms, wellbeing is how a person feels about themselves and their life, i.e. their happiness and life satisfaction. Wellbeing is not simply the absence of disease or illness; it is a complex combination of physical, mental, emotional and social health factors. Every aspect of life influences an individual's state of wellbeing.

A wide range of interrelated factors including, but not limited to, relationships, employment, wealth, sleep, diet, exercise, recreation, religious beliefs, equity and a sense of belonging, can influence one's wellbeing (Better Health Channel 2015). Wellbeing has been described as being akin to a seesaw, in that stable wellbeing can be achieved when one has the resources (psychological, social and physical) needed to meet a particular challenge, but when there are more challenges than resources, wellbeing dips, and vice versa (Dodge et al. 2012). Resilience, namely social and emotional skills and the

ability to adapt to, cope with or bounce back from challenge, trauma, change and adversity, will become a necessary skill set for everyone, given how fast change is happening.

Mental wellbeing and resilience are particularly important for young people. Youth is a period of transition from the dependence of childhood to the independence of adulthood; a time when physical, intellectual, emotional and social changes take place (AIHW 2011). It is a critical period of social and emotional development and a time when people can face serious challenges that threaten lifelong mental wellbeing (UNESCO 2015a). While some argue youth is more fluid than a fixed age group, there is reasonable consensus that youth is limited to those aged between 12 and 25 years (Patel et al. 2007).

The challenges faced by young people include the pressures of academic and educational activities; embarking on new pursuits, such as employment and romantic relationships
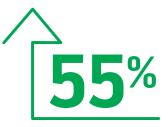
Headline facts and figures

Youth is a critical period of social and emotional development, and a time when people can face serious challenges that threaten lifelong mental wellbeing (UNESCO 2015a).

Compared to other OECD countries, Australia performs only moderately well in relation to child and youth health and wellbeing indicators (ARACY 2013).

15–17 year olds   **18–24 year olds**

Around half of 15–17 year olds and two-thirds of 18–24 year olds have experienced a personal stressor related to mental health and wellbeing (e.g. bullying, family conflict, body image) in the past year (ABS 2015b).

55%

The onset of mental illness peaks during youth and accounts for 55 per cent of the burden of disease in Australia for the 15–24-year age group (AIHW 2011).

(Patel et al. 2007); plus dealing with issues, such as bullying, family conflict, body image and alcohol and drug use (Beyond Blue 2015). The 2014 General Social Survey stated that 52 per cent of 15–17 year olds and 62 per cent of 18–24 year olds had experienced at least one personal stressor in the past 12 months (ABS 2011). The 2013 Australian Research Alliance for Children and Youth (ARACY) *Report card: the wellbeing of young Australians* reported that when compared with other OECD countries, Australia performs only moderately well in relation to child and youth health and wellbeing indicators, which include being loved and safe, having material basics, being healthy, learning and participation, and supportive systems and environment. The report card also noted that socioeconomic and cultural gaps exist in Australia, with a significant developmental gap in language and learning of Indigenous children compared to non-Indigenous children provided as an example (ARACY 2013).

Problems in mental wellbeing can occur when the burden of life stressors is high. If the problems causing diminished mental wellbeing continue or increase in severity over time, mental illness may develop (Hunter Institute for Mental Health 2014). Mental illnesses or disorders are often considered more serious and are a medically-recognised health problem (Department of Health 2007). In Australia, mental illness accounts for 55 per cent of the burden of disease in the 15–24-year age group. In 2007, one in four young Australians aged 16–24 years experienced at least one mental disorder. In 2013, there was a suicide rate of 10 deaths per 100,000 for 15–24 year olds (AIHW 2011).

It is important to note, however, that mental health and mental illness are not mutually exclusive. An individual with poor mental health will not necessarily have a diagnosed mental illness, and being diagnosed with a mental illness does not imply the individual has poor mental health (Hunter Institute for Mental Health 2014). The World Health Organization defines mental health as "a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO 2014).

Given that the onset of mental illness peaks during youth, with 75 per cent of mental illnesses affecting people throughout their lives first emerging by 25 years of age (McGorry et al. 2011), it is important that the community works together to improve the wellbeing of all children and young people. There is still so much about mental health and wellbeing that is unknown (AIHW 2011). However, it is clearly a very important issue for Australia, with major social and economic impacts. The purpose of this report is not to provide additional answers, but to shine a light on a range of trends emerging in Australia and around the world that might influence the wellbeing and mental health of young Victorians over the coming decades.

Note: OECD and G20 countries

The OECD is an organisation of 34 member countries founded in 1961 with the aim of stimulating economic development. The G20 is an international forum, with representation from the world's 20 largest national economies by gross domestic product.

3

Megatrends impacting the mental wellbeing of young Victorians over the next 20 years

A megatrend is a long-term change that affects societies, governments and economies permanently over a long period of time. Megatrends occur at the intersection of multiple smaller trends, including geopolitical, economic, environmental, social and technological change, and have implications for current day decision making.

In this study, five megatrends have been identified, providing a succinct narrative of the challenges and opportunities for young Victorians over the next 20 years.

These megatrends, described in detail in this section, include rising levels of education, connectivity and artificial intelligence; increasing globalisation; greater cultural diversity; overexposure online; and an improvement in prevention and treatment of mental health issues.

Identification of these trends followed an intensive strategic foresight process involving background research, in-depth interviews, and robust tests of relevance and evidence.

3.1 The rising bar

The *Rising bar* megatrend describes a world where entry into the labour market will involve clearing a higher educational and skills hurdle.

- Increased number of young job seekers in Victoria.
- Higher rates of youth unemployment in regional areas.
- The rise of casual, temporary, part-time and freelance work modes.
- Increasing gap between the rich and poor in Australia and across the world.
- Growth in the requirement for higher levels of education and skills.
- Increase in the proportion of young people with a tertiary education in Australia.
- Reduced number of graduates finding full-time employment four months after completion of studies.
- Increase in the number of tertiary graduates from emerging economies creating global competition for talent.

- Increasing costs of education.
- Reduced numbers entering tertiary education in science, technology, engineering and mathematics (STEM), despite increasing need in Australia for STEM graduates means increased recruitment of STEM graduates from overseas.
- Increasing requirement from employers for social and emotional skills to be as well developed as cognitive skills.
- Concern among young people that formal education is not providing the skills needed for future employment.
- Jobs are increasingly being replaced by artificial intelligence and process automation and reducing employment opportunities for low-skilled workers.
- Young people disadvantaged by socioeconomic status, regional location and poor education are at the highest risk in the changing jobs market.

Rising skills and educational levels in emerging economies, plus the rise of computing power, device connectivity and artificial intelligence, are creating a more competitive jobs market for young people.

Three main driving forces are combining to create this megatrend. First, skills and educational levels are rising rapidly in both advanced and emerging economies. The growth rates are steeper in emerging economies. For example, if current trends continue, India and China will hold 40 per cent of all young people with a tertiary qualification in both G20 and OECD countries by 2020 (OECD 2015a). Second, information technology is creating increased connectedness of global and regional labour markets. Skill sets in one location can increasingly compete with skill sets in another, as work can be done remotely. Third, advances in technology and increased task automation are placing many low-skilled, routine and structured manual or cognitive job tasks at risk. Young people therefore need a balanced set of cognitive, social and emotional skills to adapt to the economic, social and technological challenges of the 21st century (OECD 2015b).

Many of the jobs currently held by young people, which do not require qualifications, experience or special talents, may not exist in the future. These driving forces create a plausible future where entry into tertiary educational institutions and the labour market, which is a ticket to broader participation in society, is more competitive and demanding of higher standards.
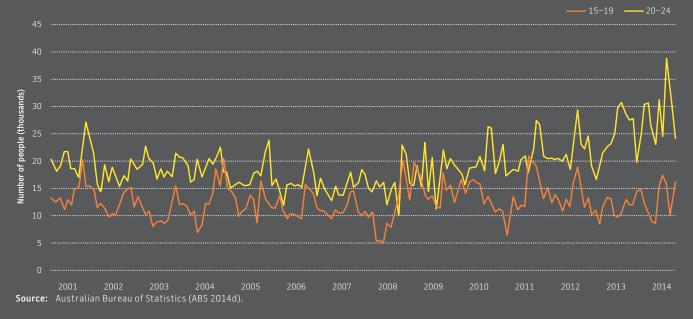
Will young people enjoy broad-based participation in the economy and society of tomorrow, or will only a shrinking group clear the bar? And what can be done to support the most vulnerable that may not ever succeed in clearing the bar?

Increased rate of young job seekers in Victoria.

The past six years have seen an upward trend in the number of young Victorians in the 20–24-year age bracket who are unemployed and looking for full-time work (Figure 2). In early 2009, around 10,000 persons fitted this description. By early 2015, nearly 39,000 individuals fitted this description. Today, an additional 29,000 young Victorians are looking for a full-time job; roughly a tripling over six years. Within the 15–19-year age bracket, the increasing number of job seekers is more moderate. While nearly 13,000 persons within this age cohort were looking for full-time work in early 2009, in early 2015, 15,700 individuals fitted this description. Overall, the Victorian youth unemployment rate in the 15–24-year age bracket has increased from 11.3 per cent in 2009 to 14.6 per cent in 2014. This is more than twice as high as the state's total unemployment rate of 6.6 per cent in 2014.

The upward trend in young job seekers may partially be associated with increased time spent in education and training to obtain a desirable job, but it also reveals a potentially more competitive job market for people leaving school and university over recent times. Indeed, the period of transition between education and employment is becoming prolonged, with young people more likely to start full-time work at a later age (AWPA 2014). The proportion of higher-education graduates finding full-time employment within a few months after their course has finished has also decreased over the past six years (Stanwick et al. 2014).

The period of transition between education and employment is becoming prolonged, with young people more likely to start full-time work at a later age.

Figure 2. Young people aged 15–24 years in Victoria who are unemployed and seeking full-time work.

Source: Australian Bureau of Statistics (ABS 2014d).

Youth unemployment in regional areas.

Rates of youth unemployment in Victoria are especially high in areas of concentrated socioeconomic disadvantage. This includes Melbourne's outer urban fringe, as well as parts of regional Victoria (VCOSS 2015). For instance, the youth unemployment rate of 15–24 year olds in the Hume area peaked at 18 per cent in 2014. In Whittlesea, youth unemployment grew from 8.9 per cent in 2009 to 16.4 per cent in 2015 (VCOSS 2015). These figures highlight that the job situation for young people in these areas is severe and appears to be worsening. High youth unemployment rates combine with low retention rates at school to reinforce the poor employment prospects for young people in these areas.

Australian and international research indicates a strong relationship between youth unemployment and low levels of mental health and wellbeing. Effects of long-term youth unemployment on mental health range from greater levels of anxiety and depression and higher suicide rates to alienation and increased anti-social behaviour (Morsy 2012, McKee-Ryan et al. 2005, Kieselbach 2000, Philip et al. 2015). Unemployment experienced early in a young person's career also has detrimental effects on employability and earning prospects decades later, often referred to as 'scarring effects' (ILO 2013). Furthermore, youth unemployment leads to broader social consequences, and contributes significantly to growing income inequality (Morsy 2012).

The rise of non-standard work.

Recent decades have seen a gradual decline of traditional full-time and permanent employment in favour of non-standard work, which is typically casual, part-time and temporary work. The proportion of non-standard workers in Australia is high at around 44 per cent, greatly exceeding the OECD average of one-third (OECD 2015c). Evidence shows that a significant part of this non-standard work is involuntary, rather than by choice. Young people aged 15–24 years are the group with the highest incidence of non-standard work, and the incidence of casual and part-time work among young people has increased considerably. In 2013, part-time employment was at its highest rate since 1986, employing 26.7 per cent of 15–19 year olds and 18.3 per cent of 20–24 year olds (Stanwick et al. 2014). Among young people with jobs, three times as many teenagers (aged 15–19 years) and more than twice as many young adults (aged 20–24 years) were employed in part-time jobs in 2011 compared to a generation ago (AWPA 2014).

Importantly, there is a tight association between casual work and low long-term earnings in Australia (OECD 2015d). Young people in casual and part-time roles are also less likely to have access to training and development opportunities, receive no paid leave entitlements, have precarious tenure and be more vulnerable to job losses. While these positions may provide a stepping stone to permanent employment, this is much more likely for those young people who are combining work and study (BSL 2014).

A widening wealth gap.

Income inequality in Australia has slowly increased since the mid-1990s (Fletcher et al. 2013, Greenville et al. 2013, OECD 2011) (Figure 3). Although real individual and household incomes have both risen, these economic gains have been unevenly distributed, and the rate of growth has been greater for those in the 'high income end' of the distribution than the 'low income end' (Greenville et al. 2013). The Gini coefficient is the most common summary measure of inequality. It equals zero when all people have the same level of income, and equals one when one person receives all the income. In general, the smaller the Gini coefficient, the more equal the distribution of income or wealth within a country. In 1982, Australia had a Gini coefficient of 0.27, which slowly increased to 0.33 in 2012 (ABS 2013b).

Alternative indicators of income inequality in Australia suggest a similar trend. The gap between the average incomes of the richest and the poorest 10 per cent of the population was close to 10:1 in 2012, up from a ratio of 8:1 in the mid-1990s (OECD 2015c). A regional comparison of income inequality highlights that Victoria (Gini coefficient of 0.33) has the third largest wealth gap in Australia, after Western Australia (0.38) and New South Wales (0.34), based on 2010 data (OECD 2015e).

Figure 3. The Gini coefficient for Australia, 1994–2013 – a measure of wealth distribution.

Source: Australian Bureau of Statistics (ABS 2013b).
Note 1: The Gini coefficient is a measure of the distribution of wealth within society. When the coefficient equals zero, wealth is as evenly distributed as possible. When the coefficient equals one, wealth is as unevenly distributed as possible.
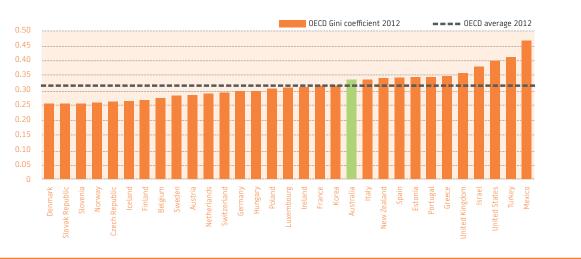**Note 2:** Based on disposable household income, improvements in methodology and income concepts may affect the consistency of the data.

International comparisons.

Other OECD countries are also moving towards greater income disparity. Indeed, in most countries the gap between the rich and poor is at its highest level for 30 years (OECD 2014), but how does Australia compare to its OECD neighbours? In 2004, Australia's Gini coefficient was 0.315, placing it at the same level as the OECD average. By contrast, in 2012, Australia's rising inequality levels meant that it had fallen below the OECD average.

The figures of rising income inequality in Australia may have a significant impact on economic growth, as they reduce the capacity of the poorer segments of the population to invest in their skills and education. A greater wealth gap may also impact the stability of the economy and its capacity to generate jobs (Stiglitz 2012). In addition, inequality has been linked to a greater prevalence of health and social problems, including mental illness, violence, drug use and obesity (Wilkinson et al. 2009).

Figure 4. The Gini coefficient for Australia compared to other OECD countries in 2012.

Growth in higher-skilled occupations.

Over the past few decades, higher level education and skills have been increasing in importance. Indeed, the Australian economy has seen a significant shift away from lower-skilled jobs towards a higher-skilled, knowledge and service-based economy. High-skilled occupations have accounted for 43.6 per cent of total employment growth over the past 10 years. Looking ahead, projections undertaken by the Department of Employment confirm the strong demand for highly-skilled professionals, with employment growth projected to be strongest, in percentage terms, in the highest skill level. Employment opportunities for skill level 1 workers (bachelor degree or higher) are projected to grow by 13.1 per cent in the coming five years. By contrast, employment growth is projected to be weaker for skill level 5 workers (certificate I or secondary education), which is forecast to grow by only 6 per cent (Department of Employment 2015).

Modelling by the Australian Workforce and Productivity Agency confirms the need for a more highly-skilled and qualified Australian workforce. It is projected that by 2025, more people will have post-school qualifications, and nearly 40 per cent of the workforce will be professionals and managers. Projected growth will be strongest in postgraduate university education. A minimum increase of 3 per cent annually in tertiary education-qualification completions to 2025 is required to meet the projected growing demand for higher skills (AWPA 2013). Not surprisingly, there is also a rising demand for higher-skilled professionals in Victoria. As the state's economy becomes more service-oriented and knowledge-based, the demand for higher-level cognitive, analytical and interpersonal skills and qualifications is growing.

This trend highlights the importance of educational attainment for potential first-time labour market entrants looking to improve their employment prospects (Department of Employment 2014). It also highlights the need for particular social and emotional skills to survive and thrive in a competitive environment with far greater mobility of work and higher expectations of education.

Tertiary-level education in Australia is growing.

The proportion of young people with a tertiary-level education has increased steadily over the past decade across Australia. In 1989, only 10 per cent of the Australian population had a university degree. In 2009, recognising the importance of higher education, the Australian Government set a national target that 40 per cent of people aged 25–34 should have a bachelor degree or above by 2025. In 2012, the proportion of this age cohort with a university education had already risen to 37 per cent, indicating that Australia is very likely to achieve the national target (ABS 2013d). Enrolments and attainment of postgraduate degrees have also grown each year since 2001. By 2012, nearly 1.3 million students participated in higher education (NCOA 2014).

Youth participation in full-time education has risen from 47.2 per cent in September 2008 to 51.8 per cent in February 2015, the equal highest rate on record (Department of Education 2015). This indicates that young people appear to increase their participation in education, or stay in study for longer, if they are unable to secure employment. Generally, people who hold higher-level qualifications have better labour market outcomes and higher earnings than those who have not studied after leaving school. In 2014, workers who held a bachelor degree or higher had the lowest unemployment rate (3.3 per cent) and the highest labour force participation rate (86.1 per cent) (Department of Education 2015).

Australians who do not hold post-school qualifications have a markedly higher unemployment rate and lower labour force participation rate (Department of Education 2015). In Victoria, a relatively higher proportion of workers (32 per cent) hold a bachelor degree or higher qualification than those in

other states (29 per cent in Australia overall) (Department of Education 2015). The rate of young Victorians aged 20–24 years enrolled in formal study has increased from 155,000 in 2004 to just under 200,000 in 2014 (ABS 2014c) (Figure 5).

Figure 5. Young people in Victoria aged 20–24 years who are enrolled in formal study.

Source: Australian Bureau of Statistics (ABS 2014c).
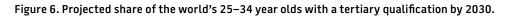
Tougher employment conditions for graduates

Despite growing numbers of young Australians seeking tertiary-level education, there are still challenges that need to be addressed. While tertiary-level qualifications ultimately improve employment prospects, employment outcomes for students immediately after graduation have weakened in recent years. For example, the proportion of bachelor-degree graduates who found full-time work within four months of completing their studies declined from 76.2 per cent in 2010 to 68.1 per cent in 2014 (Department of Education 2015). The steady rise in the number of tertiary students also raises issues about ensuring that academic standards are being maintained (King et al. 2013).
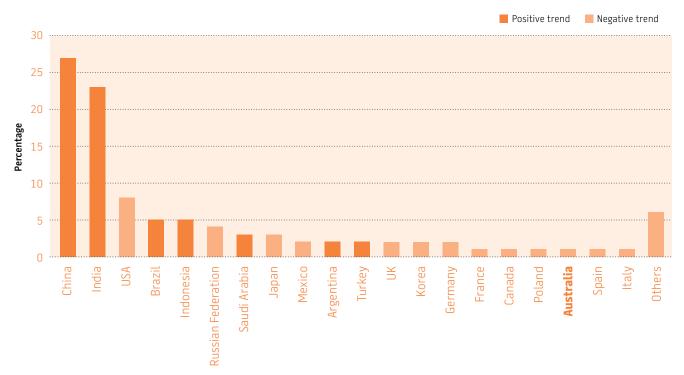
Global competition for talent.

Recent years have seen an unprecedented growth in the supply of university-educated workers in both developed and emerging countries, leading to a global competition for talent (Figure 6). The number of tertiary-educated young people aged 25–34 in OECD and G20 countries has increased by nearly 45 per cent over the past decade, and is expected to continue growing until 2030 (OECD 2015a).

Non-OECD/G20 countries have been the main drivers of this growth, and it is expected that 70 per cent of young people with tertiary education will come from this group of countries by 2030 (OECD 2015a). Fast-growing economies such as China and India are developing into successful producers of high-level skills, and the availability of so-called 'cheap brainpower' is competing successfully for hi-tech, high-value employment (AWPA 2013). In 2013, China surpassed the United States for having the largest share of tertiary graduates. If current trends continue, China and India will account for 50 per cent of all young people with a tertiary education in OECD and G20 countries by 2030 (OECD 2015a). At the same time, the digital revolution has aided the dissemination of skills and the movement of high-tech work across the globe (AWPA 2013).

These figures highlight that the Australian workforce is susceptible to increasing competition from its Asian neighbours.

Figure 6. Projected share of the world's 25–34 year olds with a tertiary qualification by 2030.

Source: Organisation for Economic Cooperation and Development (OECD 2012).

Increasing costs of education.

Australian universities have seen a strong growth in tuition costs over time. Total funding from the Commonwealth Government to universities in 2012 was nearly $15 billion, including payments under the Higher Education Loan Programme student loan scheme. The Commonwealth currently pays on average 60 per cent of domestic bachelor-degree tuition costs, while students cover the remaining 40 per cent. Higher-education expenses are projected to grow around 5.8 per cent annually over the next decade (NCOA 2014). In 2014, the Australian Government announced a range of reforms to improve the higher-education system. Until 2018, $1.1 billion will be withdrawn from higher education by decreasing the Commonwealth's contribution to undergraduate student places.

STEM disciplines in demand.

Skills in STEM are relevant to a very wide range of industries, and are seen to play a critical role in Australia's ability to innovate and remain competitive globally. An increasing number of future jobs will involve STEM skills. Indeed, research indicates that 75 per cent of the fastest-growing occupations will require STEM skills and training (Becker et al. 2011).

An Australian employer survey confirmed that STEM graduates are also in demand, with 82 per cent of respondents agreeing that people with STEM qualifications are valuable to the workplace (Deloitte Access Economics 2014). Currently, around 15 per cent of the Australian working age population have a STEM qualification, and those numbers are rising (Prinsley et al. 2015). However, Australia is lagging on a number of key STEM indicators in comparison to other OECD countries.

While many Australian businesses are looking to increase their number of STEM-qualified staff, there is a shortage of STEM graduates in Australia (Deloitte Access Economics 2014). Enrolments and completions in STEM university courses have remained flat over the past decade, and the number of Year 12 students studying STEM subjects is declining (Pricewaterhouse Coopers 2015). Furthermore, there is severe gender imbalance in Australian tertiary enrolments in STEM, and a further issue in relation to women in STEM employment (Marginson et al. 2013, The Australian Industry Group 2015). Women are an under-utilised resource in the workforce, and could provide a larger talent pool from which to draw STEM employees (The Australian Industry Group 2015) helping to reduce the growing domestic STEM skills deficit, which may require Australian businesses to recruit STEM workers from overseas to meet their workforce needs.

Skills beget skills.

It is increasingly recognised that young people need a balanced set of cognitive, social and emotional skills in order to better face the challenges of the 21st century (OECD 2015b, Miyamoto et al. 2015). STEM skills alone are not sufficient to manage the complexities of modern lives. Social and emotional skills, also known as soft skills or character skills, are as important as cognitive skills in shaping positive outcomes. They manifest themselves in countless everyday life situations, and include skills such as perseverance, self-esteem and sociability. Indeed, extensive developmental research indicates that effective mastery of social and emotional skills supports the achievement of positive life outcomes, including educational attainment, employment, wellbeing and health (Clarke et al. 2015).

Young people with a strong social and emotional foundation can better thrive in a highly-dynamic and skill-driven market by persevering, adapting to change, working hard and maintaining strong interpersonal relationships (OECD 2015b). In addition, social and emotional skills do not operate in isolation. Instead, they are tightly connected with cognitive skills. High levels of social and emotional skills in an individual can aid cognitive skill development. Research from the United States highlights that children participating in social and emotional learning programs demonstrated improvements in multiple areas, including significant improvements in academic performance (Durlak et al. 2011).

Furthermore, many of the 21st century skills, such as creativity and critical thinking, have both cognitive and socioemotional elements. Social and emotional skills can even help individuals benefit more from attending tertiary education (OECD 2015b). Therefore, early intervention in social and emotional skills is particularly important, since skills interact and develop progressively building on past investment in these skills.

44% 44 per cent of Australian jobs are at high risk of being affected by computerisation and technology over the next 20 years.

Education not necessarily translating into skills.

Young people are concerned that they are not learning the skills required for the job market of the future (Pope et al. 2015). It is difficult to predict which exact skills will be needed in 2030, but the demand for advanced skills is certainly on the rise.

Over the past few decades, the demand for skills involving routine manual work (typical factory worker) has decreased significantly. Instead, skills requiring advanced, high-quality education, such as expert thinking and complex communications, are expected to keep increasing in the future (OECD 2015a). A survey of Australian employers found that interpersonal skills (e.g. the ability to listen, speak and present information) were the most important candidate attributes that they looked for during recruitment (Deloitte Access Economics 2014).

Importantly, formal education does not necessarily translate into the type of skills required in many workplaces, which include problem solving as well as critical analysis skills. Furthermore, skill levels may differ from what the data on formal qualifications suggest. For example, the OECD Survey of Adult Skills found that, on average, Japanese and Dutch 25–34 year olds who have only completed high school easily outperform Italian and Spanish university graduates of the same age in literacy and numeracy proficiency (OECD 2013b). Survey results like these raise questions about the relevance and quality of formal education in some countries, at least when these are compared internationally.

Artificial intelligence, process automation and job replacement.

There is mounting evidence indicating dramatic changes to the economy and employment driven by technological progress, robotics and artificial intelligence. Historically, computerisation has been confined to routine tasks involving explicit rule-based activities. More recently, advanced robots have been gaining enhanced senses and dexterity, allowing them to perform a broader scope of manual tasks (Frey et al. 2013).

While experts largely agree about the evolution of technology itself, they are deeply divided on how technological advances will impact future employment (Smith et al. 2014). Modelling undertaken by Oxford University found that about 47 per cent of total employment in the United States is at high risk of computerisation over the next couple of decades (Frey et al. 2013). The impacts of technological innovations and computerisation on labour market outcomes are equally significant in Australia. According to a recent analysis undertaken by PricewaterhouseCoopers, 44 per cent of current Australian jobs are at high risk of being affected by computerisation and technology over the next 20 years (Pricewaterhouse Coopers 2015).

Computerisation is predicted to primarily affect low-skill and low-wage occupations in areas such as data entry, checkout operations, office administration and machinery operations. Jobs requiring high levels of social intelligence, technical ability and creative intelligence, on the other hand, are most likely to endure over the next couple of decades (Pricewaterhouse Coopers 2015). Young people are likely to be disproportionally affected by automation because they typically gain entry into the labour market in fields such as retail, administration or labour. These fields are highly exposed to the impacts of technological progress (Foundation for Young Australians 2015).

What about the most vulnerable?

Some disadvantaged groups of youth in Victoria might find it especially hard to clear the bar and gain entry into the job market. Recent years have seen a growing number of youth who are disengaging altogether and opting out of the labour market. They can be described as the 'invisible unemployed', as they are not in work, not studying, not looking for a job and often not receiving income support or welfare benefits.

A range of factors have been identified that are associated with an increased probability of young people not being engaged in education, training or employment. The main risk factors for disengagement include deprivation, an unstable home environment, behavioural issues, learning difficulties and disabilities, low educational attainment and low aspirations as a result of joblessness within families and communities (AIHW 2011, Sweet 2012).
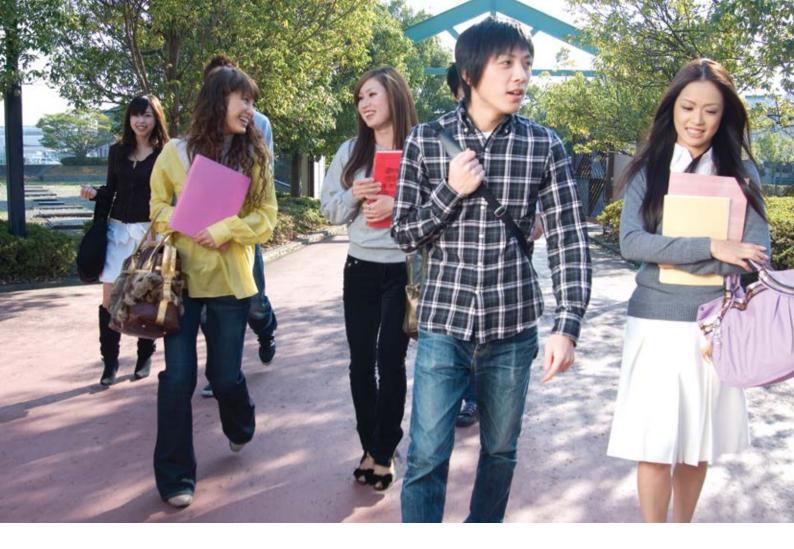
Many of these factors, when combined, have a compounding effect (McLachlan et al. 2013). Young people living in rural and remote areas, as well as Indigenous young people, are also highly vulnerable, as they typically have less access to higher education and employment opportunities. There will be longer-term social and economic consequences if these hard-to-reach young people cannot be re-engaged (BSL 2014). Prolonged economic inactivity has shown to have profound effects on mental and physical health, and increases the risk of social exclusion. Youth are also faced with extended reliance on income-support payments and other social services.

In conclusion: clearing the bar

Despite the seemingly enormous challenges before young people of the future seeking to enter the labour market and secure a good job, there is much reason for optimism. Technology change is not just associated with job loss but also job creation. Digital technologies will create many new exciting and well-remunerated career pathways for young people. The rise of a new middle-income bracket across Asia and the transition of emerging economies from industrialisation into advanced service sector economies will also create opportunity. It is also worth noting that it is not just one bar. For example, skills in social interaction, emotional intelligence and manual dexterity for non-routine tasks may allow young people to 'clear the bar' for many new jobs of the future.

Emerging questions

1. What does Victoria need to do to improve the capabilities of young people in STEM to ensure they are employable and competitive in global markets?
2. Does Victoria invest sufficiently in the delivery of high quality interventions to enhance the social and emotional skills of children and adolescents to ensure that they develop into healthy, engaged, responsible, prosperous and happy citizens?
3. What actions is Victoria taking to improve educational and employment outcomes for its most disadvantaged young people?
4. How can mental health risks among those who are unlikely to clear the bar be best addressed?
5. How can we best protect the mental health of young people adversely affected by a society with significant, and potentially growing, inequities in wealth?
6. How fit-for-purpose is the educational system in Victoria to keep pace with the rising skills, capabilities and knowledge of the global workforce in general? What is the right balance for education and training between generalist and specialist skills and knowledge for the future workforce?

3.2 Global reach

The *Global reach* megatrend is about dissolving the boundaries that previously existed around individuals, organisations and countries.

- Culture, people and goods are flowing at greater speed and volume across national borders.
- Exportation and importation of goods is increasing.
- Globally, the number of students enrolled outside their country of origin has doubled.
- There is increasing participation in online learning courses globally.
- It is now much faster for businesses to start up and develop, leading to the era of the entrepreneur.
- The internet has facilitated the rise in small, collaborative organisational structures.

- Digital technology is creating the opportunity for new businesses to start up with low costs and become agile and responsive to customer needs.
- Alternative sources of finance are disrupting the traditional finance industry.
- Freelancing will increase with future workers selling skills and knowledge to multiple employers.
- Normal limits on how long, when and how fast people work are breaking down leading to increasing levels of work-related stress.

Digital technology and globalisation are breaking down many of the boundaries that previously existed around organisations, societies, governance structures and individuals.

Operating in the workforce, the business community and society of tomorrow will require a deeper ability to understand and plug into networks with global reach.

The peer-to-peer (P2P) or sharing economy is on the rise. Many traditional business models are being disrupted, and may in time be replaced by new models which utilise capital and labour in different ways. The boundary around the individual is also becoming more porous. The online world

means less and less of the information about ourselves can be guaranteed private.

The Foundation for Young Australians recently identified globalisation, automation and collaboration as the three key forces that will shape the future workforce (Foundation for Young Australians 2015). The global reach megatrend suggests that young people of the future will increasingly find themselves adrift in a vast ocean of risk and opportunity.

Those who are able to form the connections and 'swim' in this environment could have fantastic opportunities for careers and lifestyles, but not all young people may flourish in a world without the shelter provided by solid structures and boundaries.

A globally mobile population.

Culture, talent, ideas and goods are all flowing at greater speed and volume across national borders. Border crossings into and out of Australia are increasing. In 2003–2004, there were 18.6 million border crossings, representing 0.9 crossings per person in the Australian population. In 2013–2014, there were 32.6 million crossings of Australia's international borders, or 1.4 crossings per person in the Australian population (ABS 2014a).

Departures from Australia exceed arrivals and have done so since 2007–2008 when departures overtook arrivals for the first time in 22 years (ABS 2014a). A majority of the movement in 2013–2014 was short term (less than 12 months) (ABS 2014a), so while long-term settlers are also counted in these figures, the trend of interest is the increase in the amount and frequency of international travel (Figure 7, Figure 8).

Increasing international trade.

In line with increasing human movement, the exportation and importation of goods around the world grew by 2 per cent in value terms in 2013, and exports of services increased by 6 per cent (UNCTAD 2015).

Australia is in the top five countries for hosting foreign tertiary-education students.

Australia has also experienced long-term increases in trade. In 1964, trade constituted 28.7 per cent of Australia's gross domestic product (GDP), with two-way goods and services trade at $6.1 billion. Trade now constitutes 42.3 per cent of GDP, and two-way trade has increased to $669.2 billion (Anderson 2014). Supply chains of the future will be increasingly blind to national and jurisdictional boundaries.
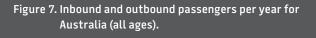
Global student mobility.

Globally, the number of foreign tertiary-education students enrolled outside of their country of origin more than doubled between 2000 and 2012 (Figure 9). International students have been the largest contributor to Australia's net overseas migration in recent years (ABS 2013c), increasing from 2.1 million in 2000 to 4.5 million in 2012, representing an annual average growth of 7 per cent per year (Department of Education 2014) and contributing $15.7 billion to the Australian economy in 2013–2014 (NCOA 2014).

Australia is in the top five countries in the world for hosting foreign tertiary-education students. Asian student enrolments accounted for 81.5 per cent of all international tertiary students enrolled in Australia in 2012. An Australian education is particularly popular with students from China, India and the Republic of Korea. However, Australia is in the top-five most expensive tertiary-education destinations in the world (HSBC 2013), and is facing increasing competition from other countries seeking a larger share of the international student market (Austrade 2014).

The evolution of massive open online courses (MOOCs).

Competition to the traditional education system is also coming from online education platforms (Austrade 2014). Online education and training resources allow just about anyone to learn just about any skill at a much lower cost than historic models. MOOCs are aimed at unlimited participation and open access via the internet. In 2012, several well-financed providers associated with top universities emerged, including Coursera, Udacity and edX.

Figure 7. Inbound and outbound passengers per year for Australia (all ages).

Source: Australian Bureau of Statistics (ABS 2014a).
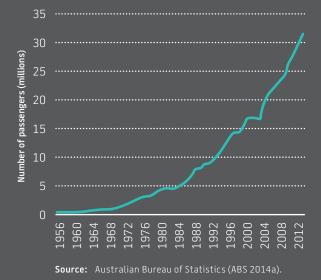
Figure 8. Overseas departures from Australia: young people 10–14 years, 15–19 years and 20–24 years.

Source: Australian Bureau of Statistics (ABS 2014a).

Since that time, a range of other global MOOC providers has emerged, and now 22 of the top 25 universities in the United States in the US News World Report rankings are now offering courses online for free (Shah 2014). MOOCs provide an opportunity in terms of accessibility to education, and also for Australian students to engage with others throughout the world (Chen et al 2013).

This trend also challenges existing education institutions to make learning more personalised. While studies have highlighted limitations, such as low participation (50 per cent) and low completion rates (4 per cent) for courses (Perna et al. 2013), greater registration rates mean MOOCs can still result in more students completing a course in one year than traditional methods might achieve over many years. For example, if 100,000 people sign up for a course (which is not unprecedented), a 4 per cent completion rate means 4000 people finish the course (Fischer 2014). Even those most critical of MOOCs do not expect them to disappear. Rather, it is expected that the current forms of MOOCs will evolve to deliver many different models and approaches (Fischer 2014).

Digital native companies and the era of the entrepreneur.

Information technology is not only impacting the way we access, share and use information, but also the way and the speed at which we do business. Technology companies are growing at exponential rates, driving change in both consumer and business behaviour through enabling technologies and new business models.
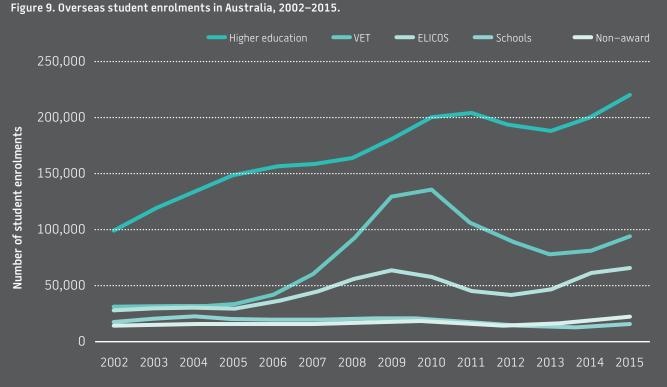
The speed at which a company reaches a given market capitalisation (known as time-to-market capitalisation or TTMC) is a new metric that measures the number of years since the company was founded for a company to reach certain market capitalisation milestones, such as $500 million, $1 billion or $5 billion. TTMC for technology companies is now almost three times faster since 2000, reflecting the new environment of global social networks and 'always-on' communication (Al Ramadan et al. 2015). TTMC between 2009 and 2013 accelerated 2.8 times for companies reaching the $500-million milestone, three times for companies reaching the $1-billion milestone and 3.1 times for companies reaching the $3-billion milestone (Al Ramadan et al. 2015).

The move from vertical to horizontal organisational structures.

The internet has also facilitated growth in small horizontal firms. Organisations with a horizontal or flat management structure have superior potential for collaboration and reduced redundancy, but can struggle to grow beyond 100 to 200 employees. With rapid advances in digital technologies, the agility of smaller horizontal firms lends them advantage in the market place. However, a horizontal structure can be a hindrance to growth beyond a certain point (Watson 2014, Vossoughi 2012).

$22 BILLION

The value of loans made through P2P lending platforms in Australia will surge to $22 billion by 2020.

Figure 9. Overseas student enrolments in Australia, 2002–2015.

Source: Austrade (Austrade 2014).
Definitions: ELICOS, English language intensive courses for overseas students; VET, vocational education and training.

Dissolving barriers for new business entrants.

The online world is associated with the rise of the start-up culture and the era of entrepreneurs. This is creating opportunities for young people. The lean start-up model is a business creation strategy that foregoes the time and money spent on early-stage product research and development, instead experimenting with real customers online. This enables rapid prototyping and product revision via the low-cost marketplace of the internet (Blank 2013, Agan 2014).

The net result is lower barriers of entry for start-up companies, coupled with access to global markets. Digital technologies have enabled a future in which a larger number of small, innovative firms are able to enter the market very cost-effectively, i.e. the world's largest taxi company doesn't own a taxi (Uber), and the world's largest holiday accommodation chain doesn't own any accommodation (Airbnb).

Alternative sources of finance.

People born after the early 1980s favour fast, convenient and cheaper credit, and are more brand agnostic (i.e. not loyal to specific brands) (Morgan Stanley 2015b). Coupled with greater access to online and mobile-banking technology, alternative lending sources are set to disrupt traditional bank lending, and Australia has been identified as a market to watch the trend continue. P2P lenders provide technology platforms that match borrowers with investors, offering both sides more attractive interest rates than banks.

P2P lending is growing fast in many countries. In Britain, loan volumes have just passed the £1 billion mark ($1.7 billion), and while comparatively small against the country's £1.2 trillion in retail deposits, the volume of P2P loans has been doubling every six months. In the United States, $2.4 billion in loans were issued in 2013, up from $871 million in 2012 (The Economist 2014). Investment bank Morgan Stanley predicts that by 2020, the value of loans made through P2P lending platforms in Australia will surge to $22 billion (Morgan Stanley 2015a). So far, focus has been on unsecured consumer credit, with approximately 80 per cent of loans used to consolidate debt and small business loans, but it would not be surprising to see P2P lenders target the $1.2 trillion student loan market, auto loans and perhaps even mortgages (Morgan Stanley 2015b).

The peer-to-peer (P2P) employment market.

The future may see a new type of employee; an employee with no fixed abode and who sells their skills and knowledge to multiple employers. Online P2P employment marketplaces, or more simply, websites that match buyers and sellers of services provided via the internet, are allowing people to sign up remotely for freelance assignments and get paid through a merchant account. A recent study conducted by Elance-oDesk found that 3.7 million Australians freelance either on a full-time, part-time or casual basis (Berland 2014). The study also found that approximately 19 per cent juggle freelancing on top of a full-time traditional job; a process known as 'moonlighting'.

The future of work has potential to be more flexible, but less secure. The report found that the top reasons for freelancing include earning extra money, having a flexible work schedule and having the freedom to choose which projects to work on.

Finding work and income instability were noted as the biggest barriers (Berland 2014). However, the trend towards freelance work is set for continued growth. A national snapshot of employer hiring intentions for 2015 has found a big shift towards hiring freelancers and white-collar project staff as opposed to full-time equivalent staff (Hendy 2015). There are currently an estimated 53 million Americans freelancing, approximately 34 per cent of the total workforce. This number is expected to balloon to 50 per cent by 2020 (Wald 2014).

'Boundarylessness': modern work and the qualities of time.

'Boundarylessness' is a term being used to describe changes that are taking place in modern work that have implications for the self-management of time and for the qualities of time (Kamp et al. 2011). Boundaryless jobs are loosening the limits on how long, when and how fast people work (Strazdins et al. 2015). A study conducted across two investment banks during the early adoption of the Blackberry, and then five years later, showed three classes of users: hypo, dynamic and hyper-connected, with the hyper-connected showing increased work stress levels over time (MacCormick et al. 2012).

Pushes to increase productivity and speed up production and service delivery are accompanied by further intensification of time. A study undertaken by the Australian National University (ANU) has found rushing (i.e. the intensity of an individual's time) is associated with poorer mental health, reflecting the need to measure more than one dimension of time; intensified time cannot be revealed by a count of hours (Strazdins et al. 2015).

In conclusion: networks, agility and connectedness

The changes in the workforce, business landscape and society generally are all pointing towards a world in which networks, agility and connectedness become vital for young people. In tomorrow's fluid environment, there is a less clear structure via which they can progress their careers and lives. Rather, young people will need to build their own careers and lifestyles.

Emerging questions

1. How can we better engender the skills and aptitudes necessary for entrepreneurial capability among young people who may increasingly need to create their own jobs?

2. How can we best develop the P2P labour market to maximise the benefits and minimise the risks for all young Victorians?

3. To what extent is tomorrow's agile, networked, connected and flexible economy associated with the loss of stability and grounding for young people and subsequent mental health issues? Who will be most at risk, and what can be done to mitigate this?

3.3 Life's richer tapestry

Life's richer tapestry is about a much more diverse world of cultures, peoples and lifestyles.

- The number of migrants to Australia has doubled and migrants are increasingly coming from Asia, Africa and the Americas creating a more diverse multicultural society.
- Changes in migration trends will have implications for provision of culturally-sensitive mental health services.
- The ageing population means that people are staying in the workforce longer.
- The Indigenous population is facing increased growth in young age groups with much higher levels of disadvantage than non-Indigenous youth.
- Race-based discrimination is one of the major drivers of mental illness in Australia.
- There is an increase in the number of non-traditional family structures.
- There is a rise in the number of same-sex couples.

- Over-protective parenting is leading to a rise in the prevalence of anxiety disorders among children and adolescents.
- Increasing numbers of families with children where both parents are employed is making family life less enjoyable and more pressured.
- Increased participation of females in the labour market combined with time spent caring and nurturing at home can erode individuals' capacities to cope with exacerbating mental health issues.
- Climate change and the associated national disasters are leading to distress and mental health issues.
- Globalisation is leading to new opportunities but is offset by loss of identity, exclusion and conflict.

In the past half-century, Australia has become an increasingly multicultural society. In addition to cultural diversification, Victoria, along with the whole of Australia, will experience demographic change with an ageing population spending more time in the workforce, and an increase in non-traditional family structures. The future will also see the continued explosion of consumer, societal and lifestyle choices for young people.

This megatrend is about a more diverse culture, society and consumer market, where identifying what's mainstream is increasingly difficult. This also identifies the need to move away from one-size-fits-all models of mental health and wellbeing to a much more nuanced model that allows the development and delivery of personalised services within appropriate policies and programs.

Shifting immigration patterns.

The number of migrants arriving during the most recent decade (2001–2010) more than doubled the previous decade, indicating that previously-stable levels of immigration may continue to fluctuate or reach even higher levels well into the future. In addition to recent increasing numbers of migrants, there has been a change in the mix of the countries of birth. In 2001, the country of birth for residents was overwhelmingly dominated by Australia, the United Kingdom, New Zealand, the United States and European countries.

However, today there is a more even spread across many nationalities from Asia and other countries. The overseas-born population from all regions in Asia, Africa and the Americas is steadily increasing, with high growth rates from the south-east, north-east, southern and central Asian regions

(Department of Education 2014). Forecasts suggest there will be a much greater spread across these nationalities by midway through the current century (Australian Government 2012).

Mental health services for new migrants.

Changes in migration trends will have implications for the provision of culturally-sensitive and accessible mental health services (AIHW 2011). The World Psychiatry Association has identified mental health and mental health care in migrants as a priority issue, and recommends clinicians, policymakers and service providers be aware of specific needs that migrants have, how these needs are met and that mental health needs are identified in a culturally-appropriate way and services delivered accordingly (Dinesh Bhugra et al. 2011). In addition, resettlement support services are important to ensure successful future integration into the community.

The challenges of resettlement are likely greatest for those who have arrived in Australia under humanitarian circumstances (AIHW 2011). As at June 2009, approximately 56,000 young people aged 12–24 years in Australia (or 1.4 per cent of all young people in Australia) had arrived under humanitarian circumstances since 1993–1994.

Twice as many migrants arrived during 2001–2010 than in the previous decade.

x2

Ageing population and the workforce.

Historically, Australia has been a relatively youthful country, but like most developed countries, Australia's population is ageing as a result of sustained low fertility and increasing life expectancy. In 2012, there were five people of working age for every person aged over 65 years; by 2030, this will have dropped to three (Australian Government 2012).

The ageing population is projected to have implications for Australia, including health, size of the working-age population, housing and demand for skilled labour (ABS 2014a). The ageing of the population also means that the demand for services will change, given the different needs of the expanding elderly population and those of younger generations (Hayes et al. 2011). It will, for example, reduce the capacity to fund infrastructure and essential services, including health (Australian Government 2012). Increased pressure related to caring arrangements is also another issue related to wellbeing. It is probable that people will stay in the workforce longer, but increasing the participation of younger people will be important to overcome the implications of an ageing population, and is yet another example for why improving youth mental health is important (Patrick et al. 2007).

Young Indigenous population.

While the non-Indigenous population of Australia is rapidly ageing, Indigenous people are facing increased growth in young age groups (Australian Human Rights Commission 2006). The average age in the Indigenous population is considerably younger than that in the non-Indigenous population. In Victoria, the median age for the Aboriginal and Torres Strait Islander population is 22 years, compared to the national median age of 37 years (ABS 2012b). The most recent Census reported a 26 per cent growth in the resident population of Aboriginal and Torres Strait Islander people in Victoria, up from 30,143 in 2006 to 37,991 in 2011, representing 6.9 per cent of the total Aboriginal and Torres Strait Islander population (ABS 2012b).

Sadly, Indigenous young people are far more likely to be disadvantaged across a broad range of health, community and socioeconomic indicators compared with non-Indigenous young people, leaving considerable scope for improved health and wellbeing actions and outcomes (AIHW 2011).

Changing prejudice and race-based discrimination attitudes.

Discrimination and its resulting disadvantages are one of the important drivers of mental illness (VicHealth 2014). The Scanlon Foundation's 2014 Mapping Social Cohesion report shows that while 85 per cent of the people surveyed agreed that multiculturalism is good for Australia, experiences of racism are close to the highest levels recorded since the surveys began in 2007 (Markus 2014).

In 2014, experience of discrimination was reported by 16 per cent of those born in Australia, 11 per cent of overseas-born of English-speaking background and 26 per cent of non-

English-speaking background. Faith-based discrimination was also evident. Negative attitudes towards Muslims were almost five times higher than attitudes to other faiths (close to 25 per cent).

Other indicators of social cohesion, and also wellbeing, are also showing signs of decline. There have been shifts in the proportion of the population who indicate they have a strong sense of belonging (77 per cent in 2007, 66 per cent in 2014), a decline in the proportion of those who can report as being happy over the past year (34 per cent in 2007, 27 per cent in 2014) and a heightened sense of pessimism about the future (11 per cent in 2007, 19 per cent in 2014). At the same time, since 2009 there has been a decline in the level of trust and a low point in confidence in the Federal Government (Markus 2014).

Changed household and family structures, and family life.

Social changes over the past two decades have led to a more diverse range of family structures and compositions (AIHW 2011). There are still plenty of 'traditional' family structures, but living alongside these are same-sex families, blended families, step-families, de facto couples and couples choosing not to have children. In fact, the proportion of couple families with children has declined from 45 per cent in 1986 to 37 per cent in 2006.

By 2026, couple families with dependent children are predicted to continue their decline as a proportion of all families (AIHW 2011). From 1986 to 2006, one-parent families increased from 8 per cent to 11 per cent of all families, although the proportion of one-parent-families is projected to remain stable until 2026 (AIHW 2011).

Rise in number of same-sex couples.

The number of same-sex couples in Australia has risen significantly in recent years, with a 32 per cent increase in the five years since 2006, and in the 15 years between 1996 and 2011, the number of same-sex couples more than tripled (ABS 2013a). Additionally, in 2011, there were 6300 children living in same-sex couple families, up from 3400 in 2001, although still a small proportion, making make up 0.1 per cent of all children in couple families.
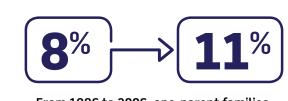
The increasing number of people identified as being in a same-sex relationship may reflect growing social acceptance. There may also be increased awareness that data about same-sex couples is made available from the Census, giving more reason for same-sex couples to be open about the nature of their relationship and willing to supply this information (ABS 2013a).

A recent study has suggested children raised by same-sex partners scored an average of 6 per cent higher than the general population on measures of general health and family cohesion, but experiences of stigma have an impact on their wellbeing, highlighting the importance of addressing such negativity (Crouch et al. 2015).

An evolution in parenting styles.

Families play a crucial role in the lives of most young people in Australia. While changes to family structure can have significant effects on young people, they do not always have negative effects, and any effect is more dependent on the quality of the parent–child relationship, parenting style and supervision that affects young people's ability to adapt to change (AIHW 2011). Children need to learn independence and autonomy as they grow and develop, and parents have a critical role in supporting children to do this (La Trobe University 2014).

Technological change, including the advent of the mobile phone and social media, has contributed directly to changes in parenting (Hayes et al. 2011). Australian psychologists have noted some parents attempt to continually monitor their children, over-schedule them and protect them from problems both great and small, and in doing this they restrict opportunities for a child to develop skills required for adult autonomy (Hayes et al. 2011). Overprotection may be contributing to the rising prevalence of anxiety disorders among children and adolescents (Hayes et al. 2011).

8% → 11%

From 1986 to 2006, one-parent families increased from 8 per cent to 11 per cent of all families.

Work–family balance.

There is an increasing trend for families with children where both parents are employed. In 2009–2010, both parents were employed in 63 per cent of the 2.3 million couple families with dependent children (ABS 2012a). Analyses of Longitudinal Study of Australian Children data (Hayes et al. 2011) show that many employed mothers and fathers with pre-school children reluctantly miss out on family activities because of their work commitments.

In addition, around one-quarter indicated that their work made family life less enjoyable and more pressured (Hayes et al. 2011). Although time spent looking after children is usually a responsibility shared among couples, women do still tend to take on a larger share of the caring and nurturing role, whether that be with their children, the household, and increasingly, their elderly parents.

Female participation in the labour market.

The extent to which women participate in the labour market has reached an unprecedented level, as has the time spent in caring and nurturing roles (whether that be with their children, the household, and increasingly, their elderly parents), resulting in many working mothers reporting that they often or always felt rushed or pressed for time (Baxter et al. 2007). In 2006, women employed full time spent 6 hours and 39 minutes per day taking care of children, compared with men employed full time who spent 3 hours and 43 minutes.

The time men spend taking care of children has remained unchanged since 1997, whereas for women it has increased by 49 minutes (ABS 2012a). A study undertaken by the ANU has found rushing is associated with poorer mental health and work–family conflicts (Strazdins et al 2015). The spill-over from work to family and from family to work can seriously erode individuals' capacities to cope, and results in relationship difficulties and impaired work performance that can either create or exacerbate mental health problems (Hayes et al. 2011).

Weathering the future.

Predicted changes to our climate resulting from global warming are generally well accepted. Impacts on human health via vector, thermal, water and food-related diseases are well documented, but more broadly, wellbeing will be affected by expected economic, social and cultural impacts of climate change (Skeat et al. 2011).

By increasing the frequency, severity and duration of adverse weather events, climate change will likely affect mental health in at least three ways. First, by inflicting more and worse natural disasters, which typically cause serious anxiety-related responses, and later, chronic and severe mental health problems. Second, it will increase the risk of injury and physical health problems, which are causally and reciprocally related to mental health. Finally, it will threaten the natural and social environment on which people depend for their livelihoods and wellbeing causing 'solastalgia', a concept developed to give greater meaning and clarity to environmentally-induced distress (Berry et al. 2010, Albrecht et al. 2007). Adaptation to climate change should therefore consider mental health as a priority.

An alternative perspective.

There is debate about whether globalisation increases or reduces cultural diversity or homogenisation (WHO 2015). Some argue that this unprecedented acceleration and intensification in the global flows of capital, labour and information is homogenising local culture, suggesting that while globalisation promotes integration of societies and has provided millions of people with new opportunities, it also associated with a loss of uniqueness of local culture, which can lead to loss of identity, exclusion and conflict (UNESCO 2015b). Others argue that greater cultural exchange is likely to increase tolerance and understanding, while more access to information can create lifestyle and social change (WHO 2015, Pickering 2001).

In Australia, there is evidence to show cultural diversity increases global connectedness, fosters innovation and opens up new trade and investment opportunities (Community Relations Commission 2011).

In conclusion: harnessing diversity via socially-inclusive models

The shift towards a more diverse landscape for youth mental health and wellbeing in Victoria and Australia is highly likely. This will create challenges for providers of preventative and treatment solutions to mental wellbeing issues. However, diversity also creates opportunity. There is more scope for a young person to find their unique fit within a social group and community. Diversity also generates a richer set of ideas and, therefore, solutions to the complex problems facing young people with mental health issues.

Emerging questions

1. What are the policy levers available to governments and others which ensure a socially-cohesive, yet diverse, community of cultures that protects against extremism?

2. How do government, society and community best communicate with young people given the rise of multiple communication channels and new and varied trusted sources of information?

3. What are the mental health and wellbeing benefits and risks of a more diverse society?

4. How can the mental health and wellbeing system, from prevention to treatment, achieve personalised services to meet an individual's unique situation in a more diverse world?

5. Is the mental health and wellbeing system in Victoria prepared to respond to new and emerging challenges, such as the impact of climate change?

3.4 Overexposure online

The *Overexposure online* megatrend is about the new risks and opportunities arising from the rising diversity, quantity and accessibility of online content.

- Social media provides multiple opportunities to young people but these are offset by multiple threats and challenges.
- Social media is providing a much wider network of other young people to compare themselves to, which can cause dissatisfaction and mental health issues.
- Risk-seeking behaviour, such as taking a "selfie" in dangerous places is leading to increasing deaths globally.
- Online gaming is increasing and has been shown to cause an increase in violence and a reduction in academic achievement.
- Online bullying is increasing, especially in the 8–17 year old age group.

- Personalised marketing and ease of purchase is seeing an increasing number of Australians living beyond their means.
- A rise in young people accessing pornography and sending explicit images or messages by text could have implications for the future mental health and relationship skills of young people.
- Social media sites are increasingly becoming the source of news for young people.
- Digital natives accessing news via social media has seen a decline in the use of traditional media.
- Reliance on digital devices as a way to remember may be changing how the brain stories and retrieves information.

Young people's rising digital footprint is exposing them to both opportunity and risk. The volume and diversity of online material is increasing, and is more readily accessible from a widening range of devices.

This megatrend describes the relationship between social media and psychological distress, and covers the rising threats from online bullying and harassment, and online manipulation. The social ramifications of increased use of pornographic sites and sexting are also discussed.

Whether or not risks are any greater in the online world is unclear. Much of what the digital world offers young people is highly positive. However, the risk profile is shifting. New types of risks are emerging that call for new management strategies by young people, parents and society.

The light and dark of exposure.

Young people walking the digital pathway are leaving footprints that allow other users to track the sites they frequent and their activities therein. Many of these sites lead to positive outcomes, including social connection, the development of identity, enhanced creativity, community engagement, learning opportunities and improved access to information and services, including those for mental and physical health. However, there is also a dark side. Digital exposure can have negative consequences including internet addiction, loss of privacy, cyberbullying and access to inappropriate sites and blogs.

On balance, young people seem to be taking all this exposure in their stride. From 2008 to 2012 there was a significant increase in the use of social networks and smart devices. However, rates of psychological distress remained stable (Burns et al. 2013).

When the Joneses mess with our heads.

Perhaps not surprisingly, it is not the number of hours spent on social media that determines whether it will increase psychological stress, but the way in which an individual interacts online. On the positive side, this suggests that training and education could be an effective mechanism to improve the wellbeing of young people on social media. A recent study conducted with young women showed that disordered eating behaviour was only associated with Facebook intensity when the women made online physical comparisons between themselves and their Facebook friends.

When no such comparisons were made, greater Facebook intensity was actually correlated with decreased disordered eating (Walker et al. 2015). It is not, however, just maladaptive Facebook usage, i.e. the tendency to evaluate oneself negatively in comparison to one's Facebook friends (Walker et al. 2015), that leads to psychological distress. Other research (Steers et al. 2014) has found that any kind of social comparisons (upward, downward or non-directional) were related to an increase in depressive symptoms, a phenomenon known as 'Facebook depression'.

These studies suggest that it is not social media per se that impacts on the psyche, but having a much wider neighbourhood in which to 'keep up with the Joneses'. Having a virtual world full of people with whom to compare and compete can have physical as well as psychological consequences.

Online gaming is expected to continue to increase in popularity, with an annual growth rate in revenue of 6.7 per cent.

6.7%

The ultimate selfie.

Adolescents are known for their risk-taking behaviour, particularly in the presence of peers (Chein et al. 2011), and the digital world provides them with a plethora of opportunities for risk. Serious injury and death due to the pursuit of the ultimate selfie are on the rise across the world. A recent study found that males high on psychopathy scales are more likely to post selfies (Fox et al. 2015); however, an earlier study demonstrated that psychopathy scores have been steadily increasing since 1938 (Twenge et al. 2010).

Psychopathy is characterised by engagement in impulsive and thrill-seeking behaviours, and may in part contribute to the increase in deaths arising from people taking selfies at great heights or while undertaking risky behaviours, such as train surfing and bull running. In Russia, 10 deaths and 100 injuries in 2014 prompted the Ministry of Internal Affairs to produce a 'selfie safety' guide.

The combination of selfies and death has become so ingrained that it has been incorporated into the latest Mortal Kombat video game, where the victor can now take a selfie with their victim.

What's in a game?

Online gaming is expected to continue to increase in popularity, with an annual growth rate in revenue of 6.7 per cent, putting it at $86 billion by 2016 (Newzoo 2013). The greatest segment increases are seen in female and social gamers, and in a move to mobile devices from console gaming. With the research community still divided on the effects of gaming on social violence, this trend is particularly relevant for youth mental health.

An American study looking at gaming and youth societal violence over two decades found that video game consumption was actually associated with a decline in youth violence (Ferguson 2011). On the other hand, other American studies have shown that playing 'real-life' violence video games increases aggression and hostile attitudes, both in the lab and beyond (Anderson et al. 2000). This was particularly true for males who were aggressive to begin with. Academic achievement, however, was associated with a reduction in the number of hours spent playing video games, so if gaming is truly glorifying or normalising violence, perhaps the solution is found in investments in education.

Online manipulation and bullying.

Despite initiatives to address cyberbullies, such as SafeBook (a privacy-preserving online social network, Fuzion, Ireland), there has been an increase in the number of 8–17 year olds who have experienced cyberbullying over a 12-month period, from 17 per cent in 2009 (ACMA 2013) to 20 per cent (i.e. 463,000 young people) in more recent surveys (ACMA 2013, Katz et al. 2014). The most prominent age group is the 10–15 year old group, with most experiencing bullying one-to-two times per year, and a smaller number regularly. Of these young people, most of whom are female, 98 per cent reported taking action either by telling their parents or blocking the bully (ACMA 2009).

Male bullies tend to post offensive material and engage in abusive or coercive texting, while female bullies spread rumours and practice exclusion. Although there has been an increase in the number of people who report experiencing bullying, there has been no increase in the 9 per cent of internet users who admit to being bullies (ACMA 2013, 2009). An English survey has found that cyberbullying is a growing trend that occurs across all social networking sites (Ditch the Label 2013). While there are no specific Australian laws against cyberbullying, there are sufficient laws on cyberstalking, harassment and telecommunications that would allow for a criminal justice response if required (Legal Aid 2012).

Whether or not a punitive approach will be successful is yet to be determined. Preferably, there is a call for coordinated, multipronged approaches to deter bullies that require the combined input of young people, parents, teachers, counsellors, police, legal aid centres, communities and social networking sites.

Personalised marketing.

A more subtle, socially-acceptable form of online manipulation is ubiquitous personalised marketing. Young people of the future are likely to be exposed to a higher volume of more sophisticated personalised marketing. The social media advertising spend is up by 40 per cent this year (to US$8.5 billion), reflecting a five-year growth rate of 18 per cent, and is expected to almost double by 2018 (Hoelzel et al. 2015).

The nature of social media advertising is having a negative effect on youth economics, with an increasing number of younger Australians living beyond their means. A cashless society and increase in online purchasing has seen an increase in the number of credit card applications, the amount of personal debt encumbered with current household debt of $80,000 and an unaffordable debt to income ratio of 1:8 (RateCity 2014, ABS 2014b). Despite the fact that large debt balances are carried forward month to month, the decrease in the number of insolvent debtors between 2009 and 2014 suggests that young Australians are getting better at managing their money (Australian Financial Security Authority 2015).

Sexting, sexuality and sex education in the digital world.

According to an article in the Australian Psychology Society Journal InPsych, the use of pornography by young and old people is prevalent at some point in their lives (Smith 2015). For example, a study of 2381 Norwegian adults aged 18–59 years found that 96 per cent of men and 71 per cent of women reported using pornography at some point, and 50 per cent of the whole population within the past 12 months (Træen et al. 2013).

Pornographic sites transfer 50 gigabytes of data per second, with a strong, steady global rise in unique visitors from approximately six million in 2010 and peaking at almost 20 million in 2012 (eHack 2012). Of these unique visitors, 82 per cent are male. An American study found 42 per cent of young people had been exposed to online porn; 66 per cent

67 per cent of millennial Twitter users source their news from the site.

67%

of whom reported unwanted exposure (Wolak et al. 2007). Of particular concern is the trend in online pornography towards increasingly violent and extreme acts that promote misogyny and the degradation of women (Crabbe et al. 2011).

There is also a rise in wanton exposure, with a surge in the number of young people sending sexually-explicit photographs or messages via digital media. Young people have an evolving view of privacy that allows them to upload personal information and images to social media sites either purposefully or inadvertently without thought to how such images may be forwarded or shared. It has been estimated that in 2012 around 20 per cent of teenagers had sent texts, with 40 per cent of girls asked to send explicit photos of themselves; most of whom complied (Quirky Kid 2015). The 2013 National Survey of Australian Secondary Students and Sexual Health reports that half of all sexually-active secondary school students (59 per cent of the secondary school student population) have sent "a sexually explicit nude or nearly nude photo or video of themselves", and 70 per cent reported receiving such a photo or video (Mitchell et al 2014).

These are new and emerging issues and risks for a generation of digital natives who have easy access to view, send and receive explicit content via a growing range of online devices, such as computers, laptops, smartphones, tablets and smart televisions (Crabbe et al. 2011). The consequences for future relationships, mental health and wellbeing are still being researched, along with solutions for parents, communities and governments.

Social media and news sources.

Young people are increasingly turning to social media to learn about news and current affairs. In 2013, approximately 50 per cent of Twitter and Facebook users sourced their news from social media, with numbers steadily increasing to 63 per cent in 2015 (Pew Research Centre 2015). This rise is seen across every demographic group; however, for the 18–34-year age group (sometimes referred to as 'millenials'), the rise is more pronounced.

In 2013, 55 per cent of millennial Twitter users sourced their news from the site, rising to 67 per cent in 2015. For Facebook, 60 per cent of millennial users sourced their news from the site in 2013, rising to 74 per cent in 2015. There are some differences in the type of news sourced. Twitter users see more breaking news, a wider variety of news and more articles on sports, business, international news and politics.

Decline of traditional media for news sources.

Not surprisingly, the increase in digital media is accompanied by a decline in the use of traditional media – television, radio, newspapers and magazines – as more people, particularly millenials aged 18–34, turn to digital media first. This tendency is considered to be due to four main characteristics of digital natives: a desire for freedom of choice and of expression; a love for customising and personalising; a need for speed, for instant knowledge; and the fact that innovation is an intrinsic part of life (Desjardins 2015).

Each new technology gives the user more; for example, with Twitter, users can follow news events as they unfold. These young people do not consider themselves to be making a change from traditional media; for them, accessing digital media is the norm.

Is exposure to so much information affecting the way we think?

Increasing reliance on digital devices is not just a matter of digital news or data storage; more people are using their devices as a tool for remembering. Access to such a vast store of online information is changing processes underlying memory and recall. Two demonstrated outcomes are the Google effect and digital amnesia.

The 'Google effect' was coined in a Harvard study looking at how young people used internet information. The study found young people retained fewer facts, yet easily recalled the site from which their information was obtained (Sparrow et al. 2011). 'Digital amnesia' refers to a readiness to forget information because it is stored on a device or easily searched (Kaperksy Lab 2015). In fact, many consumers will look up a fact before even trying to remember it, and often forget the online fact once used.

Because permanent memories are formed by actively recalling information, there is an argument that the 'search first' behaviour will prevent the build-up of long-term memories, and result in shallow information processing. Therefore, the outsourcing of memory to digital devices could have wide-ranging repercussions for the way personal and professional decisions are made.

However, functional magnetic resonance imaging studies tell a different story (Small et al. 2009). In Small's study, internet searching not only activated the same areas of the brain as book reading, but the brains of tech-savvy participants were almost twice as active as those who were not tech savvy. Furthermore, the increased activity in the tech-savvy group was seen in the areas of the brain that control decision making and complex reasoning. Together, these studies suggest that exposure to digital technology is changing the hard wiring of our brains, but that the deficits in memory consolidation may in part be compensated for by increased executive function.

In conclusion: adjusting the aperture and managing exposure

The trends identified in this megatrend describe a future where young people are likely to be exposed to a wide range of new and emerging online material with both positive and negative dimensions. Both the volume and range of material (and associated risks and opportunities) are likely to continue expanding into the foreseeable future. Training, education and awareness for young people, parents and the entire community may provide an effective mechanism for handling greater exposure to the online world.

Emerging questions

1. Are schools, parents and communities equipped with sufficient resources, knowledge and capability to teach children and young people about how to manage the risks (and harness the opportunities) of the online world?

2. Is the loss of privacy for young people in tomorrow's online world inevitable, or is more action required to create a protective buffer for personal information?

3. Are there under-utilised technological solutions that can provide improved protection for young people while enabling the benefits of digital communication?

4. Has the research community sufficiently identified and characterised the risks so that we can make informed decisions about where the real versus perceived dangers lie?

5. Is the software and digital communications industry able to develop a new range of social media tools that can vastly improve safety, privacy, collegiality and friendliness, and avoid or reduce the tendency for negative self-evaluations?

3.5 Out of the shadows

The *Out of the shadows* megatrend heralds a potentially brighter future for the treatment and management of youth mental health and wellbeing.

- New technologies are enabling better mental health research, investigations and treatments.
- Diagnosis of mental disorders based on modern research allows for a better understanding of mental health.
- The gap between the high level of resources devoted to physical health care and the low level of resources for mental health care is slowly closing.
- Expenditure on treatment and prevention of mental health in Australia has risen in the past two decades.
- Use of digital devices to treat mental illness is rising and showing similar success rates to face-to-face care.
- Young people with mental health issues are more comfortable seeking advice and information from the Internet or friends.
- The rate of mental illness is similar in country and metropolitan areas but the rate of suicide is higher in country areas.
- Mental health issues are exacerbated in young Indigenous people but recent preventative programs have proved successful.

- A leading cause of youth mental health issues is violence in the family home.
- The ramifications of domestic violence on children are being increasingly recognised.
- An increasing number of soldiers returning from military service with post-traumatic stress disorder is negatively affecting their children.
- Suicide rates in Australia have declined but suicide rates among 15-19 year olds is increasing, especially among males, people living in remote areas and Indigenous Australians.
- Increased awareness of mental health issues and willingness to seek treatment has seen an increase in prescriptions for medicines used to treat mental illness.
- An increasing number of programs to enhance wellbeing and prevent mental illness are being delivered by government and non-government organisations across Australia.

Increased breadth and depth of scientific research has improved our understanding of conditions, treatments and social and economic influences on mental wellbeing. As a result, new models of mental health diagnostics and care will be developed, and mental health service delivery will change.

In the future, there will be improved access for rural and remote populations, and a rise in Indigenous-appropriate social and emotional wellbeing programs. There will also be a greater understanding of the implications of adversities, including homelessness, domestic violence, suicide and illicit drug use.

All of this will be reflected in more organisations and schools providing programs aimed at awareness and prevention of the socioeconomic factors associated with mental ill health, such as employment, education, housing, social connectivity and participation, as well as programs to manage social and mental wellbeing in a positive light. These programs will focus on promotional strategies, such as the building of social and emotional skills and mindfulness over reactive strategies.

New technologies are changing the landscape.

Advances in medical technologies, such as wearable sensors, brain stimulation and imaging, exome and whole-genome sequencing, provide an opportunity to examine the biological factors associated with mental health at an increasingly microscopic level. Wearable sensors that monitor stress and anxiety will become increasingly popular with people wanting to self-manage chronic stress, or for parents monitoring an autistic child.

Advanced technologies will provide insights into the mechanisms underlying mental illness. For example, a recent study using a new form of diffusion tensor imaging revealed disruptions in white matter (the pathways connecting regions of the brain) in first-episode schizophrenia. This study was able to identify the cells likely to be involved, potentially leading to new treatments for schizophrenia (Lee et al. 2013).

Towards an improved understanding of mental illness.

Our increased understanding of mental illness is partly reflected in revisions to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) (APA 2013). The DSM was first published in 1952 to describe and classify 106 disorders; by the fourth edition in 1994, 300 diagnostic categories were covered. The most recent edition, the DSM-5, published in 2013, contains another 10 per cent increase in diagnostic categories. This latest version, however, has been met with controversy, with the National Institutes of Mental Health (NIMH) claiming that the symptoms-based approach of the DSM is outdated and lacking in validity.

The NIMH is developing a research domain criteria based on genetic, neural and cognitive data (Cuthbert 2014). It is likely that in time Australia will adopt this new approach. Basing diagnostics on modern research approaches allows for a much greater understanding of mental health and its machinations that can be harnessed to inform the design and development of sustainable models of delivery for mental health services and mental wellbeing programs.

Bridging the divide between physical and mental health care.

Disability-adjusted life years (DALY) are a measure of the benefits patients receive from some type of health care treatment. DALY have increased by 38 per cent for mental and behavioural disorders since 1990 (Horton 2010). In 2003, DALY for mental disorders in Australia were estimated at over 350,000 (Doran 2013). However, DALY are complicated for this population due to a high level of comorbidity with physical illnesses, leading to premature death.

Optimising treatment and prevention through enhanced models of care and interventions targeted to schools and workplaces will have positive social and economic consequences.

Increasing expenditure.

Expenditure on treatment and prevention of mental health in Australia has risen considerably over the past two decades (Figure 10). In 1992–1993, the majority of this expenditure was directed towards public psychiatric hospitals; however, from the late 1990s, expenditure has been increasingly divided between specialist psychiatric units and community-based care.

Over the period 2008–2013, there was an annual increase of 8.2 per cent in the number of Medicare-subsidised mental health services available (AIHW 2014). Psychiatry services
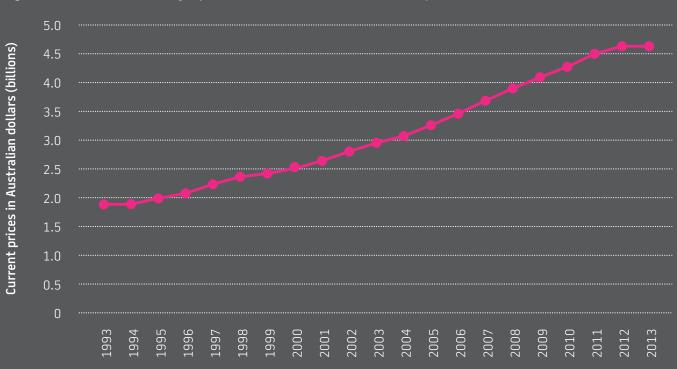
Figure 10. Total state and territory expenditure on mental health services for the period from 1992–1993 to 2012–2013.

Source: Australian Institute of Health and Welfare (AIHW 2014).

contributed a small but stable 0.4 per cent increase per annum. With this growth in service use and demand, it was predicted that by 2027, the current system would require more than 8800 additional mental health consultants at a cumulative cost of $9 billion (Ernst & Young 2015). Since the advent of digital mental health services, expenditure on mental health has begun to plateau (Figure 10).

The rise of digital services.

The only way to meet the rising need for mental health solutions is through digital services. In 2012, the e-Mental Health strategy was announced (DoHA 2012), followed by a surge of digital mental health solutions, including online diagnosis, support, apps and resources. In 2013, tele-psychiatry was introduced, and by 2014 comprised 50 per cent of all tele-health consultations in at least four Australian states (Victoria, New South Wales, South Australia and Queensland). A review of five e-health interventions conducted by the Black Dog Institute (O'Dea et al. 2015) found all but one demonstrated positive effects, with adherence rates similar to face-to-face studies.

Together, these studies show that the internet is a potentially effective platform for the provision of specialist services. Over the next decade we will begin to understand which elements of digital solutions are effective and engaging in this population, and refine both the face and function of online services.

Youth uptake of online mental health options.

A recent youth survey revealed young people with mental health issues were more comfortable seeking advice and information from the internet or friends than from other sources, whereas young people who did not report mental health issues were equally comfortable seeking advice from the internet, friends, parents or relatives (Mission Australia 2013). Similarly, young males experiencing psychological distress spend more time on the internet than males with negligible distress, and were more likely to talk about their problems over the internet and search for information on mental health and/or alcohol and substance use (Burns et al. 2013).

The tyranny of distance.

Australia is a land of wide, open spaces, and this characteristic is one of the greatest barriers to equitable mental health service provision. The rate of mental illness is similar in the country areas as in metropolitan areas, yet the rate of suicide is 66 per cent higher, with rates for young people twice as high as in cities (www.ruralhealth.org.au).

Individual expenditure on mental health care is significantly lower in country areas due to a number of factors including access, affordability, culture and awareness. Some other factors thought to contribute to these higher rates are greater access to guns, reluctance to seek help, limited access to opportunities and perceived (or real) intolerances to issues, such as gender identity and homosexuality. Improvement in connectivity through the combination of cable, fibre, wireless and satellite will increasingly improve tele-health services to even the most remote areas, and may address some of the opportunity and support issues as well.

Indigenous mental health.

Many of the factors associated with mental health are exacerbated in young Indigenous people; they are 26 times more likely to be in detention than young non-Indigenous people (Amnesty International 2015), 42 per cent have experienced violence against their mother compared to 23 per cent of all children (Australia's National Research Organisation for Women's Safety 2015) and suicide rates for young Indigenous people are five times that of non-Indigenous young people (ABS 2015a). Indigenous-led initiatives are emerging to address these issues. Examples include the development and validation of Strong Souls, a culturally-appropriate tool

Young Indigenous people are 26 times more likely to be in detention than young non-Indigenous people.

x26

for assessment of social and emotional wellbeing in young Indigenous people (Thomas et al. 2010), and the Yarrabah Family Life Promotion Program.

The Yarrabah program was initiated in 1997 following a spate of 17 suicides in six years that devastated the community. Recognising that suicide was a community-wide issue, Yarrabah sought to implement a set of strategies for suicide prevention, intervention, after care and life promotion. In the first eight years of the program, no suicides were recorded in Yarrabah. This successful program has now been taken up by other Indigenous communities around Australia (SEWBMH, 2015).

There has been a four-fold increase in the number of cases of PTSD since 2001.

The extent and impacts of domestic violence in Australia are being revealed.

A leading cause of youth mental health issues is violence in the family home. The spotlight was initially shone through the domestic curtains in 1970, with the opening of the first women's shelter in Sydney. Today more than 300 shelters operate throughout Australia.

The number of family homicides in Australia is declining; from 1989 to 2002 there were an average of 129 family homicide victims each year, comprising 32–47 per cent of all homicides. However, while the total number of homicides decreased between 2002 and 2012, the proportion of family victims still comprised 32–53 per cent over the decade, an average of 101 per year. This decline is likely to be due in part to the number of reported incidents of domestic violence and subsequent intervention, which has increased and continues to increase quite significantly. The current Victorian Royal Commission into Family Violence has heard that reports have increased by 136 per cent over the past decade.

The impact of domestic violence on young people.

Of the women who experienced violence at the hands of an ex-partner, 61 per cent had children in their care at the time (Australia's National Research Organisation for Women's Safety 2015). The ramifications for the child are far reaching and include psychological, behavioural, health and socioeconomic impacts, as well as potential intergenerational effects in perpetration and/or victimisation.

The effect of family violence on the child varies with a number of factors, including severity and frequency of the violence. A recent study found that more than half of homeless youth have experienced violence in the home so severe as to cause them to leave (Flatau et al. 2015). The median age of their first runaway experience was 10 years. Since 2008, the effects of

exposure to family violence on children are being increasingly recognised, and this is reflected in changes in policy to include it as child abuse, an increase in reporting of exposure to violence, referrals to appropriate bodies and the development of specific legislation.

At the federal level, the National Plan to Reduce Violence against Women and their Children 2010–2022 has been released. Victoria is currently conducting a Royal Commission into family violence, and there is an increasing nationwide call for change in the attitudes that underlie all family violence, and particularly in those that foster violence against women and their children.

Understanding the impacts on children with parents returning from overseas military service.

A challenge Australia faces is the increase in the number of soldiers returning from war with post-traumatic stress disorder (PTSD), and the ramifications for their children if they are parents. PTSD is the most prevalent condition in veterans returning from Afghanistan and Iraq, and is one of the most prevalent in veterans from East Timor and the Solomon Islands (DVA 2015). There has been a four-fold increase in the number of cases of PTSD since 2001 (Rosenbaum et al. 2015), with ramifications including physical ill health, substance abuse, suicide and family violence.

In recognition of this challenge, and following a recommendation of the Independent Study into Suicide in the Ex-Service Community (Dunt 2009), the Centre for Military and Veterans Health has conducted reviews into evidence-based, best-practice treatments for PTSD (CMVH 2011). The outcomes of these programs will have implications for veterans and their children.

Suicide rates.

Overall, in the 50 years from 1963 to 2012, Australia has seen a consistently steady decline in the number of suicides per 100,000 people from 19.2 to 10.1 (OECD 2015f). However, when we drill into this data, we see that there is a different story for teenagers (aged 15–19 years). In OECD countries, two distinct trends emerge: a stable rate of 8.1 per 100,000 persons across the period 1990–2009, and a slight decrease to 6.2 in the period 2000–2009 (Department of Health and Ageing 2007).

While many countries are converging to this lower rate, sadly Australia's rate has been steadily increasing from 6.2 per 100,000 in 2004 to 10.1 in 2013 (ABS 2015a). The situation is particularly dire for males and for people living in rural and remote areas, including Indigenous Australians. Suicide is still the leading cause of death for young people aged 19–24 years (ABS 2015a).

Alcohol and other drugs are often used as self-medication, but are also widely associated with suicide and suicide ideation; in 2006, 34 per cent of people (predominantly men) who suicided had misused substances (Department of Health and Ageing 2007). However, the strongest risk factor for suicide is diagnosis of a mental disorder, although the risk can be mitigated by the quality and availability of services; efficacy of, and compliance with, medication; and the quality of social support.

There are drugs for that.

An increased level of awareness around mental health and a consequent increase in willingness to seek treatment are reflected in an increase in prescriptions for common psychotropics, drugs used to treat mental disorders. Australia is now the second-highest prescriber of antidepressants in the OECD (OECD 2013a), with an almost 100 per cent increase in daily doses over the period 2000–2011 (Stephenson et al. 2014).

A similar trend, at a much lower rate, is seen in all OECD countries, including the United Kingdom and United States. Throughout the OECD, this increase is likely to stem from an interplay of factors, including increased awareness of depression, greater drug efficacy and the use of antidepressants to treat other disorders, such as anxiety and pain. Another factor driving up these rates is pharmaceutical misuse, mainly in older age groups (ACC 2015). While there are strong associations between substance use and psychosis (Degenhardt et al. 2015), the increasing reliance on psychotropics coincides with a decreasing trend in illicit drug use, particularly in ecstasy and heroin (ACC 2015).

The American 'Monitoring the Future' survey also found a general decline over the past two decades in illicit drug use, coupled with decreasing use of cigarettes, inhalants and synthetic drugs (SAMHSA 2014). In both Australia and the United States, cannabis use remains consistent, but there is a significant increase in the number of young people choosing not to drink or choosing to delay their first drink. School and community programs are likely to be driving this trend.

Mastering mental health.

One of the most valuable outcomes of the rise in scientific and social understanding of risk factors for mental health is the development of preventative programs that look at enhancing mental wellbeing. The aim of these programs is to generate a society that fosters mental wellness, communities in which people are able to realise their potential, have respectful relationships and contribute in meaningful ways.

The foundations for positive mental wellbeing are being built into homes, childcare centres, schools, workplaces and communities. Aiming preventative programs at the formative years well before mental illness takes a hold will help to build strong resilient young people, and may help us address our alarming suicide rates. National initiatives draw on the collaborative resources of government, non-government organisations (NGOs) and research institutes to target the early years.

This breadth and depth of expertise has been used to generate a whole-service framework to provide tools, resources and support to allow childcare centres and primary schools to work with parents and community to raise happy, healthy kids. Similar programs have been, or are being, designed for secondary schools to develop positive school communities that primarily target the prevention of mental ill health, but also look at detection and early intervention.

Concurrent with the development of programs to enhance wellbeing in kids, mental health awareness is being introduced into the workplace through a range of initiatives to build an employee's capacity to detect and respond to signs or episodes of mental illness. At the community level, there is a rise in the number of NGOs that aim to protect communities from suicide through a range of interventions, from evidence-based practice to promotion of a caring attitude by suggesting people ask the simple question: 'Are you OK?'.
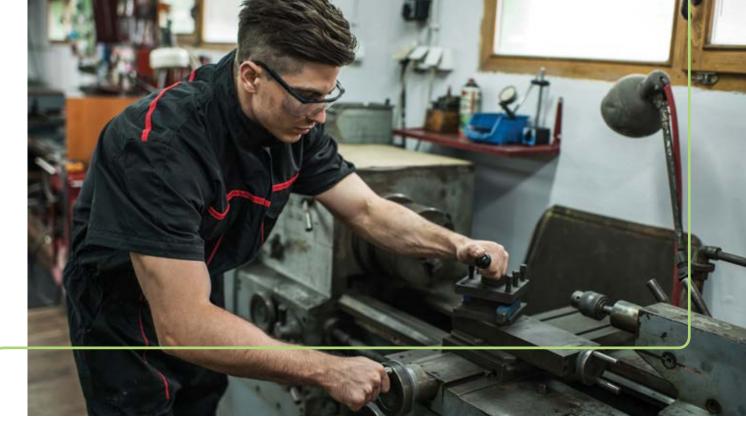
A wide range of NGOs play a critical role in supporting mental health services throughout the continuum of care, from hospital-based to community services. Community Mental Health Australia collaborates with over 800 community-based NGOs to support people with mental illness to achieve good mental and physical health, stable accommodation and meaningful engagement (CMHA 2012). Support for NGOs is evidenced by a 10-fold increase in grant funding in the past two decades. Between 2008 and 2013 alone, grants to NGOs increased from $268,000 per annum to $321,000, an average annual increase of 4.4 per cent (AIHW 2014).

In conclusion: into the light

By gaining greater insights into the biological, physical, economic and social causes of mental illness, we can design models of care to provide dignified, holistic treatment and programs to circumvent preventable risk factors. By understanding the underlying causes of poor mental health and mental illness, we can pave a future for youth mental health that focuses on and fosters preventing illness and promotes mental wellbeing.

Emerging questions

1. What new thinking do we need to apply to reduce the incidence of mental illness in future cohorts of young people?

2. Is enough being done by governments, communities and the private sector to tackle the confronting and tragic issue of youth suicide, which is now the most common cause of death for people within the 15–24 year age bracket? How can we better implement proven and innovative solutions?

3. Are we moving towards a more destigmatised, informed and evidence-based view of mental health and wellbeing in Australia? If so, what new opportunities does this open up for management, prevention and treatment?

4. What are the various roles in building a socioeconomic, political and cultural environment in which mental wellbeing can flourish, and who needs to assume responsibility for those roles?

4 Strategic foresight: background information

CSIRO has developed a generic strategic foresight process, pioneered through multiple megatrends, scenario planning and strategy projects delivered over the past five years in diverse industry sectors. The generic process is designed to be adaptable to meet the specific needs of a specific organisation. It has been applied in this study to identify megatrends impacting young people's mental health and wellbeing in Victoria over the next 20 years.

The approach draws on concepts developed by the Shell's (Cornelius et al. 2005, Shell 2012) scenario planning team (which has been in operation for over 40 years); the concept of 'megatrends', as developed by John Naisbitt (Naisbitt 2013) in the 1980s; The Boston Consulting Group (Sander et al. 2010); and more recent academic publications in the Elsevier journals of *Futures and Foresight* (Voros 2003). The result is a process with five main stages and numerous building blocks (Figure 11).

Stage 1 of the strategic foresight process

In the first stage, the process commences with a background study and scope definition. This background study documents the current conditions, size, structure, opportunities and challenges within the industry, region or societal grouping being studied. In this case, it involved a brief background review of youth issues in Victoria. Unlike the following stages, the background study is concerned with the current status and historical conditions. It does not attempt to look into the future. The scope defines the stakeholder groups, timeframe and issues to be considered throughout the remainder of the project.

Stage 2 of the strategic foresight process

In the second stage, trends are identified by a horizon scanning process. This casts a wide net over all patterns of change, which are potentially relevant to the organisation. The

environmental scan errs on the side of being overly inclusive, rather than exclusive. The trends are typically grouped as:

- geopolitical
- social
- economic
- environmental
- technological.

However, an alternative and tailored nomenclature can be designed to classify the trends based on the unique needs of the organisation. Validation and screening are used at a secondary stage to remove any trends which are unsubstantiated or irrelevant.

The screening and validation process ensures trends pass two tests:

- evidence that the pattern of change is actually occurring and likely to continue occurring into the future
- evidence that it matters to the organisation.

The process of validation often involves checking the proposed trend against datasets, expert opinions and research findings published in journals to ensure accuracy. Sometimes evidence is found both supporting and undermining the trend, and the foresight team needs to make a difficult judgement call about where the weight of evidence lies and whether the trend should be included.

Stage 3 of the strategic foresight process

In the third stage, the trends are collated and synthesised to identify more salient patterns of change and possible future events, which hold significant implications for decision makers. These are captured as building blocks:
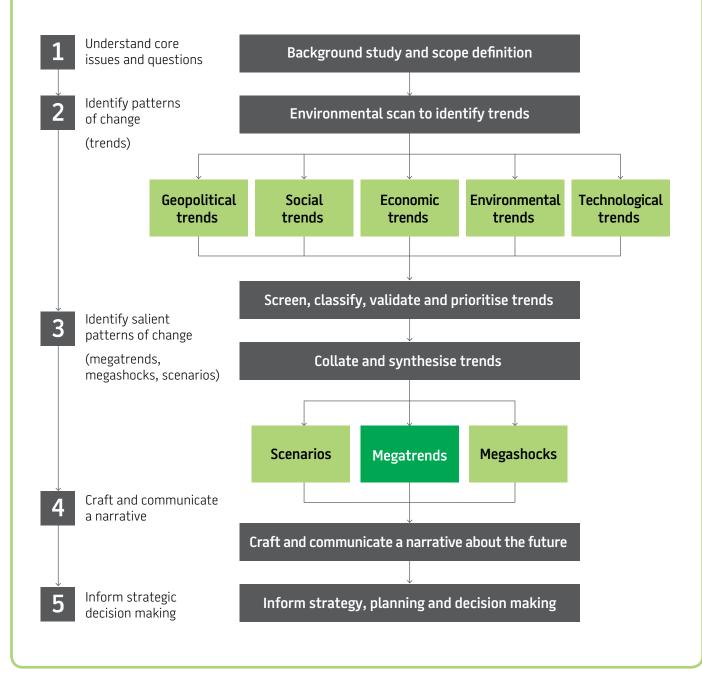
- scenarios
- megatrends
- megashocks.

These building blocks are not necessarily mutually exclusive, and a foresight study may use one, some or all in developing a narrative about the future. We note that this project is limited to megatrends, as this provides a good fit to the horizon scanning needs identified by VicHealth.

Stages 4 and 5 of the strategic foresight process

The final two stages involve crafting and communicating a narrative about the future, and then injecting that narrative into strategic decision-making processes. The narrative captures all of the relevant building blocks, and describes the methods and information sources so that the audience has confidence in the results. A Venn diagram is used to convey the megatrends, as it shows the areas of overlap. A unique story of the future exists within each overlap area. A resilient strategy performs well in all areas of overlap.

Figure 11. Generic foresight process developed by CSIRO (in this study, only megatrends are being identified).

4.1 Methodology of the Megatrends Impacting the Mental Wellbeing in Young People project

The methodology used to collect data in the Megatrends Impacting the Mental Wellbeing in Young People project involved the use of the convergent interview technique, which both investigated and tested emerging interpretations. The findings of the interviews were then consolidated and refined during a one-day workshop with 33 experts in related fields.

Convergent technique interviews

Interviews with key mental health and wellbeing experts were designed to help inform and validate the megatrends developed by CSIRO, in that trends emerging in early interviews were tested in subsequent interviews. The trends identified by the interview process were progressively reported back to the CSIRO Futures team which was concurrently conducting the horizon scanning process. Information collated from the interview process was progressively reviewed and discussed with CSIRO researchers, and used to inform the set of megatrends outlined in this study.

Ten telephone interviews were undertaken with representatives from universities, research institutes, independent think tanks, peak bodies and various NGOs relevant to youth and mental health. Interviews were undertaken via telephone using the convergent interviewing technique developed by the University of Queensland (Dick 1990, Williams et al. 2005). Convergent interviewing aims to collect, analyse and interpret people's experiences, opinions, attitudes, beliefs and knowledge that converge around a set of interviews.

Using this technique, interviewers engage in a constant, comparative reflexive process that permits detail-rich content and theoretical sampling, as researchers seek to continuously test emerging interpretations from early interviews in subsequent interviews. This process provides rigour and structure to the analysis, despite the reliance on unstructured content.

Some interviews were one-on-one; others were undertaken using a lead interviewer, but with multiple project team members listening, and on occasion asking additional clarifying questions. The style of the interview was conversational, taking between 30 and 60 minutes to complete.

In convergent interviews, a suitable opening question is one that encourages interviewees to talk about the strengths and weaknesses of the current issue. The interview in this instance opened with the question: What are the key trends that you can see emerging that will influence youth mental health and wellbeing in the coming 20 years, so out to 2035? The interviewer purposely did not contribute content to the conversation, using only prompting questions to continue the conversation, or on occasion using questions to validate points from previous interviews. A summary of the trends identified by interviews is captured in Table 1.

Table 1. Trends identified by interviewees

Category	Observed trend
Social	The population is ageing
	Inequality: socioeconomic, cultural, gender, geographical
	People are becoming increasingly time poor
	Mobility: importance of friend and family networks
	Cyberbullying
	Education system issues
	Parenting behaviour
	Domestic violence
	Suicide
	Drugs
	Reducing stigma associated with mental illness
Economic	Employment/unemployment/under-employment for young people
	Cost of living: difficulty entering housing market
	Cost of education
	Borderless markets
Environmental	Urbanisation
	Anxiety/concern about climate change
	Impacts of extreme weather events
Technological	e-health: personal health management
	How young people communicate: social media
	Technology replacing workforce
Political	Voting preferences of young people
	Activism in young people: youth having a voice
	Global instability – terrorism
	Trust in institutions
	How does Australian society value young people?

The final workshop

Following on from these interviews, a one-day workshop was held in Victoria with a further 33 experts to refine the formative megatrends generated from interviews held with experts Australia-wide. Workshop attendees actively participated in the process, and provided a wealth of data to contribute towards refining of the megatrends presented in this report. Both the interviews and workshop were conducted in accordance with CSIRO Social Science Human Research Ethics Committee approval (021/15).

5 **Summary and conclusion**

The five megatrends presented in this report identify both challenges and opportunities relating to the mental health and wellbeing of young Victorians over the coming 20 years. Many of the drivers lie beyond the direct control of any single organisation. However, collective efforts across government, industry and community organisations will help manage the risks and harness the benefits of the forthcoming change.

The 'rising bar' megatrend describes a world where entry into the labour market will involve clearing a higher educational and skills hurdle.

This largely results from advances in artificial intelligence and the increased skills and mobility of the global workforce. There may be equity implications if some sections are unable to clear the bar and enter the workforce. A job is vital for young people's self-definition and active participation in society. The challenge will ensure the rising bar doesn't knock out part of the population who want a job and to be productive members of society.

The 'global reach' megatrend is about dissolving the boundaries that previously existed around individuals, organisations and countries.

The peer-to-peer labour market is likely to grow. This will be associated with a rise in portfolio workers and freelancers who provide services to many employers. The ability to be agile and connected into networks will be of much importance to young people. The era of the entrepreneur is upon us, and young people will increasingly need to create their own opportunities in life and work. New skills, aptitudes and outlooks will be required to flourish in this world.

'Life's richer tapestries' is about a much more diverse world of cultures, peoples and lifestyles, where there is an explosion of choices for young people.

The workforce will contain a greater spread of age groups, and society will contain a greater mix of cultures. The online environment will create a wide diversity of selective news and information sources. Often it will be difficult or impossible to identify what is the dominant or mainstream perspective on an issue. Adapting to this world may be challenging for a few, but rewarding for many.

The 'overexposure online' megatrend is about the new risks and opportunities arising from the rising diversity, quantity and accessibility of online content.

It's not necessarily predicting a more dangerous world than before. The rapid increase in social media use and online communication over the past decade is not associated with a rise in population-wide mental health and wellbeing problems. However, it's a changed world with different types of risk and new issues, which we may not yet understand. The coming decades may see young people, parents and community become more 'streetwise' in the online environment.

The 'out of the shadows' megatrend heralds a potentially brighter future for the treatment and management of youth mental health and wellbeing.

The data and evidence reveal growing awareness and understanding of the issues across society as a whole compared to earlier decades. Today there is a large and growing number of NGOs tackling a widening range of mental wellbeing issues. Expenditure on treatment by governments has increased. The coming decades are likely to see a continued rise in our understanding and management of mental health and wellbeing.

Together, these megatrends describe plausible futures for young people in Victoria. However, this report does not prescribe actions. At the end of each megatrend, some emerging questions are raised, which point to one overriding question: How can Victoria educate, prepare, and support young people so that they are ready to take on the challenges and benefit from the opportunities of the future? It is hoped this material will inform discussion, and help others make wise choices and develop an action agenda to build a brighter future for Victoria's young people.

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