WELLBEING AND PREVENTION COALITION IN MENTAL HEALTH

Measuring what matters – mental health and wellbeing.

A submission by the Wellbeing and Prevention Coalition to the Treasury Consultation on Measuring What Matters.

January 2023

The Wellbeing and Prevention Coalition in Mental Health.

Summary

Wellbeing is a vital personal and community asset. There is an established body of credible evidence that consistently links high levels of wellbeing with a wide range of positive outcomes including increased academic success and educational attainment, higher workforce participation and increased productivity, lower use of health and social services, and a reduced need for income support and other government payments. Any steps that governments can take to strengthen people's wellbeing is good for each individual and good for the community.

Mental health is a major element of wellbeing, and when measuring wellbeing it is vital to include robust measures of both positive mental health – or mental wellbeing – and mental ill-health. While a wide range of scales are available for this purpose, we recommend the following evidence-based measures for mental wellbeing:

- Mental Health Continuum Short Form
- Warwick-Edinburgh Mental Wellbeing Scale
- Short Form Health Survey (SF-36)

We also recommend the following evidence-based measures for tracking mental ill-health:

- The Kessler 6 (K6) and the Kessler 10 (K10) to measure psychological distress
- The Patient Health Questionnaire when assessing depression.
- The Generalised Anxiety Disorder scale when assessing generalised anxiety disorder.
- The Strengths and Difficulties Questionnaire (SDQ) when assessing emotional and behavioural disorders among children and adolescents.
- The Alcohol Use Disorders Identification Test (AUDIT), and the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) for alcohol and substance use.

It is also important to measure some of the key risk and protective factors that influence our mental health. These include self-care behaviours; drug and alcohol use; relationships and connections; safety; equality; connection to culture; financial wellbeing; housing and homelessness; employment; and access and use of health and human services.

While there is no single validated scale that assesses all these factors, there are nevertheless a range of existing government and non-government surveys that capture this data, and we therefore recommend that the Federal government aggregates this data into its proposed wellbeing framework. Alternatively, there may be value in collecting this information through a new national survey that focuses on tracking the key influences on people's mental health and wellbeing.

Reliably measuring and monitoring wellbeing – including mental health and wellbeing – across the Australian population is of utmost importance as it allows governments to target their investment on key social issues, and ensure that their programs, services, and public policies are having their desired effect in advancing the physical, psychological, and social health of its citizens, and the economic prosperity of the community.

We therefore encourage the Federal Government to regularly and reliably measure mental wellbeing, mental ill-health and risk and protective factors when "measuring what matters" and proactively use this information to help plan and track the outcome of its investments in mental health promotion and mental healthcare programs, services and policies.

Introduction

The Wellbeing and Prevention Coalition in Mental Health welcomes the opportunity to provide a submission to the Australian Treasury's consultation on Measuring What Matters as part of the proposed development of a Wellbeing Framework.

Wellbeing is a holistic and multidimensional concept that reflects how happy and healthy people are, and their quality of life. It has both subjective and objective elements.

Wellbeing, which includes mental wellbeing, is a vital personal and community asset. There is an established body of credible evidence that consistently links high levels of wellbeing with a wide range of positive outcomes including increased academic success and educational attainment, higher workforce participation and increased productivity, lower use of health and social services, and a reduced need for income support and other government payments. Any steps that governments can take to strengthen people's wellbeing is good for each individual and good for the community.

Our wellbeing is heavily influenced by our physical, social, and economic environments – how safe and supportive our homes, schools, workplaces, and communities are; how compassionate, inclusive, cohesive, and fair our society is; how evenly wealth and power are distributed; and how much emphasis we place on preserving our national environment and tackling climate change. These drivers of mental wellbeing must therefore be the target for action.

Reliably measuring and monitoring wellbeing across the Australian population, over time, is of utmost importance as it allows governments to target their investment on key social issues, and ensure that their programs, services, and public policies are having their desired effect in advancing the physical, psychological, and social health of its citizens, and the economic prosperity of the community.

As the Budget Papers note, several countries have already developed national or subnational frameworks to measure wellbeing. While the specific indicators vary across frameworks, they cover similar policy areas such as education, income and employment, housing, health, personal and community safety, civic engagement, and the environment.

While we believe these areas should be included in the Federal Government's proposed Wellbeing Framework, we also strongly believe that if we are seeking to "measure what matters" we need a clear focus on 'mental wellbeing' and 'mental ill-health'.

Mental wellbeing is about feeling generally happy and satisfied with life while acknowledging that negative emotions are normal, and we need to learn to recognize and express these feelings and manage our emotions. It is also about functioning well psychologically and socially, having a sense of meaning and purpose in life, and contributing to others.

By contrast, mental ill-health is characterised by significant negative changes in a person's thoughts, feelings, perceptions, and behaviours that cause distress, interfere with interpersonal relationships, and impair day-to-day educational, occupational, and social functioning.

Our level of mental wellbeing and our level of mental ill-health has an enormous influence on all aspects of our life. This submission therefore provides a brief overview for why a focus on mental wellbeing and mental ill-health is critical to good public policy, and suggestions about how we can track mental wellbeing and mental ill-health and the factors that shape it.

We thank the Hon Dr. Jim Chalmers MP for initiating this important discussion on measuring – and investing in – what matters.

What is mental wellbeing and what is mental ill-health?

For many people in the community, the term mental health has become a 'euphemism' or synonym for mental illness. When most people hear the term, they immediately think of conditions like depression, anxiety disorders, eating disorders, bipolar disorder, and schizophrenia.

But mental health is more than that, and it is better – both from an academic and a lived experience perspective – to think of it as an umbrella term for how we think, feel, perceive, relate, and behave. This approach is reflected in the US Department of Health and Human Services definition of mental health which states that "mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices." [1]

Broadly speaking, mental health can be broken into two broad categories of indicators – mental wellbeing and mental ill-health.

While there is no single, universally accepted definition of mental wellbeing there is general consensus that it is composed of two main dimensions – hedonic wellbeing and eudaimonic wellbeing.

High levels of hedonic wellbeing occur when people experience mostly high positive affect and low negative affect, and when they report being satisfied with most aspects of their life. [2-5] This is also referred to as subjective wellbeing (SWB).

Eudaimonic wellbeing refers to a person's psychological functioning, their interpersonal relationships and perceptions of others, their sense of purpose or meaning in life and their contribution to those around them. [3, 6-9]. This concept is also referred to as psychological wellbeing (PWB).

By contrast, the term mental ill-health encompasses a broad range of negative psychological experiences like psychological distress, mental health difficulties and mental disorders. Mental disorders are the 'clinical' conditions described in manuals like the World Health Organization International Classification of Disease or the American Psychiatric Association Diagnostic and Statistical Manual. There are many different types of disorders and each has its own specific signs and symptoms, age of onset, and trajectory over time; however, as a group these conditions are characterised by significant changes in a person's thoughts, feelings, perceptions, and behaviours that cause distress, interfere with interpersonal relationships, and impair day-to-day educational, occupational and social functioning. [10, 11].

There is now considerable evidence from over eighty academic papers to show that mental wellbeing and mental ill-health are two linked but independent experiences. According to this 'dual continua model', at any given point in time, an individual will experience a certain level of mental wellbeing ranging from high (flourishing), to moderate, to low (languishing) as well as varying levels of mental ill-health (none, mild, moderate, severe). [6, 7, 12-15].

What influences our mental health?

Our current knowledge reveals mental health is influenced by the dynamic interplay of a wide range of factors. [16] Some of these are intrinsic to us – our biology and genetic profile, our temperament and personality, and our unique life experiences – however, many of the factors that influence our mental health exist in the social, cultural, and economic environments in which we are born, grow, learn, work, play and live.

Some factors have a positive influence on our mental health, and these are referred to as protective factors. Other factors have a negative influence on our mental wellbeing and increase our likelihood

of experiencing a mental disorder, or alcohol or other drug use issues. These are referred to as risk factors. [16, 17]

Risk and protective factors vary over the life course and interact with each other in complex ways. [18] The timing and total number of risk factors an individual experiences over their life, and the degree to which they are 'offset' or 'buffered' by protective factors is important in determining whether a person experiences a mental disorder or not. [19] Broadly speaking, the more risk factors a person experiences the more likely they are to experience mental ill-health, while the more protective factors a person experiences the less likely they will experience these difficulties. [17, 20]

Why should we focus on mental wellbeing and mental ill-health?

High levels of mental wellbeing are associated with a range of benefits. These include:

- Better learning, academic success, increased creativity, and greater productivity.
- Better quality relationships, more pro-social behaviours, and civic engagement.
- Greater adoption of positive health behaviours, better physical health, and increased longevity.
- A lower risk of experiencing mental health conditions like depression and anxiety disorders.
- Better recovery from these conditions should they occur. [12, 21-26]

Mental wellbeing is a driver for these outcomes and not just a result of them. From an economic perspective high mental wellbeing is associated with higher employee engagement, job performance, and organisational productivity. [27] A recent prospective study found that each one-point increase in the short Warwick-Edinburgh Mental Wellbeing Scale at baseline was associated with significantly less absence from work due to sickness in the following year, and by extension significantly less productivity loss. [28]

Higher levels of mental wellbeing are also associated with a reduction in healthcare usage. In another prospective study, each one-point increase in the Warwick-Edinburgh Mental Wellbeing Scale at baseline was associated with US$43 less in healthcare costs, and US$23 less in sickness benefits per person in the following year. [29] A recent Australian study similarly found that high levels of life satisfaction are associated with lower levels of healthcare usage, although the study did not estimate the cost savings. [30]

By contrast, mental ill-health is associated with an increased risk of:

- Health risk behaviours like smoking, risky drinking, and other substance use.
- Poor academic performance and early school leaving.
- Relationship breakdown.
- Higher levels of not in education, employment or training (NEET); unemployment, poverty, and homelessness.
- Contact with the criminal justice system.
- Poor physical health and premature death from chronic diseases. [31-43]

The economic impacts of mental ill-health are profound. The Productivity Commission recently estimated that the direct economic costs of mental ill health and suicide in Australia was $43–70 billion in 2018-19. In addition, the cost of disability and premature death due to mental health conditions, suicide and self-inflicted injury is equivalent to a further $151 billion. [44]

It is also crucial to note that outcomes of ill-health and wellbeing are not mutually exclusive. There is overlap, but also are significant differences. For example, the factors that lead to low mental wellbeing are not always the same as those that lead to mental ill-health, although there is overlap. [45]

Measuring wellbeing *as well as* ill-health will therefore provide a more nuanced understanding of the drivers and barriers of wellbeing and provide better insights for policy makers.

Moreover, while much is yet to be discovered, there is now good evidence to show that it is possible to improve people's mental health through targeted and population-wide policy changes and programs that target these risk and protective factors. Including mental health in broader wellbeing indicator frameworks will therefore enable us to track the impact of these interventions at a population level.

What should we measure?

Given the major benefits associated with high levels of mental wellbeing and the negative impacts of mental ill-health, a robust Wellbeing Framework should include three broad groups of measures:

- Measures of mental wellbeing (or 'good' mental health)
- Measures of mental ill-health
- Measures that track some of the major influences on our mental health.

Mental wellbeing

A wide range of questionnaires have been developed to measure mental wellbeing. Indeed, one review found that by 2016 researchers had published 99 self-report measures of mental wellbeing with 196 different components. [46]. Some of these scales focus on affect, life satisfaction or hedonic (subjective) wellbeing overall. Others focus on eudiamonic (psychological) wellbeing, while some include measures of both elements. [22]

A very common approach to measuring mental wellbeing is to use a single item measure of general life satisfaction, or a multi-item measure that includes questions about one's satisfication across several life domains such as relationships, standard of living, and health (e.g. The Australian Unity Wellbeing Index).

However, there is growing consensus that unidimensional measures – like 'life satisfaction' – are not as useful as multi-dimensional measures in tracking the mental wellbeing of the community. We therefore strongly encourage governments to move away from a single item question about overall life satisfication and move towards more comprehensive measures, especially those that measure hedonic as well as eudaimonic wellbeing.

These include well validated and reliable measures like the Mental Health Continuum Short Form (a 14 item scale that measures emotional, social and psychological wellbeing), and the Warwick Edinburg Mental Wellbeing Scale (the full measure has 14 items, the short form has 7 items). Both these two scales are widely used, including by research groups in Australia, and either would be a suitable measure of mental wellbeing for the Australian population.

Another approach is to use a measure of Quality of Life which includes some questions about mental health. For example, The Household, Income and Labour Dynamics in Australia (HILDA) Survey uses the Short Form Health Survey (SF-36) which includes a five item subscale (MHI-5) that measures affective (subjective) wellbeing. However, it is important to note that this scale tends to focus on deficits/limitations rather than strengths, and hedonic wellbeing rather than both hedonic and eudaimonic wellbeing.

Some non-government organisations have also created scales that measure aspects of mental wellbeing. For example, Smiling Mind in collaboration with KPMG has developed a Wellbeing Index

that includes measures of emotional awareness, focus and concentration, emotional regulation, relationships and social connections, stress and sleep.

Whatever scales are chosen, it is important to ensure that they measure reliable and scientifically validated constructs, which are based on a solid theoretical foundation. At minimum, this ought to include hedonic and eudaimonic markers. We also recommend that measures be preferenced where they have evidence for effectively guiding population improvements in mental health.

Mental ill-health

There are also a wide range of questionnaires that can be used to measure mental ill-health. Some scales measure stress, others psychological distress, while several have been designed to screen for or diagnose specific mental health conditions. While these scales may be administered by clinicians many can also be completed by individuals on a self-report basis, including through online surveys.

Two of the most widely used scales in Australia to measure psychological distress among adolescents and adults are the Kessler 6 (K6) and the longer Kessler 10 (K10). We support the ongoing use of these scales to track the prevalence of psychological distress in the community.

Other more disorder-specific screening tools include:

- The Depression, Anxiety and Stress Scale (DASS) which includes a 42-item scale and a 21-item version to screen for symptoms of stress, depression and anxiety.
- The Patient Health Questionnaire (2 item and 9 item versions) that assesses for the prescence of depression.
- The Generalised Anxiety Disorder scale (2 item and 7 item versions) that assesses for the prescence of generalised anxiety disorder.
- The Edinburgh Postnatal Depression Scale, which screens for the prescence of postnatal depression.

Diagnostic scales are also available. For example, The National Study of Mental Health and Wellbeing uses the World Health Organization Composite International Diagnostic Interview (CIDI). However, this questionnaire needs to be administered by trained interviewers.

Specific screening and diagnostic scales also exist for children. The most widely used screening tool for children is the Strengths and Difficulties Questionnaire (SDQ) which is a brief questionnaire to screen for emotional and behavioural disorders among 2-17 year olds.

There are also reliable and valid scales to measure alcohol and susbtance use such as the Alcohol Use Disorders Identification Test (AUDIT), and the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST).

In the UK, the Wellcome Trust encourages its researchers to use the Patient Health Questionnaire (PHQ-9), the General Anxiety Disorder questionnaire (GAD-7) and the Revised Child Anxiety and Depression Scale (RCADS-25) (children and adolescent depression and anxiety) as standard measures.

While the choice of the scale depends on the purpose, such as screening, diagnosis, outcome measurement, or tracking population prevalance, it is important to use reliable and validated scales and ideally chose those scales that are widely used to enable comparison and benchmarking with other countries.

Risk and protective factors

There are scores of risk and protective factors that influence our mental health [19], and it is clearly not feasible to measure all these influences on a regular basis. However, it is vital that we keep track of people's exposure to certain *highly influential factors* including:

- Self-care behaviours – these include physical activity, diet, sleep, social competencies such as spending time with others, use of resiliency and relaxation strategies, stress management etc.
- Drug and alcohol use.
- Relationships – number and *quality* of social supports, family and community support, the prevalance of social isolation and loneliness, and measures of belonging.
- Safety – the prevalance of adverse childhood experiences such a child abuse and neglect; family violence; exposure to racism and homophobic/transphobic violence; and the level of crime victimisation including physical assault, sexual harrassment and assault, injury and hazards.
- Equality – the gender pay gap and other measures of gender equality, and the level of income inequality in society.
- Cultural – the proportion of Aboriginal and Torres Strait Islander people who report strong cultural identity and connection to Country and language.
- Financial – personal and household, income levels, ability to afford the basic necessities of life, and the number of people – especially children – living in poverty.
- Housing – a measure of housing affordability, overcrowding and the prevalence of homelessness.
- Employment – the number/proportion of young people Not in Education, Employment or Training (NEET), and the prevalance of under-employment and unemployment by gender and age.
- Health and Human Services – the proportion of people with a 12-month mental health condtion who access mental healthcare services, which services they engage with and their level of met and unmet need.

We also support the inclusion of several of the measures included in the OECD Wellbeing and Progress Framework particularly those focused on the environment and action on climate change.

Some of this information is already collected, through surveys such as the National Health Survey, the National Aboriginal and Torres Strait Islander Health Survey, General Social Survey, Personal Safety Australia, the National Drug Strategy Household Survey, the Australian Secondary School Students Alcohol & Drug Survey (ASSAD) and The Household, Income and Labour Dynamics in Australia (HILDA) Survey. Communities That Care Ltd have developed a youth survey that assesses a wide range of modifiable risk and protective factors relevant to young people's mental health. This survey is used to assist local community coalitions to plan and track their efforts to reduce depressive symptoms and alochol and other drug use among young people at a population level. [47]

Other information is lacking and will need to be collected through new surveys. Indeed, the tracking of risk and protective factors needs to be significantly improved. This will require a streamlined and coordinated approach, guided by an overarching framework, strong definitions, and utilising evidence-based reliable and valid measures. It is essential that we decide on which specific risk and protective factors that influence people's mental wellbeing should be monitored, and that we adopt a clear definition and standardised measure of these factors, and measure them using psychometrically sound scales across representative samples of the Australian popultion.

Cultural relevance

It is important to note that the measurement of mental wellbeing, mental ill-health and risk and protective factors is influenced by a person's cultural background and key constructs or the wording of items in a scale can have different meanings for different cultures. It is therefore vital to choose

scales that have been translated and validated across multiple cultures/countries. However, in some instances, it will be necessary to use a scale/questionnairre that has been specifically designed for a particular group, such as scales that measure the social and emotional wellbeing of Aborginal and Torres Strait Islander people. It is also important to ensure that this data is collected in a culturally safe manner.

How frequently should we measure mental wellbeing and mental ill-health?

It is important to collect robust prevalence data on mental wellbeing, mental ill-health and modifiable risk and protective factors on a regular basis. While annual data collection would be ideal, at a minimum this data should be collected *at least every 3 years* as it is simply not possible to design robust public policy or track its outcome unless there is frequent collection of this core data.

Unfortunately, this has not been the case in Australia. For example, most national surveys that focus on mental wellbeing, only measure life satisfaction rather than hedonic and eudaimonic mental wellbeing. Mental ill-health is measured too infrequently. The first National Survey of Child and Adolescent Mental Health and Wellbeing was conducted in 1998, and the second was conducted in 2013-14. Likewise, the first adult National Survey of Mental Health and Wellbeing was published in 1997, the second in 2007, and the most recent survey is occuring at the moment. In addition, as far as we are aware there is no regular national survey that includes a comprehensive measure of modifiable risk and protective factors.

How should the information be used?

Data should be collected with a clear purpose in mind, and one of the benefits of collecting the data described above, is that it would enable government to take a different approach to the way it approaches mental health.

At present, government expenditure in mental health is heavily skewed towards the provision of services and supports for people *after* they have already started to experience a mental health condition. There is very little emphasis on promoting mental wellbeing and preventing mental health conditions from occurring in the first place.

Yet, mental ill-health is not inevitable and there is growing scientific evidence that we can enhance people's mental wellbeing and reduce their risk of experiencing mental health conditions like depression and anxiety disorders through initiatives that alter the balance of risk and protective factors in people's lives. We can also improve their chance of recovery and lower their chance of remission or re-engagement with mental health services by focusing on these factors.

While we acknowledge that our mental healthcare system continues to experience structural challenges, and continued efforts to enhance the availability, affordability, quality, and effectiveness of these supports and services is important, we strongly believe that good mental health policy is not only about supporting individuals who experience mental health conditions – it is also about promoting and protecting the mental health of the whole community.

Taking a 'Wellbeing First' approach would help rebalance government expenditure and require each government department to examine the ways they can target the underlying risk and protective factors that influence our mental wellbeing through a whole-of-government approach, while also continuing to invest in mental healthcare services for people dealing with mental health challenges.

Indeed, while measuring what matters is vital, it is not enough. We also need to 'do what matters'.

References

1. Mental Health.Gov. *What is mental health?* 2020 [cited 2022 04/01/2022]; Available from: https://www.mentalhealth.gov/basics/what-is-mental-health.
2. Weiss, L.A., G.J. Westerhof, and E.T. Bohlmeijer, *Can We Increase Psychological Well-Being? The Effects of Interventions on Psychological Well-Being: A Meta-Analysis of Randomized Controlled Trials.* PLoS One, 2016. **11**(6): p. e0158092.
3. Weisz, J.R., et al., *What five decades of research tells us about the effects of youth psychological therapy: a multilevel meta-analysis and implications for science and practice.* The American Psychologist, 2017. **72**(2): p. 79.
4. Brandel, M., F. Vescovelli, and C. Ruini, *Beyond Ryff's scale: Comprehensive measures of eudaimonic well-being in clinical populations. A systematic review.* Clin Psychol Psychother, 2017. **24**(6): p. O1524-o1546.
5. Diener, E., *Subjective well-being. The science of happiness and a proposal for a national index.* Am Psychol, 2000. **55**(1): p. 34-43.
6. Keyes, C.L., *The mental health continuum: from languishing to flourishing in life.* J Health Soc Behav, 2002. **43**(2): p. 207-22.
7. Westerhof, G.J. and C.L.M. Keyes, *Mental Illness and Mental Health: The Two Continua Model Across the Lifespan.* Journal of adult development, 2010. **17**(2): p. 110-119.
8. McLellan, R. and S. Steward, *Measuring children and young people's wellbeing in the school context.* Cambridge Journal of Education, 2015. **45**(3): p. 307-332.
9. Ryan, R.M. and E.L. Deci, *On happiness and human potentials: a review of research on hedonic and eudaimonic well-being.* Annu Rev Psychol, 2001. **52**: p. 141-66.
10. World Health Organization, *International classification of diseases for mortality and morbidity statistics (11th Revision).* 2018.
11. American Psychiatric Association, *Use of the manual*, in *Diagnostic and Statistical Manual of Mental Disorders*. 2013, American Psychiatric Association.
12. Iasiello, M., J. Agteren, and E. Muir-Cochrane, *Mental Health and/or Mental Illness: A Scoping Review of the Evidence and Implications of the Dual-Continua Model of Mental Health.* Evidence Base, 2020. **2020**.
13. Keyes, C.L., *Promoting and protecting mental health as flourishing: a complementary strategy for improving national mental health.* Am Psychol, 2007. **62**(2): p. 95-108.
14. Keyes, C.L.M., *Mental Health as a Complete State: How the Salutogenic Perspective Completes the Picture*, in *Bridging Occupational, Organizational and Public Health: A Transdisciplinary Approach*. 2014, Springer Netherlands: Dordrecht. p. 179-192.
15. Keyes, C.L., *Mental illness and/or mental health? Investigating axioms of the complete state model of health.* J Consult Clin Psychol, 2005. **73**(3): p. 539-48.
16. Institute of Medicine Committee on Prevention of Mental Disorders. Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research, ed. P.J. Mrazek and R.J. Haggerty. 1994, Washington (DC): National Academies Press.
17. Institute of Medicine Committee on the Prevention of Mental Disorders, *The National Academies Collection: Reports funded by National Institutes of Health*, in *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities*, M.E. O'Connell, T. Boat, and K.E. Warner, Editors. 2009: Washington (DC).
18. Barry, M.M., et al., *Implementing mental health promotion*. Second edition. ed. Springer Behavioral Science and Psychology eBooks 2019 English+International. 2019: Springer.
19. Furber, G., et al., *Developing a broad categorisation scheme to describe risk factors for mental illness, for use in prevention policy and planning.* Aust N Z J Psychiatry, 2017. **51**(3): p. 230-240.
20. Commonwealth of Australia, *Promotion, Prevention and Early Intervention for Mental Health. A Monograph.* 2000, Commonwealth of Australia: Canberra.

21. Iasiello, M., et al., *Positive mental health as a predictor of recovery from mental illness.* J Affect Disord, 2019. **251**: p. 227-230.
22. van Agteren, J., et al., *A systematic review and meta-analysis of psychological interventions to improve mental wellbeing.* Nature Human Behaviour, 2021. **5**(5): p. 631-652.
23. Huppert, F. and K. Ruggeri, *Policy challenges: Well-being as a priority in public mental health*, in *Oxford Textbook of Public Mental Health.*, D. Bhugra, et al., Editors. 2018, Oxford University Press Oxford. p. 131-140.
24. Kansky, J. and E. Diener, *Benefits of well-being: Health, social relationships, work, and resilience.* Journal of Positive Psychology and Wellbeing., 2017. **1**(2): p. 129-169.
25. Huppert, F., *The state of wellbeing science: Concepts, measures, interventions, and policies*, in *Interventions and policies to enhance wellbeing*, Huppert Felicia A and C.L. Cooper, Editors. 2014, John Wiley & Sons: UK. p. 1-49.
26. Santini, Z.I., et al., *Higher levels of mental wellbeing predict lower risk of common mental disorders in the Danish general population.* Mental Health & Prevention, 2022. **26**: p. 200233.
27. Kundi, Y.M., et al., *Employee psychological well-being and job performance: exploring mediating and moderating mechanisms.* International Journal of Organizational Analysis, 2021. **29**(3): p. 736-754.
28. Santini, Z.I., et al., *Economics of mental wellbeing: A prospective study estimating associated productivity costs due to sickness absence from the workplace in Denmark.* Mental Health & Prevention, 2022. **28**: p. 200247.
29. Santini, Z.I., et al., *Economics of mental well-being: a prospective study estimating associated health care costs and sickness benefit transfers in Denmark.* The European Journal of Health Economics, 2021. **22**(7): p. 1053-1065.
30. Kesavayuth, D., P. Shangkhum, and V. Zikos, *Subjective well-being and healthcare utilization: A mediation analysis.* SSM - Population Health, 2021. **14**: p. 100796.
31. Goodsell B, et al., *Child and Adolescent Mental health and educational outcomes. An analysis of educational outcomes from Young Minds Matter: the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. Perth: Graduate School of Education*. 2017, The University of Western Australia: Perth.
32. Veldman, K., et al., *Mental health problems and educational attainment in adolescence: 9-year follow-up of the TRAILS study.* PLoS One, 2014. **9**(7): p. e101751.
33. Hjorth, C.F., et al., *Mental health and school dropout across educational levels and genders: a 4.8-year follow-up study.* BMC Public Health, 2016. **16**: p. 976.
34. Rodwell, L., et al., *Adolescent mental health and behavioural predictors of being NEET: a prospective study of young adults not in employment, education, or training.* Psychol Med, 2018. **48**(5): p. 861-871.
35. Lawrence, D., et al., *Key findings from the second Australian Child and Adolescent Survey of Mental Health and Wellbeing.* Aust N Z J Psychiatry, 2016. **50**(9): p. 876-86.
36. OECD, *Mental Health and Work: Australia*. Mental Health and Work. 2015, Paris: OECD Publishing.
37. Gutwinski, S., et al., *The prevalence of mental disorders among homeless people in high-income countries: An updated systematic review and meta-regression analysis*, in *PLoS Medicine*. 2021, Public Library of Science (PLoS). p. e1003750-e1003750.
38. Doran, C.M. and I. Kinchin, *A review of the economic impact of mental illness.* Aust Health Rev, 2019. **43**(1): p. 43-48.
39. Breslau, J., et al., *A multinational study of mental disorders, marriage, and divorce.* Acta Psychiatr Scand, 2011. **124**(6): p. 474-86.
40. Fazel, S. and K. Seewald, *Severe mental illness in 33,588 prisoners worldwide: systematic review and meta-regression analysis.* Br J Psychiatry, 2012. **200**(5): p. 364-73.

41. Correll, C.U., et al., *Prevalence, incidence and mortality from cardiovascular disease in patients with pooled and specific severe mental illness: a large-scale meta-analysis of 3,211,768 patients and 113,383,368 controls.* World Psychiatry, 2017. **16**(2): p. 163-180.
42. Walker, E.R., R.E. McGee, and B.G. Druss, *Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis.* JAMA Psychiatry, 2015. **72**(4): p. 334-41.
43. Forsythe, L. and A. Gaffney, *Mental disorder prevalence at the gateway to the criminal justice system.* Trends and Issues in Crime and Criminal Justice, 2012(438): p. 1-8.
44. Productivity Commission, *Productivity Commission Mental Health Inquiry Report, Volume 1.* 2020, Productivity Commission: Canberra.
45. Kinderman, P., et al., *Causal and mediating factors for anxiety, depression and well-being.* Br J Psychiatry, 2015. **206**(6): p. 456-60.
46. Goodman, F.R., D.J. Disabato, and T.B. Kashdan, *Reflections on unspoken problems and potential solutions for the well-being juggernaut in positive psychology.* The Journal of Positive Psychology, 2021. **16**(6): p. 831-837.
47. Chilenski, S.M., et al., *Public Health Benefits 16 Years After a Statewide Policy Change: Communities That Care in Pennsylvania.* Prevention Science, 2019. **20**(6): p. 947-958.