“It’s hard to imagine, until you live it”

Experiences of Mental Illness in Australia: A systematic and qualitative examination of interventions and support needs

Final Report for
National Mental Health
Commission 2021-22

University of
New England

Authors

This report was led by Professor Myfanwy Maple, PhD and Dr Sarah Wayland, PhD

Project Team

Ms Alayna Carrandi, Ms Yanan Hu, Ms Shae Karger and Dr Humayun Kabir.
We thank Mr Jackson Newberry-Dupe for his initial qualitative coding.

School of Health
Faculty of Medicine and Health
University of New England (UNE)
Armidale NSW Australia

Sub-contract

Everymind, with research colleagues at the University of Newcastle, undertook the priority populations focus groups. Everymind produced the accompanying plain English report.

Funding

National Mental Health Commission, Australian Government

Suggested Citation

Maple, M., Wayland, S., Carrandi, A., Hu, Y., Karger, S. & Kabir, H. *It's hard to imagine, until you live it. Experiences of Mental Illness in Australia: A systematic and qualitative examination of interventions and support needs.* A report for the National Mental Health Commission of Australia. October 2022.

Warning

This report profiles the experiences of people who voluntarily shared their experience of mental illness. Throughout the report verbatim quotes have been used. Readers should be aware that quotes refer to distressing content including intergenerational trauma, child abuse and neglect, sexual abuse, suicide attempts, witnessing traumatic events and situational trauma experiences. All quotes are included in *italics*, to allow the reader to opt-out of content if needed.

Table of Contents

EXECUTIVE SUMMARY 11

Background **11**

Aims **13**

Methods **13**

Key Learnings **14**

Activity 1: Evidence Review 14

Activity 2: Mental Illness and Distress Survey 15

Activity 3: Priority Populations Focus Groups 16

Activity 4: Grey literature search 17

Activity 5: Living Experience of Mental Illness 17

Summary **18**

Composite journeys of mental illness and distress **19**

Recommendations **21**

ACTIVITY 1: EVIDENCE REVIEW 23

Abstract **23**

Background **24**

Aims **26**

Methods **26**

Eligibility Criteria 27

Screening 28

Data Analysis 29

Results **31**

Digital Health Interventions 95

Light-touch Interventions 98

Discussion **101**

Increasing Engagement in a School Setting 105
Hybrid Delivery Model 106
Standardised Outcome Measures 107

Strengths and Limitations **108**

Conclusion **109**

Key Learnings **110**

ACTIVITY 2: NATIONAL SURVEY ON LIVED EXPERIENCE OF MENTAL ILL-HEALTH, MENTAL ILLNESS AND SUICIDE 111

Background **111**

Aims **111**

Methods **111**
Participants 112
Recruitment 112
Ethics Approval 113
Data Analysis 113

Results **114**
Quantitative Data 114
Qualitative Data 128
Leading Up to Diagnosis 133

Discussion **145**

Key Learnings **148**

ACTIVITY 3: PRIORITY POPULATION FOCUS GROUPS 149

Background **149**

Aims **149**

Method **149**
Participants 150
Ethics Approval 150
Data Analysis 150

Results **151**
Priority Population: Young individuals 151
Priority Population: Culturally and Linguistically Diverse (CALD) 153
Priority Population: LGBTIQ+ 157
Priority Population: Men 159

Discussion **162**

Key Learnings **163**

ACTIVITY 4: GREY LITERATURE SEARCH 164

Background **164**

Aims **164**

Methods **164**
Key Words 165

Data Analysis **165**

Results **166**

Discussion **175**

Key Learnings **176**

ACTIVITY 5: LIVING EXPERIENCES OF MENTAL ILLNESS 177

Background **177**

Methods **178**
Participants 178
Recruitment 180
Ethics Approval 180

Data analysis **181**

Results **181**
Quantitative Data 181
Qualitative Data 191
Situational Crisis impacts Ongoing Mental Illness – How Do We Know What Comes First? 199

Can Support Services Respond to These Complex Needs? 201

Recommendations For Service Improvements 206

Discussion 209

Limitations 211

Key Learnings 212

REFERENCES 214

Index of Figures

FIGURE 1: PRISMA 2020 FLOW DIAGRAM 29
FIGURE 2: A FLOW DIAGRAM OF STUDY PARTICIPANTS 114
FIGURE 3: MAPPING OF COMMON DIAGNOSES AMONG PARTICIPANTS 117
FIGURE 4: DISTRESS WORD CLOUD 129
FIGURE 5: A FLOW DIAGRAM OF STUDY PARTICIPANTS 182
FIGURE 6: PERCEIVED HELPFULNESS OF MENTAL HEALTH SERVICES 184
FIGURE 7: PERCEIVED ACCESSIBILITY AND AVAILABILITY OF MENTAL HEALTH SERVICES 185

Index of Tables

TABLE 1: CHARACTERISTICS OF INCLUDED STUDIES 32
TABLE 2: QUALITY ASSESSMENT OF INCLUDED STUDIES 51
TABLE 3: PAGER FRAMEWORK OVERVIEW 90
TABLE 4: RECOMMENDATIONS ON HOW TO IMPROVE RECRUITMENT AND ENGAGEMENT, BY INTERVENTION TYPE 104
TABLE 5: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF STUDY SAMPLE 115
TABLE 6: A COMPARISON OF DEMOGRAPHIC CHARACTERISTICS BY MENTAL DISORDERS 118
TABLE 7: A COMPARISON OF DEMOGRAPHIC CHARACTERISTICS BY LIVED EXPERIENCE OF SUICIDE 120
TABLE 8: A COMPARISON OF DEMOGRAPHIC CHARACTERISTICS BY AGE OF FIRST DIAGNOSIS 122
TABLE 9: ESTIMATED ODDS RATIOS BY MENTAL DISORDERS 126
TABLE 10: GREY LITERATURE SEARCH 165
TABLE 11: OVERVIEW OF RELEVANT GREY LITERATURE 167
TABLE 12: CATEGORISATION OF THE SOCIAL DETERMINANTS OF MENTAL HEALTH, ADAPTED FROM WORLD HEALTH ORGANIZATION (2014) 179
TABLE 13: COST COMPARISON OF RECRUITMENT ADVERTISING 180
TABLE 14: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SAMPLE POPULATION 183
TABLE 15: ODDS OF HAVING A MENTAL HEALTH CONDITION BY PRIORITY POPULATION GROUPS 186
TABLE 16: AGE OF MENTAL HEALTH DIAGNOSIS AMONG PRIORITY POPULATIONS AND THE BROADER SAMPLE POPULATION 187
TABLE 17: MOST PROMINENT SOCIAL DETERMINANT OF MENTAL HEALTH AND MOST PROMINENT LIFE STAGE FOR PRIORITY POPULATION GROUPS 189

Glossary

Assertive/Proactive outreach	Targeted community-based intervention, or service provision, designed to support individuals with emerging mental ill-health. While some literature refers to assertive outreach, people with lived experience prefer the term ‘proactive outreach’ which will be used throughout, other than in reference to the literature.
Community	The place a person lives or works; where a person interacts in their daily life, for example, school or sports; and the group of individuals with which a person shares a common culture, identity, values, beliefs, behaviours or experiences
Digital health intervention	An intervention that incorporates digital technology (e.g., mobile phone application or website) in its delivery
Light-touch intervention	Non-clinical community interventions that utilise health promotion strategies in the prevention or early intervention
Lived experience	“Personal knowledge about the world gained through direct, first-hand involvement in everyday events rather than through representations constructed by other individuals” (Chandler & Munday, 2016)
Person-centred care	“Holistic, biopsychosocial or integrative care that is responsive to people’s needs and values, that treats individuals with dignity, respect and compassion, and that empowers them and offers choice, involvement and a partnership approach” (Boardman & Dave, 2020, p. 66)
Social determinants of mental health	The social, economic and physical environment in which a person is born, grows, works, lives and ages that can influence mental health outcomes

Abbreviations

ABS	Australian Bureau of Statistics
ACT	Acceptance Commitment Therapy
ADD	Attention Deficit Disorder
ADHD	Attention Deficit Hyperactivity Disorder
AIHW	Australian Institute of Health and Welfare
CALD	Culturally And Linguistically Diverse
CBT	Cognitive-Behavioural Therapy
CI	Confidence Interval
c-PTSD	Complex Post-Traumatic Stress Disorder
EAP	Employee Assistance Program
ED	Emergency Department
GP	General Practitioner
HIIT	High Intensity Interval Training
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome
LGBTQI+	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex +
MeSH	Medical Subject Headings
NHMRC	National Health and Medical Research Council
OCD	Obsessive Compulsive Disorder
OR	Odds ratio
PAGER	Patterns, Advances, Gaps, Evidence for Practice and Research Recommendations
PBS	Pharmaceutical Benefits Scheme
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PROSPERO	International Prospective Register of Systematic Reviews
PTSD	Post-Traumatic Stress Disorder
RCT	Randomised Controlled Trials
SDOMH	Social Determinants of Mental Health
SMS	Short-message-service
UNE	University of New England

Executive Summary

Background

The prevalence of mental ill-health among Australians is increasing, from 17.5% in 2014-15 to 20.1% in 2017-18 to 21.4% in 2020-21 (ABS, 2018, 2022). The recently released Mental Health and Wellbeing Survey (2022) results provide new nationally representative data for Australia. More than 40% of Australians have experienced a mental disorder at some time in their life (ABS, 2022), higher than the global mental disorder prevalence of one in eight individuals (Institute of Health Metrics and Evaluation, 2019). The prevalence of psychological distress among Australians has also increased, from 13% in 2017-18 to 15.4% experiencing high or very high levels of psychological distress in 2020-21 (ABS, 2018, 2022). One in five (20%) young individuals experience high or very high levels of psychological distress, twice the rate of individuals aged 65-85 years (9.6%) (ABS, 2022). Compared with 12% of males, 18.6% of females experience high or very high levels of psychological distress (ABS, 2022). Over half (64.2%) of individuals with high or very high levels of psychological distress had a 12-month mental disorder (ABS, 2022).

The most common mental disorders include anxiety (16.8%), affective disorder (e.g., depression) (7.5%) and substance abuse disorder (3.3%) (ABS, 2022). Those at higher risk of anxiety and affective disorder include females, young individuals (aged 16-24 years), individuals who identify as LGBTQI+ (Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex) and individuals living in one parent family households with dependent children (ABS, 2022). The effects of mental ill-health include reduced life expectancy and increased risk of physical health comorbidity and substance misuse and these factors often compound the severity of mental illness (AIHW, 2020). Seeking support, being able to access the right support and find it helpful to assist with psychological distress and mental illness is challenging. In 2020-21, nearly one in five (17.5%) Australians saw a health professional for their mental health (ABS, 2022). It was more common for individuals to see their general practitioner (12.9%) for their mental health than a psychologist, (7.6%) (ABS, 2022).

Every day, there are nine suicide deaths reported in Australia—more than two and a half times that of the national road toll (ABS, 2021). Since 2009, the age-standardised suicide rate in Australia has increased 13% to 12.1 deaths per 100,000 population (ABS, 2021). In 2020-21, one in six (16.7%) Australians aged 16-85 years experienced suicidal thoughts or behaviours in their life and 3.4% of all Australians had experienced suicidal thoughts or behaviours in the last 12 months (ABS, 2022). For individuals aged 15-44, suicide and self-inflicted injuries are the leading cause of total burden of disease (AIHW, 2020). Other high-risk groups include individuals with mental illness, those who have previously attempted suicide, men and women, young individuals, individuals living in regional areas and First Nations individuals (ABS, 2022; AIHW, 2020). We understand that the effects of suicidal ideation and behaviour include lifetime social and economic disadvantage, regardless of sociodemographic characteristics. This includes IQ, parental mental disorders and concurrent youth mental disorders and substance use (Orri et al., 2022).

The Australian mental health system has begun to shift towards a person-centred focus. This shift incorporates the social, psychological, or behavioural dimensions of illness. However, the system still very much operates in a biomedical model (Commonwealth of Australia, 2020), relying heavily on pharmaceuticals to treat those living with mental illness (Pai & Vella, 2020). The evidence identifies that if you have severe mental illness or substance use disorder — where you may receive acute care through a public inpatient or community mental health service—people are more likely to receive pharmaceutical-based treatment for mental ill-health (Pai & Vella, 2020). In contrast, person-centred care is defined as "holistic, biopsychosocial, or integrative care that is responsive to people's needs and values. Care is underpinned by interventions that treat people with dignity, respect, and compassion, empowering people to be involved in making choices about their care, ensuring their involvement and a prioritising a partnership approach" (Boardman & Dave, 2020, p. 66). When person-centred and biopsychosocial approaches to mental health and suicide are utilised, they can improve the provision of care by integrating medical practice (including pharmaceutical interventions) with other clinical and non-clinical health and social care services in the community (Boardman & Dave, 2020). Ultimately, enhancing the person-centredness of mental health practice and services improves the experiences and outcomes of service users (Boardman & Dave, 2020).

To ensure ongoing efforts to expand person-centred care in Australia, there is a need to invest in gathering evidence for how individuals experience emerging mental illness, how mental ill-health progresses over time, and the relevance of the social determinants of mental health across the lifespan. What also needs to be understood is the ways in which language shapes health care interactions, focussing more on what has happened to a person rather than a deficit base of what is 'wrong' with them is needed (Szalavitz & Perry, 2011) What underpins this investment is a need to better understand the role of distress, as being uniquely attached to the emergence of mental illness and its role in early opportunities to intervene in the lives of those needing enhanced care (Macintyre, Mansell, Pratt & Tai, 2021) These learnings of emergence and the role of distress, will then address current service gaps to hasten the commitment to a person-centred model of care.

Aims

This project aims to understand how Australians experience mental illness and suicide, particularly the time leading up to, and when diagnosed with, mental illness and how services may have, or may not have, responded to their needs. To achieve these aims the following objectives were established:

- Identify current evidence for effective community-based active outreach interventions for individuals living with mental illness or suicidal distress;
- Report on the lived experiences of mental illness and suicide among individuals in Australia;
- Provide qualitative data on individuals' perceptions of the mental health and suicide prevention system, particularly among priority populations;
- Relate the evidence collected to the social determinants of mental health and suicide-related behaviours; and
- Make recommendations on how funding can be allocated to improve service delivery and ultimately the outcomes for individuals accessing mental health services.

Methods

To achieve the stated aim and objectives, this project comprised five research activities:

1. A systematic literature review to assess and synthesise evidence of effective community-based outreach interventions for individuals with mental illness;

2. A community survey on individuals' lived experience of distress, mental illness and suicide;
3. Focus groups with priority populations (Culturally and linguistically diverse individuals, LGBTIQ+, young individuals and men) who have lived experience of mental illness, suicide and alcohol and other drug use;
4. A review of grey literature evidence to identify where current programs and services exist to serve those with mental illness or suicidal distress in the community; and
5. A community survey to assist in developing journey maps of experiences of mental illness considering the social determinants of mental health, health services accessibility and availability.

Key Learnings

The impact of mental illness and suicide in Australia is substantial and requires a person-centred approach to decrease associated morbidity and mortality. An enhanced approach, as identified in this report, needs to acknowledge the multifactorial aspects that contribute to, and protect against, further ill-health. The years 2020-21, considering the natural disasters of fires, floods, and hail, as well as the devastation associated with COVID-19 pandemic, has further strengthened resolve to provide greater support to those at risk of mental ill-health, illness, and suicide. The key findings from each of the five activities of this report are presented below.

Activity 1: Evidence Review

- Individuals with severe mental ill-health were more likely to benefit from targeted interventions.
- Individuals with mild to moderate symptoms of mental ill-health were more likely to benefit from highly interactive interventions where participants experience a sense of connection and belonging to a service, in addition to reducing the need for repetitive sharing of mental health and/or trauma histories.
- Further efforts are needed to strengthen the evidence base for effective proactive interventions for mental illness. Interventions need to improve their recruitment strategies, offer hybrid delivery of services, commit to standardised outcome measures,

have a targeted approach, and embed co-creation in the development and delivery of the intervention, with consumers.

- The review highlighted that early intervention could change the trajectory of an individual's journey of declining mental health. However, early intervention may not mean "early in life". Rather, early intervention may be considered as "early in distress" or "early in trauma" to better intervene in the lives of those at risk of complex mental illness.
- Trauma responsivity is key – for those experiencing, or who have experienced trauma. Effective early intervention needs to be targeted to those at risk of distress and/or an emerging mental illness rather than a universal intervention.
- Targeted interventions for those who have lived experience of trauma can help to prevent any further trauma experienced by individuals reaching out for help.
- Enhanced awareness of the cumulative impact of trauma (characterised as events throughout life) requires a rethink from the current approach of universal interventions (such as those employed in primary schools) as these interventions may not reach those who need care, at a time when they need care.

Activity 2: Mental Illness and Distress Survey

- Mental illness across the lifespan and experiences of distress associated with life events and reactions, are intrinsically linked.
- Respondents noted that distress was highly stigmatised in the community, viewed as not being "enough" of a mental illness to receive treatment or prompt a person to seek help. Distress has physical manifestations and symptomatology meaning it may be viewed as a physical ailment, rather than an approach that could be enhanced take a holistic approach that incorporates both physical and psycho-emotional health.
- The significance of distress is not reflected in the process of engaging with general health and social care provision. People are not actively encouraged to share their experiences of distress, when engaging with primary health services. This negatively impacts their mental and physical health ongoing.
- The journey of mental illness often had a lead up phase that was lengthy, and non-linear. Coupled with this slow emergence, was also a protracted period of diagnosis.

The journey to the 'correct' or subsequent diagnoses requires ongoing support and should not be viewed as a resolution.

- Respondents identified experiences of health service engagement. The predominant themes of engagement noted:
    - a disconnect between services accessed within the public and private system;
    - pervading negative reactions from health professionals when help seeking; and
    - significant emotional labour when retelling mental health journeys to health professionals.
- When distress is not explored there is a missed opportunity to locate appropriate services. This delay is also impacted by the time required to meet diagnostic criteria to receive support and treatment, rather than addressing distress when it occurs. Diagnosis or mental health crisis occurs at a much higher level of acuity.
- The survey revealed recommendations for health services to enhance their proactivity (e.g., reaching out early), responsivity (e.g., asking the right questions), adaptivity (e.g., acknowledging that diagnosis may change over time), and ongoing surveillance (e.g., longer monitoring) to better support people across the lifespan.

Activity 3: Priority Populations Focus Groups

- The survey responses, from Activity 2, were then explored in real time via a series of focus groups with priority populations.
- The focus groups reinforced that lived experience of mental illness is highly individual and requires a targeted approach to explore distinctive presentations.
- Priority populations are not homogenous by group and the social determinants of mental health continue to play a role in experiences and outcomes across the priority groups.
- Representation and collaboration with priority populations, in the development and implementation of targeted interventions, can enhance development of appropriate services.
- Priority populations do not specifically include women as an at-risk group. Enhanced awareness of women being highly active in care and support roles, as well as more highly represented in common mental illness diagnoses (and in mental health research), requires their inclusion as a priority population.

Activity 4: Grey literature search

- Activities 1, 2 and 3 findings were explored in the grey literature to ascertain how community-facing resources identify or recommend interventions and support options.
- The grey literature emphasised that community interventions are important, yet there was little clarity about what community interventions people could engage with and if there were effective (or evaluated).
- Despite emphasis on community interventions being co-designed and community-led there was limited focus on best-practice for engagement or how they could meet the needs of priority populations.

Activity 5: Living Experience of Mental Illness

- The final survey, seeking to explore living experiences of mental illness, identified disparities relating to gendered experience of mental illness and organic aetiology.
- Trauma was commonly reported as happening prior to a mental illness diagnosis and could be either caused or exacerbated by the emerging mental illness.
- The survey data demonstrated gendered differences in diagnoses
    - Men had higher odds of reporting a schizophrenia diagnosis compared to their counterpart.
    - Women had higher odds of reporting a diagnosis of anxiety, depression and eating disorder, compared to their counterpart.
- Participants who identified as a member of the LGBTIQ+ community, compared to those who did not, had three times the odds of reporting a diagnosis of anxiety and over two times the odds of reporting a diagnosis of eating disorder or personality disorder.
- Young individuals had statistically significant higher odds of reporting an eating disorder diagnosis, compared to their counterpart.
- Older adults had twice the odds of reporting a diagnosis of depression, compared to those below the age of 65 years.
- When considering the social determinants of mental health, differences depending on group membership are noted:

  - For First Nations individuals, the most prominent social determinant of mental health was social factors;
  - For CALD individuals, the most prominent social determinant of mental health was community factors; and
  - For the remainder of the priority population groups, the most prominent social determinant of mental health across all life stages was interpersonal factors.
- Most experiences reflect on interactions with the mental health system as negative. However, good timely care was extremely helpful, especially when connecting with a General Practitioner, who had awareness of the person's care needs.
- Significant qualitative data reinforced the need for a diverse service offering - what may work for one, may not work for others. Individuals have personal preferences as to what best suits their needs, and these needs will change over time as people engage with transitions relating to lifespan and their mental illness.
- Services can improve by being more accessible, person-centred, and trauma-informed (i.e., normalising help-seeking and providing compassionate, holistic care).

Summary

The activities, across the project, identify that mental health services must have consideration of education, employment and physical health needs alongside a focus on inclusivity, anonymity, reduction of shame or stigma and incorporating the voices of all individuals in the community. This is required in a targeted way for priority population groups and in the community more broadly to be able to access a variety of different services that can be tailored to their needs without the need to continuously repeat their trauma history. The participants identified that mental illness is often a lifelong experience, and that within presentations people's distress is a complex and often deeply personal experience not often noticed by others. Distress can also be compounded by the effects of trauma, leading to mental ill-health diagnosis, or acute distress months, years or decades later and shapes how a person accesses education, how they work and how they can meaningfully engage with others. The experience of help seeking identified that whilst interventions, diagnoses and medications are offered, the environment in which individuals engage with those who provide support is inconsistent and this inconsistency loses individuals from the system, meaning their access to care is affected. As expressed by Enticott and colleagues (2022, p. 11), attending to

> *“social determinants of mental health in economic, housing, education, employment and other policy spheres across government portfolios and with the community…is perhaps Australia’s greatest challenge in mental health reform now, beyond the usual calls for political will and more funding.”*

Composite journeys of mental illness and distress

Mapping common journeys is not an attempt to simplify the complexity of one’s own lived experience. Rather grouping similar trajectories allows a broad understanding of common experiences across time which can assist in policy and service development to ensure that all experiences are considered in isolation when a person seeks care, while simultaneously common trajectories are considered.

The four trajectories from the combined piece of work presented here are conceptualised as journeys of mental illness transition points. Priority populations are not ‘journey’ statements in their own rights, the needs of priority populations depend on interpersonal, social and community domains of the individual. These domains should also be considered when considering these trajectories with an individual or group.

1. ***Where a situational crisis occurs, and appropriate care and support are received, the individual can move into the next phase of their life as well as to reflect on the preceding factors relevant to that crisis.***

The scope to recognise and respond to a person’s life experiences that suggest an emergent or transient mental ill-health concern, to better understand the underlying causes prior to acuity. Early and appropriate intervention shifts the trajectory away from mental illness and back to well-being. Consideration of health messaging targeted to awareness of the social determinants of mental health, life stage and priority population about the potential impact of significant life transitions, and where to access early, appropriate support depending on the person’s needs.

2. ***Where a significant life transition occurs and the individual is unable to adjust to the change, distress is heightened. When care and support is not received, mental illness may follow.***

The escalation of, or emergent experience of, mental illness as a response to a significant life transition such as adolescence to adulthood, becoming a parent, relationship breakdown, exposure to disaster, retirement, generally with multiple challenges occurring simultaneously. The individual may not be able to determine which need has priority and be in a heightened crisis reactive state for some time as distress increased and mental health declines. Support needs are not attended to, or appropriate support is not located.

3. ***Where an individual experiences multiple, and often overlapping adverse experiences, (often commencing in childhood) this can result in poor decision making, ongoing vulnerability, further abuse and often alcohol and other drugs along with emerging mental illnesses.***

Understanding the interwoven experience of mental illness as an outcome of a trauma and abuse history, as precursors to ongoing mental health challenges, is needed. These prior experiences may resurface at times when individuals are under increasing strain as well as the impact of ongoing traumas. Decision making, that results in poor outcomes for the individual, throughout their life can exacerbate mental illness.

4. ***Where an individual experiences mental illness through any of the pathways above they may also experiences trauma directly related to their mental illness. This includes not being appropriately diagnosed and inappropriate support provided which leads to ongoing – and in some cases – permanent mental illness.***

Mental illness as a precursor to trauma. In this trajectory an individual experiences trauma due to the mental illness and the experiences of poor care and support.

Recommendations

Across the five activities in this project reinforced that each person's lived experience is unique and simultaneously there are similarities across life stages and priority population groups. Different interventions will be required across groups with embedded flexibility to address individual need, and early intervention in the emerging distress period is vital to reduce adverse outcomes. Distress is common and yet different for all. Notwithstanding these similarities and differences, we offer six recommendations:

1. **De-individualise responsibility to achieve 'good' mental health** – the project emphasised that mental illness is often the outcome of interpersonal, community or societal challenges, yet responsibility is focussed on individual shortcomings and personal resources to manage mental health. Service improvement needs to consider ways to design interventions that acknowledge the social determinants of mental health and the ways in which macro impacts of mental health shape micro-presentations when an individual is distressed.

2. **Primary and allied health services, need to be funded to provide connectedness to individuals across the lifespan**. This allows for partnerships between the provider and the individual to track and reflect on the emergence of mental illness (whether it be crisis or 'slow moving' in its presentation), explore the impacts and suitability of diagnosis and treatment options, conceptualisation of the role of social determinants of health on outcomes and capacity to limit pipeline system engagement – where people escalate from one to another due to the limitations of services not being able to engage with their complete story.

3. **Distress needs to be key priority focus in mental health care** – if we are seeking to offer compassionate and person-centre service delivery we need to estimate the impact of distress in peoples' lives. A significant proportion of the participants across Activity 2 and Activity 5 highlighted the ways in which distress was displayed by them, sometimes months or years prior to a significant mental health crisis. Questions about the emergence of distress, reduced stigma of seeking help for ongoing distress and health promotion messaging about the inclusion of distress, in a person's life span, is required.

4. **Health professionals and the community need to be aware that mental illness is not a single presentation event** - Mental health and suicide prevention policy requires funding and professional capacity development to encompass the reality that for many mental illness is intimately linked to a lifetime of distress events, childhood and adult traumas, and socioeconomic, environmental, and situational factors via communities of practice committed to addressing the micro, macro and meso factors that impact wellbeing. This needs to be reinforced at all stages of intervention – including curriculum design for health professionals, continuing professional development for health and social care workers, health messaging approaches, and at the time of crisis when mental health needs are addressed.

5. **Universal or targeted interventions need to not just occur early in life but also early in distress**. The significant transition points highlighted by the participants relating to transitions from childhood and adolescence to adulthood, post-significant trauma experiences, and within priority populations, means that early in distress engagement, specific to certain populations, may enhance uptake of interventions when delivered to the right people at the right time.

6. **Shift the language** – asking people when they engage with services, *what happened to you*, rather than *wants wrong with you* shifts from a deficit approach to understanding of the social determinants, trauma experiences and situational distress underlying the mental illness presentation. Many of the participants noted that their engagement with health services, particularly during crisis periods, focused only on the tip of an iceberg; their history was either not a priority or they could no longer repeat it to the next clinician. This led to inappropriate care and longer periods in acute distress.

7. **Limit health promotion approaches that valorise diagnosis as a gateway to recovery** – recovery from mental illness was not mitigated by the identification of a 'correct' diagnosis. Participants shared that they were led to believe that the desired outcome for managing a mental illness was *a diagnosis*. Enhanced public health campaigning needs to demystify diagnosis and highlight that diagnosis can be an ongoing, inexact response to both mental illness, trauma, and distress. Collaborations between consumers, caregivers, and health professionals requires longevity to explore distress and associated mental illness presentations that may emerge and likely shift over time.

Activity 1: Evidence Review

Effectiveness of assertive community outreach interventions for individuals living with mental ill-health in Australia: A systematic review[1]

Abstract

Background: Mental ill-health is a common occurrence globally and represents a significant burden of disease. In Australia, the development and improvement of programs that connect individuals with emerging mental ill-health is a national health priority. However, there are current data limitations and informational gaps on community-based initiatives and their associated mental health outcomes. Examination of reported outcomes and contribution of community outreach interventions for individuals with emerging mental ill-health, to improve early intervention and prevention efforts, is required. The aims of this review were to systematically summarise assertive outreach interventions provided within a community setting for individuals with emerging mental ill-health and to examine the effectiveness and assess the quality of identified studies.

Methods: A systematic review of the literature was conducted across 6 electronic databases and Google Scholar on 01 November 2021 and 12 June 2022 to identify studies reporting on assertive outreach interventions in the community. Study quality was assessed using the National Health and Medical Research Council Evidence Hierarchy. The PAGER framework was used to synthesise and analyse the evidence identified among identified interventions.

Results: Eighty-four studies met the inclusion criteria. Studies were categorised as either digital health or light-touch interventions. Most studies reported a high risk of bias due to small sample size, high attrition and insufficient outcome measures. Therefore, it remains unclear whether interventions are universally effective. Individuals with severe mental ill-health were likely to benefit from targeted interventions and interventions with external engagement from health professionals and community organisation representatives. Individuals with mild to moderate

---

[1] A shortened version of this systematic review is being submitted for publication

symptoms of mental ill-health were more likely to benefit from interventions involving high levels of engagement from participants.

Discussion: Results from this review provide an understanding of the patterns in previous studies related to assertive outreach interventions for supporting individuals in the community. Knowledge from this review can inform the implementation of strategies to improve support available to community members and community organisations with the specific aim of early intervention or prevention of mental ill-health. Further efforts are needed to strengthen the delivery of assertive outreach interventions that will be assisted by improved study design and standardised outcome measures.

Background

Mental ill-health is a common occurrence globally (Ginn & Horder, 2012; Steel et al., 2014) and represents a significant burden of disease (Naghavi, 2019; Rehm & Shield, 2019). Whereas mental illness often requires a formal diagnosis, the term *mental ill-health* encompasses acute experiences of poor mental health and the mental distress experienced prior to a formal diagnosis (Centers for Disease Control, 2021). In Australia, more than half the adult population will experience mental ill-health in their lifetime, yet the current mental healthcare system is not designed to adequately support the diverse needs of individuals at-risk of or living with mental illness (AIHW, 2022; Australian Government, 2021). Unmet needs for mental health care are associated with being male, having low income, having higher out of pocket costs, having other chronic conditions, having poorer self-rated health and living in rural areas (Corscadden et al., 2019; van Spijker et al., 2019). The consequences of mental ill-health are experienced by individuals living with mental ill-health as well as their carers, families, and friends, as well as communities, employers, and governments (Commonwealth of Australia, 2020). The nature of these consequences can include direct expenditure on mental healthcare and other support services, time and effort caring and supporting individuals, limited career opportunities, reduced living standards and social and emotional costs (Commonwealth of Australia, 2020). Hence, the development and improvement of programs that connect individuals early, prior to a formal diagnosis of mental illness or with emerging mental ill-health is a national health priority (AIHW, 2022).

The rise in prevalence of mental health conditions, accompanied by a significant strain on human and financial resources, has highlighted the need for integrated person-centred healthcare services (Boardman & Dave, 2020). Person-centred health care generates significant benefits for individuals and is an effective strategy to meet health system challenges; namely, promotion of human rights and early access to social health services in the primary and community care setting (Rosen et al., 2020; World Health Organization, 2015). Movement from a biomedical model of care that prioritises interventional, clinical therapies (e.g., inpatient and outpatient care) to a person-centred model of care requires investment in health promotion and mental ill-health prevention strategies in the community (World Health Organization, 2015). The central inclusion of community engagement, in shaping health services, has been highlighted as a critical strategy to ensure the responsiveness of services to the needs of services users, as well as trust in and ownership of services by its users (World Health Organization, 2015).

Community-based mental healthcare approaches have been increasingly used to promote help-seeking behaviour and utilisation of mental health services (Jordans et al., 2020). Advantages of community-based approaches include (Khoury, 2019; Ponce & Rowe, 2018; Rosen et al., 2020) that they often occurring in the context of one’s life day-to-day and simultaneously can be responsive to broader issues including the social determinants of health (such as poverty, housing, education, employment). Community based care can reduce stigma which can advert early access, resulting in adverse health and social outcomes, such as poor access to mental and physical healthcare, reduced life expectancy, exclusion from higher education and employment and increased risk of contact with the criminal justice system, victimization, poverty and homelessness. Such models are often recovery-oriented and promote social connectivity and community participation reducing isolation. Thus, prevention and early intervention initiatives, including reforms that improve the prevention, early detection and intervention for mental ill-health across the life span, is a particularly important nexus for the transition to a person-centred mental health system (Commonwealth of Australia, 2020).

The Australian mental health system has shifted towards person-centred, and community-based mental healthcare delivery in recent years. Prevention and early intervention along with mental health consumer and carer involvement are prioritised health policy planning, with the goal of improving the quality of life for individuals living with mental ill-health (Commonwealth of Australia, 2020). Person-centred care espouses community-based outreach initiatives providing prevention and early intervention efforts for individuals with emerging mental ill-health. Consequently, these initiatives account for an important and growing part of the Australian mental health system but more data is required to identify service gaps, evaluation findings and to improve service delivery (Commonwealth of Australia, 2020).

Aims

The aim of this systematic review was to examine the extent of evidence and reported outcomes relating to assertive outreach interventions in Australia. For the purposes of this review, assertive outreach refers to a targeted community-based intervention, or service provision, designed to support individuals with emerging mental ill-health.

Methods

A systematic search of the literature was conducted to identify relevant studies concerning assertive outreach interventions provided within a community setting for individuals with emerging mental ill-health in Australia. The protocol for the systematic review was registered with the International Prospective Register of Systematic Reviews (PROSPERO ID: CRD42021288616) and the reporting of results followed the Preferred Reporting Items for Systematic reviews and Meta-analyses (PRISMA-SR) 2020 (Page et al., 2021). A university health librarian was consulted throughout the development of the search strategy and verified the search strategy prior to the final database searches being undertaken. The search was conducted on 01 November 2021 then rerun on 12 June 2022 to capture studies published between December 2021 and June 2022. The following electronic databases were searched: Ovid (Embase classic + Embase), Web of Science (MEDLINE, Social Sciences Citation Index), EBSCO Host (CINAHL Plus), ProQuest (PsycINFO, Social Science Database, Sociology Collection), Informit (Aboriginal and Torres Strait Islander Health Bibliography) and Elsevier (Scopus). Google Scholar was also included in the search with the first 100 results included. The searches were restricted to articles published within the last five years (01 January 2017 and 12 June 2022) to ensure a timely completion of the review. The search terms used comprises the following central concepts: (i) suicide and mental illness prevention; (ii) intervention and promotion; (iii) evaluation; and (iv) Australia. Searches incorporated the use of Medical Subject Headings (MeSH), Boolean operators (i.e., AND, OR) and proximity searching (Appendix 1: Full search strategy).

Eligibility Criteria

Peer-reviewed studies, published in English, and conducted in Australia were included for local context evidence as to why an intervention was implemented successfully and how the intervention and contextual characteristics impact its effectiveness. No restriction was applied to study design. The eligibility criteria were framed using the following Population, Intervention, Context and Outcome parameters:

Population: Studies with participants who were vulnerable to or at risk of mental ill-health, or had mild, moderate or severe symptoms of mental illness were included. Studies reporting on healthy populations were excluded. Interventions which involved family members of an individual with mental illness (e.g., parents or carers) as target participants to prevent or alleviate their child(ren)'s mental ill-health were excluded.

Intervention: Studies reporting on community outreach programs were included, such as nation-wide programs and non-clinical interventions. Studies with interventions where recruitment took place in the community were included and studies where participants were referred into the program were excluded (e.g., follow-up or transitional care for patients after discharge).

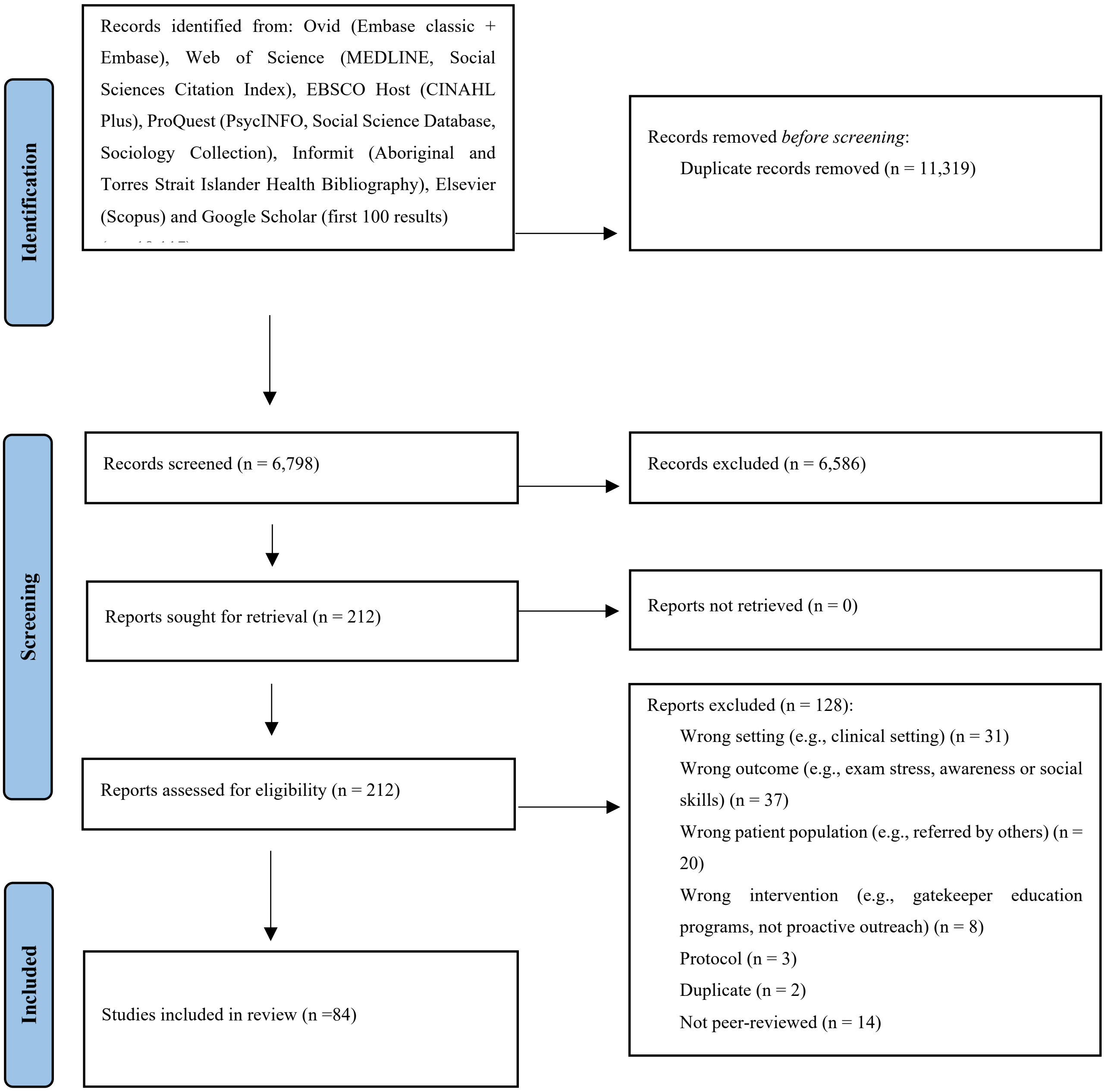
Context: Studies evaluating interventions conducted in community settings (including digital health) and in open institutions (e.g., university, school, prison, workplace, or non-for-profit organisation) were included. Studies conducted in clinical settings (e.g., hospital, local health district, aged care, or nursing home) were excluded. Our definition of Community comes from the National Mental Health Commission's Vision 2030: "A community could be the place a person lives or works; it could be where a person interacts in their daily life, for example, school or sports; and it could be the group of individuals with which a person shares a common culture, identity, values, beliefs, behaviours or experiences" (National Mental Health Commission, n.d.).

Outcome: Studies reporting qualitative and/or quantitative outcome(s) related to the effectiveness of an intervention on mental ill-health or mental illness were included. Studies reporting on outcomes from the perspective of carers were included. Other studies reporting only outcomes related to help-seeking behaviour, awareness-raising, general mental wellbeing, social skills, stigma and quality of life, as well as outcomes associated with the impact of interventions on conditions other than mental ill-health or mental illness (e.g., exam stress, or music performance anxiety) were excluded.

Screening

The title and abstract of all results were imported into the Covidence platform (Veritas Health Innovation) and duplicates were automatically removed. The title and abstract screening process was independently conducted by two reviewers (YH and AC/TP). Studies that met the eligibility criteria or could not be explicitly excluded underwent full-text review. The full-text articles of the included publications were independently screened by two reviewers (YH and AC/TP) and the reasons for exclusion were recorded. Discrepancies during title and abstract screening and full-text review were first discussed and resolved by the two reviewers (YH and AC/TP) and the remaining conflicts were adjudicated by a third reviewer (MM). The researchers were blinded to each other's decisions in both title and abstract screening and full-text review to increase the rigour of the process. A PRISMA flow diagram illustrating the search results is provided in Figure 1 and a PRISMA checklist, in Appendix 2 (Page et al., 2021).

Figure 1: PRISMA 2020 Flow Diagram



Data Analysis

Data extraction was performed by two independent reviewers (AC and YH) for the first 67 studies using a standardised form in Covidence with differences resolved through discussion. The remaining 17 were performed by one independent reviewer (YH) and reviewed by the second (AC). The following information were extracted from each of the included studies: (i) study details (author(s), title, publication year, and state/territories in Australia); (ii) study characteristics (aim(s), study design, time interval, funding sources, and potential conflicts of interests); (iii) participants (description, inclusion criteria, exclusion criteria, method of recruitment, type of mental ill-health, and sample size); (iv) intervention (description, type of intervention, activities or components, comparator(s), outcome(s), outcome measures, and follow-up time interval); and (v) results (challenges or barriers identified, and opportunities identified).

Study quality was assessed by two independent reviewers (AC and YH) for the first 67 studies using the National Health and Medical Research Council Evidence Hierarchy (2009). The remaining 17 studies were assessed by one independent reviewer (YH) and reviewed by the second (AC). Studies were assessed on the following dimensions: (i) strength of evidence (level of evidence, quality of evidence, and risk of bias and statistical precision relating to the outcome(s) assessing mental illness); (ii) size of effect relating to the outcome(s) assessing mental illness; and (iii) relevance of evidence in the context of this review's research question. Level of evidence was categorised as follows: Level I (Systematic review of level II studies); Level II (Randomised controlled trial); Level III-1 (Pseudo-randomised controlled trial); Level III-2 (A comparative study with concurrent controls, such as randomised experimental trial, cohort study, case-control study and interrupted time series with control group); Level III-3 (A comparative study without concurrent controls, such as historical cohort study, two or more single arm study, interrupted time series without a parallel control group); or Level IV (Case series with either post-test or pre-test/post-test outcomes). High quality evidence was characterised by a study with low risk of bias, meaning that any difference between study result and the "true" result is likely to be small. Low quality evidence was characterised by a study with high risk of bias, meaning any difference between the study result and the "true" result could be large. The outcome relating to mental illness or suicidal distress of each included study were evaluated to determine whether the effect was real, rather than due to chance, using a level of significance expressed as a p-value or confidence interval. We reported studies as having high statistical precision if the effect was statistically significant or low statistical precision if the effect was not statistically significant. A study's effect size is useful for assessing the clinical importance of the findings and refers to the measure of effect or point estimate provided in the results of each study (e.g., mean difference, relative risk, odds ratio, hazard ratio, sensitivity, specificity, etc.). Appropriateness of the outcomes were determined on the basis of whether the outcomes measured in the study were relevant to the participants. The relevance of the study question was rated on a scale of not relevant to very relevant and referred to how closely the elements of the research question match those of the question being considered in this review. Any conflicts with respect to quality assessment were resolved through discussion until a consensus was reached. If studies did not provide enough information to determine the quality of a study, reviewers recorded “unsure” in the quality assessment form. A summary of study characteristics and quality are presented in tabular form. The PAGER (Patterns, Advances, Gaps, Evidence for practice and Research recommendations) framework was used to analyse the findings (Bradbury-Jones et al., 2021). A meta-analysis was not deemed appropriate due to the diversity of interventions and differences in study designs and outcome measures.

Results

Of the nearly 7,000 studies identified, 84 studies met the inclusion criteria for the purposes of the systematic review. Key characteristics of the included studies are presented in Table 1 below. Most studies (n=76; 90%) were published after 2018. A majority of included studies (n=80; 95%) measured quantitative outcomes; only four measured qualitative outcomes. All Australian states and territories were represented, including Australian Capital Territory (n=6; 7%), South Australia (n=6; 7%); New South Wales (n=17; 20%); Northern Territory (n=1; 1%); Queensland (n=2; 2%); Victoria (n=14; 17%); and Western Australia (n=4; 5%). The remaining studies (n=34; 40%) included a study population located in more than one state or territory. The most common study designs were randomised controlled trials (RCT; n=46; 55%) and cohort studies (n=21; 25%). Study populations included older adults (aged >50 years) (n=6; 7%), adults (aged >18 years) (n=35; 42%), adolescents and children (aged <18 years) (n=21; 25%) or both adults and children (n=3; 4%).

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
Almeida et al. (2021)	Preventing Depression Among Older Individuals Living In Rural Areas: A Randomised Controlled Trial Of Behavioural Activation In Collaborative Care	RCT	Light-touch	Older adults (aged 65 years or older)	307	Depression
Baldwin et al. (2020)	A Web-Based Mental Health Intervention To Improve Social And Occupational Functioning In Adults With Type 2 Diabetes (The Springboard Trial): 12-Month Outcomes Of A Randomized Controlled Trial	RCT	Digital health	Adults with Type 2 Diabetes	780	Depression
Bartels et al. (2019)	"I Would Just Feel Really Relaxed And At Peace": Findings From A Pilot Prison Yoga Program In Australia	Cohort	Light-touch	Prisoners	9	Depression, anxiety
Batterham et al. (2018a)	Fitmindkit: Randomised Controlled Trial Of An Automatically Tailored Online Program For Mood, Anxiety, Substance Use And Suicidality	RCT	Digital health	Adults	194	Depression, anxiety, suicidal ideation
Batterham et al. (2017b)	Trajectories Of Change And Long-Term Outcomes In A Randomised	RCT	Digital health	Adults (aged 18-64 years)	1149	Depression, anxiety

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Controlled Trial Of Internet-Based Insomnia Treatment To Prevent Depression					
Batterham et al. (2021a)	Efficacy Of A Transdiagnostic Self-Help Internet Intervention For Reducing Depression, Anxiety, And Suicidal Ideation In Adults: Randomized Controlled Trial	RCT	Digital health	Adults with mild to moderate symptoms of psychological distress	1986	Depression, anxiety
Batterham et al. (2021b)	A Brief Intervention To Increase Uptake And Adherence Of An Internet-Based Program For Depression And Anxiety (Enhancing Engagement With Psychosocial Interventions): Randomized Controlled Trial	RCT	Digital health	Adults	849	Depression, anxiety
Bayer et al. (2022)	Follow-Up Of The Cool Little Kids Translational Trial Into Middle Childhood	RCT	Light-touch	Parents of young school-aged children	545	Depression, anxiety
Blake et al. (2016)	The SENSE Study: Post Intervention Effects Of A Randomized Controlled Trial Of A Cognitive-Behavioral And Mindfulness-Based Group	RCT	Light-touch	High school students (aged 12-17 years)	144	Depression, anxiety

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Sleep Improvement Intervention Among At-Risk Adolescents					
Blignault et al. (2019)	Evaluation Of The Acceptability And Clinical Utility Of An Arabic-Language Mindfulness CD In An Australian Community Setting	Cohort	Light-touch	Arabic-speaking adults	70	Depression, anxiety
Blignault et al. (2021a)	Cultivating Mindfulness: Evaluation Of A Community-Based Mindfulness Program For Arabic-Speaking Women In Australia	Cohort	Light-touch	Arabic-speaking adults	27	Depression, anxiety
Blignault et al. (2021b)	Effectiveness Of A Community-Based Group Mindfulness Program Tailored For Arabic And Bangla-Speaking Migrants	Cohort	Light-touch	Arabic- and Bangla-speaking adults	171	Psychological distress, depression, anxiety
Blignault et al. (2022)	Promoting Mental Health And Wellbeing In Multicultural Australia: A Collaborative Regional Approach	Cohort	Digital health	Arabic- and Bangla-speaking adults	397	Depression, anxiety
Bryant et al. (2022)	Effectiveness Of A Videoconferencing-Delivered Psychological Intervention For Mental Health Problems During	RCT	Digital health	Adults	240	Psychological distress

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	COVID-19: A Proof-Of-Concept Randomized Clinical Trial					
Calear et al. (2016)	A Pilot Randomized Controlled Trial Of The E-Couch Anxiety And Worry Program In Schools	RCT	Digital health	School-aged students	225	Anxiety
Chen et al. (2022)	A Randomised Controlled Trial Evaluating Two Universal Prevention Programs For Children: Building Resilience To Manage Worry	RCT	Light-touch	Primary school students	316	Depression, anxiety
Christensen et al. (2016)	Effectiveness Of An Anline Insomnia Program (Shuti) For Prevention Of Depressive Episodes (The Goodnight Study): A Randomised Controlled Trial	RCT	Digital health	Internet users (aged 18-64 years) with insomnia and depression symptoms	1149	Depression
Collins et al. (2020)	A Pilot Evaluation Of A Smartphone Application For Workplace Depression	Cohort	Digital health	Employed adults	81	Depression
Crane et al. (2019)	Strengthening Resilience In Military Officer Cadets: A Group-Randomized Controlled Trial Of	RCT	Light-touch	Officer cadets	226	Depression, anxiety

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Coping And Emotion Regulatory Self-Reflection Training					
Crane et al. (2020)	Strengthening Resilience In Over 50's: A Nested Clustered-Randomized Controlled Trial Of Adaptive Systematic Self-Reflection	RCT	Light-touch	Older adults (aged over 50 years)	93	Depression, anxiety
Crawford et al. (2019)	Web-Based Benefit-Finding Writing For Adults With Type 1 Or Type 2 Diabetes: Preliminary Randomized Controlled Trial	RCT	Digital health	Adults with Type 1 or Type 2 Diabetes	72	Depression
D'Cunha et al. (2019)	Psychophysiological Responses In Individuals Living With Dementia After An Art Gallery Intervention: An Exploratory Study	Exploratory	Light-touch	Older adults living with dementia	28	Depression
Deady et al. (2016)	An Online Intervention For Co-Occurring Depression And Problematic Alcohol Use In Young Individuals: Primary Outcomes From A Randomized Controlled Trial	RCT	Digital health	Young individuals	104	Depression
Deady et al. (2018)	Preliminary Effectiveness Of A Smartphone App To Reduce Depressive Symptoms In The	RCT	Digital health	Adult workers in male-dominated industries	84	Depression

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Workplace: Feasibility And Acceptability Study					
Deady et al. (2020)	Preventing Depression Using A Smartphone App: A Randomized Controlled Trial	RCT	Digital health	Adult workers in male-dominated industries	2268	Depression
Deans (2021)	Exploring The Impact Of A Large Gender-Sensitised Health Promotion Program: The Sons Of The West Program	Cohort	Light-touch	Men who participated in the Sons of the West Program in 2017	776	Psychological distress
Dove and Costello (2017)	Supporting Emotional Well-Being In Schools: A Pilot Study Into The Efficacy Of A Mindfulness-Based Group Intervention On Anxious And Depressive Symptoms In Children	Cohort	Light-touch	Grade 5 children	57	Depression, anxiety
Dray et al. (2017)	Effectiveness Of A Pragmatic School-Based Universal Intervention Targeting Student Resilience Protective Factors In Reducing Mental Health Problems In Adolescents	RCT	Light-touch	Students in secondary schools	3115	Internalising problems

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
Drew et al. (2021)	Behavioral And Cognitive Outcomes Of An Online Weight Loss Program For Men With Low Mood: A Randomized Controlled Trial	RCT	Digital health	Men with low mood	125	Depression
Dudgeon et al. (2022)	Understanding Aboriginal Models Of Selfhood: The National Empowerment Project's Cultural, Social, And Emotional Wellbeing Program In Western Australia	Qualitative	Light-touch	Aboriginal Individuals	49	Psychological distress
Eather et al. (2019)	Efficacy And Feasibility Of HIIT Training For University Students: The Uni-HIIT RCT	RCT	Light-touch	University students	53	Anxiety
Eather et al. (2020)	Integrating High-Intensity Interval Training Into The Workplace: The Work-HIIT Pilot RCT.	RCT	Light-touch	University staff	47	Anxiety
Falon et al. (2021)	A Clustered-Randomized Controlled Trial Of A Self-Reflection Resilience-Strengthening Intervention And Novel Mediators	RCT	Light-touch	Second-class Officer Cadets from the Royal Military College	204	Depression, anxiety
Farrer et al. (2019)	A Novel Multi-Component Online Intervention To Improve The Mental Health Of University Students:	RCT	Digital health	University students	200	Depression, anxiety

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Randomised Controlled Trial Of The Uni Virtual Clinic					
Fassnacht et al. (2022)	A Group-Facilitated, Internet-Based Intervention To Promote Mental Health And Well-Being In A Vulnerable Population Of University Students: Randomized Controlled Trial Of The Be Well Plan Program	RCT	Digital health	University students	126	Depression, anxiety
Fuller-Tyszkiewicz et al. (2020)	Efficacy Of A Smartphone App Intervention For Reducing Caregiver Stress: Randomized Controlled Trial	RCT	Digital health	Caregivers	183	Depression, anxiety
Giallo et al. (2018)	A Pilot Evaluation Of 'Working Out Dads': Promoting Father Mental Health And Parental Self-Efficacy	Cohort	Light-touch	Fathers	57	Depression, anxiety
Giallo et al. (2021)	Family Foundations To Promote Parent Mental Health And Family Functioning During The COVID-19 Pandemic In Australia: A Mixed Method Evaluation	Mixed methods	Digital health	Parents and caregivers	62	Maternal stress and anxiety
Gold et al. (2017)	Group Music Therapy As A Preventive Intervention For Young	RCT	Light-touch	Students	100	Depression

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Individuals At Risk: Cluster-Randomized Trial					
Grummitt et al. (2022)	Selective Personality-Targeted Prevention Of Suicidal Ideation In Young Adolescents: Post Hoc Analysis Of Data Collected In A Cluster Randomised Controlled Trial	RCT	Light-touch	Highschool year 8 students	1636	Suicidal ideation
Howells et al. (2020)	Can Participation In A Community Organized Football Program Improve Social, Behavioural Functioning And Communication In Children With Autism Spectrum Disorder? A Pilot Study	Non-randomised experimental	Light-touch	Children	40	Internalising disorder, anxiety
Johnson and Wade (2021)	Acceptability And Effectiveness Of An 8-Week Mindfulness Program In Early- And Mid-Adolescent School Students: A Randomised Controlled Trial	RCT	Light-touch	School-aged student	434	Depression, anxiety
Johnstone et al. (2020)	A Pilot Investigation Of Universal School-Based Prevention Programs For Anxiety And Depression	RCT	Light-touch	Primary school children	295	Depression, anxiety

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Symptomology In Children: A Randomized Controlled Trial					
Kahl et al. (2020)	Evaluation Of Reachout.Com, An Unstructured Digital Youth Mental Health Intervention: Prospective Cohort Study	Cohort	Digital health	Website users	1982	Depression, anxiety
Law et al. (2021)	A Peer Support Intervention For First-Time Mothers: Feasibility And Preliminary Efficacy Of The Mummy Buddy Program	Non-randomised experimental	Light-touch	Pairs of experienced mothers and first-time mothers	47 pairs	Postnatal depression
Leggett et al. (2018)	Bright Light As A Preventive Intervention For Depression In Late-Life: A Pilot Study On Feasibility, Acceptability, And Symptom Improvement	Cohort	Digital health	Older adults (aged 65 years or older)	11	Depression
Li et al. (2022a)	The Uptake And Outcomes Of An Online Self-Help Mindfulness Programme During COVID-19	Cross-sectional	Digital health	General public	5058	Psychological distress
Li et al. (2022b)	COVID-19 Related Differences In The Uptake And Effects Of Internet-Based Cognitive Behavioural	Cross-sectional	Digital health	Adults	1343	Obsessive compulsive disorder

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Therapy For Symptoms Of Obsessive-Compulsive Disorder					
Marshall et al. (2021)	Smartphone Psychological Therapy During COVID-19: A Study On The Effectiveness Of Five Popular Mental Health Apps For Anxiety And Depression	Single-case	Digital health	Adults	29	Depression, anxiety
McKenzie et al. (2021)	"Feels Good To Get Wet": The Unique Affordances Of Surf Therapy Among Australian Youth	Mixed methods	Light-touch	Youth between 14-17 years	9	Depression
McKeon et al. (2021)	Feasibility Of An Online, Mental Health-Informed Lifestyle Program For Individuals Aged 60+ Years During The COVID-19 Pandemic	Cohort	Digital health	Older adults (aged 60 years or older)	10	Psychological distress
Metcalf et al. (2022)	Attention-Control Training As An Early Intervention For Veterans Leaving The Military: A Pilot Randomized Controlled Trial	RCT	Light-touch	Australian Defense Force personnel transitioning from the military	59	Posttraumatic stress disorder
Murawski et al. (2019)	Efficacy Of An M-Health Physical Activity And Sleep Health Intervention For Adults: A	RCT	Digital health	Adults	160	Depression, anxiety

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Randomized Waitlist-Controlled Trial					
Newton et al. (2020)	Evaluating The Differential Effectiveness Of Social Influence And Personality-Targeted Alcohol Prevention On Mental Health Outcomes Among High-Risk Youth: A Novel Cluster Randomised Controlled Factorial Design Trial	RCT	Light-touch	Year 8 students	947	Internalising and externalising problems
O'Dea et al. (2019)	Smooth Sailing: A Pilot Study Of An Online, School-Based, Mental Health Service For Depression And Anxiety	Cohort	Digital health	Secondary school students	59	Depression, anxiety
O'Dea et al. (2020)	A Randomised Controlled Trial Of A Relationship-Focussed Mobile Phone Application For Improving Adolescents' Mental Health	RCT	Digital health	Adolescents (aged 12-16 years)	193	Depression, anxiety, psychological distress
O'Dea et al. (2021a)	A Cluster Randomised Controlled Trial Of A Web-Based Youth Mental Health Service In Australian Schools	RCT	Digital health	Secondary school students	1841	Depression, anxiety, psychological distress

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
O’Dea et al. (2021b)	Delivering A Digital Mental Health Service In Australian Secondary Schools: Understanding School Counsellors' And Parents' Experiences	Qualitative	Digital health	Counsellors and parents of secondary school students	41	Depression, anxiety
Ogloff et al. (2022)	The Impact Of A Short-Term Mental Health Intervention Delivered In An Australian Prison: A Multi-Cultural Comparison	RCT	Light-touch	Prisoners	124	Psychological distress
O'Moore et al. (2018)	Internet Cognitive-Behavioral Therapy For Depression In Older Adults With Knee Osteoarthritis: A Randomized Controlled Trial	RCT	Digital health	Older adults (aged 50 years and older)	69	Depression
Parker et al. (2022)	A Brief, Daily, Online Mental Health And Well-Being Intervention For University Staff During The COVID-19 Pandemic: Program Description And Outcomes Using A Mixed Methods Design	Mixed methods	Digital health	University staff	106	Depression, anxiety
Rasmussen et al. (2018)	Suicide/Self-Harm-Risk Reducing Effects Of An Aboriginal Art Program For Aboriginal Prisoners	Cohort	Light-touch	Aboriginal prisoners	335	Suicide

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
Rees et al. (2020)	Pilot Study Of The Effectiveness Of A Mindful Self-Care And Resiliency Program For Rural Doctors In Australia	Cohort	Light-touch	Doctors based in a rural area	13	Burnout, psychological strain
Roberts et al. (2018)	Efficacy Of The Aussie Optimism Program: Promoting Pro-Social Behavior And Preventing Suicidality In Primary School Students. A Randomised-Controlled Trial	RCT	Light-touch	Grade 6 students	2288	Depression, anxiety
Ruocco et al. (2018)	Learning To Cope: A CBT Evaluation Exploring Self-Reported Changes In Coping With Anxiety Among School Children Aged 5-7 Years	Cohort	Light-touch	Primary school children	65	Anxiety, Internalising behaviours
Sanatkar et al. (2019)	Using Cluster Analysis To Explore Engagement And E-Attainment As Emergent Behavior In Electronic Mental Health	Clustering analysis	Digital health	App users	43,631	Depression, anxiety
Sharrock et al. (2021)	The Uptake And Outcomes Of Internet-Based Cognitive Behavioural Therapy For Health	Cross-sectional	Digital health	Adults	904	Depression, anxiety

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	Anxiety Symptoms During The COVID-19 Pandemic					
Singh et al. (2019)	Impact Of A Secondary School Depression Prevention Curriculum On Adolescent Social-Emotional Skills: Evaluation Of The Resilient Families Program	RCT	Light-touch	Secondary school students	1826	Depression
Slewa-Younan et al. (2020)	Improving The Mental Wellbeing Of Arabic Speaking Refugees: An Evaluation Of A Mental Health Promotion Program	Cohort	Light-touch	Arabic-speaking refugees	33	Psychological distress
Snodgrass et al. (2020)	Evaluation Of A Culturally Sensitive Social And Emotional Well-Being Program For Aboriginal And Torres Strait Islanders	Cohort	Light-touch			
Tighe et al. (2020)	Usage And Acceptability Of The Ibobbly App: A Pilot Trial For Suicide Prevention In Aboriginal And Torres Strait Islander Youth	Qualitative	Digital health	Aboriginal and Torres Strait Islander Youth	13	Depression, anxiety
Torok et al. (2022)	The Effect Of A Therapeutic Smartphone Application On Suicidal Ideation In Young Adults: Findings	RCT	Digital health	Young adults (aged 18-25 years)	445	Suicidal ideation

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
	From A Randomized Controlled Trial In Australia					
Tracey et al. (2018)	Combining Acceptance And Commitment Therapy With Adventure Therapy To Promote Psychological Wellbeing For Children At-Risk	Cohort	Light-touch	Upper primary school-aged children enrolled in a specialist school	9	Depression, anxiety
van Spijker et al. (2018)	Effectiveness Of A Web-Based Self-Help Program For Suicidal Thinking In An Australian Community Sample: Randomized Controlled Trial	RCT	Digital health	Adults (aged 18-65 years)	418	Suicidal thinking
Vella and McIver (2019)	Reducing Stress And Burnout In The Public-Sector Work Environment: A Mindfulness Meditation Pilot Study	Cohort	Light-touch	Governmental employees	65	Burnout
Viskovich and Pakenham (2020)	Randomized Controlled Trial Of A Web-Based Acceptance And Commitment Therapy (ACT) Program To Promote Mental Health In University Students	RCT	Digital health	University students	1,162	Depression, anxiety, stress

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
Visvalingam et al. (2022)	A Mixed Methods Study Of An Online Intervention To Reduce Perfectionism	Mixed methods	Digital health	University students	70	Depression, anxiety
Wicks et al. (2018)	Intensive Child-Centered Play Therapy In A Remote Australian Aboriginal Community	Cohort	Light-touch	Aboriginal children under the age of 12 years	9	Behavioural problems (e.g., hyperactivity, inattention, prosocial behaviour)
Wilson (2021)	Novel Solutions To Student Problems: A Phenomenological Exploration Of A Single Session Approach To Art Therapy With Creative Arts University Students	Qualitative	Light-touch	University students	6	Depression, anxiety, psychological distress
Wright et al. (2019)	Mindfulness-Based Cognitive Therapy For Children (MBCT-C) For Prevention Of Internalizing Difficulties: A Small Randomized Controlled Trial With Australian Primary School Children	RCT	Light-touch	Primary school children	89	Depression, anxiety, internalising problems

Table 1: Characteristics of Included Studies

Author (Publication Year)	Title	Study Design	Intervention Type	Study Population	Number of participants	Targeted mental illness
Yap et al. (2018)	A Tailored Web-Based Intervention To Improve Parenting Risk And Protective Factors For Adolescent Depression And Anxiety Problems: Postintervention Findings From A Randomized Controlled Trial	RCT	Digital health	Students (aged 12-15 years) and their parents	359 parent-adolescent dyads	Depression, anxiety
Young et al. (2021)	Assessing The Feasibility Of An M-Health Intervention For Changing Diet Quality And Mood In Individuals With Depression: The My Food & Mood Program	Cohort	Digital health	Adults with current depressive symptoms	123	Depression

Note: RCT=randomised controlled trial

Intervention types were categorised as either digital health (n=43; 51%) – an intervention that incorporates digital technology (e.g., mobile phone application or website) in its delivery – or light-touch interventions (n=41; 49%). Light-touch interventions are defined as non-clinical community interventions that utilise health promotion strategies in the prevention or early intervention, as opposed to clinical interventions or treatments for illness. This included implicit and explicit references to mental ill-health prevention, as well as more broadly references to managing distress or enhancing wellbeing. In this review, light-touch interventions comprised mindfulness-based programs, resilience-strengthening programs, play therapy, art programs, sports-based programs, and other preventive therapies (e.g., lifestyle interventions). Among studies evaluating light-touch interventions (n=41; 49%), less than half (n=16; 39%) occurred in primary or secondary schools. Other settings included universities (n=4; 10%), non-English-speaking community organisations (n=4; 10%), prisons (n=3; 7%), and employment contexts (n=4; 10%). The types of mental illnesses identified and measured in the included interventions were one or more of the following: internalising and externalising behaviour, anxiety, depression, postpartum depressions, psychological distress, suicidal behaviour, loneliness, and burnout. The most common targeted mental illness(es) among the interventions were a combination of depression and anxiety (n=35) or depression (n=16).

Most studies were Level III evidence (n=47; 56%), and the remaining studies were Level II (n=32; 38%) or Level IV (n=5; 6%), whereby higher-level studies in the hierarchy have study designs that are minimally impacted by bias. A majority of studies (n=70; 83%) were of low quality with a high risk of bias. This was mostly due to small sample size, high attrition, low adherence to the intervention and/or a lack of control group. Approximately half of the studies (n=43; 51%) had high statistical precision, or statistically significant improvements with respect to relevant mental health outcomes. The other half (n=37; 44%) of the studies reported low statistical precision. The remaining studies (n=4; 5%) were qualitative studies and did not include a statistical analysis. Most studies (n=56; 67%) reported a small or medium effect size, while the remaining studies reported a large effect size (n=15; 18%) or did not report an effect size (n=12; 14%). Most studies used outcome measures that were "very appropriate" (n=50; 60%) or "somewhat appropriate" (n=30; 36%) with respect to person-centredness. Nearly all studies were either somewhat relevant (n=36; 43%) or very relevant (n=47; 56%) to the research question. See Table 2.

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Almeida et al. (2021)	Preventing Depression Among Older Individuals Living In Rural Areas: A Randomised Controlled Trial Of Behavioural Activation In Collaborative Care	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Very relevant
Baldwin et al. (2020)	A Web-Based Mental Health Intervention To Improve Social And Occupational Functioning In Adults With Type 2 Diabetes (The Springboard Trial): 12-Month Outcomes	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Unsure	Somewhat appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Of A Randomized Controlled Trial						
Bartels et al. (2019)	"I Would Just Feel Really Relaxed And At Peace": Findings From A Pilot Prison Yoga Program In Australia	Level IV: Case series with either post-test or pre-test/post-test outcomes	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Large	Very appropriate	Somewhat relevant
Batterham et al. (2018a)	Fitmindkit: Randomised Controlled Trial Of An Automatically Tailored Online Program For Mood, Anxiety, Substance Use And Suicidality	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Batterham et al. (2017b)	Trajectories Of Change And Long-Term Outcomes In A Randomised Controlled Trial Of Internet-Based Insomnia Treatment To Prevent Depression	Level II: RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant
Batterham et al. (2021a)	Efficacy Of A Transdiagnostic Self-Help Internet Intervention For Reducing Depression, Anxiety, And Suicidal Ideation In Adults: Randomized Controlled Trial	Level II: RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Batterham et al. (2021b)	A Brief Intervention To Increase Uptake And Adherence Of An Internet-Based Program For Depression And Anxiety (Enhancing Engagement With Psychosocial Interventions): Randomized Controlled Trial	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Somewhat relevant
Bayer et al. (2022)	Follow-Up Of The Cool Little Kids Translational Trial Into Middle Childhood	Level II: RCT	High quality/ low risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Blake et al. (2016)	The SENSE Study: Post Intervention Effects Of A Randomized Controlled Trial Of A Cognitive-Behavioral And Mindfulness-Based Group Sleep Improvement Intervention Among At-Risk Adolescents	Level II: RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant
Blignault et al. (2019)	Evaluation Of The Acceptability And Clinical Utility Of An Arabic-Language Mindfulness CD In An Australian Community Setting	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Blignault et al. (2021a)	Cultivating Mindfulness: Evaluation Of A Community-Based Mindfulness Program For Arabic-Speaking Women In Australia	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant
Blignault et al. (2021b)	Effectiveness Of A Community-Based Group Mindfulness Program Tailored For Arabic And Bangla-Speaking Migrants	Level IV: Case series with either post-test or pre-test/post-test outcomes	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant
Blignault et al. (2022)	Promoting Mental Health And Wellbeing In Multicultural Australia: A	Level III-2: A comparative study with	High quality/ low risk of bias	High: The effect is real, rather than due to	Unsure: We don't have enough	Somewhat appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Collaborative Regional Approach	concurrent controls		chance (e.g., statistically significant).	information to decide either way.		
Bryant et al. (2022)	Effectiveness Of A Videoconferencing-Delivered Psychological Intervention For Mental Health Problems During COVID-19: A Proof-Of-Concept Randomized Clinical Trial	Level II: RCT	High quality/ low risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant
Calear et al. (2016)	A Pilot Randomized Controlled Trial Of The E-Couch Anxiety And Worry Program In Schools	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not	Small	Very appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
				statistically significant).			
Chen et al. (2022)	A Randomised Controlled Trial Evaluating Two Universal Prevention Programs For Children: Building Resilience To Manage Worry	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant
Christensen et al. (2016)	Effectiveness Of An Anline Insomnia Program (Shuti) For Prevention Of Depressive Episodes (The Goodnight Study): A Randomised Controlled Trial	Level II: RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Collins et al. (2020)	A Pilot Evaluation Of A Smartphone Application For Workplace Depression	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant
Crane et al. (2019)	Strengthening Resilience In Military Officer Cadets: A Group-Randomized Controlled Trial Of Coping And Emotion Regulatory Self-Reflection Training	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Very relevant
Crane et al. (2020)	Strengthening Resilience In Over 50's: A Nested Clustered-Randomized	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance	Small	Somewhat appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Controlled Trial Of Adaptive Systematic Self-Reflection			(e.g., not statistically significant).			
Crawford et al. (2019)	Web-Based Benefit-Finding Writing For Adults With Type 1 Or Type 2 Diabetes: Preliminary Randomized Controlled Trial	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant
D'Cunha et al. (2019)	Psychophysiological Responses In Individuals Living With Dementia After An Art Gallery Intervention: An Exploratory Study	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Unsure: We don't have enough information to decide either way.	Somewhat appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Deady et al. (2016)	An Online Intervention For Co-Occurring Depression And Problematic Alcohol Use In Young Individuals: Primary Outcomes From A Randomized Controlled Trial	Level II: RCT	High quality/ low risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Somewhat appropriate	Very relevant
Deady et al. (2018)	Preliminary Effectiveness Of A Smartphone App To Reduce Depressive Symptoms In The Workplace: Feasibility And Acceptability Study	Level II: RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Deady et al. (2020)	Preventing Depression Using A Smartphone App: A Randomized Controlled Trial	Level II: RCT	High quality/ low risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant
Deans (2021)	Exploring The Impact Of A Large Gender-Sensitised Health Promotion Program: The Sons Of The West Program	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Unsure: We don't have enough information to decide either way.	Very appropriate	Very relevant
Dove and Costello (2017)	Supporting Emotional Well-Being In Schools: A Pilot Study Into The Efficacy Of	Level III-2: A comparative study with	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance	Small	Somewhat appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	A Mindfulness-Based Group Intervention On Anxious And Depressive Symptoms In Children	concurrent controls		(e.g., not statistically significant).			
Dray et al. (2017)	Effectiveness Of A Pragmatic School-Based Universal Intervention Targeting Student Resilience Protective Factors In Reducing Mental Health Problems In Adolescents	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant
Drew et al. (2021)	Behavioral And Cognitive Outcomes Of An Online Weight Loss Program For	Level II: RCT	High quality/ low risk of bias	Low: It is likely that the effect is due to chance	Small	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Men With Low Mood: A Randomized Controlled Trial			(e.g., not statistically significant).			
Dudgeon et al. (2022)	Understanding Aboriginal Models Of Selfhood: The National Empowerment Project's Cultural, Social, And Emotional Wellbeing Program In Western Australia	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	Unsure: We don't have enough information to decide either way.	Unsure: We don't have enough information to decide either way.	Somewhat appropriate	Somewhat relevant
Eather et al. (2019)	Efficacy And Feasibility Of HIIT Training For University Students: The Uni-HIIT RCT	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not	Small	Not appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
				statistically significant).			
Eather et al. (2020)	Integrating High-Intensity Interval Training Into The Workplace: The Work-HIIT Pilot RCT.	Level II: RCT	Low quality/ high risk of bias	Unsure: We don't have enough information to decide either way.	Small	Not appropriate	Somewhat relevant
Falon et al. (2021)	A Clustered-Randomized Controlled Trial Of A Self-Reflection Resilience-Strengthening Intervention And Novel Mediators	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Not appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Farrer et al. (2019)	A Novel Multi-Component Online Intervention To Improve The Mental Health Of University Students: Randomised Controlled Trial Of The Uni Virtual Clinic	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant
Fassnacht et al. (2022)	A Group-Facilitated, Internet-Based Intervention To Promote Mental Health And Well-Being In A Vulnerable Population Of University Students: Randomized Controlled	Level II: RCT	High quality/ low risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Trial Of The Be Well Plan Program						
Fuller-Tyszkiewicz et al. (2020)	Efficacy Of A Smartphone App Intervention For Reducing Caregiver Stress: Randomized Controlled Trial	Level II: RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant
Giallo et al. (2018)	A Pilot Evaluation Of 'Working Out Dads': Promoting Father Mental Health And Parental Self-Efficacy	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Giallo et al. (2021)	Family Foundations To Promote Parent Mental Health And Family Functioning During The COVID-19 Pandemic In Australia: A Mixed Method Evaluation	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Very relevant
Gold et al. (2017)	Group Music Therapy As A Preventive Intervention For Young Individuals At Risk: Cluster-Randomized Trial	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, relevant, unsure*
Grummitt et al. (2022)	Selective Personality-Targeted Prevention Of Suicidal Ideation In Young Adolescents: Post Hoc Analysis Of Data Collected In A Cluster Randomised Controlled Trial	Level II: RCT	High quality/ low risk of bias	Unsure: We don't have enough information to decide either way.	Small	Very appropriate	Very relevant
Howells et al. (2020)	Can Participation In A Community Organized Football Program Improve Social, Behavioural Functioning And Communication In Children With Autism Spectrum Disorder? A Pilot Study	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Somewhat appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**^{a} *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Johnson and Wade (2021)	Acceptability And Effectiveness Of An 8-Week Mindfulness Program In Early- And Mid-Adolescent School Students: A Randomised Controlled Trial	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Somewhat relevant
Johnstone et al. (2020)	A Pilot Investigation Of Universal School-Based Prevention Programs For Anxiety And Depression Symptomology In Children: A Randomized Controlled Trial	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Kahl et al. (2020)	Evaluation Of Reachout.Com, An Unstructured Digital Youth Mental Health Intervention: Prospective Cohort Study	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Unsure: We don't have enough information to decide either way.	Very appropriate	Very relevant
Law et al. (2021)	A Peer Support Intervention For First-Time Mothers: Feasibility And Preliminary Efficacy Of The Mummy Buddy Program	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	Unsure: We don't have enough information to decide either way.	Small	Very appropriate	Somewhat relevant
Leggett et al. (2018)	Bright Light As A Preventive Intervention For Depression In Late-Life: A	Level III-2: A comparative study with	Low quality/ high risk of bias	High: The effect is real, rather than due to	Large	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Pilot Study On Feasibility, Acceptability, And Symptom Improvement	concurrent controls		chance (e.g., statistically significant).			
Li et al. (2022a)	The Uptake And Outcomes Of An Online Self-Help Mindfulness Programme During COVID-19	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Somewhat appropriate	Somewhat relevant
Li et al. (2022b)	COVID-19 Related Differences In The Uptake And Effects Of Internet-Based Cognitive Behavioural Therapy For	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Somewhat appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Symptoms Of Obsessive-Compulsive Disorder						
Marshall et al. (2021)	Smartphone Psychological Therapy During COVID-19: A Study On The Effectiveness Of Five Popular Mental Health Apps For Anxiety And Depression	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Very relevant
McKenzie et al. (2021)	"Feels Good To Get Wet": The Unique Affordances Of Surf Therapy Among Australian Youth	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	Unsure: We don't have enough information to decide either way.	Unsure: We don't have enough information to decide either way.	Somewhat appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
McKeon et al. (2021)	Feasibility Of An Online, Mental Health-Informed Lifestyle Program For Individuals Aged 60+ Years During The COVID-19 Pandemic	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Somewhat relevant
Metcalf et al. (2022)	Attention-Control Training As An Early Intervention For Veterans Leaving The Military: A Pilot Randomized Controlled Trial	Level II: RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant
Murawski et al. (2019)	Efficacy Of An M-Health Physical Activity And Sleep Health Intervention For	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance	Small	Somewhat appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Adults: A Randomized Waitlist-Controlled Trial			(e.g., not statistically significant).			
Newton et al. (2020)	Evaluating The Differential Effectiveness Of Social Influence And Personality-Targeted Alcohol Prevention On Mental Health Outcomes Among High-Risk Youth: A Novel Cluster Randomised Controlled Factorial Design Trial	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Somewhat appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
O'Dea et al. (2019)	Smooth Sailing: A Pilot Study Of An Online, School-Based, Mental Health Service For Depression And Anxiety	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Unsure: We don't have enough information to decide either way.	Somewhat appropriate	Somewhat relevant
O'Dea et al. (2020)	A Randomised Controlled Trial Of A Relationship-Focussed Mobile Phone Application For Improving Adolescents' Mental Health	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant
O'Dea et al. (2021a)	A Cluster Randomised Controlled Trial Of A Web-Based Youth Mental Health	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance	Small	Somewhat appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, relevant, unsure*
	Service In Australian Schools			(e.g., not statistically significant).			
O’Dea et al. (2021b)	Delivering A Digital Mental Health Service In Australian Secondary Schools: Understanding School Counsellors' And Parents' Experiences	Level IV: Case series with either post-test or pre-test/post-test outcomes	Low quality/ high risk of bias	Unsure: We don't have enough information to decide either way.	Unsure: We don't have enough information to decide either way.	Somewhat appropriate	Somewhat relevant
Ogloff et al. (2022)	The Impact Of A Short-Term Mental Health Intervention Delivered In An Australian Prison: A Multi-Cultural Comparison	Level II: RCT	High quality/ low risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
O'Moore et al. (2018)	Internet Cognitive-Behavioral Therapy For Depression In Older Adults With Knee Osteoarthritis: A Randomized Controlled Trial	Level II: RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant
Parker et al. (2022)	A Brief, Daily, Online Mental Health And Well-Being Intervention For University Staff During The COVID-19 Pandemic: Program Description And Outcomes Using A Mixed Methods Design	Level III-3: A comparative study without concurrent controls	High quality/ low risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Rasmussen et al. (2018)	Suicide/Self-Harm-Risk Reducing Effects Of An Aboriginal Art Program For Aboriginal Prisoners	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Somewhat appropriate	Very relevant
Rees et al. (2020)	Pilot Study Of The Effectiveness Of A Mindful Self-Care And Resiliency Program For Rural Doctors In Australia	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant
Roberts et al. (2018)	Efficacy Of The Aussie Optimism Program: Promoting Pro-Social	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to	Unsure: We don't have enough	Somewhat appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Behavior And Preventing Suicidality In Primary School Students. A Randomised-Controlled Trial			chance (e.g., statistically significant).	information to decide either way.		
Ruocco et al. (2018)	Learning To Cope: A CBT Evaluation Exploring Self-Reported Changes In Coping With Anxiety Among School Children Aged 5-7 Years	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant
Sanatkar et al. (2019)	Using Cluster Analysis To Explore Engagement And E-Attainment As Emergent	Level III-3: A comparative study without	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g.,	Small	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Behavior In Electronic Mental Health	concurrent controls		statistically significant).			
Sharrock et al. (2021)	The Uptake And Outcomes Of Internet-Based Cognitive Behavioural Therapy For Health Anxiety Symptoms During The COVID-19 Pandemic	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant
Singh et al. (2019)	Impact Of A Secondary School Depression Prevention Curriculum On Adolescent Social-Emotional Skills: Evaluation Of The Resilient Families Program	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Slewa-Younan et al. (2020)	Improving The Mental Wellbeing Of Arabic Speaking Refugees: An Evaluation Of A Mental Health Promotion Program	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant
Snodgrass et al. (2020)	Evaluation Of A Culturally Sensitive Social And Emotional Well-Being Program For Aboriginal And Torres Strait Islanders	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Somewhat appropriate	Somewhat relevant
Tighe et al. (2020)	Usage And Acceptability Of The Ibobbly App: A Pilot Trial For Suicide Prevention	Level IV: Case series with either post-test or pre-	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance	Small	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	In Aboriginal And Torres Strait Islander Youth	test/post-test outcomes		(e.g., not statistically significant).			
Torok et al. (2022)	The Effect Of A Therapeutic Smartphone Application On Suicidal Ideation In Young Adults: Findings From A Randomized Controlled Trial In Australia	Level II: RCT	High quality/ low risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant
Tracey et al. (2018)	Combining Acceptance And Commitment Therapy With Adventure Therapy To Promote Psychological	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g.,	Small	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	Wellbeing For Children At-Risk			statistically significant).			
van Spijker et al. (2018)	Effectiveness Of A Web-Based Self-Help Program For Suicidal Thinking In An Australian Community Sample: Randomized Controlled Trial	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Large	Very appropriate	Somewhat relevant
Vella and McIver (2019)	Reducing Stress And Burnout In The Public-Sector Work Environment: A Mindfulness Meditation Pilot Study	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Viskovich and Pakenham (2020)	Randomized Controlled Trial Of A Web-Based Acceptance And Commitment Therapy (ACT) Program To Promote Mental Health In University Students	Level II: RCT	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Very appropriate	Very relevant
Visvalingam et al. (2022)	A Mixed Methods Study Of An Online Intervention To Reduce Perfectionism	Level III-3: A comparative study without concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Small	Somewhat appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Wicks et al. (2018)	Intensive Child-Centered Play Therapy In A Remote Australian Aboriginal Community	Level III-2: A comparative study with concurrent controls	Low quality/ high risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Large	Very appropriate	Very relevant
Wilson (2021)	Novel Solutions To Student Problems: A Phenomenological Exploration Of A Single Session Approach To Art Therapy With Creative Arts University Students	Level IV: Case series with either post-test or pre-test/post-test outcomes	Low quality/ high risk of bias	Unsure: We don't have enough information to decide either way.	Unsure: We don't have enough information to decide either way.	Very appropriate	Very relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
Wright et al. (2019)	Mindfulness-Based Cognitive Therapy For Children (MBCT-C) For Prevention Of Internalizing Difficulties: A Small Randomized Controlled Trial With Australian Primary School Children	Level III-1: A pseudo-RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Somewhat relevant
Yap et al. (2018)	A Tailored Web-Based Intervention To Improve Parenting Risk And Protective Factors For Adolescent Depression And Anxiety Problems: Postintervention Findings	Level II: RCT	Low quality/ high risk of bias	Low: It is likely that the effect is due to chance (e.g., not statistically significant).	Small	Very appropriate	Somewhat relevant

Table 2: Quality Assessment of Included Studies

Author (Publication Year)	**Title**	**Level of evidence**[a] *Level I, II, III-1, III-2, III-3 or IV*	**Quality of evidence** *High quality/low risk of bias, low quality/high risk of bias or unsure*	**Statistical precision** *High, low or unsure*	**Size of the effect (on mental illness and/or suicidal distress)** *Large, small or unsure*	**Appropriateness of the outcomes** *Very appropriate, somewhat appropriate, not appropriate or unsure*	**Relevance of the study question** *Very relevant, somewhat relevant, not relevant, unsure*
	From A Randomized Controlled Trial						
Young et al. (2021)	Assessing The Feasibility Of An M-Health Intervention For Changing Diet Quality And Mood In Individuals With Depression: The My Food & Mood Program	Level III-2: A comparative study with concurrent controls	High quality/ low risk of bias	High: The effect is real, rather than due to chance (e.g., statistically significant).	Unsure: We don't have enough information to decide either way.	Very appropriate	Somewhat relevant

Note: RCT=randomised controlled trial.

[a] A higher level of evidence (e.g., Level I) indicates higher probability that the study design has minimised the impact of bias on the results.

The PAGER framework was used to analyse and synthesise the evidence identified among light-touch and digital health interventions (Table 3). The strengths and weaknesses and target population are further summarised below and opportunities for improvement are presented in the discussion section.

Table 3: PAGER Framework Overview

Pattern	Advances	Gaps	Evidence for practice	Research recommendations
Digital health interventions	Have the potential to overcome barriers to mental health help-seeking and treatment; Concerns about mental health stigma, treatment cost, and clinician fatigue can lead some patients to avoid seeking help; Programs are tailored to the symptom patterns of the individual user; Programs can be widely disseminated and culturally-adapted; Ability to address comorbidities (e.g., insomnia and depression);	Self-report outcome measures; Short-term follow-up (from 10 days to 12 months); Low uptake and adherence (such as participants with the highest symptoms of distress and impairment tended to leave the study); High attrition; Recruitment difficulties (e.g., discourage individuals with low computer skills); Short intervention period (~4-6 weeks) which may explain why long-term follow-up measures	Fill a critical gap in the accessibility of mental health services for the community; Effective to individuals with mild to moderate symptoms as opposed to severe symptoms; Unstructured interventions (i.e., flexible) with personalization and interactivity are favourable; Transdiagnostic interventions can identify participants at-risk and provide targeted interventions and direct participants to appropriate services; Digital services are important	Extend to other mental ill-health (most studies focus on depression and distress) but remain targeted on one type of mental illness; Extend follow-up time; Measure outcomes by using clinical metrics and more detailed medical and psychosocial covariates; Identify ways to improve uptake and adherence (e.g., co-design methodology, partnership-based approach); The inclusion of an option for in-person service may assist in creating a stepped-care model where those who require access to

Table 3: PAGER Framework Overview

Pattern	Advances	Gaps	Evidence for practice	Research recommendations
	Automated and self-guided mental health interventions; Universal program available to everyone, including hard-to-reach populations (e.g., men, rural communities); Often acceptable and feasible, especially during Covid-19 lockdown period; High-quality study designs (e.g., Randomised Controlled Trial); Clinician-guided intervention; Evidence-based programs. (e.g., Cognitive Behavioural Therapy, Acceptance Commitment Therapy).	have mixed results; Attracts mostly female participants; Group differences (between control and intervention groups) were mixed across trials which indicates further investigation into the conditions under which the program may be beneficial; Structured interventions requiring high levels of compliance from participants may not show the same levels of improvement.	across the spectrum from early intervention to crisis services.	services have them readily available; Explore ways to reduce intervention-related workload while ensuring positive outcomes (e.g., content duration, delivery methods, reminder methods and target populations); Investigate optimisation strategies and utilize factorial experiments to evaluate app components and mechanisms that are more likely to influence outcomes variables (i.e., test modules or combinations of modules that are most efficacious).
Light-touch	Available in a diverse setting and	Small and less diverse sample	Flexible modes of delivery (e.g.,	Transdiagnostic prevention

Table 3: PAGER Framework Overview

Pattern	Advances	Gaps	Evidence for practice	Research recommendations
interventions	easy to conduct (school, prison, workplace and community); Potentially less stigmatising than other interventions explicitly targeting participants with mental illness; Ability to be targeted and culturally-adapted; Widely used in schools due to a brief and intensive style that can fit within the school's timeframe; In organisations, light-touch interventions make the program extremely accessible; Can be considered in the context of a stepped care approach (e.g., with	size (i.e., recruitment difficulties, unrepresentative sample); Shorter length (intensive) intervention style; Stigma of mental illness may be a barrier to participation (if the intervention explicitly states mental illness); In school settings, engaging parents can present difficulties and this posed challenges to achieving a sufficient sample size; Due to wide-sweeping study design, the most suitable	non-specialist practitioners, group settings, individual settings, school-based, internet and hybrid modes of delivery incorporating digital tools); In school settings, providing parents and teachers with weekly updates can assist in engagement and support, which can improve longitudinal outcomes; Mixed results with respect to who is more likely to participate and remain in the trial, so it may be likely that light-touch interventions are suitable for a wider spectrum of mental illness.	programs that target common features of multiple disorders are needed; A Randomised Controlled Trial study design with an active control assists in controlling for regression to the mean, the natural course of symptoms, change over time, the Hawthorne effect and the placebo effect. Further outcome variables for consideration are symptoms items that are tailored to the unique nature of the setting; Must consider the adequate staff support necessary and cost associated with carrying out the intervention;

Table 3: PAGER Framework Overview

Pattern	Advances	Gaps	Evidence for practice	Research recommendations
	the inclusion of a school psychologist or the incorporation of colleagues) which can extend the impact of the intervention into the daily environment); Evidence-based interventions (e.g., Cognitive Behavioural Therapy); Can be administered in large group settings.	outcome measure was difficult to ascertain; Issues with cluster Randomised Controlled Trial and other less robust study designs that lacked a control group.	Highlights the importance of increasing emphasis on family and community protective factors in adolescent social-emotional development and depression prevention programs; Provide initial support for the use of guided self-reflection as an alternative to coping skills approaches to resilience training; Interventions that increased mindfulness were effective in reducing symptoms of mental illness.	Explore how smaller groups and one-on-one opportunities for experiential learning could be adapted to reinforce and consolidate content into weekly workbook exercises (e.g., peer groups, direct contact between instructors and participants); Co-design methodology or the involvement of a consumer may be beneficial in reducing stigmatising attitudes towards individuals suffering with mental health problems; Explore mediators and mechanisms of the intervention effects, including different forms of interventions that may be more effective based on factors such as severity of

Table 3: PAGER Framework Overview

Pattern	Advances	Gaps	Evidence for practice	Research recommendations
				symptoms; More research is needed into what type of intervention, with what intensity, is best suited to help specific target groups of at-risk populations (i.e., more tailored interventions to participants' needs); Measure clinical thresholds and use screening to better identify subclinical cases; Self-selection may circumvent potential stigma, increase engagement and commitment to the program and improve group cohesion.

Digital Health Interventions

Strengths and Limitations

Digital health interventions (n=43) were reported to have the potential for wide dissemination and universal implementation, with high acceptability and feasibility (Bryant et al., 2022; Calear et al., 2016; Christensen et al., 2016; Collins et al., 2020; Deady et al., 2018; Farrer et al., 2019; Fassnacht et al., 2022; Fuller-Tyszkiewicz et al., 2020; Giallo et al., 2021; Li et al., 2022b; McKeon et al., 2021; Murawski et al., 2019; O'Dea et al., 2020; O'Dea et al., 2021a; O’Dea et al., 2021b; Parker et al., 2022; Sharrock et al., 2021; Tighe et al., 2020; Viskovich & Pakenham, 2020; Visvalingam et al., 2022; Yap et al., 2018; Young et al., 2021). Digital health interventions were deemed effective with respect to their improvement of mental health outcomes (Baldwin et al., 2020; Blignault et al., 2022; Bryant et al., 2022; Christensen et al., 2016; Deady et al., 2020; Deady et al., 2018; Fassnacht et al., 2022; Fuller-Tyszkiewicz et al., 2020; Kahl et al., 2020; Li et al., 2022a; Li et al., 2022b; Marshall et al., 2021; O'Moore et al., 2018; Parker et al., 2022; Sanatkar et al., 2019; Sharrock et al., 2021; Torok et al., 2022; Viskovich & Pakenham, 2020; Visvalingam et al., 2022; Young et al., 2021) and ability to target what the researcher referred to as ‘hard-to-reach’ populations (e.g., older adults, First Nations individuals and non-English speaking communities) (Blignault et al., 2022; Leggett et al., 2018; O'Moore et al., 2018; Tighe et al., 2020).

There was evidence for effective digital interventions. myCompass, a self-guided digital intervention, identified that different types of users evoked different usage patterns all with equivalent mental health benefits, which may indicate that any engagement with the intervention may observe improvement (Sanatkar et al., 2019). iBobbly, a suicide prevention app for First Nations young individuals, showed increased app use leads to improved outcomes, although minimally and effects were not significant (Tighe et al., 2020).

Most digital intervention studies (n=25; 58%) utilised a high-quality study design of a randomised-controlled trial (Table 1). One-third of the identified digital interventions (n=14; 33%) utilised evidence-based interventions such as cognitive-behavioural therapy (CBT) or acceptance commitment therapy (ACT) (Batterham et al., 2018b; Christensen et al., 2016; Drew et al., 2021; Li et al., 2022b; Newton et al., 2020; O'Dea et al., 2021a; O’Dea et al., 2021b; O’Dea et al., 2019; O'Moore et al., 2018; Sharrock et al., 2021; Tighe et al., 2020; Torok et al., 2022; Viskovich & Pakenham, 2020). Digital health interventions were also able to address mental ill-health comorbidities, such as insomnia (Batterham et al., 2018b; Christensen et al., 2016), alcohol abuse (Deady et al., 2016; Drew et al., 2021) and pain management (O'Moore et al., 2018). In addition to co-morbidities another factor relating to digital intervention, Partners in Parenting (PiP), reported their intervention to be potentially low in cost (Yap et al., 2018), although economic evaluations are necessary to corroborate this claim. Digital health interventions were identified as a feasible, accessible and effective format during the COVID-19 pandemic, when COVID-19-related restrictions were in place across Australia (Blignault et al., 2022; Bryant et al., 2022; Giallo et al., 2021; Li et al., 2022a; Li et al., 2022b; Marshall et al., 2021; McKeon et al., 2021; Parker et al., 2022; Sharrock et al., 2021). For example, one study assessing the uptake and effects of an online Obsessive-Compulsive Disorder Cognitive Behavioural Therapy program reported a 522% increase in course registrations in 2020 compared to 2019 (Li et al., 2022b).

Reported limitations of digital interventions included high attrition (Batterham et al., 2018a; Batterham et al., 2018b; Blignault et al., 2022; Calear et al., 2016; Deady et al., 2020; Deady et al., 2016; Farrer et al., 2019; Li et al., 2022b; Murawski et al., 2019; van Spijker et al., 2018; Viskovich & Pakenham, 2020; Yap et al., 2018) and recruitment difficulties with respect to inadequate sample size and an unrepresentative sample (i.e., mostly female) (Blignault et al., 2022; Bryant et al., 2022; Calear et al., 2016; Christensen et al., 2016; Crawford et al., 2019; Fuller-Tyszkiewicz et al., 2020; Kahl et al., 2020; Leggett et al., 2018; McKeon et al., 2021; O'Dea et al., 2020; Parker et al., 2022; Sanatkar et al., 2019; Tighe et al., 2020; van Spijker et al., 2018; Viskovich & Pakenham, 2020; Young et al., 2021). For example, Smooth Sailing, a secondary school-based intervention, used email and short-message-services (SMS; i.e., text-based) reminders in the delivery of the intervention but these did not appear to increase engagement (O’Dea et al., 2019). Among the reported barriers of engaging with digital interventions were low motivation, time constraints, difficulties with internet connectivity, forgetfulness, worry about the privacy of data, using too much phone data and lack of perceived need (O'Dea et al., 2021b; O’Dea et al., 2019). In addition to difficulties with attrition and recruitment, many studies had insufficient outcome measures. Some digital interventions reported limitations regarding the use of self-report measures (Bryant et al., 2022; Farrer et al., 2019; Fassnacht et al., 2022; Kahl et al., 2020; Li et al., 2022a; Murawski et al., 2019; van Spijker et al., 2018). Measuring adherence was also a complex and dynamic behaviour

(Batterham et al., 2021b) and it was difficult to adjust for lack of consistency across participants in the intervention content they accessed (Farrer et al., 2019). Furthermore, long-term outcomes were either absent or reported mixed results, commonly due to lack of follow-up, issues with retention and short intervention periods of 4-6 weeks (Blignault et al., 2022; Deady et al., 2020; Farrer et al., 2019; Giallo et al., 2021; Leggett et al., 2018; Murawski et al., 2019; O'Dea et al., 2020; Sharrock et al., 2021; Viskovich & Pakenham, 2020; Young et al., 2021).

Target Population

Digital health interventions appear to best suit those with mild to moderate symptoms (i.e., lower baseline symptom levels) of mental illness (van Spijker et al., 2018) and those who may not seek treatment or who prefer not to take medication (Christensen et al., 2016). For example, one study assessing the effectiveness of five evidence-based mental health apps for anxiety and depression found that more favourable outcomes were achieved by younger participants, those concurrently undertaking psychotherapy and/or psychotropic medication, those with anxiety and mixed anxiety and depression (rather than stand-alone depression) and those with a shorter history of mental illness (Marshall et al., 2021). In the case of HeadGear, an app that takes the form of a 30-day challenge to reduce depression in the workplace, it was found to have the capacity to screen for symptoms of depression (Deady et al., 2020). Findings provided compelling evidence of the utility of mHealth tools to identify early symptoms of mental ill-health, even in clinically well populations (Deady et al., 2020), importantly however, those participants with severe baseline levels of mental ill-health were more likely to drop out of digital intervention studies (Baldwin et al., 2020; van Spijker et al., 2018; Visvalingam et al., 2022) and less likely to benefit from the intervention (Batterham et al., 2018b). This included Living with Deadly Thoughts, an online self-help intervention for suicidal thinking (van Spijker et al., 2018); myCompass, a web-based program for individuals living with Type II diabetes and mental illness (Baldwin et al., 2020); and SHUTi (Sleep Healthy Using the Internet), an internet-based insomnia treatment to prevent depression (Batterham et al., 2018b). Further studies on myCompass and SHUTi in the general Australian adult population found those with severe levels of mental illness were less likely to complete their follow-up assessments (Christensen et al., 2016; Sanatkar et al., 2019). The authors of Living with Deadly Thoughts consider that severe symptoms may be the reason for this interference with the completion of the program (van Spijker et al., 2018), although it was difficult to ascertain whether those who exited the program early were early mental health goal achievers or those not having needs met (Deady et al., 2016).

In contrast, other studies reported participants with severe baseline symptoms experiencing higher module completion and greater mental health benefits. This included Smooth Sailing, a secondary school-based intervention, which found module completion was higher among participants with more severe symptoms at baseline but still a majority were minimal users (O'Dea et al., 2019). myCompass2, an app for Australian adults in the community (Batterham et al., 2021b), iBobbly (Tighe et al., 2020) and ReachOut, an unstructured website for young individuals (Kahl et al., 2020), were found to be effective for participants with more severe levels of mental distress. Another study highlighted the potential benefits of a web-based transdiagnostic informed intervention in a university setting, You Only Live Once (YOLO), for participants across the distress continuum described participants with severe distress levels reporting similar levels of intervention completion compared with the university population sample (Viskovich & Pakenham, 2020). Allowing for a wider audience meant that those with emerging mental ill-health could be identified and provided with targeted services (Viskovich & Pakenham, 2020). This was countered by another web-based transdiagnostic intervention among Australian adults, FitMindKit, that found it difficult to capture change across a broad range of the mental health domains and suggested a less ambiguous transdiagnostic intervention approach, potentially focusing only on one type of mental illness (Batterham et al., 2018a).

Light-touch Interventions

Strengths and Limitations

Light-touch interventions (n=41) have been widely used in Australian primary and secondary schools due to their brief, intensive format and ability to fit within a school's timeframe (Blake et al., 2016; Chen et al., 2022; Dove & Costello, 2017; Dray et al., 2017; Gold et al., 2017; Grummitt et al., 2022; Johnson & Wade, 2021; Johnstone et al., 2020; Roberts et al., 2018; Ruocco et al., 2018; Singh et al., 2019; Tracey et al., 2018; Wright et al., 2019). There was a similar experience to interventions via organisational health promotion programs which attributed high compliance to the flexibility and accessibility of the program (Eather et al., 2020; Rees et al., 2020; Vella & McIver, 2019). Other institutional settings where light-touch interventions were feasibly administered to large groups were universities (Eather et al., 2019; Wilson, 2021), military institutions (Crane et al., 2019; Falon et al., 2021; Metcalf et al., 2022) and prisons (Bartels et al., 2019; Ogloff et al., 2022; Rasmussen et al., 2018).

Our analysis of included study outcomes demonstrate some light-touch interventions were effective in improving psychosocial health (Deans, 2021); reducing the incidence of suicide and self-harm (Grummitt et al., 2022; Rasmussen et al., 2018); and reducing symptoms related to depression (McKenzie et al., 2021; Ogloff et al., 2022), generalised anxiety (Dove & Costello, 2017) and post-traumatic stress disorder (Metcalf et al., 2022). A tailored 8-week meditation-based program in the public-sector work environment proved to be an effective, efficient and low-cost inclusion within an organisation's health promotion repertoire to help improve mental health among staff (Vella & McIver, 2019).

In some school-based light touch interventions, engagement with teachers and parents bolstered the impact of the intervention for children in their school environment (Giallo et al., 2018; Singh et al., 2019; Tracey et al., 2018). For example, engagement with parents in the secondary school-based intervention, Resilient Families, was associated with longitudinal reductions in depressive symptoms (Singh et al., 2019). These findings highlight the importance of increasing emphasis on family and community protective factors in adolescent social-emotional development and depression prevention programs (Bayer et al., 2022; Giallo et al., 2018; Singh et al., 2019). Additional advantages reported for light-touch interventions were being evidence-based (e.g., CBT (Blake et al., 2016; Ruocco et al., 2018)) and able to be adapted for the target population (Almeida et al., 2021; Blignault et al., 2019; Blignault et al., 2021a; Blignault et al., 2021b; Dudgeon et al., 2022; Slewa-Younan et al., 2020; Wicks et al., 2018). For example, a men's health promotion program Sons of the West attributed their high participation rates to the broad-ranging, gender-sensitised format (Deans, 2021).

Like digital health interventions, common limitations included retention and insufficient outcome measures. Many studies reported high attrition (Almeida et al., 2021; Dray et al., 2017; Johnstone et al., 2020; Ogloff et al., 2022; Roberts et al., 2018) and/or a small sample size, resulting in self-selection bias and a lack of representativeness (Almeida et al., 2021; Bartels et al., 2019; Blignault et al., 2019; Blignault et al., 2021a; Blignault et al., 2021b; Chen et al., 2022; D'Cunha et al., 2019; Eather et al., 2019; Giallo et al., 2018; Howells et al., 2020;

Johnstone et al., 2020; McKenzie et al., 2021; Rees et al., 2020; Slewa-Younan et al., 2020; Tracey et al., 2018; Wilson, 2021; Wright et al., 2019). One study assessing the effectiveness of a postnatal depression prevention program for new mothers reported difficulties with recruitment due to potential participants citing no one could support them to take part in the program (Law et al., 2021). Further, the most suitable outcome measures were often difficult to ascertain. Some studies reported needing additional parent-reported and teacher-reported outcomes (Chen et al., 2022) and others reported difficulties with self-report measures (Blignault et al., 2021a; Chen et al., 2022; D'Cunha et al., 2019; Tracey et al., 2018). Reliance on self-report measures and the short length of interventions illuminated a need for better outcome measures and longer-term follow-up (Blignault et al., 2019; Blignault et al., 2021a; Blignault et al., 2021b; Chen et al., 2022; Deans, 2021; Dudgeon et al., 2022; Eather et al., 2020; Eather et al., 2019; Johnstone et al., 2020; Newton et al., 2020; Roberts et al., 2018; Tracey et al., 2018; Vella & McIver, 2019; Wicks et al., 2018). Future studies would benefit from using a RCT design with standardised outcome measures and control groups (Bartels et al., 2019; Blake et al., 2016; Crane et al., 2020; D'Cunha et al., 2019; Deans, 2021; Dove & Costello, 2017; Howells et al., 2020; Rasmussen et al., 2018; Ruocco et al., 2018; Slewa-Younan et al., 2020; Snodgrass et al., 2020; Tracey et al., 2018; Vella & McIver, 2019; Wicks et al., 2018; Wilson, 2021; Wright et al., 2019). This was particularly salient among institution-based (e.g., school and prison) interventions that employed a pseudo-randomised controlled trial or cluster randomised controlled trial (Dove & Costello, 2017; Grummitt et al., 2022; Newton et al., 2020; Rasmussen et al., 2018) due to issues with confounding.

Target Population

Among light-touch interventions were those community approaches that targeted particular populations; such as First Nations' prisoners art intervention (Rasmussen et al., 2018), school-based ACT in Outdoors (Tracey et al., 2018) and Aussie Optimism Program (Roberts et al., 2018), and community-based Working Out Dads (Giallo et al., 2018) and a yoga program in prison (Bartels et al., 2019). In these programs participants were more likely to report lower baseline levels of distress, and those with lower baseline levels of distress were also more likely to remain in the trial.

Interventions targeting behaviours such as sleep (Blake et al., 2016) and emotional regulation (Almeida et al., 2021; Chen et al., 2022; Crane et al., 2019; Johnstone et al., 2020) or populations such as refugees (Blignault et al., 2021a; Blignault et al., 2021b; Blignault et al., 2019) and medical doctors (Rees et al., 2020) generally reported were higher baseline levels of distress among participants. Stigma of mental illness was reported as a barrier to participation in some interventions (Rasmussen et al., 2018; Rees et al., 2020). Thus, an intervention targeting a co-morbidity that commonly accompanies mental illness may be less stigmatising. For example, a disproportionate level of participation in interventions targeting sleeping disorders by those with higher baseline levels of distress may be attributed to the stigma experienced when seeking help specifically for depression and anxiety and a general sleep program viewed as more acceptable (Blake et al., 2016). For other target populations, this may be because of an ordinarily high baseline distress score at entry, particularly among those experiencing chronic stressors, for example, long-term unemployment among older adults adjusting to retirement (Crane et al., 2020), resettlement among refugees (Blignault et al., 2021a; Blignault et al., 2021b) and Australian Defence Force personnel transitioning from the military (Metcalf et al., 2022). This is supported further by studies reporting on strength and resilience training for cadets (Crane et al., 2019) and employee health promotion programs (Crane et al., 2020), which found long-term health improvements associated with the intervention because it occurred in parallel with a period of significant stress. Additionally, regression towards the mean could see a decrease in distress among those with a high baseline distress score (Blignault et al., 2021a; Blignault et al., 2021b; Tracey et al., 2018).

Discussion

This review identified 84 studies reporting on assertive outreach programs in Australia for individuals experiencing mental ill-health. Intervention types were categorised as either digital health or light-touch interventions. Digital health interventions were reported to have the potential for wide dissemination and universal implementation, with high acceptability and feasibility. Most digital intervention studies utilised a high-quality study design, were evidence-based and able to address mental ill-health comorbidities. In comparison, light touch interventions have been widely used in schools and other institutional settings (e.g., universities, prisons and organisational contexts) due to the flexible and accessible mode of delivery. Some digital interventions (n=16; 55%) and some light-touch interventions (n=21;

64%) were effective with respect to mental health outcomes but common limitations across all studies included high attrition, recruitment difficulties and insufficient outcome measures and follow-up. Both digital and light intervention types were deemed important across the spectrum of emerging mental illness and feasible to implement universally. With most studies presenting a high risk of bias associated with their reported limitations, it remains unclear whether interventions are universally effective. Participants with higher baseline levels of distress, or more severe symptoms of mental ill-health, were more likely to gain greater benefits from the intervention and remain engaged in the intervention. Individuals with mild to moderate symptoms of mental ill-health are more likely to benefit from interventions involving high levels of engagement from participants.

This review highlights that early intervention is often thought of chronologically – most studies identified in this review were implemented in the primary or secondary school setting providing early support to young individuals. A 2019 review identified that although school infrastructures allow for large-scale implementation of interventions, there can be numerous barriers to delivery including policies, school culture and climate and leadership structure (Castillo et al., 2019). Therefore, developing sustainable interventions in schools that are truly responsive to the needs of students may require years of building academic-community partnerships (Castillo et al., 2019). While the global prevalence of mental ill-health among adolescents has increased in recent years (Keyes et al., 2019; Wiens et al., 2020) the burden of mental illness has disproportionately affected socio-economically disadvantaged, chronically ill and marginalised groups (Patalay & Fitzsimons, 2018). Predictors of mental ill-health are far more nuanced than age (e.g., sex-specific vulnerabilities (Patalay & Fitzsimons, 2018)) and distress can be experienced throughout the lifespan particularly at times of significant transition. Thus, rather than approaching prevention and early intervention temporally with respect to age (i.e., children in schools), the result from this review indicates targeted programs to reach those who need it most, at a time when they need it most are also required.

The Productivity Commission states individuals with mild mental illness and those at-risk need timely and culturally appropriate access to early interventions and mental health services in the community (Commonwealth of Australia, 2020). By incorporating personalised components (e.g., culturally-adapted content or content tailored to an individual's symptom level) and responding to the rapid changes to an individual's needs, a targeted approach accounts for the spectrum of mental illness and the progression of mental ill-health. Targeted interventions are less likely to miss those who “need it most”—such as those at-risk of, or living with, severe symptoms of mental ill-health. This finding aligns with another systematic review in the adjacent field of grief and loss, which showed interventions may be effective in preventing complicated grief if they are addressed to a subset of individuals at higher risk (Linde et al., 2017). A targeted approach is a tenant of person-centred health care (Commonwealth of Australia, 2020), and connects individuals to their health and community care system. The effectiveness of interventions could be improved by employing a targeted approach and subgrouping participants based on their personal needs and risk mental ill-health.

Prevention and early intervention programs are potentially ineffective if interventions are not reaching those who need them. Those who dropped out of interventions requiring high levels of engagement may have had severe symptoms that interfered with completion and were still in need of support, whereas those who participated may have been more motivated to engage and seek help in the first place. Hence, structured mental health interventions that require high levels of compliance from participants may impact engagement and, ultimately, effectiveness (Fuller-Tyszkiewicz et al., 2020). This conjecture is supported by recent studies that found individuals with lower levels of mental health and suicide literacy are less likely to seek support services compared to individuals with higher levels of literacy (Bonabi et al., 2016; Mok et al., 2021). It is, therefore, recommended that future programs target interventions to meet a participant’s needs, as well as establish a more robust recruitment and retention strategy to identify participants who are less likely to engage in services and more likely to benefit from the intervention (see Table 4). Strategies to improve recruitment and retention are particularly necessary in circumstances where the participants have characteristics that might undermine their participation and indicate they might particularly benefit from the program (Bartels et al., 2019). In fact, engagement was reported as a way to improve both short-term and longitudinal outcomes (Crane et al., 2020; Wright et al., 2019).

Table 4: Recommendations on How to Improve Recruitment and Engagement, By Intervention Type

Digital Health Interventions	Light-touch Interventions
1. Improve the user experience through greater personalisation and flexibility	1. Offer flexible modes of delivery, such as group and individual settings
2. Utilise co-design methods in the development and delivery of the intervention	2. Allow participants to self-select as a way to circumvent potential stigma, increase engagement and commitment to the program and encourage participants to join with friends, thus leading to better group cohesion
3. Explore ways to reduce intervention-related workload while ensuring positive outcomes; for example, highlighting the brief time commitment required to work through the online modules may increase module completion	3. Explore how small group and one-on-one opportunities for experiential learning could be adapted to reinforce and consolidate the content into weekly workbook exercises through peer group discussion or direct contact between instructors and participants

Future research should also consider characteristics of individuals most likely to benefit (Fuller-Tyszkiewicz et al., 2020; Leggett et al., 2018). Mixed results with respect to group differences between control and intervention groups indicate a need for further investigation into the conditions under which an intervention may be beneficial (van Spijker et al., 2018). Hence, testing modules (or combinations of modules) that are most efficacious may provide data for the digital or light-touch program to tailor specific combinations of modules to the participant (Fuller-Tyszkiewicz et al., 2020). Optimisation strategies and factorial experiments are needed to evaluate components and mechanisms that influence mental health outcomes (Batterham et al., 2021b; O'Dea et al., 2020; O'Dea et al., 2021a) and the impact of tailoring interventions with respect to content, duration, delivery methods and target populations on program efficacy (Batterham et al., 2018a; Farrer et al., 2019; Murawski et al., 2019). Adjusting for multiple statistical testing allow for any small effects on mental health symptoms such as depression and anxiety to be firmly established, and for investigation of mediation or moderation effects based on demographic, mental health status, relationship characteristics and program adherence (O'Dea et al., 2020). For example, cultural background was found to influence the effectiveness of some mental health interventions (Dudgeon et al., 2022; Ogloff et al., 2022). Future research might consider how to select participants into trials of targeted preventive interventions (Gold et al., 2017) and whether different participants respond to different forms of interventions based on factors such as severity of symptoms (Wright et al., 2019). Strategies that match participants' needs with tailored interventions and address mechanisms and outcomes of therapy may improve efficacy through more focused targeting of programs, particularly among those experiencing significant difficulties (Gold et al., 2017; Wright et al., 2019). The exploration of mediators and mechanisms of intervention effects, or the type of intervention and with what intensity is best suited for participants with varying levels of mental ill-health promotes a person-centred approach to service delivery (Gold et al., 2017; Newton et al., 2020).

Increasing Engagement in a School Setting

In the school setting, suggested strategies to increase engagement with digital interventions included the following: allocating class time for module completion; publishing promotional material throughout the schools; inserting a web link to the service on schools' websites and students' desktops; introducing multiple options for restoring access and password retrieval (e.g. one-time pin codes, email verification links, or use of secret questions); and utilising student leaders to promote the service (O'Dea et al., 2019). Given the nature of delivery, both digital and light-touch interventions within a school setting must consider the adequate support needed for staff delivering the service and associated implementation costs. As schools often do not have the time or resources to follow-up participants later, it is therefore imperative to highlight to schools the importance of research compliance and the need to obtain as many participant assessments as possible (Calear et al., 2016).

In a universally implemented emotional regulation intervention, for example, schools assigned to the control condition were less motivated to participate once they were made aware of their assigned condition (Johnstone et al., 2020). This resulted in the control school offering fewer classes to be involved and the classroom teachers appeared to be less motivated to encourage students to return their parent/caregiver consent forms (Johnstone et al., 2020). This ultimately led to the smaller number of participants in the control condition (Johnstone et al., 2020). The utility of and compliance with the service may be strengthened by embedding a feedback loop that enables parents to share their own observations about their child's mental health and progress (O'Dea et al., 2021b). Service uptake may also be increased by offering parents an educational component and service demonstration to improve their understanding of the service benefits, how they can support their child to use the service, and to upskill parents' abilities to recognise and respond to mental health concerns (O'Dea et al., 2021b). The recommendation of engaging with parents, especially fathers, aligns with a 2022 systematic review on targeted community-based programmes for Australian children's mental health (Savaglio et al., 2022).

Engaging parents can be difficult in a school setting, particularly when the intervention is conducted during school time by external facilitators, so providing parents and teachers with weekly updates was recommended assist in engaging parents and teachers (Wright et al., 2019). Hence, school counsellors recommend weekly rather than fortnightly reminders to use the service to improve engagement as well as embedding the service into the school curriculum (O'Dea et al., 2021b). Further, schools may benefit from an "opt-out" approach to parental consent or a partnership-based approach with parents to ascertain optimal communication channels and an incentive plan to encourage uptake in students (O'Dea et al., 2021b). Future trials may also benefit from using multi-modal methods of reminders including ones that are classroom-based, as well as customisable electronic reminders via SMS and email (O'Dea et al., 2019).

Hybrid Delivery Model

A hybrid delivery model allows for the option of both a light-touch intervention and/or digital health intervention, depending on participant preferences. One study assessing the effectiveness of FitMindKit, a tailored online program for mood, anxiety, substance use and suicidality, reported difficulties with recruitment and engagement as a result of participants not personally engaging with the project and having no interaction with a researcher (Batterham et al., 2018a). Another digital intervention within a school setting suggested more frequent screening and engagement by a clinician or an external organisational representative to increase uptake and engagement (O'Dea et al., 2021b). Among light-touch interventions, the development of a mobile application to promote and record program adherence completed at home was a suggested strategy for improving program adherence during and beyond the program (Eather et al., 2019). Thus, a hybrid model of light-touch and digital is a potentially effective method of improving engagement, as well as integrating contact time with a researcher or health professional and a targeted approach (Blake et al., 2016; Falon et al., 2021). This integration can assist in the development of a stepped care approach where participants at-risk of or living with severe symptoms of mental ill-health can be identified and referred to mental health professionals when required (Ruocco et al., 2018). Further, the stepped care approach assists in extending the impact of the intervention into the daily environment (Tracey et al., 2018), reducing stigma (Thornicroft et al., 2016) and improving access to services (Farrer et al., 2019). For example, a digital intervention for Australian adults suggested blending in person support with a self-guided program as possibly beneficial as a way of increasing uptake of the intervention (Batterham et al., 2021b). Rather than replacement for face-to-face or specialist care, a digital component can be an extension of service provision that provides targeted resources and facilitates connections to in-person care when necessary (Rosen et al., 2020). In preparation for a hybrid service implementation, resources would need to be allocated to increase staff and ensure timely screening and follow-up (O'Dea et al., 2019).

Standardised Outcome Measures

The evidence base of assertive outreach interventions would strengthen through standardised outcome measures. Most outcome measures identified in this review were self-reported and lacked clinical assessment, meaning some participants may have met the criteria for mild depression and potentially blurring the distinction between prevention and treatment (Batterham et al., 2018b). The selection of a measure that is suitable for use in both clinical and non-clinical populations is necessary, in order to avoid limitations of floor or ceiling effects (Wright et al., 2019). Because interventions have the potential to address co-morbidities, outcome measures must be better chosen to capture clinical symptom thresholds (Newton et al., 2020) and other relevant health components, such as sleep (Blake et al., 2016; Dove & Costello, 2017), internalising disorders (Roberts et al., 2018; Wright et al., 2019) and resilience (Dove & Costello, 2017). This includes interventions supporting the mental wellbeing of those with recognised chronic physical and mental conditions (e.g., patients with diabetes, hypertension, tuberculosis and HIV/AIDS), who are at higher risk of mental ill-health (Thornicroft et al., 2016).

The evidence base relating to assertive outreach interventions can also improve with the inclusion of mental health disorders other than depression and anxiety (Leggett et al., 2018), as well as longer-term outcome measures (Deady et al., 2016; Yap et al., 2018). Further outcome measures that could be considered are symptom items that are tailored to the unique nature of the setting. For example, in self-reflection therapy for military cadets, outcome measures could assess concerns about career or the effects of training on performance outcomes (Crane et al., 2019). Furthermore, studies evaluating First Nations' art programs in the prison setting could consider the impact of engagement on post-release outcomes such as suicidal behaviours, general health, mental health and violent recidivism as well as positive outcomes such as reconnection to culture, community supports and employment (Rasmussen et al., 2018).

Strengths and Limitations

This review was strengthened by the inclusion of a broad range of studies, innovative categorisation of interventions and analysis using a high-quality framework. To our knowledge, this is the first study that has analysed and synthesised studies related to proactive mental health prevention in community settings. Nonetheless, there are also limitations. There is a risk that a relevant article has been missed during the literature search due to the lack of consistent terminology for assertive community outreach, though we used a systematic approach and identified a clear definition prior to conducting the search. We limited our search strategy to studies published within the last six years (2017-2022) due to time constraints of the review, but we can be confident the findings of this review are timely and relevant. We also excluded studies targeting a healthy population or included an outcome measure related to but not specifically mental ill-health (e.g., stress, general well-being). This was to ensure that the studies included in the review were contributing to the evidence base related to mental ill-health prevention and early intervention. We were also unable to conduct a meta-analysis due to the various participants, interventions, types of mental ill-health and outcome measures in various settings. Further, the quality of some studies was low, which may compromise our interpretation of the results.

Conclusion

Results from this review provide an understanding of the available evidence related to assertive outreach interventions for supporting individuals in the Australian community. A systematic search of the literature identified 84 studies and studies were further categories as either digital health or light-touch interventions. Most studies reported a high-risk of bias, so it remains unclear whether interventions are universally effective. Yet, discrepancies in engagement in this review illuminated issues about implementation. Individuals with severe mental ill-health were likely to benefit from more targeted interventions and interventions with external engagement. Individuals with mild to moderate symptoms of mental ill-health were more likely to benefit from interventions involving high levels of engagement from participants. Knowledge from this review will inform the implementation of strategies that can improve support available to community members and community organisations with the specific aim of early intervention or prevention. Further efforts are needed to strengthen evidence base of effective assertive interventions with respect to employing a targeted approach, standardising outcome measures, delivering a hybrid model and utilising co-design methodology.

Key Learnings

- Individuals with severe mental ill-health were more likely to benefit from targeted interventions.
- Individuals with mild to moderate symptoms of mental ill-health were more likely to benefit from interventions requiring high levels of engagement from participants.
- Further efforts are needed to strengthen the evidence base for effective proactive interventions for mental illness. Interventions need to improve their recruitment strategies, offer hybrid delivery of services, commit to standardised outcome measures, have a targeted approach, and embed co-creation in the development and delivery of the intervention, with consumers.
- The review highlighted that early intervention can change the trajectory of an individual's journey of declining mental health. However, early intervention may not mean "early in life". Rather, early intervention may be considered as "early in distress" or "early in trauma" to better intervene in the lives of those at risk of complex mental illness.
- Trauma responsivity is key – for those experiencing, or who have experienced trauma. Effective early intervention needs to be targeted to those at risk rather than a universal intervention.
- Targeted interventions for those who have lived experience of trauma can help to prevent any further trauma experienced by individuals reaching out for help.
- Enhanced awareness of the cumulative impact of trauma (characterised as events throughout life) requires a rethink from the current approach of universal interventions (such as those employed in primary schools) as these interventions may not reach people when they most need care.

Activity 2: National Survey on Lived Experience of Mental Ill-health, Mental Illness and Suicide

Background

Lived experience centers attention and knowledge about the phenomena under investigation as the primary concern, it aims to review the world though firsthand experiences. In 2020, the research team at UNE explored people's lived experience of suicide, contributing significantly to the Compassion First Report delivered as part of the Final Advice to the Prime Minister on Suicide Prevention (National Suicide Prevention Adviser, 2020). In this study, the research team used a similar methodology to explore people's lived experience of mental ill-health and distress. The data was collected during a time of significant social, economic, and geographic distress mediated by the COVID-19 pandemic.

Aims

To understand how Australian adults experience mental ill-health, mental illness and suicide, an open-ended qualitative survey was undertaken for Activity 2. The open-ended survey design with broad questions aimed to capture individuals' lived experiences of suicide and mental illness. Our focus in this survey was to explore the lead up to mental illness and how mental distress manifests prior to diagnosis or seeking support services. The purpose of this was to inform us on where the very early indicators of 'something not being quite right' are, and how these may be identified in the general population. We also asked participants about how services may have, or may not have, responded to participants needs.

Methods

The survey was hosted in Qualtrics, an online survey platform accessible via computer and mobile devices. Short demographic information collected included age, gender, cultural background, country of birth and main language spoken at home. Other questions asked about the participants' experiences mental illness and suicide, including the events leading up to symptoms or diagnosis, when diagnosed with mental illness and how services may have, or may not have, responded to participants' needs.

Participants were asked to self-report any mental health diagnoses and lived experience of suicide. Mental illness diagnoses included but were not limited to the following (as per the AIHW most common mental illnesses in Australia (AIHW, 2022)): anxiety (inclusive of generalised anxiety disorder, obsessive compulsive disorder (OCD), panic disorder, social anxiety disorder, phobia, post-traumatic stress disorder (PTSD)), bipolar disorder, depression, eating disorder, personality disorder (inclusive of borderline personality disorder) and schizophrenia. Participants were provided with an 'other' option to explain their diagnosis outside of the options provided. Lived experience of suicide included but was not limited to the following: suicidal ideation, suicide attempt, caring for someone who has made a suicide attempt, having cared for someone who has subsequently died by suicide and having been bereaved by suicide.

Participants

Participants in the study had to be over the age of 18, be proficient in English language skills and have lived experience of mental ill-health. The broad use of the term 'Lived Experience of mental ill health' refers to those who identify as having personal reflective capacity to identify their journey with mental health – both those diagnosed, and those that have not sought a diagnosis. To assist with alternate formats of participation, and diversity of technology access and literacy, those who wished to submit their answers in a different format (e.g., audio recording or typed into a word document) were directed to contact the principal investigator (MM).

Recruitment

Participants were recruited from the public through social media and network links. Specifically, online and community promotion by partner organisations such as Suicide Prevention Australia, Lifeline, Standby, UNE social media, as well as paid Facebook boosting of advertising to ensure exposure across the country. A brief description of the study was distributed to suicide prevention and mental health organisation partners for content to be included in newsletters and, as relevant, for promotion on social media. Once participants selected to review the information statement via the online link, a question identifying digital consent was undertaken and then participants were provided with a short series of questions to support self-screening. Those who provided consent and were eligible then went on to complete the survey.

Ethics Approval

This project was approved by the Human Research Ethics Committee of the University of New England (Approval No. HE19-242, Valid to 30/06/2022).

Data Analysis

Descriptive analysis was performed on socio-demographic variables. Additionally, chi-squared tests of association were performed to identify any associations between socio-demographic variables and lived experience of mental illness, lived experience of suicide and age of first diagnosed mental disorders. Then, logistic regressions were conducted to compare the odds ratios of socio-demographic variables between participants who reported anxiety, depression, bipolar disorder, personality disorder, Schizophrenia, eating disorder and other mental disorders, and who did not report, respectively.

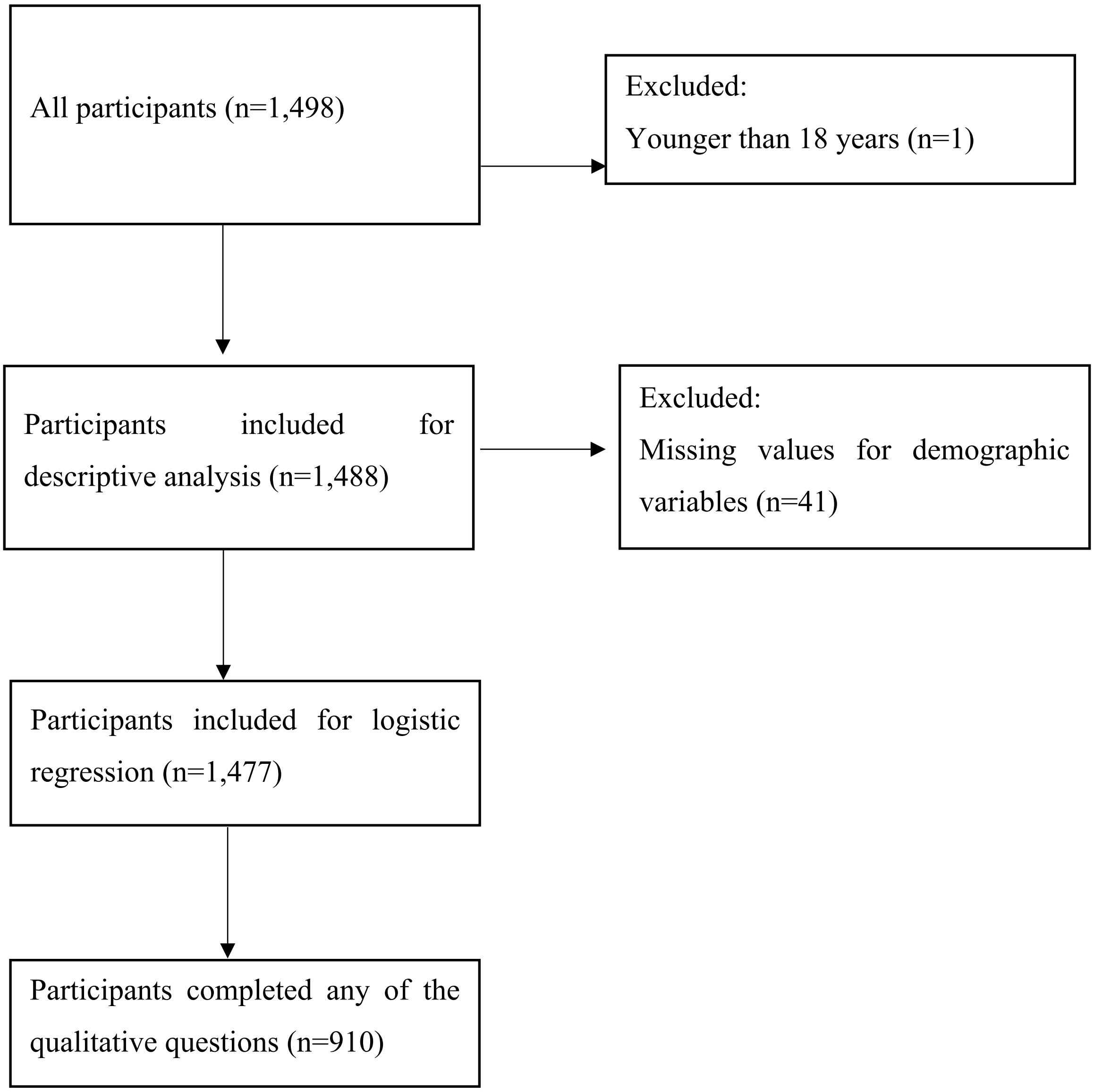
A thematic analysis approach was used to analyse the qualitative responses. All qualitative responses were exported to excel to understand, as noted by Braun and Clarke (2012), the thematic explorations of the participants responses. Data were deductively analysed by three independent researchers (SW, HK, JD) to search for participants' experiences of emerging mental illness, distress and suicide and supports that were useful. Inductive analysis occurred in parallel to explore new insights about these experiences. Regular meetings of the whole research team were held to delve into the data and emerging findings, and to ensure rigor and trustworthiness in our processes. The data were then consolidated to respond to the core research questions about the period leading up to and after diagnosis, followed by the experience of seeking support to better understand transition points. MM was consulted across the analysis phase to ensure that the research team was able to reach consensus.

Results

Quantitative Data

The total sample population comprised 1,498 participants (Figure 2). Nearly all of those participants completed the socio-demographic survey components and approximately two-thirds (60.7%) completed any of the qualitative survey components.

Figure 2: A Flow Diagram of Study Participants



Most participants were below the age of 44 (65.0%) (Table 5). Participants predominately (75.9%) identified as female. Most participants were neither Aboriginal nor Torres Strait Islander (94.4%) and were born in Australia (85.9%). The most reported diagnoses were anxiety (73.1%) and depression (80.4%). Three-quarters of participants (73.3%) reported their age of diagnosis as being prior to 30 years. Common examples of 'other' diagnoses include Autism Spectrum Disorder, Attention-deficit/hyperactivity disorder, complex post-traumatic stress disorder and dissociative disorders. Nearly half of participants reported experiencing suicidal thoughts (43.2%).

Table 5: Socio-Demographic Characteristics of Study Sample

Socio-demographic Characteristics	Sample Population n (%)
Total	1488
Age (years)	
18-24	422 (28.4%)
25-34	296 (19.9%)
35-44	248 (16.7%)
45-54	286 (19.2%)
55-64	167 (11.2%)
65 and older	69 (4.6%)
Gender	
Female	1130 (75.9%)
Male	223 (15%)
Non-binary/third gender/other[a]	135 (9.1%)
Cultural identity	
Neither Aboriginal nor Torres Strait Islander	1405 (94.4%)
Aboriginal and/or Torres Strait Islander	52 (3.5%)
Not stated	31 (2.1%)
Country of birth	
Australia	1278 (85.9%)
Other	201 (13.5%)
Not stated	9 (0.6%)

Main language spoken at home	
English	1464 (98.4%)
Other	22 (1.5%)
Not stated	2 (0.1%)
Diagnoses[b]	
Anxiety	1088 (73.1%)
Depression	1197 (80.4%)
Bipolar disorder	206 (13.8%)
Personality disorder	281 (18.8%)
Schizophrenia	27 (1.8%)
Eating disorder	288 (19.4%)
Other	468 (31.5%)
Not stated	1 (0.1%)
Age of first diagnosis (years)	
17 or younger	573 (38.5%)
18-29	518 (34.8%)
30-49	309 (20.8%)
50 or older	70 (4.7%)
Not stated	18 (1.2%)
Experience of suicide[c]	
Thoughts	642 (43.2%)
Attempt	429 (28.8%)
Carer	293 (19.7%)
Bereaved	274 (18.4%)
Other	79 (5.3%)
No experience of suicide	12 (0.8%)
Not stated	720 (48.4%)

[a] Non-binary/third gender/other includes individuals who answered ‘non-binary/ third gender’, ‘prefer not to say’ and ‘prefer to self-describe’.

[b] Participants could report more than one diagnosis.

[c] Participants could report more than one experience of suicide.

The most common diagnoses were anxiety and depression (N=1,196), anxiety (N=1,088) and depression (N=902). Other commonly reported diagnoses included attention deficit disorder

(ADD), autism spectrum disorder, schizophrenia, adjustment disorder and attention deficit hyperactivity disorder (ADHD). Participants could identify more than one diagnosis. These are mapped in Figure 3 below.

Figure 3: Mapping of Common Diagnoses Among Participants

Diagnoses	**Anxiety**	**Depression**	**Bipolar disorder**	**Personality disorder**	**Schizophrenia**	**Eating disorder**	**Other**
Anxiety	1088	903	120	215	17	245	267
Depression		1197	134	246	21	252	357
Bipolar disorder			206	59	11	51	66
Personality disorder				281	12	102	88
Schizophrenia					27	12	7
Eating disorder						288	104
Other							468

Key	0 < x < 100	100 < x <200	200 < x < 300	300 < x < 400	400 < x < 500	x > 500

Note: Participants could have chosen more than one option. The table displays some of the common combinations of responses.

Chi-square tests of association between socio-demographic variables and lived experiences of mental illness, lived experience of suicide and age of first diagnosed mental disorders are reported in Table 6 through 8. There were statistically significant ($p<0.05$) associations between lived experience of mental illness and the following socio-demographic variables: age, gender, cultural identity, and country of birth. There were statistically significant ($p<0.05$) associations between lived experience of suicide and the following socio-demographic variables: age, gender, and country of birth. There were statistically significant ($p<0.05$) associations between age of first diagnosed mental disorders and the following socio-demographic variables: age, gender, cultural identity, country of birth, mental health diagnosis and experience of suicide.

Table 6: A Comparison of Demographic Characteristics by Mental Disorders

Demographic Variables	Anxiety n (%)	Depression n (%)	Bipolar disorder n (%)	Personality disorder n (%)	Schizophrenia n (%)	Eating disorder n (%)	Other diagnosis n (%)
Age (years)							
18-24	362 (85.8%)	361 (85.6%)	35 (8.3%)	100 (23.7%)	11 (2.6%)	125 (29.6%)	136 (32.2%)
25-34	255 (86.2%)	248 (83.8%)	31 (10.5%)	71 (24%)	3 (1%)	65 (22%)	89 (30.1%)
35-44	185 (74.6%)	188 (75.8%)	45 (18.2%)	43 (17.3%)	6 (2.4%)	43 (17.3%)	79 (31.9%)
45-54	175 (61.2%)	211 (73.8%)	59 (20.6%)	41 (14.3%)	6 (2.1%)	33 (11.5%)	90 (31.5%)
55-64	92 (55.1%)	136 (81.4%)	23 (13.8%)	18 (10.8%)	1 (0.6%)	18 (10.8%)	54 (32.3%)
65 and older	19 (27.5%)	53 (76.8%)	13 (18.8%)	8 (11.6%)	0	4 (5.8%)	20 (29%)
p-value of X^2 test	**<.0001**	**0.0007**	**<.0001**	**0.0001**	0.3210	**<.0001**	0.9854
Gender							
Female	832 (73.6%)	913 (80.8%)	161 (14.3%)	221 (19.6%)	15 (1.3%)	232 (20.5%)	351 (31.1%)
Male	141 (63.2%)	175 (78.5%)	25 (11.2%)	31 (13.9%)	7 (3.1%)	13 (5.8%)	66 (29.6%)
Non-binary/third gender/other[a]	115 (85.2%)	109 (80.7%)	20 (14.8%)	29 (21.5%)	5 (3.7%)	43 (31.9%)	51 (37.8%)
p-value of X^2 test	**<.0001**	0.7239	0.4590	0.1031	**0.0407**	**<.0001**	0.2297
Cultural identity							
Neither Aboriginal nor Torres Strait Islander	1042 (74.2%)	1129 (80.4%)	196 (14%)	263 (18.7%)	24 (1.7%)	270 (19.2%)	435 (31%)
Aboriginal and/or Torres Strait Islander	37 (71.2%)	44 (84.6%)	7 (13.5%)	12 (23.1%)	2 (3.9%)	16 (30.8%)	19 (36.5%)

Not stated	9 (29%)	24 (77.4%)	3 (9.7%)	6 (19.4%)	1 (3.2%)	2 (6.5%)	14 (45.2%)
p-value of X^2 test	**<.0001**	0.6831	0.7902	0.7311	0.4403	**0.0217**	0.1752
Country of birth							
Australia	954 (74.7%)	1038 (81.2%)	172 (13.5%)	240 (18.8%)	24 (1.9%)	250 (19.6%)	410 (32.1%)
Other	130 (64.7%)	155 (77.1%)	32 (15.9%)	36 (17.9%)	2 (1%)	38 (18.9%)	57 (28.4%)
Not stated	4 (44.4%)	4 (44.4%)	2 (22.2)	5 (55.6%)	1 (11.1%)	0	1 (11.1%)
p-value of X^2 test	**0.0019**	**0.0095**	0.4928	**0.0180**	0.0761	0.3294	0.2400
Main language spoken at home							
English	1072 (73.2%)	1180 (80.6%)	203 (13.9%)	276 (18.9%)	27 (1.8%)	283 (19.3%)	460 (31.4%)
Other	16 (72.7%)	15 (68.2%)	2 (9.1%)	5 (22.7%)	0	5 (22.7%)	7 (31.8%)
Not stated	0	2	1 (50%)	0	0	0	1 (50%)
p-value of X^2 test	0.0655	0.2709	0.2713	0.7122	0.7982	0.7258	0.8516

[a] Non-binary/third gender/other includes individuals who answered ‘non-binary/ third gender’, ‘prefer not to say’ and ‘prefer to self-describe’.

Bolded text for statistical significance at p<0.05.

Table 7: A Comparison of Demographic Characteristics by Lived Experience of Suicide

Demographic Variables	Suicidal thoughts n (%)	Previous suicide attempts n (%)	Carer n (%)	Bereaved n (%)	Other n (%)	No experience n (%)
Age (years)						
18-24	179 (42.4%)	137 (32.5%)	96 (22.8%)	55 (13%)	17 (4%)	6 (1.4%)
25-34	131 (44.3%)	82 (27.7%)	58 (19.6%)	49 (16.6%)	13 (4.4%)	0
35-44	100 (40.3%)	75 (30.2%)	42 (16.9%)	45 (18.2%)	9 (3.6%)	1 (0.4%)
45-54	132 (46.2%)	76 (26.6%)	56 (19.6%)	63 (22%)	22 (7.7%)	0
55-64	72 (43.1%)	43 (25.8%)	27 (16.2%)	44 (26.4%)	11 (6.6%)	3 (31.6%)
65 and older	28 (40.6%)	16 (23.2%)	14 (20.3%)	18 (26.1%)	7 (10.1%)	2 (2.9%)
p-value of X^2 test	0.8083	0.3372	0.4139	**0.0008**	0.0685	**0.0229**
Gender						
Female	483 (42.7%)	324 (28.7%)	215 (19%)	208 (18.4%)	54 (4.8%)	6 (0.5%)
Male	97 (43.5%)	57 (25.6%)	36 (16.1%)	37 (16.6%)	21 (9.4%)	4 (1.8%)
Non-binary/third gender/other[a]	62 (45.9%)	48 (35.6%)	42 (31.1%)	29 (21.5%)	4 (3%)	2 (1.5%)
p-value of X^2 test	0.7744	0.1255	**0.0013**	0.5121	**0.0082**	0.1024
Cultural identity						
Neither Aboriginal nor Torres Strait Islander	603 (42.9%)	398 (28.3%)	274 (19.5%)	256 (18.2%)	73 (5.2%)	11 (0.8%)
Aboriginal and/or Torres Strait Islander	29 (55.8%)	22 (42.3%)	14 (26.9%)	14 (26.9%)	5 (9.6%)	0

Not stated	10 (32.3%)	9 (29%)	5 (16.1%)	4 (12.9%)	1 (3.2%)	1 (3.2%)
p-value of X^2 test	0.0860	0.0918	0.3678	0.2052	0.3293	0.2591
Country of birth						
Australia	559 (43.7%)	374 (29.3%)	261 (20.4%)	243 (19%)	61 (4.8%)	7 (0.6%)
Other	80 (39.8%)	53 (26.4%)	32 (15.9%)	31 (15.4%)	18 (9%)	4 (2%)
Not stated	3 (33.3%)	2 (22.2%)	0	0	0	1 (11.1%)
p-value of X^2 test	0.4833	0.6367	0.1083	0.1708	**0.0378**	**0.0003**
Main language spoken at home						
English	630 (43%)	421 (28.8%)	28 7(19.6%)	271 (18.5%)	77 (5.3%)	10 (0.7%)
Other	10 (45.5%)	6 (27.3%)	6 (27.3%)	3 (13.6%)	2 (9.1%)	1 (4.6%)
Not stated	2	2	0	0	0	1 (50%)
p-value of X^2 test	0.2604	0.0835	0.5228	0.6721	0.6890	**<.0001**

[a] Non-binary/third gender/other includes individuals who answered ‘non-binary/ third gender’, ‘prefer not to say’ and ‘prefer to self-describe’.

Bolded text for statistical significance at p<0.05.

Table 8: A Comparison of Demographic Characteristics by Age of First Diagnosis

Characteristics	Age of first diagnosed (years) n (%)				
	Not stated	17 or younger	18-29	30-49	50 or older
Age (years)					
18-24	2 (0.5%)	327 (77.5%)	92 (21.8%)	1 (0.2%)	0
25-34	0	132 (44.6%)	153 (51.7%)	11 (3.7%)	0
35-44	4 (1.6%)	61 (24.6%)	98 (39.5%)	85 (34.3%)	0
45-54	3 (1.1%)	27 (9.4%)	109 (38.1%)	131 (45.8%)	16 (5.6%)
55-64	6 (3.6%)	19 (11.4%)	43 (25.8%)	61 (36.5%)	38 (22.8%)
65 and older	3 (4.4%)	7 (10.1%)	23 (33.3%)	20 (29%)	16 (23.2%)
p-value of X^2 test	**<.0001**				
Gender					
Female	12 (1.1%)	420 (37.2%)	409 (36.2%)	245 (21.7%)	44 (3.9%)
Male	4 (1.8%)	63 (28.3%)	73 (32.7%)	58 (26%)	25 (11.2%)
Non-binary/third gender/other[a]	2 (1.5%)	90 (66.7%)	36 (26.7%)	6 (4.4%)	1 (0.7%)
p-value of X^2 test	**<.0001**				
Cultural identity					
Neither Aboriginal nor Torres Strait Islander	16 (1.1%)	541 (38.5%)	496 (35.3%)	289 (20.6%)	63 (4.5%)
Aboriginal and/or Torres Strait Islander	0	28 (53.9%)	16 (30.8%)	6 (11.5%)	2 (3.9%)
Not stated	2 (6.5%)	4 (12.9%)	6 (19.4%)	14 (45.2%)	5 (16.1%)
p-value of X^2 test	**<.0001**				
Country of birth					
Australia	14 (1.1%)	510 (39.9%)	443 (34.7%)	261 (20.4%)	50 (3.9%)
Other	4 (2%)	62 (30.9%)	72 (35.8%)	45 (22.4%)	18 (9%)
Not stated	0	1 (11.1%)	3 (33.3%)	3 (33.3%)	2 (22.2%)
p-value of X^2 test	**0.0032**				
Main language spoken at home					

English	18 (1.2%)	562 (38.4%)	509 (34.8%)	307 (21%)	68 (4.6%)
Other	0	11 (50%)	7 (31.8%)	2 (9.1%)	2 (9.1%)
Not stated	0	0	2	0	0
p-value of X^2 test	0.5133				
Diagnoses					
Anxiety	2 (0.2%)	490 (45%)	374 (34.4%)	187 (17.2%)	35 (3.2%)
p-value of X^2 test	**<.0001**				
Depression	4 (0.3%)	497 (41.5%)	427 (35.7%)	224 (18.7%)	45 (3.8%)
p-value of X^2 test	**<.0001**				
Bipolar disorder	0	68 (33%)	82 (39.8%)	49 (23.8%)	7 (3.4%)
p-value of X^2 test	0.0780				
Personality disorder	1 (0.4%)	155 (55.2%)	85 (30.3%)	33 (11.7%)	7 (2.5%)
p-value of X^2 test	**<.0001**				
Schizophrenia	0	13 (48.2%)	8 (29.6%)	6 (22.2%)	0
p-value of X^2 test	0.6392				
Eating disorder	1 (0.4%)	185 (64.2%)	83 (28.8%)	18 (6.3%)	1 (0.4%)
p-value of X^2 test	**<.0001**				
Other	17 (3.6%)	196 (42%)	151 (32.3%)	85 (18.2%)	19 (4.1%)
p-value of X^2 test	**<.0001**				
Not stated	1	0	0	0	0
Experience of suicide					
Thoughts	7 (1.1%)	242 (37.7%)	219 (34.1%)	149 (23.2%)	25 (3.9%)
p-value of X^2 test	0.2573				
Attempt	2 (0.5%)	211 (49.2%)	134 (31.2%)	69 (16.1%)	13 (3%)
p-value of X^2 test	**<.0001**				
Carer	4 (1.4%)	129 (44%)	93 (31.7%)	55 (18.8%)	12 (4.1%)
p-value of X^2 test	0.2941				
Bereaved	7 (2.6%)	94 (34.3%)	88 (32.1%)	70 (25.6%)	15 (5.5%)
p-value of X^2 test	**0.0226**				
Other	0	27 (34.2%)	24 (30.4%)	23 (29.1%)	5 (6.3%)
p-value of X^2 test	0.2718				

No experience of suicide	0	4 (33.3%)	5 (41.7%)	1 (8.3%)	2 (16.7%)
p-value of X^2 test	0.2900				
Not stated	9 (1.3%)	294 (40.8%)	262 (36.4%)	121 (16.8%)	34 (4.7%)
p-value of X^2 test	**0.0090**				

[a] Non-binary/third gender/other includes individuals who answered ‘non-binary/ third gender’, ‘prefer not to say’ and ‘prefer to self-describe’.

Bolded text for statistical significance at p<0.05.

There were 1,447 participants included in logistic regression. Younger individuals had statistically significant higher odds of reporting anxiety, depression, bipolar disorder, personality disorder or eating disorder diagnosis than older individuals (Table 9). Females had statistically significant higher odds of reporting anxiety, personality disorder or eating disorder diagnosis, compared to males. Other demographic variables were not distributed differently across diagnoses.

Table 9: Estimated Odds Ratios by Mental Disorders

Demographic Variables	Anxiety OR (95% CI)	Depression OR (95% CI)	Bipolar disorder OR (95% CI)	Personality disorder OR (95% CI)	Schizophrenia OR (95% CI)	Eating disorder OR (95% CI)	Other diagnosis OR (95% CI)
N (with mental illness)	372	280	200	270	25	286	453
N (without mental illness)	1075	1167	1247	1177	1422	1161	994
N (total)*	1447	1447	1447	1447	1447	1447	1447
Age (years)							
18-24	*Reference*						
25-34	1.059 (0.679-1.654)	0.835 (0.548-1.273)	1.383 (0.825-2.320)	0.974 (0.681-1.392)	0.456 (0.123-1.683)	**0.685 (0.480-0.978)**	0.964 (0.694-1.340)
35-44	**0.473 (0.314-0.714)**	**0.492 (0.325-0.744)**	**2.649 (1.620-4.331)**	**0.620 (0.410-0.939)**	1.118 (0.395-3.168)	**0.502 (0.335-0.753)**	1.038 (0.733-1.471)
45-54	**0.270 (0.184-0.397)**	**0.460 (0.307-0.689)**	**3.229 (2.001-5.211)**	**0.511 (0.335-0.780)**	0.658 (0.196-2.214)	**0.336 (0.217-0.521)**	1.071 (0.763-1.504)
55-64	**0.216 (0.141-0.333)**	0.681 (0.415-1.118)	**1.898 (1.049-3.433)**	**0.362 (0.205-0.641)**	0.268 (0.033-2.149)	**0.333 (0.193-0.574)**	1.030 (0.688-1.542)
65 and older	**0.072 (0.038-0.137)**	**0.474 (0.244-0.921)**	**3.191 (1.513-6.731)**	0.453 (0.197-1.042)	N/A	**0.196 (0.068-0.561)**	1.137 (0.627-2.063)
Gender							
Male	*Reference*						
Female	**1.471 (1.050-2.060)**	1.052 (0.724-1.528)	1.421 (0.886-2.280)	**1.671 (1.073-2.600)**	0.411 (0.154-1.095)	**4.075 (2.264-7.335)**	1.095 (0.791-1.515)
Non-binary/third gender/other^{a}	1.625 (0.901-2.931)	0.805 (0.456-1.422)	2.239 (1.137-4.412)	1.457 (0.803-2.642)	0.992 (0.281-3.505)	**4.927 (2.494-9.733)**	1.510 (0.941-2.421)
Cultural identity							
Aboriginal and/or Torres Strait Islander	*Reference*						

Neither Aboriginal nor Torres Strait Islander	1.417 (0.730-2.748)	0.827 (0.381-1.797)	0.882 (0.384-2.022)	0.785 (0.400-1.540)	0.564 (0.125-2.542)	0.555 (0.293-1.052)	0.810 (0.453-1.450)
Country of birth							
Australia	*Reference*						
Other	0.753 (0.526-1.078)	0.802 (0.553-1.163)	1.153 (0.749- 1.773)	0.948 (0.627-1.434)	0.674 (0.156-2.913)	1.125 (0.752-1.682)	0.831 (0.589-1.170)
Main language spoken at home							
English	*Reference*						
Other	1.120 (0.348-3.603)	0.474 (0.175-1.283)	0.937 (0.208- 4.214)	0.999 (0.320-3.115)	N/A	1.105 (0.375-3.259)	1.022 (0.383-2.728)

[*]41 participants were deleted due to missing values for the demographic variables.

[a]Non-binary/third gender/other includes individuals who answered ‘non-binary/ third gender’, ‘prefer not to say’ and ‘prefer to self-describe’.

Bold text indicates statistical significance, based on 95% Confidence Interval

Qualitative Data

The results of the survey explore Australians' perceptions of their experiences with both the mental health system and engaging in (or reflections on) suicide prevention activities. The goal was not to identify one universal truth but rather to explore the nuanced ways in which individuals live with mental ill-health, mental illness, and suicide. The analysis is presented in temporal format exploring the role of distress, the lead up to diagnosis and the experiences following diagnosis. We examined reflections on what it meant to utilise services, the barriers and facilitators of access, and how appropriate services are identified. We then explore the connection between mental ill-health and experiences of suicide. Participants words are used verbatim in italics, however where a quote discusses suicide methods or is identifying these details have been removed. No other changes to participants quotes have been made, thus some have spelling or grammatical errors, but are presented as they were entered by participants in the online survey platform. We also include the reported gender and age of the participant to provide context where quotes are presented.

Emerging Distress

Distress is searching for the nearest exit and not being able to run

An analysis of the language used to describe what distress looks and feels like offered rich insights into the experience of the intersection between trauma, living with a mental illness, and emerging or persistent suicide-related behaviours. Participants explained that '*everything becomes louder and harsh'* (non-binary, 25-34 years) when distress was present in their lives, and this was a persistent theme in the descriptions of how an individual experienced distress and/or reduced mental health. The findings of how distress is experiences are grouped thematically below; they speak of how distress can be a physical manifestation of symptoms, that can sometimes be delayed in terms of a person's awareness as to what is occurring for them. There are also explorations of how distress can be minimised or dismissed by others, and that this repetitive limiting of sharing how a person is feeling, can impact early stages of support.

Figure 4: Distress Word Cloud

The Body and the Mind Connected

The physical experiences of distress were prominent in participant narratives – including physical manifestations such as chest pains, digestive upsets, uncontrollable crying, difficulty breathing and many 'crossover' symptoms that might present as the primary health concern prior to or at the time of mental health diagnosis. For some, the descriptions noting physical symptoms and substance use when seeking help could mask opportunities for a health professional to make a mental health diagnosis. For example, men spoke about the connection between distress and use of substances to reduce feelings of distress and that these decisions to use substances came from feeling as if they struggled to breathe, '*The physical feeling of distress is similar to when I have an asthma attack"* (Female 35-44 years). Many referred to the use of asthma inhalers to settle feelings of constant distress, also self-medicating with marijuana and other substances. Male participants in the survey described what their distress looked and felt like – descriptions of panic, sweating, physically and psychologically 'hiding' from others and over-committing to activities to limit thinking about the distress were described. The physical nature of these symptoms, the self-medication with alcohol and other drugs was particularly prominent for male participants, although were also experienced by other genders.

Distress created a need to escape coupled with an inability to rationalise what a person should do next – akin to a bodily sensation of stress and shock that led to sleep problems, chest pain and constant crying. The commencement of distress was often pinpointed to a single event, that then led to ongoing issues, cumulated over time and often leading to thoughts of suicide.

> *Working full-time, sometimes 12-hour days. Relationship breakdown/ empty nester and loss of a loved family pet. I started not being able to sleep. Next my eating patterns changed then my emotional coping mechanisms started to fail (family, friends, hobbies) me. I began wanting to hurt myself and fantasised about [ways to hurt myself].* (Female, 55-64 years)

Participants who identified as female described how lead up periods to phases of acute distress were often met with diagnoses related to hormonal cycles or symptoms of puberty and menstruation. Some noted that the contraceptive pill was recommended as a solution, with limited opportunities to explore more deeply what was underlying their distress. Many noted simplistic responses to their requests for help when attempting to describe them to services, which resulted in ongoing, inappropriate treatments without accurate diagnoses;

> *When I was 16 I was forced to see a school counsellor who would take me out of class (against my will) and would later tell my parents I was suicidal and self-harming. I was then taken to a GP [general practitioner] who told me it was only hormonal and to wait a year to see if my mental illness was real. After 12 months of being on the pill and suffering many migraines and panic attacks, the GP finally prescribed me medication for my anxiety and depression. A few years later (at university) I was forced to move out of home and was living out of a suitcase for 3 months. I suffered a psychotic episode and experienced extreme paranoia, hallucinations, delusions and relapsed into self-harm. After 2 months of therapy and an appointment with a psychiatrist I was formally diagnosed with Bipolar II, and anxiety.* (Non-binary, 18-24 years)

These rich descriptions of the physical nature of distress provide deep insight into the emotions below these physical manifestations.

> [Distress is] *emotions that are too intense to bear. For me the emotions are humiliation and shame, a sense of someone taking my power off me, and an*

> *emotional pain that I feel in my arms and chest and front of my head.* (Female, 35-44 years)

Commonly, feelings of shame associated with distress were identified as creating barriers between and isolation from others;

> *I had a panic attack at work after the pressure of being a manager of a government customer service centre drove me to go hide in a dark cupboard till, I could stop crying and breathe normally. I had to leave to office for the day. The added stress of having to face that environment every day and the shame I felt only compounded my deteriorating mental health.* (Female, 55-64 years)

And;

> *I had a hard time in TAFE and Uni trying to be a "normal" adult as I suffered continuously anxiety and depression. I had to repeat a course because I failed my clinicals (I'm a student nurse) as I couldn't communicate properly with other people without dying with anxiety. Now I'm getting a little better but still suffering from anxiety and depression. I have been getting some from uni counseling and GP* (Female, 18-24 years)

For LGBTQI+ participants in particular exposure to family violence, or exposure to parental complex mental health, bullying from others, those with conservative ideologies, amplified feelings of loneliness. One participant noted that it was difficult to seek help, because of the ways they were treated:

> *I was scared that I wouldn't be able to be "fixed" because I thought I was "broken", I wish the nurses at the psych ward tried a little harder to understand my experience and not tell me I'm "making it up"* (Non-binary, 18-24 years)

These feelings were explained as embarrassing to experience and sharing that distress was prominent in a person's life, was difficult for individuals to articulate. This was experienced as a chasm between being able or willing to communicate the internal experience and how the participant perceived their experiences may be understood by others;

> *Arguing with my wife. Feeling shamed, judged, criticised, like I'm a failure, never good enough. I feel like I'm losing my mind. I want her to stop but she doesn't*

> *stop. My mind tells me I'd be better off dead. I'm trapped and there's no way out. Hopeless and helpless.* (Male, 45-54 years)

Participants noted that acute distress, which would usually be the point where an intervention was sought, and the period during which distress was escalating or chronic '*looked very different'*. The responses regarding what triggered distress or lead up to a diagnosis at some point in a person's life, were often in response to acute distress and included trauma ruminations, situational stress (from school exams, workplace bullying, loss of job, or traumatic bereavement), periods of acute mental illness flare ups and points of life transition at key development points (e.g., adolescence and adulthood) and during relationship or personal losses. The vulnerability of constant '*flight or fight'* responses or '*discomfort in my own being'* characterised long periods of individuals' journeys of mental illness and/or suicidal behaviour;

> *To me distress is like the world is ending. Its tear filled and anxiety driven. Distress is being unable to think, and panic attacks setting in. Distress means wanting to harm myself, and the feeling like my brain just wants to escape. Distress is searching for the nearest exit and not being able to run.* (Male, 18-24 years)

While men primarily spoke of the internalisation of physical manifestations of distress, women more often spoke about distress in relation to increasing self-harm, increased severity of an eating disorder, anxiety, and when reflecting back to when they were younger changes to reduced capacity to connect to friendship groups, inability to sit exams, dangerous situations leading to suicide attempts;

> *I saw the school counsellor on and off. 2 teachers supported me however they had to involve local (regional) mental health services. This was a negative experience. They called my parents without consent and then left me to deal with everything alone. I attempted suicide just before VCE [Victorian Certificate of Education] exams. I had a nurse called me a "little twit" for passing out when inserting a cannula. No follow up support provided. At 19 I had a crisis and went to ED [emergency department]. Psychologist reviewed me from the emergency psych team and supported me to access community support and PAPU admission to give me some time to heal before going home. This was beneficial.* (Female, 18-24 years)

While many participants reported their distress in past tense, some were actively experiencing this at the time they participated. Unfortunately, contemporary experiences were not dissimilar to those being reported from the past;

> *GP's being supportive but not understanding the complicated factors of PTSD or ED.* (Female, 45-54 years)

When accessing support participants described feeling that there was not the same level of urgency shown by health professionals that the participant themselves thought there should be regarding their current situation. This was particularly the case where the participant described presenting with less acute which was reported as being due to perceptions as to what complex mental health or suicidal crisis presented as;

> *For me distress can look different in different situations and at differ levels. For me in this situation was 10/10 distress. It looked like: having a panic attack, crying uncontrollably, swearing/yelling and ultimately dissociating.* (Female, 18-24 years)

And;

> *Having flashbacks of a suicide attempt causes me significant distress. This either involves uncontrollable crying or I dissociate. I struggle to find words and express what I'm feeling when highly distressed whereas normally I have excellent emotional language.* (Female, 35-44 years)

Leading Up to Diagnosis

As with the analysis on experiences of distress, the events leading up to diagnosis were vast, with no one, clear trajectory. The survey asked participants to: *Please tell us about your experience leading up to, and of being diagnosed with mental illness.* There was vast array of psychological, social, economic and relationship challenges experienced. Diagnosis was often reported as a pivotal time, yet not always definitive. Again, there was often descriptions of a variety of situational and lifespan transition events that were described as precursors to diagnosis and concerningly obtaining a diagnosis, while desired, was often reported as extremely difficult. Further, health professionals can be both helpful and harmful along this journey. The lengthy quote below is illustrative of these challenging trajectories.

> *I found it really hard to get help and diagnosis. Initially as an 18-year-old I went to headspace where I was diagnosed with depression. As I got older it became harder to access psychiatric support - what has been much more complicated is that for me my mental illness was a complex one not depression and anxiety. So getting diagnosed with PTSD and later a dissociative disorder the hardest thing has been access to information to understand my diagnosis. The other issue particularly with dissociation is the stigma associated with it and lack of information to share with my community. I think our mental health system is a bit broken but functions on the back of hard-working passionate individuals. I literally went to a doctor 3 time in a matter of weeks - hadn't been able to work, was really, really unwell and not responding well to medication. She then said she would get me in to see someone for some support, that she would book me for an appointment in a few days- I didn't hear from her, then received a letter in the mail saying I didn't meet the criteria. I had told the doctor I couldn't stop thinking about [METHOD] myself, no follow up and then a letter in the mail. I then tried to refer to the mental health line, after a while I got to see someone- that service was pretty terrible, I had multiple changes of case workers and psychiatrist. Then someone breached my confidentiality - not due to risk but just unprofessionally to my workplace. It's been pretty challenging, after lots and lots of searching I have a great psychologist and gp who have supported my diagnosis etc.* (Female, 25-34 years)

The stories of the lead-up period often began with individuals reflecting on adverse childhood experiences. These were described in terms of external factors like being exposed to trauma, witnessing and or being the victim of family violence, sexual abuse (predominantly by family members or close non-kin connections), descriptions of unsafe homes where emotional neglect was common, and feelings of volatility in relationships. Bullying was also a predominant theme either during school years or in the workplace (or both).

Social determinants of both health and mental health were often present in these descriptions. The events included in explaining distress and the lead up to diagnosis were not 'one off' – but often repetitive exposure to family violence or personal violence, with an over representation of child sexual abuse shared by participants. There were also intergenerational experiences described, with some referring to pre-existing mental illnesses within the family;

> *I have a family history of mental health and parental suicide. I have always wanted to be very proactive if I experienced any symptoms but it was a real battle.* (Female 45-54)

While the onset of distress was commonly identified as becoming significantly problematic during adolescence, the distress being experienced was reported as minimised by schools, health professionals and family and then later reframed via the diagnosis of mental illness. Participants reported feeling as though there were ‘not heard.’ Many reported the emergence of mental illness coupled with suicidal behaviours developing during adolescence;

> *First self-harmed at 13 after knowing an older friend who did it. Struggled with confidence issues all through high school and adopted "emo" style after having a lot of friends abandon me, call me "annoying", high level of romantic interest in dating/boys all the way from kindergarten. Saw therapist for anxiety in primary school because severe fear of dark and then returned at age 17 after suicide attempt. Incorrectly diagnosed with bipolar, took [medication] then decided the medications and treatment of psychiatrist was poorly done. Left therapy for years until 2021 as a result of finally doing the work on my own and ready to accept someone to talk to. Diagnosed with anxiety, depression, OCD, and BPD* (Female 18-24)

Participants who are either currently young adults or those reflecting back on when they were young, reported that the lead up to either intervention or diagnosis (or both) as a time of feeling being;

> *lost, sad and alone.* (Non-binary, 18-24 years)

Ambiguity about what was happening to them, or as they came to understand their identity within society was othering;

> *I was a freak and an outsider and that I would never be like a "normal person" again.* (Non-binary, 18-24 years)

Those who identify as neurodiverse reported being labelled as ‘problematic’ by schools and allied health professionals. During primary school and early adulthood mental health needs were often reported as being viewed through a behavioural lens, providing limited scope for individuals’ distress to be noticed. Participants reflected on diagnoses of ADHD, Tourette’s

Syndrome, and autism spectrum disorders, were identified as a primary concern rather than exploring secondary co-morbid issues relating to mental illness or distress. For some neurodiversity acted as a gateway diagnosis.

Understandably, many participants also reported on the impact of the COVID-19 pandemic compounding other challenges;

> *During the first COVID lockdown in 2020, my family pet died and it through me into a deep depression unexpectedly. I was also in yr 12 at the time so the combination of all of that really made me struggle for quite a while.* (Female, 18-24 years)

And how this period led to increased distress, but also seeking help;

> *Being physically isolated from friends and support networks (such as at school) made me withdraw completely from social life and I spent a lot of my time trying to sleep so I wouldn't have to deal with any of it.* (Female, 18-24 years)

To understand how distress was physically, emotionally and socially experienced by participants, and the contributing factors that led to that distress, differed between groups. Situational experiences of trauma, across the lifespan, were prominent in the men's experiences. In early life experiences, as children, men identified that abusive households shaped their experiences of conflict and created distress, often mitigated by exposure to parents who abused alcohol and other substances. There were also experiences of multifactorial traumas in childhood – impacts of adoption, exposure to domestic violence, sexual assault as well as responses to the emergence of their sexuality which created increasing feelings of distress from young adulthood onwards;

> *I was sexually abused by a family member as a child I did not disclose.*
> *By the time I was 12 I had been to the GP on my own and she diagnosed me with depression, anxiety, social phobia, panic disorder, dyslexia, ADD, and a few other things. My parents didn't allow me to see a psychologist. I first saw one when I was 17 and had moved out of home. My first psychologist she said I was too complex for her and recommended someone else, he took me on but after 2 sessions he said he was leaving the field. This caused me to shut down and not trust psychologists, I have probably seen at least 30 different ones. None more than 5 sessions until I met my current*

> *psychologist who is trauma informed, understands autism, and manages me well even when I tell him I can't talk to him anymore. He manages to get me to feel safe again with him and talk things through. This is what I think everyone needs in a psychologist I believe.* (Non-binary, 35-44 years)

In young and middle adulthood, participants discussed, (especially men in the middle adulthood phase of life) the impacts of war and past periods of conscription, leading to traumatic experiences and familial disconnection, as well as ongoing impacts of bullying in high school, and the emergence of workplace bullying;

> *Served in Vietnam as a 17-year-old Sailor. RAN. Was raped as a slightly older Sailor by others. Seen several psychiatrists and completed a PTSD course at the Toowong Private hospital early 2000's. Have a gold card from DVA but they do not accept any responsibility saying they acknowledge I have ptsd but insist it's not service related. 8 and a half to get it. Live on a $33,000 a year pension. Seeing another psychologist from Soldier On at the moment.* (Male, 65-74 years)

For everyone, but especially noted among neurodiverse participants, access to services need to focus on being able to consider individual needs. One participant noted that lack of education about the access to service needs of women with autism also impacted how she was cared for when she did reach out for support. One participant noted '*I felt humiliated and dismissed*' when her distress was minimised because of her lack of capacity to connect with others and share what was happened '*it made getting help and opening up so much harder*' (Female, 18-24 years).

Diagnosis was not reported as being a static event, but rather a continually changing experience across the lifespan. Participants noted that much of the public health communication messaging did not convey this, which rather focuses on diagnosis being an end point and that recovery follows. The reality for most participants differed. Constant changes of diagnosis or treatment were viewed as helpful (when they moved towards a clearer diagnosis over time to better understand their needs) or unhelpful (when the diagnosis led to different thoughts on how to manage mental health or constant medication changes creating physical and psychological responses). This 'lead up' to diagnosis, spoke of individuals' lives' being 'on hold' for 10-15 years before they were able to access, the 'right help' or a chance to start to begin to know what help was optimal for them. Waiting periods could also exacerbate symptoms, as well as being a trauma risk factor. What was integral in the discussions about the journey to diagnosis, was a need for participants to learn how to navigate their own support needs and how, for some, trauma about service delivery during this time were prominent;

> *Financially I am lucky to pay my own way. I find podcasts and meditation apps to be helpful. Yoga and mindfulness is beneficial and is seeing a lot is expansion, covid has highlighted the problem TV and social platform ads offer some help to informing individuals, but they always paint the picture of it can be fixed easily when that is false, the resources are limited and the demand exceeds supply. Everything is also practitioner dependent, individuals can't currently get into see psychologists, especially children. The RU Ok platform is commendable but not educational enough. How do you prepare individuals to respond if someone says no I am not ok? Realistic resources that are available immediately would have to be a help* (Female 65-74 years)

Life After Diagnosis – How Did This Shape the Mental Illness Journey?

The action of reaching out for help and subsequent help offerings did not match with the idea perceived support needs once people knew they had a diagnosis of mental illness, but still had periods of being unwell. Some referred to the need for more community based mental health availability prior to a crisis, and then others, who did seek support from emergency departments of GPs in distress felt that crisis environments were not conducive to good ongoing care;

> *"Emergency departments are also a harmful experience. If I end up in an ED I am usually told something like "we don't have enough beds for you, we only take the sickest of the sickest, it's your choice if you want to kill yourself" I'm not kidding, I have been told those exact words, "it's your choice if you want to kill yourself" before being sent home."* (Non-binary 25-34 years)

Availability of support at the time needed was commonly reported as challenging. This was noted to be in stark contrast to the health messaging to 'reach out' for help when in distress, suggesting that supports are ready to respond. Participants reported that when they reached out for support services were overwhelmed or simply not available to assist.

> *I notice when my distress starts to rise and I usually reach out early - but get turned away from mental health services because I am not in "crisis", even though I know I am heading for one. My self-harm increases, the voices in my head get louder and I lose perspective- blaming people around me for things that may not have occurred. Before I know it I am in crisis either planning or making a suicide attempt, but at that stage it is too late for early intervention. I get admitted to hospital and know that I will be there for more than a month - disrupting my life and my families life. (*Female, 35-44 years)

Participants also noted that the expectation from services is that consumers can engage in rational discussions about what they need, yet asking individuals to contribute to finding ways to reduce their distress, *when* they are distressed, was unhelpful due to the distress.

For some, diagnosis was a disempowering time. The focus on what may be 'wrong' with them, or where multiple health professionals or services become involved, was reported as confusing;

> *I was diagnosed with Tourette's at age 5, I have lived my whole life struggling with mental illness, diagnoses of other illnesses past that have been complex, doctors have picked and choosed (sp) and ultimately decided for themselves what disorders I do and don't have, and which ones need to be treated, regardless of what I have told them. I seem to be constantly told I have plenty of support and a functioning support network, but I am consistently let down in every regard by therapists, psychologists, psychiatrists, specialists and counsellors. Several doctors have simply disappeared instead of continuing to help me after several failed attempts.* (Male, 18-24 years)

Others, who also identified multiple social, physical and psychological traumas found that finally locating a health professional who could assist with a diagnosis and (and this was emphasised, the follow-on component) was able to assist with effective community-based interventions, was the key strength in receiving a diagnosis;

> *I started experiencing mood swings around 20 years of age. Mainly getting depressed and could happen totally out of the blue and within literally minutes. Was always shy and got anxious easily. Was assaulted at work in the early nineties and things went downhill. Diagnosed with depression and PTS. Saw umpteen*

> *counsellors with little effect. Kept pushing myself but my work suffered. Lost my confidence, had panic attacks. Lots of sick leave as so tired and would be convinced that if I left my house something bad would happen. Despite antidepressants ended up losing my husband as he didn't understand. Had to stop working as so anxious and depressed, suicidal and had a couple of manic episodes. Ended up bankrupt and living in a shed. Finally found a wonderful psychiatrist who diagnosed more bipolar type 2. Referred for EMDR [eye movement desensitisation and reprocessing therapy] which saved my life along with eventually finding an antidepressant that worked and a mood stabiliser. Still not great but less mood swings, less suicidal thoughts.* (Female, 45-54 years)

The following quote exemplifies the ongoing nature of mental illness diagnosis and the impact on a person's life as they struggle to stay alive;

> *I developed bipolar when I was as about 15/16. I had my first suicide attempt at 18 and was hospitalised. The aftercare was limited (and) I did not receive any treatment following this episode I had numerous episodes in the intervening years and was diagnosed with depression by a GP when I was 23. I dismissed it. When I was 27, I was referred to a psychiatrist and was diagnosed with bipolar. I have been medicated since then I have had numerous depressive episodes. A few suicide attempts that went unnoticed. I had a suicide attempt that ended up with me being put under an order. After that I went into a private hospital for a couple of months and have been under the care of a psychiatrist since. I had a period of over 2 years where I was unable to work.* (Female, 45-54 years)

Service Responsivity to Individual Needs

The questions in the survey encouraged participants to reflect beyond traditional health services and to include other supports they may have found useful. We asked participants to indicate their own recommendations for how services can better respond, and to include other potential support avenues outside of health, and suggestions included education, financial, social support, and online supports in response to mental health or suicide prevention.

Impact of a Two-tiered System

Access to services was a common issue for participants. There were many responses that detailed incredibly poor service experiences, and these were often in life-threatening situations;

> *I phoned mensline, and was left waiting for an hour and then the call dropped out.*
> (Male, 65-74 years)

While for some their GP was the first person they discussed their mental health concerns with, others went to the emergency department of their hospital. In this survey we did not locate any reports of satisfactory responses from ED, where the best response that can be hoped for was reported as the ED having '*less than welcoming staff*' (Female, 45-54 years)

Regional Australians have needs and experience systemic and geographic barriers to care and support;

> *I think we need more mental health professionals in regional nsw and in Australia. Its so hard to get in to see anyone. The waiting lists can be so long.the help lines are good also the texting services. We need to destigmatize suicide and suicidal talk.so that it becomes normal to speak up if your feeling that way.*
> *Teach kids in school about mental health.to not be afraid to say if your not feeling too good Financial, should be a covered on mental health from centrelink.so that someone can recover or at least find their bearings without having to jump through so many hoops.* (Female 55-64 years)

Public versus private health service divide was present among the responses to this survey. Importantly for those able to access private services, ease of access, reduced wait times, and what was perceived as better levels of care were reported. Participants suggested a gap reduction between the associated costs when seeking public care and then deciding to engager with a private provider;

> *The process is: ring a psychiatrist office and ask if they are taking new patients. If no, scrub off your list. If yes, get a referral from your gp, submit the referral and wait a good couple of weeks to be told no. Ring the next psychiatrist on your list. Ask same question and if yes, go back to your gp and get a referral. And so on and so on. However, gp's don't like you to keep writing referral after referral*

> *(I have no idea why). I opted for private over public as the waiting list for public is horrendous and I wanted a say in whom I had treatment from. In the case of my children - finding a psychiatrist who will take on a teenager is almost non-existent in my state. I actually looked for psychiatrists in other states. My psychiatrist took them both as patients because I begged him.* (Female, 45-54 years)

Cost was also reported as a barrier to private health care, particularly in light of additional costs of being mentally unwell including the cost of medications. Those with the financial means were aware of this privilege;

> *I will also add that I am fortunately in a financial position where we can afford to both seek professional assistance and pay for medication not on PBS [the Pharmaceutical Benefit Scheme]. The cost of medication alone between the three of us is over $350 a month.* (Female, 45-54 years)

Despite the focus on compassionate engagement, many of the narratives were shaped by the simple interactions with the system. If these had negative impacts, the potential for stories to be shaped that uncovered the long histories of distress experienced by many were hindered;

> *I cannot emphasise enough that frontline workers and gatekeeper healthcare workers need to be more adequately trained in responding to mental health and suicide presentations. Across both public and private facilities and healthcare professionals I have encountered shaming, belligerence, lack of understanding, negative attitudes, inadequate care responses, uninformed care responses, and a total lack of interest or respect in really listening to the patient's story.* (Female, 45-54 years)

Health professional responses were identified as hindering access to interventions especially in the tone, warmth and welcoming response when seeking mental health or suicide prevention interventions;

> *How about emergency staff take a person seriously. They feel it's OK to tell someone who is distressed that they can't help and to go somewhere else. I have always gone on my own to the hospital and leave with an address to go to. There is no way I can gather the strength to present somewhere else. I think it would be*

> *helpful if when you present at emergency or call access line that they can bring up your details and see your story and psych history so you don't have to repeat it again and again.* (Female, 45-54 years)

Participants made suggestions beyond the current service offering to improve care;

> *ED doesn't work. Places to go where no record is kept and individuals are genuinely caring and not robotic. (Female, 25-34 years)*

This difficulty in being asked to repeat one's history was reported as challenging by many. This was not always related to experiences of distress (given many were asked about what had 'happened' to them, not what they were experiencing) and that identifying how to give a concise personal history was difficult;

> *I think it would be helpful if when you present at emergency or call access line that they can bring up your details and see your story and psych history so you don't have to repeat it again and again.* (Female, 45-54 years)

Some provided examples as to how allowing for the sharing of private information was given consent to share, but it was unclear if participants knew that this could occur, or—if they were connected to both medical services and mental health services—how sharing could be facilitated;

> *I've disclosed my suicidal thoughts to all three therapists I've seen in the past few years and a couple of GPs (as well as my husband and a few friends). Not sure how this information is shared (I've always consented to my therapists transferring my file to save me repeating things), so I don't know if anything could be done there to ensure individuals who show a pattern don't slip through the cracks.* (Female, 25-34 years)

The repetition of the story is not the only factor that impacted access, when analysing the participant data. The real or imagined process of calling a service or attending a service, and identifying how to articulate the support needed, was recommended by participants in terms of saying;

> *'make it [access] less scary'* (Female, 25-34 years)

Another noted '*have individuals case managed'* (Female, 45-54 years) to avoid individuals having to repeat their story when they must access multiple places.

Participants noted that the energy required to access services can sometimes be the significant barrier to accessing the care that they need;

> *I feel shit, I have self-hatred, only assertive individuals survey a system designed to discourage.* (Male, 65-74 years)

Participants Suggestions to Improve Help-seeking

One of the final questions asked of participants was the recommendations as to how services could respond early to provide better support. The results were consistent with the broader findings of the systematic review, that is, participants want responsivity to their distress, and they want to feel safe when accessing care. This is even more pronounced for those who also reported trauma and distress in childhood where a desire for trusted adults to notice their needs, or to ask the 'right' questions to uncover their needs.

Solutions were focused on challenging the common discourse that espouses diagnosis being an end point with recovery following being an outdated belief and that focusing on this can increase ongoing distress of individuals into adulthood and later in life. That a trauma informed approached needed awareness that diagnosis may (and will change) and that treatment and interventions will need to change too.

A trauma-informed approach to mental illness help-seeking was suggested as being able to be enhanced by longer monitoring periods and enhanced by access to after care;

> *I have spent many years thinking about suicide as if it was just a normal part of life. I have had many overnight hospitals stays due to attempts or plans to end my life. I had a cemented thought pathway that overwhelm/distress means I have to die but really, I just wanted things to not be so bad. Seeing my psychologist helped & building a relationship with myself helped a lot. Being homeless & living on Centrelink has pushed me over the edge so many times. It's hard to imagine how hard it is until you live it. I've had many hospital trips in support of friends that have attempted taking their lives. I've been the first one at their places, having to*

> *call the ambulance, thinking my friend is dead or soon to be. When I was 17, I lost a close friend to suicide, she was only 13. If the town I was in had mental health supports, it's unlikely it would have got to the point it did. Having an accessible mental health service could prevent so many suicides & other mental health related issues.* (Non-binary, 18-24 years)

Discussion

Mental health-related distress is a broad concept and cannot be treated adequately without considering the psychological and social context as well as the needs of the consumer (Pai & Vella, 2020). This discussion is also explored in detail in Activity 5 where the research team identifies how mental health services have consideration of education, employment, and physical health needs alongside a focus on inclusivity, anonymity, reduction of shame or stigma and incorporating the voices of all individuals in the community – both within priority population groups and in the community more broadly.

This online survey analysis demonstrates that distress is a complex and often deeply internal experience. For men this can be more evident through changes to physical health, and for others bodily damage and harm manifests. Early life experiences of bullying, being neurodiverse, exposure to, and harm from, family and domestic violence, child sexual abuse, and other adverse childhood experiences where often identified as where distress began. Despite the time since childhood participants identified that these early-stage exposures, continue to contribute to ongoing distress, and thus all intervention need to appreciate the ongoing and compounding nature of trauma. The domino effect of trauma, leading to mental illness diagnosis, or acute distress months, years, or decades later shapes how a person accesses education, how they work and how they can meaningfully engage in relationships with others.

Social isolation was a significant theme across all the participant narratives. Over time distress, left untreated, leads to complex mental ill-health, a variety of diagnoses that are likely to change and poor health service support. Importantly, where supports were reported as useful primarily focused on the support being person-centred. Reducing the need to tell and retell one's history was recommended as a way in which to reduce the trauma of reliving distressing and traumatic situations. Proactive rather than reactive interventions were emphasised by the participant narratives.

The strong recommendations for better support made by these participants what the need for enhanced access to quality, compassionate services. The stigma of describing or sharing distress, appears akin to the same stigma shared by discussing complexity of mental ill-health and mental illness. Participants appeared to have high health literacy in terms of an understanding their needs, how systems work and what would be helpful to meet their needs, yet this awareness did not equate into ease of access to services.

Finally, expectations of what health professionals can provide appeared to vary amongst the participants, there appears to be no best practice standards for how services engage with individuals experiencing distress. Whilst interventions, diagnoses and medications are offered, the environment in which individuals engage with those who provide support is inconsistent and this inconsistency loses individuals from the system, meaning their access to care is affected. The way in which a health professional answers the phone, greets a person at reception or receives them at an emergency department can and will impact the immediate situation and future experiences of service provision.

In summary, to better meet the needs of those experiencing distress, mental ill-health and mental illness, policies need to focus on inclusivity and access with person-first approach, leading with empathy and compassion. What was uncovered by the analysis of experiences of help seeking is that practice standards (that are not discipline specific but system specific) can assist with consumers feeling that they will be treated with courtesy, compassion and respect irrespective of how the service works, how it is funded and what its primary role is. This could be enhanced through record keeping that reduces the need to retell trauma to each new professional working with the person. We note that the participants explained that ease of access is not a definable term and must be flexible in terms of understanding targeted population groups, different experiences and levels of distress will influence how ‘ease of access’ is experienced by consumers.

The long-standing impacts of a two-tiered public/private system results in some individuals being able to access timely services and others not being able to, where private services are often viewed as more stable than public. This creates a chasm in the lived experience reflections of Australian experiences where access to services is impacted by financial privilege, as well as geographic access. This disparity then becomes a human rights issue in terms of safe access to evidence-based care.

Key Learnings

- Mental illness across the lifespan, and experiences of distress associated with life events and reactions, are intrinsically linked.
- Respondents noted that distress was highly stigmatised in the community, viewed as not being "enough" of a mental illness to receive treatment or prompt a person to seek help. Distress has physical manifestations and symptomatology meaning it may be viewed as a physical ailment, rather than requiring a psychosocial intervention.
- The journey of mental illness often had a lead up phase that lengthy, and non-linear. Coupled with this slow emergence, was also a protracted period of diagnosis. The journey to the 'correct' or subsequent diagnosis requires ongoing support, and should not be viewed as a much-desired resolution.
- Respondents identified experiences of health service engagement. The predominant themes of engagement noted:
    - a disconnect between services accessed within the public and private system;
    - pervading negative reactions from health professionals when help seeking; and,
    - significant emotional labour when retelling mental health journeys to health professionals.
- The significant of distress is not reflected in the process of engaging with general health and social care provision. People are not actively encouraged to share their experiences of distress, creating impacts on their mental and physical health.
- When we do not ask people about distress, we miss the opportunity to locate appropriate services or delay time waiting for a person to meet diagnostic criteria to receive support and treatment. Diagnosis or mental health crisis occurs at a much higher level of acuity.
- The survey revealed recommendations for health services to enhance their proactivity (e.g., reaching out early), responsivity (e.g., asking the right questions), adaptivity (e.g., acknowledging that diagnosis may change over time), and ongoing surveillance (e.g., longer monitoring) to better support people across the lifespan.

Activity 3: Priority Population Focus Groups

Background

To ensure representation from priority population groups who may be less likely to engage in an open survey, focus groups were conducted. During February and April 2022 Everymind, and their research partners at the University of Newcastle, undertook a series of online focus groups as part of a broader research study to better understand community experiences of stigma and preferences about the language and images used to represent mental illness, suicide and alcohol and other drug use. This section reports on a subset of findings from four of the focus groups that targeted *individuals identifying as or working with priority populations*. Within this category, focus groups were planned and conducted with young individuals, people from culturally and linguistically diverse (CALD) backgrounds, people identifying as LGBTIQ+ and men. A focus group with Aboriginal and Torres Strait Islander peoples was planned but did not proceed due to the impact of natural disasters and a lack of available participants at rescheduled times. This focus groups will be conducted at a later date, but it is not included in this report.

Aims

The aims of the focus groups were to understand the lived experience of mental illness, suicide and alcohol and other drug use among young people, CALD communities, LGBTIQ+ communities and men.

Method

Everymind, working with research partners at the University of Newcastle, planned and conducted the focus groups. Lead focus group facilitators were experienced researchers with both qualitative and clinical expertise: one female research psychology professor; and four female doctoral level or higher accredited social workers. The project was underpinned by an appreciative inquiry theoretical framework using a strengths-based approach.

Participants

Non-probability convenience sampling was used to target eligible participants across Australia, using existing networks and partner organisations to promote the research opportunity. Participants were eligible to participate in the focus groups if they were: i) aged 18 years or older; ii) currently living in Australia; iiI) identified as being from, or working closely with, a priority population group.

The focus groups involved the following participants:

1. People from culturally and linguistically diverse (CALD) backgrounds: N=4
2. People identifying as LGBTIQ+: N=9
3. Young individuals: N=4
4. Men: N=3

Researchers aimed for 6-8 participants in each group. Due to a range of factors, including availability and extreme weather across NSW and QLD, recruitment to the study was impacted and several focus groups went ahead despite not meeting the recruitment target number.

Ethics Approval

The focus groups were approved through Hunter New England Local Health District's Research Ethics Committee (approval ETH00487).

Data Analysis

The focus group were transcribed verbatim and de-identified. These were inductively analysed (SW) to understand the unique needs for each priority population group, and findings were then discussed with the Everymind team undertaking the focus groups.

Results

Priority Population: Young individuals

Participants (N=4) in this focus group had multiple perspectives from those who had capacity to reflect on issues impacting children and young individuals—participants were either working with young individuals, speaking about their children's current experiences, or reflecting on their own or their children's experiences of mental illness and/or suicidality.

The discussions between participants and facilitator centred on the importance of providing space or inviting an opportunity for the young person to have the ability to share their stories;

> *And that's the same as all of this with young individuals, you've got to be ready for those moments when they allow you in and don't miss them.*

This was succinctly described by one participant in the focus group as giving permission or noticing a young person's decision to speak, or not;

> *I'll just add onto that with talking about individuals feeling safe to speak about their experiences. When I was teaching, I found that as soon as you gave students permission to say, "I don't want to talk about that" It made them so much more open and more willing because they had the option.*

Within the focus groups the participants shared that the mental illness journey or pathway to seeking support as a young person can be varied;

> *I think there needs to be less outward comparison and more acknowledgement that we all have different experiences. We can all have different experiences, but still be in the same boat.*

For some, the experience of seeking help or becoming more unwell may create compounding negative experiences over time. For others, the inclusion of a mental illness was viewed as a condition or chemical imbalance;

> *So you've got different things that like, sometimes it can be the chemical imbalance stuff they talk about, but quite often, so in my son, so it was shit happened and constant shit happened until it was too much. So which then creates the mental ill*

> *health. For me, it was the shit that happened that came before the mental, which then led to depression, to anxiety, to all of the other stuff and then suicide at the end. So I'm a big believer that quite often it is stuff that happens.*

The worldview, associated with what 'should' occur in the life of a young person was also viewed by some as a compounding issue as to the lived experience of having a mental illness;

> *I've been told and young individuals are constantly told being a teenage, being a kid's best party, best time of your life. Great. That's all good and well, if you're having a really good childhood and teenager time, but if it's shit and someone says that it's not going to get better. Fuck, I'd be out of here too.*

In addition to this life stage reflection, there was also reflections about the impact of the pandemic and other health related conditions on very young children—suggesting that young age may be an increasingly vulnerable time period;

> *A lot of young individuals on the autism spectrum, humongous. Oh my goodness. We've got kids six years old that don't want to be here anymore. Who are cutting, who are six years old. And the COVID has just exasperated that because those kids have been taken out of school and a lot of them don't like that change….*

The focus group also provided opportunities to discuss support options and experiences. What was noted by participants was the experience social connection being viewed as valuable;

> *It's connections, like connection is so important for young individuals. So, if they're struggling with those connections and getting through, that's really, really big thing.*

And;

> *So we know that childhood trauma is coming up as quite a big thing. Also, yeah, lack of connection, lack of connection to family, friends and support, is definitely a big thing. So connection and trauma.*

And;

> *It's been one of the best things that I have been able to do for myself in my healing. I go and I do all this volunteer work and I've studied it now and I'm qualified in learning sort of scenarios, but I actually feel so much better myself. It just helps. It has helped me so much. So, and yeah. And, if they can't listen to about self-care from someone like me, they're not going to listen to anybody.*

Participants also noted that the historical shifts over time allowed young individuals to reclaim the language about mental illness as a way to challenge the perceived stigma and shame surrounding mental health;

> *But I feel like language is changing and it's changing. Thank God that the youth, I think youth are inquisitive and they're picking up on this stuff and they're wanting to know. If they're not educated, they're wanting to know how you say something or what, how is it being referred to, or if something's being referred to in a way they're uncomfortable, they'll call it out. So, I think it is changing in a positive way.*

Priority Population: Culturally and Linguistically Diverse (CALD)

Participants (N=4) in this focus group identified as belonging to culturally and linguistically diverse backgrounds, and reflected on the key areas of mental illness, suicidality and alcohol/other drug issues through the lens of cultural perspectives.

Unsurprisingly, the core theme identified was a focus on culturally appropriate and responsive services. Participants described a desire for services to adopt principles of cultural humility and cultural curiosity. These reflections focussed on ways to engage individuals in difficult conversations;

> *So all the questions before that, like asking about their sleep, the food and then asking, "Are you having thoughts that you feel a bit upset about?" So all that questions that are around the topic of suicide, but leading the conversation into it might be very helpful to break the ice and make the person a little bit more comfortable before you ask the suicide question. So easing into the question, that's very beneficial. When I go out with clinicians sometimes to see clients who speak Arabic, that's how they do it. And it seems to be always the kindest way of asking about suicide.*

There was acknowledgement that health professionals try to be culturally sensitive to CALD needs and how important being open in such conversations are;

> *It's also, some clinicians do it and I feel it has a good going with clients when they actually apologise. And they said, "Look, I understand that this question might not be acceptable, or you might see it as rude or very direct in your culture. And I apologize for doing this. But I really have to ask because I'm worried about you. And I want to make sure that you are safe and fine." And then ask the question. And of course, that doesn't mean that they don't ease themselves into that question. They still do that first bit.*

Stigma remains an important issue, not only is this stigma felt by or imposed on the person experiencing the poor mental health, but also by their parents and family;

> *So the community is putting pressure on them and in terms of stigma, parents must have done something wrong that their kids end up like this. Or you are not a good person because you are addicted or all of that, their own community puts as a pressure on them.*

Accurate and appropriate messaging is required for different communities as a way to both inform and to educate to reduce stigma;

> *The messaging for the community, I feel could be beneficial if the stigma is reduced. And yes, individuals talk a little bit more about it, but there is definitely still stigma when things get tough. So individuals are willing to talk, "Oh yeah, go to your GP. Talk about this, do that." But for example, if they get a diagnosis, you find that most of the friends disappeared. And so there is still a level of stigma that isn't really, it's not budging from the CALD communities. And that can be quite hard.*

Participants noted that strategies to be culturally inclusive did not just reside in the one-to-one interactions between health professionals and individuals, but also at a systems level. This requires culturally responsive ways of delivering and providing mental health care;

> *And when they seek services, I mean, we're still far from being genuinely culturally inclusive services in public mental health service, at least in Queensland. So, I mean, we're doing some things really well. But we still have a lot to go, especially in things that it's difficult to train individuals, they have to actually experience it. You can train individuals how to use an interpreter, but they need experience to learn actually that the whole conversation is run completely differently with*

> *somebody from CALD background when you, for example, do a suicide risk assessment. So those two ends are very, very hard for individuals.*

Importantly, the needs of those from CALD backgrounds who live outside metropolitan areas also need to be considered. Distance is one barrier, however others, including language barriers are also important to consider to improve access to support;

> *So is the outreach looking at rural and remote throughout Victoria and the Metro area finding bilingual or multilingual psychologists, social workers, psychotherapists GPS? And it was fascinating to me that the health direct service finder, none of these health professionals were listed on the upper listing, but just general Google searches, hours and hours of work to find individuals.*

Participants described the need for adequate training for health professionals to build rapport, as well as health literacy development in CALD communities on how to seek help and advocate for yourself as a consumer;

> *And I sometimes feel that the promotion should be honest about that (whether or not it is culturally specific). That sometimes it might not be what you're... That you are wanting. This will give individuals, from the get go, the thought that, "If I don't like it, I can complain. I can advocate for myself. I can seek other services." Because would we just say seek help and then if that help isn't really help, then where do individuals go? Yeah, sorry. That's very daunting.*

Utilising community leaders was recommended as a way to provide culturally appropriate information from trusted community identities;

> *Oh, I think getting some opt in here and having messaging and media informed by community leaders that have mental health literacy and hold the cultural sensitivity and safety to guide what's actually being produced. Yeah. That'd be amazing. I think there's a lot of opportunity in this space.*

In addition to training requirements was also understanding that co-design or co-producing service delivery in partnership with cultural awareness was key;

> *.... with CALD communities, it's about building trust and that doesn't happen overnight, and it doesn't happen when they are in a crisis. So having that continuation of, "Hey, we're there." It doesn't have to be too much connection*

> *because that can also overwhelm communities. But at least something that says, "We're here. Happy Diwali," or whatever the communities is celebrating or going through, just to say that we're there. And then if there is a crisis, when there is a crisis, if there is a trust that's already built with the service, then it's much more accessible. The messaging doesn't need so much work. Everything else after that is so easy.*

Co-design alone is not enough without the trust of the community of the individuals providing services and the services they are employed by;

> *We could spend a lot of energy and time in how to perfect the messaging at the end. But if there is no trust built, it's going to be extremely hard to get individuals to actually follow that messaging. But if there is trust and that's already built and I could think of a service that would... And I'm not going to just say which service or who's the person for confidentiality reasons... A service that would traditionally be very untrusted by the community. But that person who held a position in that service as a community liaison person stayed in that role for a long time. And pretty much at every occasion in my community, I would see him there. He knows individuals by the name. He knows everybody. And for that organization that individuals would be very reluctant to trust, when he says something, everybody follows, he doesn't need to do it twice. And even when there is a problem, he doesn't go out to try and explain to individuals this is how you access services. Individuals actually call him to access services.*

Hearing and seeing others who are from similar backgrounds or more from CALD backgrounds more generally assist in adding weight to health messaging;

> *One thing I love is SBS [Special Broadcasting Service] Voices. There was, in terms of lived experience, individuals having an opportunity to tell their story of suicidality, AOD [alcohol and other drugs], mental health. It was one particular story about a mom with a Chinese background, 40 days of confinement after having a baby. And a beautiful expose on lived experience of mental health and the benefits that she actually found in taking that quiet, soft time with her baby.*

Importantly, such activities help to destigmatise and open conversations about mental illness and suicide in the community. Participants reflected on how they then felt more able to share their lived experience more publicly;

> *Yeah, absolutely. It (suicide prevention activities) has an impact. At least it makes individuals feel like, " I'm not alone." If that's the only thing that gets across, that's very beneficial. It's also not normalizing suicide, but normalizing the experience that sometimes if we're very distressed, just like our bodies get to be unwell, if we have a flu, our minds and can also be, or our hearts, depending on the community can also get unwell, be unwell. That's very important. And also the fact that it gives hope when you put a lived story at display, and then you see how a person could be in a place and then be healthy and fine and good after a while, that gives hope.*

Priority Population: LGBTIQ+

Participants (N=9) in this focus group reflected on community-led initiatives that allow individuals to share their story and enhance representation of individuals who belong to the LGBTQI+ community, to engage in raising awareness of mental illness and complex health conditions;

> *Something I feel kind of compelled to raise is, as a new diverse, disabled and chronically ill person, is that a lot of the stigma that's around things like mental illness, suicidality and drug and alcohol usage is rooted in ableism…And a lot of that is to do with the oppression of individuals with disabilities and chronic health issues. So if we talk about that, get that normalized, it can kind of explain some of the reasons why individuals engage with, what are called now, maladaptive coping mechanisms, or maybe they're actually protective coping mechanisms. So there's a problem, I think, in this disconnect between disability and then mental illness and drugs or alcohol. They're very much, the stigma's very much rooted in the same place. We need to start having conversations about disability beyond this person uses a wheelchair.*

Importantly, the need to engage in authentic conversation beyond the superficial was highlighted as a need;

> *There is a lot of shame (about mental illness). I felt a lot of shame from my end. With what I've gone through and I haven't then shared it with other individuals, but it's also difficult within our society for... So we've got like "Are you okay day", all of this sort of thing, but for individuals to actually investigate what you're going through, and to have an actual conversation. So it almost feels as though we pretend to have a conversation about certain issues, but we are not actually talking about it anyway. And so nothing needs to be resolved, but nothing is resolved. Then there is nowhere to go from there.*

Shame, stigma, and the need to educate individuals early about mental illness and diversity of sexual orientation were also strong themes. For one participant this resulted in, what she described as, tokenistic or fatuous check-ins such as “Are you okay”. There was a sense of confusion around what a listener might do if the participant was not okay;

> *…but for individuals to actually investigate what you’re going through, and to have an actual conversation. So it almost feels as though we pretend to have a conversation about certain issues, but we are not actually talking about it anyway*

In addition to the ways in which story telling may be unique to LGBTQI+ communities, participants in this focus group centred on financial issues as the main barrier to accessing appropriate mental health services;

> *If you have, say, depression and that, but if you don't have the finances to be able to afford something and if you are depressed and that and it's not on the PBS and it's private, then how are you able to afford that? And then you become more depressed and then it's just a cycle that you become into. I'm fortunate to be able to afford private health, but then some individuals aren't able to, and then it's just, how are you to be able to access that certain treatment that you might need to?*

There were also reflections as to the ways in which services were funded, and what capacity these services had to be able to deliver support;

> *My gut reaction was, "Well, look at the look at the access, it's just atrocious." We're under resourced, underfunded, individuals don't have their basic needs. We've got all this stuff and that really stresses me out. So, I have to think about an optimistic term and that means being realistic about it as well. So, in the future,*

> *in the short term and long term, I want to see us be more community focused rather than corporate focused. That's one of the things that we can do.*

When asked about ways to explore how the health system may be enhanced, participants reflected that;

> *I think if I was trying to put it in a very small phrase, it would be untold stories. I think there are just so many individuals out there in the universe with a wide variety of untold stories of all different kinds of narratives. And that's the only way I can kind of bring the focus and I wonder what kind of institution we could dream, where individuals could go, or access somehow, and feel safe to tell those stories that maybe they can't tell anybody else. I don't know. I'm just throwing that out there.*

Participants in this group linked the depiction of individuals with a mental illness to the creation (or not) of a "safe space". The socially stigmatising experience of "othering" was diminished when individuals could see others who are identifiable – "individuals who reflect me". For this focus group, participants spoke of structural disadvantage and systemic marginalisation as being challenges to change;

> *I really would love to see it more as a community responsibility and talking about how we support individuals in our community, how we support our friends….*

Priority Population: Men

The focus group (N=3) exploring the lived experience of being male and the ways in which help-seeking and lived experience were represented by both professional and personal experiences. The small size of the focus group demonstrated the first barrier to help-seeking—being male—with comments made about the low numbers being '*telling'*.

The analysis of the participant narratives also spoke to the construction and depictions of masculinity in society as one of the failures of how current services are delivered and tailored to men;

> *I suppose the last thing I wanted to mention was probably more a men-specific thing, was that when men-specific things are kind of... macho men. It goes to the*

> *word diversity, because there's diversity within gender. But I often find when that men's imagery becomes very masculine, overly masculine, as the only way we can demonstrate it…I don't resonate with it, and to me it's like the underground miner, it just doesn't hit home with me. It's not who I am. I never want to be that kind of a macho-macho man, that doesn't resonate with me.*

Mental health services were viewed by the participants as not meeting men's needs due to a lack of awareness about how to be responsive to men (and the ways they communicate) when in crisis;

> *My own lived experience and stuff. I said, I still... And I had a suicide attempt, but I said, when I look back, I'm still not even sure if I really wanted to kill myself, but I wanted the pain and everything to stop. And so at that time, when you're in that mind space, that's a rational, you feel that's your only rational option... you sit there for weeks or months, and you have all these options in your head on, how you can stop what's happening the feelings and all that sort of stuff that dread. And that seems like the only rational option that you have.*

Taking this into account in development of male appropriate services, rather than needing to be in life threatening crisis to receive help;

> *Well, I suppose for me, it's individuals getting the appropriate care for their condition… I've given this advice and I've done it to somebody when they were deeply distressed...mentally distressed and stuff. And I took them up to the (hospital) and the only way I said to them and they really wanted to be looked after and I said "look, the only way that they will admit you is you have to say to them, 'I have a plan to kill myself'… I knew it was true, it was the only way... that's the red flag that the clinician that's doing the admission has that if a person says that, then I will do it.*

Participants suggested that structural reform is needed. There was a sense that two ends of the service spectrum – crisis lines or GP care – is insufficient. Other options for those who are experiencing declining mental health, that are available when needed, and accessible were suggested as an improvement to the service offering ecosystem;

> *And it would be nice to think that in a wonderful system that wouldn't have to be... individuals in really significant distress think that... There are other options*

> *because I still think we had this discussion last week and it's really, really hard. It's that we are saying to them, to get into the GP... it's two weeks to get into the GP cause that's the first point of call as these sort of thing... There's help lines, you can tell the help lines and all those sorts of things, but it just seems there's that for individuals that are... moving from the sort of mild to the moderate to the not suicidal… GPs…fear asking that question…about do you have a plan to kill yourself? Because if they ask that question, the person says, yes... what do they do?*

This reflection was further supported by an additional participant, about the emphasis on crisis interventions rather than longer term engagement that allows individuals to share their story;

> *... and there's a lot of it being spent, I think, overspent on the help lines and all those sort of stuff at that level, because that's an easy thing for governments to do... But it's that level, what Pat McGorry talks about, the missing middle that sort of stuff, there just does not seem to be… there's millions of dollars underspent in mental health, millions of dollars.*

Participants, when reflecting on the systems that men seek to engage with when unwell, were also impacted by funding and equity concerns;

> *What do I do as a GP? What do I do? Because I know if they're a public patient and that stuff, they're not going to get into see a psychiatrist. They're not going to, you know what I mean?*

Participants spoke of wanting to dismantle current mental health care systems. Solutions did not centre on simply increasing funding or increasing the number of support sessions;

> *I'm not sure that just giving individuals access to more and more clinical appointments and stuff is, because I know... And look, this is, again, because what I find is with, and being with a lot of organizations, they'll take the easier clients, you know what I mean?*

In addition, a participant reflected on a longer-term vision to adequately funding services, to shape service delivery away from short term focus to future focussed structural change;

> *I've been at community consultations with, I won't say where, but... well, I said his name, but anyway... with other politicians, and, "Oh, we've got half a million dollars. Do you think that'll help?" And you've got individuals that are sitting around there from the community and they go, "Half a million dollars! Oh my god, isn't this fantastic," because for the last three years they've been running barbecues, they've been running raffles, and getting $20,000 to help, and that for them is a great thing. And this guy comes in and says, "Here's a half million dollars." Then you talk to his advisor after, "Oh, okay. So, what is that?" "Oh, well it's just on the table, but you'll need to put some proposals up, and we'll need to see coming forward," and all that stuff, and you're going, well, what's half a million dollars going to do? It's not recurrent funding. It's just another band aid.*

Participants emphasised the importance of more upstream solutions-focussed approach, where long lasting positive change could target the needs of men. This remit is well beyond the health system and included exploring social factors such as housing and education;

> *I always said the answer to fixing the health system will never be found in the health system. I don't think it is, because I think it's not. It's housing, it's education, it's all those sorts of things. So it's the social determinants of health, and I think a lot of this extra mental health funding that goes in for governments, it's easier to do that and say, "Look, we are doing a load of this," when you're saying really the solution to a lot of the mental health issues and stuff are right back at the education level, the housing.*

There was also discussion about how these social factors are experienced more by some, highlighting the social determinants of health;

> *So putting more funding into it is just going to accentuate the inequalities that are already there in the system, and reinforce it.*

Discussion

The inclusion of focus groups, that sought to understand priority population needs sought to ensure that those who experience greater mental ill-health and suicide were fully included in this report. Our goal was to provide a more nuanced understanding of how at-risk groups live with mental illness and suicidal ideation. Marginalised groups, including Aboriginal and Torres Strait Islander, culturally and linguistically diverse and LBGTIQ+ communities, highlighted both differences and similarities in their responses. Timely access to appropriate services, and choice of service offerings are important considerations. The structural and systemic disadvantages that these groups experience must be addressed.

Key Learnings

- The focus groups reinforced that lived experience of mental illness is highly individual and requires a targeted approach to explore distinctive presentations.
- Priority populations are not homogenous by group and the social determinants of mental health continue to play a role in experiences and outcomes across the priority groups.
- Representation and collaboration with priority populations, in the development and implementation of targeted interventions, can enhance development of appropriate services.
- Priority populations do not specifically include women as an at-risk group. Enhanced awareness of women being highly active in care and support roles, as well as more highly represented in common mental illness diagnoses, requires their inclusion as a priority population.

Activity 4: Grey Literature Search

Background

The grey literature was consulted to ascertain the effectiveness of assertive or proactive community outreach interventions for individuals with mental ill-health or mental illness in Australia.

Aims

The review aims were consistent with the systematic review, in seeking to:

- Describe outreach interventions provided within a community setting for individuals with emerging mental ill-health or mental illness;
- Understand the activities associated with outreach interventions provided within a community setting for individuals with emerging mental ill-health or mental illness;
- Examine the effectiveness of outreach interventions provided within a community setting for individuals with emerging mental ill-health or mental illness; and
- Examine the reported outcomes of outreach interventions provided within a community setting for individuals with merging mental ill-health or mental illness.

Methods

The grey literature search of the available material was conducted, to complement the scientific literature searches outlined in the main file of the manuscript. The strategy used to explore the grey literature has been informed by the Flinders University tool developed to critically analyse the grey literature and explore its accuracy, coverage and significance, in relation to the topic area of community outreach interventions (Tyndall, 2010). Searches used broader terms than those applied to the scientific database searches given the lack of consistency in terms and keywords used between organisations, clearinghouses, grey literature databases and agencies involved in programs or services related to outreach services for individuals living with mental health conditions.

The same date range was consistent with the search of the scientific literature was used (2017-2022). Table 10 below presents the search strategy used.

Table 10: Grey literature search

Search Action / Component	Outcome
Using keyword search*, and application of date exclusion period, conduct searches Google (not Google Scholar give this had been included in the systematic review)	**Google** Advanced search that includes the same MESH terms used in the systematic review, using date range and google removing content that is duplicated (n=42) Preliminary review is included in overview of content below.
In addition to a review of the grey literature database, a search of Australian and state-based health departments or mental health charities that engage in community-based interventions for individuals living with mental illness, were completed.	**Identified PEAK bodies or organisations in review so far:** ➢ Department of Health Australia ➢ State and territory health departments ➢ Peak body organisations ➢ Outcomes from Royal Commissions with a focus on mental health

Key Words

*Key word searches of grey literature with using a search string, consistent with the systematic review - *Suicide prevention" "mental health" "mental disorder" suicide effectiveness efficacy*

Data Analysis

The following data were extracted: organisation involved with the publication, publication year, who was involved in the development of the publication, intended audience, objectives of the information, sources of evidence/resources cited, and whether an intervention was evaluated. The team then utilised the AACODS checklist to critically appraise the information to explore any additional specialist knowledge on the topic to complement the academic publications (Tyndall, 2010). The ACCODS checklist (Authority, Accuracy, Coverage, Objectivity, Date, Significance) led to the following results, identified below.

Results

Forty-two reports or articles were identified in the grey literature search. Of these 18 met the inclusion criteria of being a report that explored mental health service delivery in Australia and identified community interventions or outreach in the executive summary (Table 11). The table identifying those reports included for review and excluded from the analysis can be found in Appendix 3.

Table 11: Overview of Relevant Grey Literature

Title / Author (Year)	Authority	Accuracy	Coverage	Objectivity	Significance
Fifth National Mental Health and Suicide Prevention Plan Commonwealth of Australia (2017)	Yes	Yes	National with reference to community-managed sector and reference to interventions for consumers and carers. No reference to efficacy other than a focus on future orientated needs for the 'system' to be more effienct in tailoring needs	Yes	Minimal. No specific mention of interventions or about the role of effectiveness. No focus on outreach.
Interventions To Reduce Suicidal Thoughts And Behaviours In Individuals Who Have Borschmann, R., Carter, A, Butler, A., Southalan, L., Willoughby, M., Janca, E., & Kinner, S. A. (2020)	Yes	Yes	Focus on criminal justice interventions in Australia only	Yes	No, an indication that once individuals are released to the community following incarceration there were no evaluated interventions to address their self-harm and suicide rates

Title / Author (Year)	Authority	Accuracy	Coverage	Objectivity	Significance
Productivity Commission Inquiry Report Into Mental Health: Volume 1 Commonwealth of Australia (2020)	Yes	Yes	Australians who experience mental health	Economic productivity focus	Figure 5 refers to the identification of community support needs in relation to mental healthcare needs. Community supports, via non-clinical services were viewed as low priority as well as a focus on preventative or self-managed care. (see pg 41) . The priority reforms also note that by expanding community-based mental health care - such as outpatient clinics or outreach services this will both improve lives and provide economic benefits and that early intervention or prevention strategies be embedded in schools, as follow up care for individuals after suicide attempts or to empower First nations communities. New parents were also seen as a priority. However early intervention was focused on age and stage, not pace and place. (pg 194)
Productivity Commission Draft Report Into Mental Health: Volume 2 Commonwealth of Australia (2019)			(Refer to final draft of Productivity Commission above)		
Improving Mental Health Outcomes For Indigenous Australians In The Criminal Justice System	Yes	YES	Focus on First Nations and those in the criminal justice system	Throughcare focus	Need to provide personcentred individual pathways once leaving custody that connect individuals with interventions in the community . Promising outcomes from the evaluation of CIRCA 2017 that looked at offending, social disconnection and

Title / Author (Year)	Authority	Accuracy	Coverage	Objectivity	Significance
AIHW (2021)					mental health and that the role of using family to intervene was positive.
Mapping The Forensic Mental Health Policy Ecosystem In Australia: A National Audit Of Strategies, Policies And Plans Southalan, L., Carter, A., Meurk, C., Heffernan, E., Borschmann, R., Waterson, E., Young, J., & Kinner, S. (2020)	Yes	Yes	Forensic patients in Australia	Justice Health focus	Important identification of justice-involved individuals in the community with high rates of self-harm and suicide = low engagement with community mental health services.
Accessibility And Quality Of Mental Health Services In Rural And Remote Australia Commonwealth of Australia (2018)	Yes	Yes	Regional, rural and remote Australians living with mental illness	Yes	Focus on Fly-in Fly-Out and outreach interventions utilized to engage with individuals with emerging mental health conditions. There are concerns that staff members only visit for short periods and have not built relationships with the community. Lack of cultural awareness and local knowledge about the struggles that the community might have. Also, note a lack of 24-hour availability of services which cannot manage social isolation or distress during the night. Mount Isa has a

Title / Author (Year)	Authority	Accuracy	Coverage	Objectivity	Significance
					high proportion of presentations in the emergency department. The organization went on to say that in rural and remote areas, one of the most effective interventions is community capacity building via informal programs in local communities.(pg 109).
Mental Health In Remote And Rural Communities Bishop, L., Ransom, A., Laverty, M., & Gale, L. (2017)	Yes	Yes	Regional, rural and remote Australians living with mental illness	Yes	Hub and spoke model used to develop drought wellbeing interventions that focus on brief interventions, community capacity and mental health literacy building (pg 11). Priority setting that focuses on early intervention but does not define what early is.
The Criminal Justice System – Issues Paper Law Council of Australia (2020)	Yes	Yes	Individuals with disability who are criminal justice-involved	Yes	Minimal significance. However, connection of the pathway between criminal involvement, inclusion of disability and co-morbidity of mental health noted as a priority to devise individualized care. A focus on exiting the system 'successfully' with minimal focus on interventions in the community.
Preliminary Interim Report Interim National Commissioner for Defence and	Yes	Yes	Veterans in Australia	Yes	Emphasis on transition to community strategies in engage individuals in community-based interventions issue of transition noted. Interventions not identified.

Title / Author (Year)	Authority	Accuracy	Coverage	Objectivity	Significance
Veteran Suicide Prevention					
Preventing Suicide By Children And Young People 2020, Volume 1: Ombudsman's Foreword And Executive Summary Ombudsman Western Australia (2020)	Yes	Yes	Users of mental health systems in Victoria, Australia	Yes	The Commission concurs that supporting healing is essential to improved Aboriginal social and emotional wellbeing and recognises that the Aboriginal Social and Emotional Wellbeing Centre is best placed to co-design and deliver an initial two healing centres with communities. This includes clinical and non-clinical interventions that extend to ongoing follow up in the community. Also note investment in non-clinical respite centres. The report emphasises use of the term 'assertive community outreach'
Primary Prevention Of Family Violence Against People From LGBTI Communities Author: Rainbow Health Australia (formally known as Gay and Lesbian Health Victoria), State of Victoria, & Our Watch (2017)	Yes	Yes	LGBTQI+ community	Yes	No community interventions explored

Title / Author (Year)	Authority	Accuracy	Coverage	Objectivity	Significance
State Of Victoria's Children 2017: A Focus On Health And Wellbeing State of Victoria (2017)	Yes	Yes	Children Under 18 years in Victoria	Yes	Early intervention focus identifies ways to disrupt pathways between trauma/neglect and criminal justice or out of home care services. Early intervention or community outreach regarding mental health is viewed as a systems approach rather than a standalone approach.
The Australian National Epidemiological Study of Self-Injury (ANESSI) Final Report Martin, G., Swannel, S., Harrison, J., Hazell, P., & Taylor, A. (2010)	Yes	Yes	Australians with self-injury reports	Yes	NIL representative sample focussing on epidemiology of individuals with self-injury behaviours
Royal Commission Into Institutional Responses To Child Sexual Abuse, Final Report: Making Institutions Child Safe Commonwealth of Australia (2017)	Yes	Yes	Children under 18 years in Australia	Yes	Similar academic reflections. 'Telephone and online interventions can be as effective as face-to-face services. Further, they are cost-effective, can be accessed from regional and remote areas, and provide anonymity. (pg 402). Emphasis on the role of local government initiatives to 'facilitate community education or outreach programs' (pg 300).

Title / Author (Year)	Authority	Accuracy	Coverage	Objectivity	Significance
Bigger Role For Pharmacists In Mental Health Treatment Cooper, R.	No	No	NIL	No	Nil – pharmacological focus only.

The analysis of the relevant reports identified that broad organisational or Government response to mental health service delivery in Australia emphasises the role and function of community-based interventions but does not identify best practice for inclusion of community interventions as a strategy to prevent or reduce distress relating to mental illness or suicidality.

The review highlighted that community interventions are identified primarily as a referral pathway following a person's engagement in either the health system or the criminal justice system. Within reports emphasising this population group (individuals who utilise services, individuals who are involved in the criminal justice sector or forensic mental health patients) explore how post-discharge referral pathways are needed to limit individuals returning to these institutions. The emphasis on the importance of this referral to community outreach is noted, yet the evaluated programs that may assist or reliance on the evidence base is minimal. The Royal Commission into Institutional Responses to Child Sexual Abuse, 'Making Institutions Safe' (2017) also noted that non-clinical community interventions such as telephone or online support enhances accessibility and manages concerns about anonymity – allowing individuals to engage at a time and place that suits them.

In addition to these specific community needs, the grey literature analysis also pays limited attention evaluation of community interventions or strategies to understand what best suits individuals across the lifespan. As with the outcomes of the systematic review of academic papers the inclusion of the term early intervention is used without definition as to what 'early' refers to. In the context of children and young individuals, early intervention relates to strategies utilised from an age and stage perspective (i.e., engaging parents after birth, engaging with children with behavioural concerns at a school age) yet lifespan impacts such as social determinants of health, or ongoing concerns as an early rarely connect to ideas of early intervention or distress reduction across the 18 reports reviewed.

Assertive community interventions are not actively included in the grey literature however community perceptions of these interventions are included. For example, The Community Affairs Reference Community report titled, '*Accessibility and Quality of Mental Health Services in Rural and Remote Australia'* (Commonwealth of Australia, 2018) explore the impact of Fly-in-Fly-Out (FIFO) outreach services on rural communities and the concerns regarding capacity to build community connections. Bishop, Ransom, Laverty and Gale (2017) note that the most effective way to manage distress and ongoing health needs in regional, remote and remote communities is to embed community capacity building and mental health literacy to those areas where significant life stressors (such as environmental impacts or natural disasters) are common. Similarly, the Royal Commission into institutional responses to child sexual abuse (2017) when specifically exploring community strategies to support young individuals' mental health noted the unique role of local government in facilitating community initiatives.

From a cultural perspective, inclusivity was also identified to generate community healing by understanding the social and emotional wellbeing needs of First Nations communities, with a focus on justice involve individuals (AIHW, 2021). Community-led initiatives were developed using co-design principles that demonstrated the intersection between clinical and non-clinical approaches to reach out to individuals, in a way that was reflective of a targeted rather than universal approach to support provision. Following on from the individual justice analysis of cultural interventions in community, there was also a significant focus on the role of community interventions as a throughcare strategy in terms of individuals leaving custody at times referred to as the justice system (Borschmann et al., 2020; Law Council of Australia, 2020; Southalan et al., 2020; AIHW, 2021). The common theme in the analysis of these 5 reports, notes that the identification of community-based support needs, as a strategy to reduce recidivism and return to custody, was lacking with no evaluated interventions to address complex health needs once individuals left the custodial system. Southalan and colleagues (2020) noted low engagement of this cohort in community mental health services despite identified 'success' of being able to remain in the community being reliant on how individuals connected with services in the community. Again, the pipeline of support between institutional or service specific care and connection to care in a community setting was absent.

Given the findings of the initial survey, and the identification of additional risk factors that linked in suicide distress, the research team completed an additional search to specifically locate bullying impacts as well as suicide prevention community interventions for neurodiverse communities. What was identified was there were no identified community interventions rather, they were considered as one of the risk factors of emerging health issues or risks.

Discussion

Our analysis of the grey literature, to complement the systematic review of peer-reviewed literature, identifies that the community has limited access to information to seek effective community interventions. What we identified is that there is a significant focus on priority populations who are justice engaged, and information as to how community-based services can respond to experiences of distress, which in turn may impact a person's mental health journey, were revealed. However, there is minimal accessible information about strategies to reduce early distress, to engage with services, prior to crisis periods.

Key Learnings

- The grey literature emphasised that community interventions are important, yet there was little clarity about what community interventions people could engage with and if there were effective (or evaluated).
- Despite emphasis on community interventions being co-designed and community-led there was limited focus on best practice for engagement or how they could meet the needs of priority populations.

Activity 5: Living Experiences of Mental Illness

Background

The final research activity for this project was a second open ended, qualitative survey open to those who report experiencing mental illness in Australia. This was designed from the consolidation of the information from the prior activities with the purpose of ascertaining experiences of mental illness, when these emerged and in what situations (including the social determinants of mental health) and the accessibility and appropriateness of support services directly accessed to support mental illness from a large community-based sample.

A person's mental health and many common mental disorders are shaped by various social, economic and physical environments operating at different stages of life (World Health Organization & Calouste Gulbenkian Foundation, 2014). Risk factors for many common mental disorders are heavily associated with social inequalities, whereby the greater the inequality the higher the inequality in risk (World Health Organization & Calouste Gulbenkian Foundation, 2014). It is of major importance that action is taken to improve the conditions of everyday life, beginning before birth and progressing into early childhood, older childhood and adolescence, during family building and working ages, and through to older age (World Health Organization & Calouste Gulbenkian Foundation, 2014). Action throughout these life stages would provide opportunities for both improving population mental health, and for reducing risk of those mental disorders that are associated with social inequalities (World Health Organization & Calouste Gulbenkian Foundation, 2014).

Key drivers for the increasing prevalence of psychological distress and mental illness in Australia are inequities and other social and economic conditions (Enticott et al., 2022). By attending to the social determinants of mental health resources can be directed to where they are needed most, and to whom, including with attention to equity in service provision, then to delivery of acceptable and effective kinds of help (Enticott et al., 2022). Whereas the social determinants of health refer to the non-medical factors that influence an individual's health, social determinants of mental health refer specifically to the factors influencing common mental disorders (World Health Organization, 2014).

Methods

An online survey was developed based on prior findings from Activities 1 through 4. After viewing the Information Sheet for Participants, individuals interested in participating were asked to provide digital consent and complete a short series of questions to support self-screening.

Participants

Participants were required to be 18 years of age or older and currently live in Australia. English language proficiency was also required in order to read and respond to the survey questions. Those who provided consent and were eligible to participate proceeded to complete the survey. No identifying information was collected. Information about, and links to, relevant support services were included throughout the process so that people wanting immediate support were able to navigate to the relevant services. Due to attrition in the survey reported in Activity 2, demographic questions were moved to later in the survey to ensure more critical information was gathered from those who may drop out of the survey prior to the end.

Participants were asked to self-report any mental health diagnoses. Mental illness diagnoses included but were not limited to the following (as per the AIHW most common mental illnesses in Australia (AIHW, 2022)): anxiety (inclusive of generalised anxiety disorder, obsessive compulsive disorder (OCD), panic disorder, social anxiety disorder, phobia, post-traumatic stress disorder (PTSD)), bipolar disorder, depression, eating disorder, personality disorder (inclusive of borderline personality disorder) and schizophrenia. Participants were provided with an ‘other’ option to explain their diagnosis outside of the options provided. Short demographic information collected included age, gender, cultural background, country of birth and main language spoken at home. Participants were also asked to self-identify whether they belonged to any of the priority population groups identified in the Compassion First report (Australian Government, 2020); i.e., First Nations, LGBTIQ+, Male and/or young person. Other questions asked about the participants’ experiences of various support services, including counselling, psychologist, psychiatrist, social worker, mental health nurse, general practitioner, Aboriginal health worker, religious, online, telephone or other support. Participants were asked to report on the availability, accessibility and helpfulness of the above listed support options they had used.

Participants were asked to identify the individual and community social determinants of mental health that may have been present throughout the various stages of life, such as at birth, early childhood, later childhood, early working age, middle life and older adulthood (WHO 2014). The social determinants of mental health were further categorised into social, interpersonal, personal and community factors (Table 12). This information provides context to determine the broader lived experience of mental illness and mental ill-health.

Table 12: Categorisation of the Social Determinants of Mental Health, adapted from World Health Organization (2014)

Social Factors	• Poor living conditions; • Poverty; and • Underemployment or poor-quality employment
Interpersonal Factors	• Relationship stress; • Psychological abuse; • Physical abuse; • Neglect, isolation or loneliness; • Lack of support; and • Grief
Personal Factors	• Lack of physical activity and adequate nutrition; • Alcohol and other drug misuse and abuse; • Financial stress; • Lack of education; • Contact with the justice system; and • Physical disability
Community Factors	• Discrimination; • Violence; • Economic insecurity; • Inadequate access to health care • Poor quality health care; • Disaster or emergency situation; • Inadequate water and sanitation; • Inadequate transportation; • Inadequate housing; and • Inadequate access to natural environment and outdoor space

Open-ended questions included asking participants about events and experiences leading up to the diagnosis of mental illness, recommendations on how different supports could improve and recommendations on how others might seek support based on the participant's own lived experience.

Recruitment

Similar to Activity 2, participants were recruited from the general public thorough network links and social media. Specifically, online and community promotion by partner organisations such as Suicide Prevention Australia, Lifeline, Standby and University of New England social media, as well as paid Facebook/Instagram and Google advertising, was used to ensure exposure across the country. A brief description of the study was distributed to partners for content to be included in newsletters and, as relevant, for promotion on social media. The brief description was also distributed via Facebook/Instagram and Google paid advertising, which included a link to the Information Sheet for Participants describing the study in further detail. Online recruitment was paused whilst the Commonwealth Government was in caretaker mode for a 6-week period in mid-2022. Given the costs associated with paid recruitment, and challenges with recruiting to all projects during COVID-19 including into Activity 2 survey, an analysis of the cost of recruitment was undertaken by using different links based on the method of recruitment to better understand which method was leading to more completions and thus greater cost efficiency. This analysis is presented below (Table 13).

Table 13: Cost Comparison of Recruitment Advertising

	Google Ads	**Facebook/Instagram Ads**	**Other (e.g., partners, LinkedIn)**
Cost	$630.02	$1109.84	0
Visitors	2155	886	62
Completed Survey	1344	789	61
Cost per completed survey	$0.47 each	$1.41 each	$0

Ethics Approval

This project was approved by the Human Research Ethics Committee of the University of New England (Approval No. HE22-017, Valid to 30/06/2022).

Data analysis

Demographic variables were analysed using descriptive statistics and sample sizes and frequencies were presented. Perceived helpfulness, availability and acceptability of current support services were also presented using frequencies. Odds ratios were calculated to determine the burden of disease among priority population groups. We chose to focus on priority population groups and included females given they are over-represented in mental illness burden of disease (ABS, 2022). Ages of diagnosis and social determinants of mental health were reported using frequencies to determine which life stage and social determinant of mental health was most significant for each priority population.

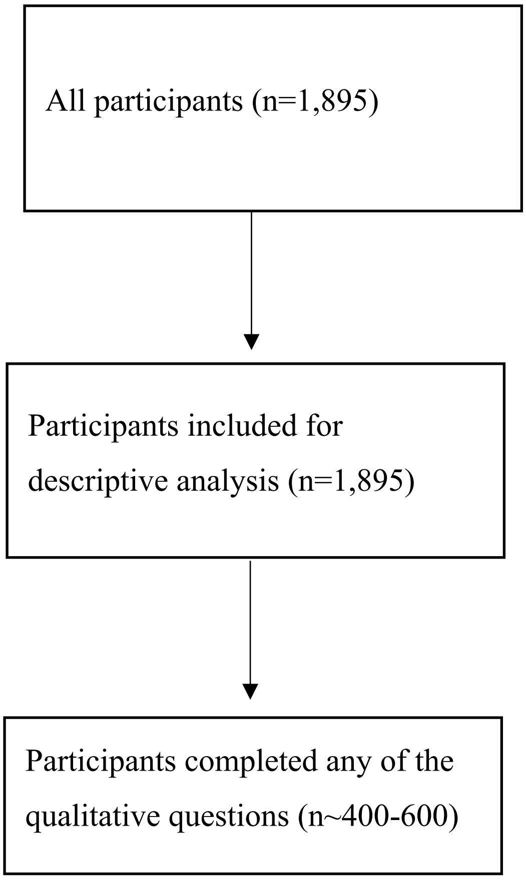
For the qualitative data analysis, the first 100 responses were coded by two independent researchers (MM, HK). The remaining responses were coded by one researcher (MM). Final codes were reviewed by two independent researchers (SW and AC) with all three researchers agreeing on final themes.

Results

Quantitative Data

The total sample population comprised 1,895 participants (Figure 5). We had a lower response rate for the qualitative survey components (N~400-600; 21-32%) compared to the quantitative survey components (N=1,895; 100%).

Figure 5: A Flow Diagram of Study Participants



Of those participants who reported their age (N=918) almost half (44.22%) of the sample were below the age of 44 years and approximately 14% of participants were above the age of 65 years (Table 14). Of those participants who reported their gender (N=836), cultural identity (N=732) and main language spoken at home (N=834) most were female (70.45%), neither Aboriginal nor Torres Strait Islander (93.44%) and spoke mainly English at home (94.84%). Over three-quarters (79.66%) of participants who reported their country of birth (N=767) were born in Australia. Less than half (45.07%) of the participants reported having been diagnosed with at least one mental health disorder. The most commonly reported mental disorders were anxiety (60.07%) and depression (76.46%). Approximately one-quarter (26.81%) of participants reported receiving a diagnosis other than those that were listed. Similar to Activity 2, common examples of 'other' diagnoses include Autism Spectrum Disorder, Attention-deficit/hyperactivity disorder, complex post-traumatic stress disorder and dissociative disorders. Over half (60.67%) of participants who reported their age of first diagnosis (N=961) indicated they received their mental health diagnosis prior to age 30.

Table 14: Socio-demographic Characteristics of Sample Population

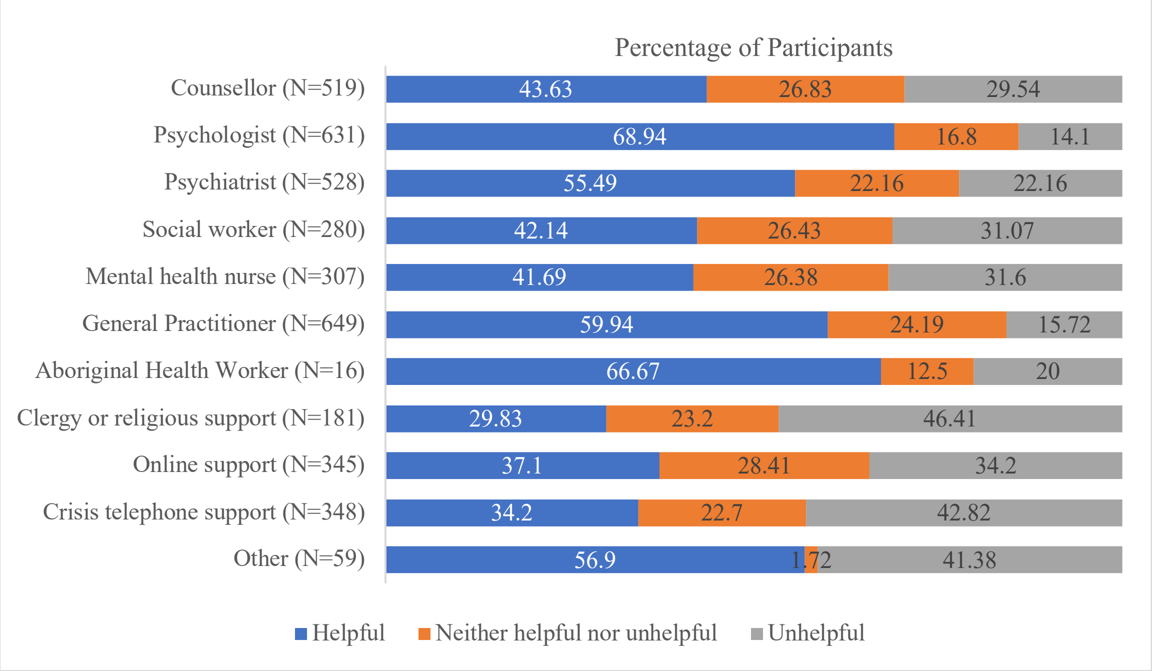
Characteristics	N (%)
Total	1895 (100%)
Age (years)	
18-24	193 (10.18%)
25-34	109 (5.75%)
35-44	104 (5.49%)
45-54	180 (9.50%)
55-64	206 (10.87%)
65 and older	126 (6.65%)
Not stated	977 (51.56%)
Gender	
Female	589 (31.08%)
Male	205 (10.82%)
Non-binary/third gender/other [a]	42 (2.21%)
Not stated	1059 (55.88%)
Cultural identity	
Aboriginal and/or Torres Strait Islander	48 (2.53%)
Neither Aboriginal nor Torres Strait Islander	684 (36.09%)
Not stated	1163 (61.37%)
Country of birth	
Australia	611 (32.24%)
Outside of Australia	156 (8.23%)
Not stated	1128 (59.52%)
Main language spoken at home	
English	791 (41.74%)
Other	43 (2.27%)
Not stated	1061 (55.99%)
Diagnoses [b]	
Anxiety	513 (60.07%)
Depression	653 (76.46%)
Bipolar Disorder	149 (17.44%)
Eating Disorder	102 (11.94%)
Personality Disorder	133 (15.57%)
Schizophrenia	27 (3.16%)
Other	229 (26.81%)
Not stated	0 (0%)
Age of diagnosis (in years)	
17 or younger	196 (10.34%)
18-29	387 (20.42%)
30-49	269 (14.20%)
50 or older	109 (5.75%)
Not stated	934 (49.29%)

[a] Non-binary/third gender/other includes individuals who answered ‘non-binary/ third gender’, ‘prefer not to say’ and ‘prefer to self-describe’.

[b] Participants could report more than one diagnosis.

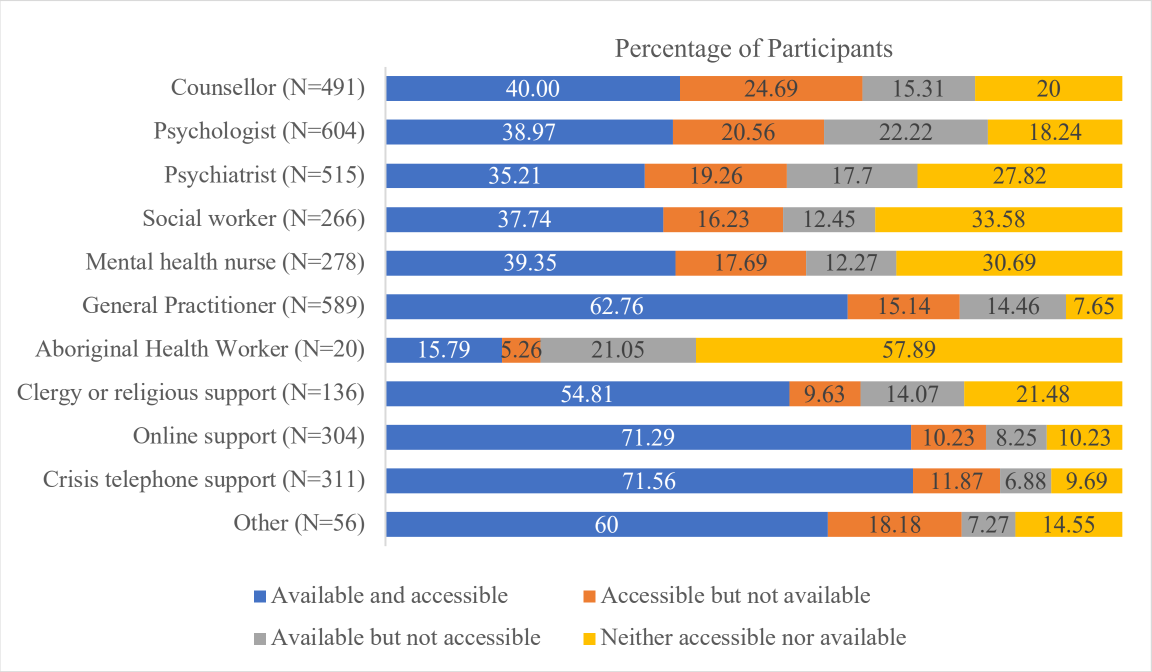
Approximately 40% of participants reported counsellors (43.63%), social workers (42.14%), mental health nurses (41.69%) and online supports (37.10%) as helpful (Figure 6). A majority of participants reported psychologists (68.94%), psychiatrists (55.49%), general practitioners (59.94%), Aboriginal health workers (66.67%) and 'other' mental health services (56.00%) as helpful. Clergy or religious support and crisis telephone support were predominately reported as unhelpful, 46.41% and 42.82% respectively. 'Other' health professionals seen for treatment included community organisations, domestic violence support, employee assistance programs, emergency services and peer support groups.

Figure 6: Perceived Helpfulness of Mental Health Services



Approximately 40% of respondents reported counsellors (40.00%), psychologists (38.97%), psychiatrists (35.21%), social workers (37.74%) and mental health nurses (39.35%) available and accessible (Figure 7). A majority of respondents reported general practitioners (62.76%), clergy or religious support (54.81%) and other support services (60.00%) as available and accessible. Nearly three-quarters of respondents found online support (71.29%) and crisis telephone support (71.56%) available and accessible. Most Aboriginal health workers (57.89%) were reported as neither accessible nor available.

Figure 7: Perceived Accessibility and Availability of Mental Health Services



Men had four and a half times the odds of reporting a schizophrenia (OR=4.64, 95% CI=1.76, 12.25) compared to their counterparts (Table 15). Survey participants who identified as female had statistically significant higher odds of reporting a diagnosis of anxiety (OR=2.40, 95% CI=1.70, 3.70), depression (OR=1.52, 95% CI=1.02, 2.25) and eating disorder (OR=2.31, 95% CI=1.23, 4.36), compared to their counterpart. Participants who identified as a member of the LGBTIQ+ community, compared to those who did not, had three times the odds of reporting a diagnosis of anxiety (OR=3.05, 95% CI=1.82, 5.13) and over two times the odds of reporting a diagnosis of eating disorder (OR=2.78, 95% CI=1.39, 5.56) or personality disorder (OR=2.32, 95% CI=1.25, 4.31). Young individuals had statistically significant higher odds of reporting an eating disorder diagnosis (OR=2.09, 95% CI=1.21, 3.58), compared to their counterpart. Older adults had twice the odds of reporting a diagnosis of depression (OR=2.23, 95% CI=1.21, 4.10), compared to those below the age of 65 years.

Table 15: Odds of Having a Mental Health Condition by Priority Population Groups

Priority Population	**Anxiety**		**Depression**		**Bipolar disorder**		**Eating disorder**		**Personality disorder**		**Schizophrenia**		**Other**	
	OR	95% CI	OR	95%CI	OR	95% CI	OR	95%CI	OR	95% CI	OR	95%CI	OR	95%CI
Male N=205	**0.33**	0.22, 0.47	0.67	0.44, 1.03	0.98	0.59, 1.61	**0.21**	0.08, 0.52	**0.41**	0.22, 0.76	**4.64**	1.76, 12.25	1.28	0.86, 1.91
Female N=589	**2.40**	1.70, 3.70	**1.52**	1.02, 2.25	0.99	0.63, 1.57	**2.31**	1.23, 4.36	1.33	0.82, 2.16	**0.22**	0.08, 0.60	0.73	0.50, 1.06
LGBTIQ+ N=134	**3.05**	1.82, 5.13	1.60	0.91, 2.83	1.37	0.70, 2.65	**2.78**	1.39, 5.56	**2.32**	1.25, 4.31	0.52	0.13, 2.06	1.15	0.69, 1.92
First Nations N=48	0.48	0.22, 1.03	0.58	0.25, 1.36	1.54	0.60, 3.90	1.97	0.77, 5.02	1.84	0.76, 4.46	1.58	0.20, 12.42	0.45	0.15, 1.33
CALD N=15	**0.22**	0.06, 0.81	3.43	0.44, 26.71	1.59	0.43, 5.94	0.67	0.09, 5.22	0.49	0.06, 3.82	N/A	N/A	1.37	0.41, 4.60
Young person N=193	0.68	0.45, 1.04	**0.39**	0.25, 0.61	1.43	0.85, 2.40	**2.09**	1.21, 3.58	1.63	0.98, 2.72	1.80	0.58, 5.59	0.77	0.47, 1.26
Older adults N=117	**0.36**	0.24, 0.56	**2.23**	1.21, 4.10	0.97	0.55, 1.70	**0.19**	0.06, 0.60	**0.13**	0.04, 0.43	0.35	0.05, 2.69	1.02	0.64, 1.63

Note: Participants could have identified with more than one priority population group (e.g., Male and young person). Participants self-identified as male, LGBTIQ+, First Nations and a young person. Young person also included those who indicated their age as 24 years or younger. First Nations also included those who indicated their cultural identity as Aboriginal and/or Torres Strait Islander. Older adult was defined as 65 years or older. Culturally and linguistically diverse was defined as speaking a language other than English AND born outside of Australia. LGBTIQ+ also included those who reported their gender as 'Prefer to self-describe' or 'Third gender / non-binary'. **Bold text** indicates statistical significance. OR = odds ratio. 95% CI = 95% confidence interval associated with Odds ratio. N/A = not applicable due to lack of comparison group.

The most common age of diagnosis across the sample was 18-29 years (Table 16). However, those who identified as members of the LGBTIQ+ population also commonly reported their age of diagnosis as before the age of 18 years.

Table 16: Age of Mental Health Diagnosis Among Priority Populations and the Broader Sample Population

Population	**17 years or younger**		**18-29 years**		**30-49 years**		**50 years or older**	
	N	%	N	%	N	%	N	%
Total Sample	196	20.40	**387**	**40.27**	269	27.99	109	11.34
Male	30	17.05	**72**	**40.91**	50	28.41	24	13.64
Female	106	19.41	**218**	**39.93**	164	30.04	58	10.62
LGBTIQ+	**52**	**40.63**	**52**	**40.63**	22	17.19	2	1.56
First Nations	8	21.62	**19**	**51.35**	9	24.32	1	2.70
CALD	1	7.14	**10**	**71.43**	2	14.29	1	7.14
Young person	69	42.86	**88**	**54.66**				
Older adult	10	9.62	**34**	**32.69**	28	26.92	32	30.77

Note: Participants could have identified with more than one priority population group (e.g., Male and young person). Participants self-identified as male, LGBTIQ+, First Nations and a young person. Young person also included those who indicated their age as 24 years or younger. First Nations also included those who indicated their cultural identity as Aboriginal and/or Torres Strait Islander. Older adult was defined as 65 years or older. Culturally and linguistically diverse was defined as speaking a language other than English AND born outside of Australia. LGBTIQ+ also included those who reported their gender as ‘Prefer to self-describe’ or ‘Third gender / non-binary’. **Bold** text for most common

Around one-quarter to one-half (25.85-44.39%) of male participants reported experiences of poor social, interpersonal, personal and community factors during early working age to middle life (Table 17). Roughly one- to two-thirds (29.20-63.33%) of women participants reported poor social determinants of mental health during early working age and middle life. Of these social determinants of mental health, interpersonal factors e.g., relationship stress; psychological abuse; physical abuse; neglect, isolation or loneliness; lack of support; or grief) were most prominent during this time period, with 40-44% of male participants and 61.80-63.33% of women participants reporting poor experiences of interpersonal factors.

Approximately 38-79% of LGBTIQ+ participants, 20.83-35.42% of First Nations participants, 20-46.67% of CALD participants and 9-31% of young participants reported adverse social determinants of mental health in later childhood and early working age. The most prominent factor during this time period for LGBTIQ+ and young participants was interpersonal, with 71.64-79.10% and 17.62-30.57% reporting poor experiences of interpersonal factors, respectively, For First Nations participants the most prominent factor during later childhood and early working age was social factors (e.g., poor living conditions; poverty; and underemployment or poor-quality employment), with one-third (33.33%) reporting poor experiences of social factors. Community factors (e.g., discrimination; violence; economic insecurity; inadequate access to health care; poor quality health care; disaster or emergency situation; inadequate water and sanitation; inadequate transportation; inadequate housing; and inadequate access to natural environments and outdoor space) were the most prominent factor during this time period for CALD participants, with 40-46.67% reporting poor experiences of community factors.

The most prominent life stage for older adult participants was middle life and older adulthood, with 20.51-68.38% of older adults reporting adverse social determinants of mental health at this life stage. A majority of older adult participants (55.56-68.38%) reported experiencing poor interpersonal factors during this life stage.

When considering the social determinants of mental health, differences depending on group membership are noted. For First Nations individuals, the most prominent social determinant of mental health was social factors (inclusive of poor living condition, poverty and under-employment or poor-quality employment). For CALD individuals, the most prominent social determinant of mental health was community factors (inclusive of discrimination; violence; economic insecurity; inadequate access to health care; poor quality health care; disaster or emergency situation; inadequate water and sanitation; inadequate transportation; inadequate housing; and inadequate access to natural environment and outdoor space). For the remainder of the priority population groups, the most prominent social determinant of mental health across all life stages was interpersonal factors (inclusive of relationship stress; psychological abuse; physical abuse; neglect, isolation or loneliness; lack of support; and grief), shown in Table 17.

Table 17: Most Prominent Social Determinant of Mental Health and Most Prominent Life Stage for Priority Population Groups

Social determinants of mental health	At birth		Early childhood		Later childhood		Early working age		Middle life		Older adulthood	
	N	%	N	%	N	%	N	%	N	%	N	%
Men (N=205)												
Social	30	14.63	34	16.59	54	26.34	64	31.22	63	30.73	14	6.83
Interpersonal	21	10.24	54	26.34	79	38.54	**82**	**40.00**	**91**	**44.39**	30	14.63
Personal	20	9.76	41	20.00	61	29.76	74	36.10	80	39.02	20	9.76
Community	30	14.63	51	24.88	70	34.15	58	28.29	53	25.85	11	5.37
Women (N=589)												
Social	97	16.47	117	19.86	145	24.62	189	32.09	172	29.20	28	4.75
Interpersonal	165	28.01	288	48.90	373	63.33	**364**	61.80	**373**	63.33	64	10.87
Personal	112	19.02	155	26.32	237	40.24	296	50.25	301	51.10	40	6.79
Community	125	21.22	195	33.11	236	40.07	226	38.37	213	36.16	33	5.60
LGBTIQ+ (N=134)												
Social	27	20.15	40	29.85	52	38.81	72	53.73	40	29.85	2	1.49
Interpersonal	40	29.85	84	62.69	**106**	**79.10**	**96**	**71.64**	56	41.79	5	3.73
Personal	34	25.37	47	35.07	82	61.19	95	70.90	51	38.06	4	2.99
Community	37	27.61	55	41.04	76	56.72	72	53.73	46	34.33	2	1.49
First Nations (N=48)												
Social	14	29.17	12	25.00	**16**	**33.33**	**16**	**33.33**	15	31.25	2	4.17
Interpersonal	11	22.92	12	25.00	17	**35.42**	15	**31.25**	13	27.08	4	8.33
Personal	6	12.50	8	16.67	12	**25.00**	15	**31.25**	14	29.17	2	4.17
Community	6	12.50	10	20.83	15	**31.25**	10	**20.83**	11	22.92	2	4.17

Culturally and linguistically diverse (N=15)												
Social	4	26.67	6	40.00	5	33.33	6	40.00	4	26.67	2	13.33
Interpersonal	4	26.67	4	26.67	5	33.33	7	46.67	6	40.00	2	13.33
Personal	3	20.00	3	20.00	3	20.00	4	26.67	3	20.00	2	13.33
Community	3	20.00	4	26.67	**7**	**46.67**	**6**	**40.00**	6	40.00	1	6.67
Young individuals (N=193)												
Social	23	11.92	20	10.36	40	20.73	38	19.69				
Interpersonal	16	8.29	34	17.62	**59**	**30.57**	**34**	**17.62**				
Personal	14	7.25	18	9.33	38	19.69	39	20.21				
Community	12	6.22	21	10.88	40	20.73	18	9.33				
Older adults (N=117)												
Social	16	13.68	22	18.80	24	20.51	19	16.24	29	24.79	25	21.37
Interpersonal	19	16.24	45	38.46	50	42.74	54	46.15	**80**	**68.38**	**65**	**55.56**
Personal	18	15.38	29	24.79	41	35.04	34	29.06	62	52.99	43	36.75
Community	22	18.80	32	27.35	38	32.48	32	27.35	35	29.91	24	20.51

Note: Participants could have identified with more than one priority population group (e.g., Male and young person). Participants self-identified with priority populations. LGBTIQ+ also included those who reported their gender as ‘Prefer to self-describe’ or ‘Third gender / non-binary’. First Nations also included those who indicated their cultural identity as Aboriginal and/or Torres Strait Islander. Culturally and linguistically diverse was defined as speaking a language other than English AND born outside of Australia. Young person also included those who indicated their age as 24 years or younger. Older adult was defined as 65 years or older. **Bold for most prominent determinant of health.** Red highlight for most prominent life stage

Qualitative Data

The qualitative data was analysed and thematically developed into a rich array of experiences and reflections. The themes are presented using sub-headings to complement the reflections from Activity 2. This emphasises the lead up to a diagnosis, and the experiences of both mental illness and distress in people's lives. The participant responses, about how awareness of both emergence of mental illness, and diagnosis, results in enhanced awareness about what support needs to be offered, and who that support is provided by. The importance of key life transitions was prominent throughout the data. The life transitions influenced the severity of mental ill-health and were reported as the tipping points into mental illness. These life transitions offer a point at which support services may be able to proactively be offered, however this was not experienced by those who participated in the survey. Two distinct experiences were identified being where mental ill-health emerged (often rapidly) in response to a single life event or cluster of events in close time proximity and set off a trajectory of adverse events. The second is the slow emergence of mental ill-health over a long period of time influenced by many life experiences, often the mental illness preceded a trajectory of adverse events.

Emerging Mental Illness

The participant narratives revealed ways in which mental illness emerged in their lives over time. The narratives reflected on bio-medical presentations of mental illness, characterised by descriptions of organic emergence of mental health symptoms. Those who did not have an organic emergence emphasised lifespan transitions as key risk factors, as well as repetitive or cumulative trauma over the lifespan.

Organic Mental Illness Onset

Mental illness, for some participants, emerged early in life without any psychosocial risk factors. There were early indications of feeling different or outcast, described in ways like;

> *...commented on by family that I was 'highly strung' and overly emotional - rollercoaster was a common phrase.* (Female, 45-54 years)

For others these feelings have always been present;

> *I was always anxious and depressed and suffered from paranoid thoughts as well as suicidal thoughts* (Female, 45-54 years)

Where there were no identifiable precipitating events;

> *Unable to identify precipitating events, was young and felt empty and started having suicidal thoughts* (Female, 35-44 years)

However, oftentimes mental illness presented as, or was perceived initially to be, something other than mental illness;

> *Lead up - having 2 children with limited family/community support. Financial insecurity eap [employee assistance program] related to 1 income. Poor role models and support from my parents. Inadequate professional mental health care which was unaffordable* (Female, 45-54 years)

As a result, people reported going undiagnosed or unsupported until later in life, at which point the condition had progressed and symptoms were much worse;

> *I have actually been diagnosed in my late 50s as being level 1 autistic, after having lived my whole life feeling I don't belong, feeling something was wrong with me, that I was somehow not good enough. I began getting depressed in my early 20s, began self-medicating on alcohol during that time, a habit I didn't kick until my early fifties, while at the same time I was diagnosed with generalised anxiety disorder and social phobia.* (Female, 55-64 years)

The 'lead up' period to diagnosis or escalating distress was often prolonged, with difficulties in identifying usual adolescent development compared with emerging mental illness;

> *Started having suicidal thoughts at age 16/17 and self-harming. Felt rejected and outcast. All of my emotions were felt in extremes and any small inconvenience felt debilitating. It wasn't until I was at my worst and had ruined relationship after relationship, none of my antidepressants were helping, I felt lost, I made the effort to get a referral for a psychiatrist and was diagnosed with unmanaged mental health conditions at 27 years old. Changing medications has helped. And psychology, though I did feel in my youth that they didn't take the time to listen to my symptoms or try to understand or possible suggest other underlying issues.* (Female, 25-34 years)

In these situations, a trajectory of challenges commenced;

> *Until my 40's I didn't realize I had mental health issues - I thought that I was weak and useless and unable to cope like everyone else. After an incident when I self-harmed (one of many) I went to see my GP in a state of collapse and he referred me to a psychiatrist. Once I was properly diagnosed and medicated, I could see what a hideous, lonely struggle my life had been until then. I have been seeing the same psychiatrist for 20 years, and he is the mainstay of my support. Since diagnosis I have had several relapses into illness and have been hospitalized several times. The support I have received from my doctor and mental health professionals in psychiatric facilities have enabled me to recover my equilibrium and re-engage with society. I wish to God this kind of help and support had been extended to me when I was 15.* (Female, 65-74 years)

Adverse Childhood Experiences

While for some there were no identifiable causes of their mental illness, the much more common experience reported by participants were adverse childhood experiences. Adverse childhood experiences are not one-off traumatic events. This included many participants reporting child sexual abuse and the impact of limited or abusive parenting – all reflecting on the impact of adverse childhood experiences. There were reflections of distressing events that overlapped where survey respondents articulated traumatic childhood backgrounds as integral to mental illness onset;

> *'....when I was 11 (I was) exposed to death and grief which contributed to a lot of my anxiety struggles. I didn't understand that the struggles I was having during my adolescence were due to anxiety and was only diagnosed when I was 20 and sought help from my GP. Taking medication and talking to a psychologist has really helped my recovery and management.* (Female, 25-34 years)

Participants also identify how trauma from childhood led to a trajectory of ongoing abuse, more assaults, alcohol and other drug use, family and domestic violence, poor decision making and insecure employment and housing. Ongoing trauma was characterised by poor coping, limited decision-making skills, self-medicating and coercive relationships. Several mentioned the unique needs of being adopted and/or fostered. There was mention of limited contact with family of origin and/or culture and mention of abuse experienced in the foster care system, even when the abuse was not present prior to fostering;

> *I would have been better supported in early childhood if I had been able to talk about my sadness and ask questions about my position in my family. I had great parents who would have done anything to get me help had I felt I could tell them i needed it. The first time I tried to (die) I was seven. But as an adopted person you have have to happy and grateful to have a home. The first time I felt water from the shower on my back I was 48 yrs old and spent two years in adoption specialist counseling. I would have also known as child it was ok to tell my mum and dad I was abused by a family member who felt and told me it matter because I wasn't really family.* (Female, 45-54 years)

Many people with experiences of childhood trauma also spoke of the significant post-traumatic stress disorder that can continue to occur or is revisited when adult life situations re-traumatise them;

> *I do not have any official diagnosis of mental illness. I am not so stupid as to get myself labelled in such a way by anyone, especially a biased idiot. Nevertheless, I am intelligent and knowledgeable enough to know that I have a problem of PTSD (at a catastrophic and life-destroying level). I have only realized this from about the age of 55, when I was finally triggered into a suicidal meltdown from which I am not fully recovered (and will never recover from). In retrospect, I have struggled with PTSD (for me an inner terror of being controlled and harmed) ever since the age of 3 or 4 when I was almost killed on a number of occasions by family violence. I have been actively suicidal (constant plans for traumatic disintegration such as standing in front of a speeding train or jumping off a building ever since my early twenties) but have always had sufficient strength to not make any actual attempts (though I have had plans for exact place and time)* (Male, 65-74 years)

Often these traumas remained unresolved, and services not providing trauma informed care;

> *Being heard by the court system, even though I was young I wanted to speak up, but my predator admitted he was guilty so they gave him a joke of a sentence no jail time. A mother to not put her children under constant duress for no reason.*

> *Better education around her damage she had done to m. More support from the courts for victims of crime and more than six free sessions with a counsellor. Better support from the hospitals reachout centres around trauma victims. If I had early invention and consistent therapy from the age my sexual abuse came to life, I may not have gone down the road of trying to grieve my deceased father in my 20,Also, my drug usage and pattern, the way this implicated all of my jobs and ongoing relationships and I would have better faith in the legal system, better faith in mental health professionals and this could have lead me to unpack my trauma properly and now would have given me proper tools to be able to manage my trauma without having to fall apart mentally, trying to take my own life and cutting myself and my commitment to working and maintaining better life goals in life.* (Female, 35-44 years)

Priority Populations

Those who identified as LGBTQI+ reported ongoing poor health outcomes, impacted by lack of physical and emotional safety, and access to care in the communities they reside. These poor health outcomes continue until middle adulthood – meaning that the period of adolescence onwards is significant in terms of psychosocial safety and access to appropriate care;

> *Anxiety from an early age meant I coped and managed relatively well with my mental health issues. High school was the most difficult time with little help, which at times was inappropriate or harmful. From my mid-twenties onwards, it has been challenging finding the right help. What has hindered recovery most of all is the inability to access appropriate help at the right time, as well as additional stressors and lack of support.* (Non-binary, 35-44 years)

Young people, who live in communities with poorer health outcomes from a social determinants of health perspective, also have enhanced risk from the period of early to mid-childhood;

> *Born to a traumatized, broken mother; Poverty; Family Domestic Violence; Early childhood sexual abuse; Preteen sexual abuse; Mid-teen sexual assault* (Female, 35-44 years)

There were many reported of bullying in the school environment, and its associated lifespan impacts. here usually in the workplace as opposed to where bullying was happening in childhood. Whilst there was a distinction for bullying with the absence of all other childhood risk factors, as there are stories of those who experienced bullying, went on to develop anxiety disorder, eating disorder in adolescence and that this continued and did not resolve. In adulthood there were significant explorations of workplace bullying and the detrimental impact of this on emerging mental illnesses, as well as suicidal thoughts and attempts;

> *Bullying changed me from being kind and sensitive to have to be someone I'm not, walk around with my chest pumped out acting like asshole to everyone. It eventually caught up with me and was a contributor to my developing ME/CFS (to which I was genetically predisposed). As an adult though it was the ME/CFS that barely allowed me to leave the house. I got a lot better, when back to uni and got a degree and advanced degree. When I finished that though I developed chronic pain and wasn't able to go on and work so I'm back on disability because the pain doctor won't treat me. The world is a horrible dark place.* (Male, 35-44 years)

And;

> *Bullying since the age of 6. A lot of trauma from my teenage years, the death of a family member. Sexual assault a number of times. Being body shamed by multiple people. 8 suicide attempts over 4 years ending up in icu and a number of times needing medical help for self harm. What helped was intense work with a psychologist 3 times a week for 3 months. I started getting better then went down the road of drugs which hindered my recovery. What also helped me at this present time is wanting to recover and not feel trash anymore* (Female, 25-34 years)

Sudden Onset Following Significant Life Transition

The major group of experiences was where one event, or several events that occurred in close time proximity, led to the onset of mental ill-health. These transitional events – birth of a child, breakdown of an important relationship, change in economic status for example, often exacerbated prior issues that the individual 'had under control' until the transitional stress resulted in quick, and severe, mental health decline;

> *Bullying at work led to a breakdown from which I have never fully recovered. I lost my career, my family broke up, I couldn't work so ended up on a disability pension, accumulated a huge debt and used alcohol to try to cope with the anxiety which then led to me staying depressed even longer.* (Male, 55-64 years)

Women's experiences of trauma and mental illness may increase when they are connected to services at significant time periods, such as the perinatal period;

> *I have struggled with anxiety since adolescence, but my major issue happened with PND after the birth of my son. I hid the true extent, but still desperately sought help from many agencies because I could not cope and it took many weeks until I finally got help. Tresillian basically saved me by getting me to see a psychiatrist and start taking medication. I am still in recovery several years later, but I'm alive and have a good relationship with my son.* (Female, 35-44 years)

Trauma related to termination of pregnancy was also reported;

> *A termination at 17yrs old is where the spiral began. I then got glandular fever, then struggled to gain control of my emotions. I then developed chronic fatigue- and depression. I was also a high achiever, Cs weren't good enough.. putting a lot of pressure on myself was never helpful!* (Female, 45-54 years)

Loss of relationships, and death of a loved one, are important life transitions reported as points where mental health declined, and in the situation below this was compounded by suicide and poor interaction with mental health systems;

> *My depression started about 30 years ago after my father's death, but only lasted for a few months. PTSD and Depression started after the Suicide of my husband 3 years ago after his terrible and wrong treatment by the current mental health system* (Female, 65-74 years)

Stressors could resurface issues that may have been buried in the past, as this participant explains occurred at a time when their career was ascending, their mental health declined;

> *1. Being put in a leadership position at work which I didn't feel ready for*
> *2. Having bad dreams and bad memories of childhood incidents.* (Female, 65-74 years)

Given that adulthood is the time where people transition from living in the family home, into more solo endeavours, the survey also identified risk profiles is the impact of adulthood loneliness, as well as sole person needs. People who live alone, have little support, and have unique needs;

> *People who live alone, especially, need immediate access to professional support when they become unwell. The difficulty is that when one is really unwell (with depression, anxiety and / or trauma) they are less likely to reach out for support from family or friends because they don't want to burden others, because of stigma, feelings of worthlessness, etc. Telephone counselling is not particularly helpful when one is in serious crises (assuming one is capable of even making a call) because what one often needs in such circumstances is practical support (food, an outing, someone to sit with, etc) and talking to a stranger on the phone can exacerbate one's sense of isolation… The only reason I have ambulance insurance is to transport me to hospital in a mental health emergency.* (Female, 65-74 years)

This loneliness was also exacerbated by the physical environment in which people lived, as well as exposure to intimate partners violence;

> *The isolation of farmers wives after experiencing violence and the lack of empathy from my partner made my experiences more traumatic. I did not have the financial resources to access help my partner's attitude of get over it. We have got time to cope with your worries made me feel alone. Having four little kids and a partner doing a uni degree by correspondence after work meant that for almost ten years I told no one how I felt, because no one came near us, Our petrol was rationed, the. kids got a school bus to school and I stayed home and worked the farm, One day at the rare doctors visits I told the doctor I intended to end it all. that was the start of many months of treatment for post traumatic stress disorder, which still bothers me at times, even at seventy-six years of age.* (Female, 75-84 years)

Retirement is another key life transition point that was identified as a period of vulnerability. Economic instability or concern about economic status was identified as a time when other past vulnerabilities also resurfaced, for men and women. For those where retirement was forced, these feelings were exacerbated;

> *Psychological, physical abuse and neglect in childhood, abandonment during teen years by parents, physical abuse up to age 21 by father, sexual harassment and/or abuse in workplace at age 26, no support from workplace and ended up with my first diagnosis in 2004 and a workers compensation claim. Systemic abuse via workers compensation claim, no return to work support or suitable duties, TPD in 2015, pensioned out through my superannuation (I was working for the Federal Government). Seeing a Psychologist that was paid for by workers' compensation insurance (Comcare) was the only thing that I felt assisted me since 2004. They have removed my entitlement to access a Psychologist since being retired TPD. I think dealing with Comcare for the last 18 years has not just hindered my recovery but instead re-inforced my experience of trauma. I have had over 5 different diagnoses and I especially did not find this helpful, rather another experience of a type of systemic abuse via Psychiatrists* (Female, 35-44 years)

Situational Crisis impacts Ongoing Mental Illness – How Do We Know What Comes First?

Due to the nature of the survey design in which participants were asked to recall their history in relation to their mental illness, it is not possible to accurately identify where situations led to mental illness or where mental illness led to adverse interpersonal situations. However, with the larger dataset of responses, we can say that many people had experiences of mental illness linked to trauma and situational crises triggered declining mental health. These are complex life histories, as indicated below;

> *I had a fairly traumatic childhood. I started getting PTSD symptoms when I was ~14, and I was diagnosed with PTSD when I was 17. This was after one of my friends killed herself and my college (Year 11) forced me to go talk to the counsellor. It didn't help. The severity of symptoms intensified; when I was 21, I tried to kill myself 12 times. I went to the university psychologist and tried to get help from her, but it didn't help at all and in fact made things worse as I tried to talk+think about stuff that happened in the past. I was then diagnosed with a brain tumour, which was removed, and the PTSD symptoms resolved. So, possibly, I never had PTSD. More recently, I was diagnosed with anxiety and social anxiety, and the psychologist I've been seeing thinks I have undiagnosed autism. I was advised to find a psychiatrist to diagnose me bc he thinks it'd be helpful for me to*

> *have an 'explanation' of why I always feel the need to watch and learn and figure out what the 'right' thing to do is in social situations before I participate.* (Female, 25-34 years)

Social stigma also plays an important role in how past traumas are experienced throughout the lifespan;

> *Being too frightened to tell anyone of my childhood abuse eliminated any means of help for me with that, although having support for bullying may have given me more confidence at an earlier age, which may have helped me find work. After my first marriage failed, a mentor or social worker, maybe connected with Centrelink or the police, would have helped with general problem solving, financial and legal advice and given me more mental strength and confidence. Having a psychologist remain in my area would have saved me having to re-live my experiences and given me a sense of stability and longer-term support, potentially stopping me from having to take medication. In an ideal world, having someone I know and trust, immediately contactable to help relieve panic attacks while they are actually occurring would really have made a difference in my quality of life and help prevent me from developing health-triggered anxiety.* (Female, 45-54 years)

This presents a complex service delivery issue; where the professionals engaged in providing care during a crisis, may not be addressing the potential risk factors longer term, or have scope to recognise a crisis as a key emergence of mental illness. For example, participants reflected on examples such as the perinatal or antenatal period, of having a baby, being a situational crisis. Whilst this is an opportune time for proactive outreach (given current screening procedures for domestic violence during the antenatal period), identification of longer-term decline, or for whom this will lead to resurfacing of past traumas is hard to predict. The recent multiple and overlapping natural disasters and the pandemic have also resurfaced issues and vulnerability has increased, as demonstrated by the young woman below;

> *I struggled with depression and anxiety since a very young age due to bullying at primary school. my conditions became worse in early high school when due to bullying and other social struggles and began to self harm and by the age of 13 i had several suicide attempt to my name one of which i was suspended from school for. I was placed on a very high dosage of Lovan for my age and had a very bad reaction. Beyond this i was sexually assaulted 4 times by my ex parter at 14 which*

> *lead to my development of PTSD which has never been formally diagnosed due to my lack of connection to new psychologists as the one I had been seeing since age 9 passed away around this time due to a motor accident. After this i have essentially been living with un-treated mental health problems made worse by the black summer bushfires, flood events and my parents projection of their own mental illnesses (depression ect) onto me.* (Female, 18-24 years)

Can Support Services Respond to These Complex Needs?

In this section of the report, we explore the experience of diagnosis and then segue to discussions about what helped and didn't help in the provision of care and support.

Participants emphasised the continuum of power and oppression associated with a '*correct*' diagnosis. For some a diagnosis could assist with the ways in which they engage with the workplace, education, relationships and access to care;

> *A correct diagnosis would have meant I could have completed University, held down jobs better and had self confidence. My symptoms led to chronic burnout and depression. I would have had a certain level of agency, autonomy and hope by understanding how to adapt and find help.* (Female, 35-44 years)

However, once a diagnosis is made, the ways in which this 'allows the person to be seen, as they move through their life appears to be restricted;

> *Access to trauma-informed psychologists (a long-term ongoing issue), a mental health system that can think outside of a "diagnosis" instead of relying on them* (Female, 35-44 years)

Regardless of the background to the mental illness the most common story for all is the inability to locate timely and appropriate services, and a lack of appreciation of the broader psychosocial issues that are present alongside the mental illness;

> *Less diagnosis, more curiosity and care about what environmental/social problems were causing presentation of symptoms* (Female, 18-24 years)

Ongoing psychosocial care was also recommended beyond the biomedical and pharmaceutical care that was more often reported;

> *Would have been better if I had counselling rather than drug therapy at the time of my diagnosis. 15 minutes with a psychiatrist is not enough to give you the right tools. Support is available but often hard to obtain quickly and quite a process of referral which takes time and energy for someone who may not have the capacity to go through the process.* (Female, 45-54 years)

Beyond the appropriateness of care there were many barriers to care. These were exacerbated for those living in regional Australia;

> *i was living in a rural area at the time of my diagnosis. The mental health nurse only travelled to the town i lived in once a fortnight and it was an hour and a half drive. There is next to no support other than a GP in rural towns.* (Female, 35-44 years)

And;

> *At the age of 29 I attempted suicide and this resulted in being diagnosed with borderline personality disorder. The lack of support in regional Australia for any person suffering from the effects of mental health is criminal. The entire system provided for these fellow Australians is severely damaged and needs instant attention people are dying every day needlessly.* (Female, 45-54 years)

When access to services was limited, participants reported searching the internet to better understand what was happening for them, however this was not always helpful;

> *Depending on what it is, social media groups can help connect with peers of similar circumstances and life experiences. They can be problematic in the way that bullying depending on the group can be rife and really damaging it can be hard for some to not take it personally. Platforms that provide information can also be helpful, they can inform and guide to further assistance, but they can also lead a person into misdiagnosis, confusion, and helplessness.* (Female 25-34 years)

Understanding that trying different services and supports to gain the right care for that individual is important;

> *From what I have learned unfortunately with DID, many clinicians struggle to understand/dont feel comfortable diagnosing it. This makes the course of treatment almost impossible, and ends with frustration on behalf of the psychologists part as their "skills/tools" and their training can make little to no difference or escalate the actual diagnosis. Their attempt to try is commendable and if they hold their ego, they can be beneficial. I have a different psychologist now, and whilst it is difficult (always will be) she is exceptionally beneficial.* (Female 25-34 years)

And yet, service experiences where very poor;

> *Right now for me our countries mental health system feels like a dodgy show ride, like the cha cha or a demented merry go round, while trying to get help you end up going around in circles until you end up sick and then you give up and get off and you're just left on your own dizzy and feeling worse than when it started.* (Female, 25-34 years)

Many participants found that while a diagnosis was desired, it became obvious over time that their diagnosis would change, new experiences would impact on their mental health, and yet those providing support were not able to take this into account appropriately;

> *I have seen multiple psychologists over the last 10 years who have just tried to use CBT on me. It was the most recent one who identified early attachment trauma, however I did not feel like she listened and understood me, but jumped to conclusions. Not one psychologist talked about trauma. The counsellor I saw also did not listen to me and tried to spin my trauma experiences as my misunderstanding them. My social worker had by far offered the most superior support - she is trauma informed and person centred and honours my truth. My gp has given me anti depressants in the past with no referral to a psychologist (I had to find someone on my own years later). Most recently a psychologist suggested I try anti depressants again, but after a blood test it showed I had a vitamin d deficiency and have since started on vitamin d supplements and this has helped more than anti depressants.* (Female, 35-44 years)

A whole or person, or person-centred model of care would assist services to take into account other issues the person has experienced and other needs they may have. This was especially prominent for those reporting neurodiverse diagnoses;

> *I forgot to mention that I have been diagnosed with ADHD. Due to highly functioning in the academic environment, the support I needed was not understood. Socioeconomic factors in the rural areas where I lived meant that my situation was not prioritised over others, despite this leading to significant difficulties throughout my life.* (Female 25-34 years)

And;

> *After giving birth at 26, and not coping, I realised I had social phobia anxiety and depression most of my life previously. After the rest of my 58 years on antidepressants, I finally discovered I had Inattentive ADHD, and that caused my lifetime of misery. I only found out from facebook memes, and then from friends who had it. As I looked into it more, I was sure. Then confirmed by a psychologist and 2 different psychiatrists. If only I was treated sooner* (Female, 55-64 years)

The costs of care were described as prohibitive, regardless of one's private health insurance status;

> *I've seen 5 psychiatrists and all were detrimental except 2. My current psychiatrist has been seeing me weekly with only $11 out of pocket expense. He has been phenomenal and really improved my quality of life. He is retiring and I need to wait 8 weeks until I can get into another psychiatrist who is charging $200 out-of-pocket, so I won't be able to afford to see her very often at all.* (Female, 35-44 years)

Delays in accessing appropriate care had significant impacts on one's mental health and sense of self, making it worse over time;

> *Unable to access psychologist for several weeks. But after 3rd admission to hospital did emergency Telehealth appt and was linked into services. Things had worsened by this time. If this service was offered on initial presentation and or a mental health assessment attended earlier, treatment would have commenced sooner.* (Female, 45-54 years)

Many experiences with health services (inpatient and community) were viewed as negative and these negative experiences occurred over long periods of time. Participants described wait times as extensive and lack of services or inappropriate referrals as common. Service offerings were reported as limited and inaccessible;

> *It felt like a factory. It felt like a huge system to keep counsellors in jobs, paying mortgages and turning a broken system around. What are called mental health problems are actually normal reactions to a broken society, corrupt politics and global corporations having excessive power. The mental health system is just a heap of do gooders feeding off the system with big wages, short sessions and hours of useless paperwork and risk assessments. Waste of time and money.* (Female 45-54 years)

As support for mental ill-health is an interpersonal experience, the relationship between the service user and professional is important. Yet, with such limited services, a compatible match is challenging;

> *There are difficulties accessing support that is suitable and useful. A 30-year-old male psychologist is not the best person for a 50+ woman to be referred to. Incompatibility is a large factor in treatment of mental health and often detrimental to any recovery. As the person referred to an incompatible service it was then deemed my fault for non-compliance.* (Female, 65-74 years)

Beyond the traditional in-person support services, many participants described their experiences of online and crisis line supports. Unfortunately, many of these experiences were also negatively reported;

> *Beyond blue frequently hangs up on callers - has happened multiple times* (Female, 18-24 years).

They described a lack of trust, which inhibited them from sharing with the health professional. This may also be impacted by one off crisis phone calls;

> *I found it hard to connect with the professionals I went to in many cases this found it difficult to open up.* (Female, 18-24 years)

However, other had positive experiences;

> *Telephone support was very helpful* (Female, 65-74 years)

Some participants reported feeling unable to '*open up*' or share, and so the ability to locate resources for themselves was viewed positively;

> *I struggled to share my thoughts and feelings about my mental health issues. I use some of the tools they suggested but have also found and used my own resources.* (Female, 45-54 years)

Informal care was also highlighted as important;

> *I was very fortunate to have a parent who identified I was having trouble when I was quite you and sent me to quality counselling. I remain fussy about my health professionals and always ask around before trying a new clinician to see they are open minded caring people. I have also been very fortunate to have had private health insurance. Without it I would be dead. My family has also been able to afford special medications I have needed because I am treatment resistant. I am sure without this too I would be dead.* (Female, 45-54 years)

Recommendations For Service Improvements

Participants proposed that services can improve by being more accessible, person-centred and trauma informed; for example, normalising help-seeking and providing compassionate, holistic care. Many recommendations were made, with the following list provided by one participant providing a comprehensive summary;

> *1. A mental health triage, connected, network pipeline that was accessible financially rather than forcing people to get a 'taste' of treatment*
> *.. and falling back thru the crack*
> *2. A wholistic, connected process that would automatically assess & then redirect me to appropriate, ongoing support meds & psychological services*
> *3. Acceptance that a person with mental illness deserves equal if not more support. Rather than having barrier after barrier placed in front of them.* (Male, 65-74 years)

The needs of priority populations are also important, whether these are specialised or generic services;

> *First and foremost medical and mental health professionals being LGBTIQA+ aware would have been supportive.* (Non-binary, 35-44 years)

As noted previously, the interpersonal nature of mental health care plays an important role in provision of appropriate services, and therefore stability of the mental health workforce will be important;

> *Having one designated person to develop a relationship with. Someone who gets to know me and helps me develop the skills to be functional despite having an often-severe mental illness.* (Female, 55-64 years)

Navigating a fragmented system was challenging, prevented timely care and added trauma at vulnerable times. The current health messaging focuses on reaching out for help, yet when doing so that help may not be responsive or desirable;

> *The public health system in Australia is broken, after my first ED admission that was clear to me, I had a suicide attempt and within 12 hours later I was sent home for my husband to care for me, I was told that the mental health ward was not for me- I had a home and family to care for me! On my 3rd ED admission the nurse told me in a very condescending tone, that I needed to get help, I told her I was getting help, she all but yelled at me, well it's not working! From the start it would have helped if there was a place I could go and get the appropriate help for childhood trauma that I needed, ED staff need to be empathic to suicide attempts, they treat attempt survives with contempt -we did this to ourselves and are taking up a precious bed in ED from a more deserving patient. Talk therapy does help but it takes a long time and privately a huge cost, someone giving me a clear path to recovery would have been very helpful. Another key recommendation was improved 'training' in how to ask for help, given all services are focused on 'ask us for help'.* (Female, 45-54 years)

Navigating these systems are also incredibly challenging and add burden when trying to locate the care that is needed;

> *Basically easy to understand mental health care services. It can be confusing what you are entitled to and what is free or reduced cost. Also some awareness of the fact that people like myself recovering from severe childhood abuse and trauma, are often struggling financially and struggling to trust people. So mental health*

> *services that are trauma informed, affordable, and not just dependent on a GP would be great.* (Female, 25-34 years)

Mental distress often occurs outside of usual working hours, and as presented earlier can arise due to many life transitions and challenges. People find themselves isolated and alone when needing support from their usual networks, and this can be exacerbated by a lack of out of hours services;

> *After hours service not just 9-5 Monday to Friday, better communication between my treatment team example my psychiatrist, psychologist and GP knowing what each was working and supporting me with and collaborating together to help me keep myself safe and well.* (Male, 45-54 years)

Given the often-long trauma histories participants in this survey had experienced, there are many opportunities for others beyond those employed in mental health care to intervene and provide support. This is especially the case to interrupt the powerful impact of early childhood trauma on a life trajectory of adverse events;

> *Had I not experienced the violence, abuse, trauma, neglect, sexual abuse and poverty I did growing up, I would be much farther in life than I currently am had the teachers and counsellor in my school actually listened when I was pleading to be removed, maybe that would have helped. Maybe not. If my family had received a wholistic family support intervention when I was still in school, that may have helped. If I had received the same quality of support in 2015 as I had between 2006-2010, I would not have become as unwell as I did and lost as much progress as I have.* (Female, 35-44 years)

And;

> *Of course, if the adverse childhood experiences had been addressed much earlier, it is likely the outcomes for my mental health would have been better - Similarly, after becoming homeless, on the verge of bankruptcy and will alcohol misuse and self-harming behaviours, had been addressed (social factors) I may not have then go on to make the attempt which has resulted in PTSD, adjustment disorder, chronic pain and treatment resistant depression.* (Female, 55-64 years)

The education system is often viewed as the panacea for all health and wellness issues to be dealt with, and while some of the participants had been in these systems some decades ago, it is important to highlight these experiences are still occurring where mental health literacy and pathways to care can be implemented currently;

> *Better education in primary school and high school would have been so helpful. Instead of teaching vulnerable children about "bad food groups" and the importance of being a "healthy weight" there should be education on intuitive eating and body acceptance. There should be better practices in place for kids who are struggling in school with mental health so it does not get much worse as they get older.* (Female, 18-24 years)

Throughout, participants in this survey highlighted the challenges with having to tell and retell their stories through a broken and unresponsive system. Considering the trauma that most had or where experiencing this is an area for immediate improvement;

> *Being too frightened to tell anyone of my childhood abuse eliminated any means of help for me with that, although having support for bullying may have given me more confidence at an earlier age, which may have helped me find work. After my first marriage failed, a mentor or social worker, maybe connected with Centrelink or the police, would have helped with general problem solving, financial and legal advice and given me more mental strength and confidence. Having a psychologist remain in my area would have saved me having to re-live my experiences and given me a sense of stability and longer-term support, potentially stopping me from having to take medication. In an ideal world, having someone I know and trust, immediately contactable to help relieve panic attacks while they are actually occurring would really have made a difference in my quality of life and help prevent me from developing health-triggered anxiety.* (Female, 45-54 years)

Discussion

The Activity 5 survey provides broad insight into the experiences of mental illness and specifically for priority populations, considering the social determinants of mental health and an assessment of the availability and accessibility of support services. Over half of participants who had used psychologist, psychiatrist, general practitioner, Aboriginal health workers, and 'other' found these supports helpful, with the remainder (counsellor, social worker, mental health nurse, online support, and crisis support) ranging from 34-43% finding these services helpful. Clergy or religious support, at 29%, was the least helpful. Availability and accessibility of these services ranged from over 70% (online and crisis) to 15% for Aboriginal health workers. Our survey was not representative, and when compared to the recently released National Mental Health and Wellbeing Survey (ABS, 2022) participants were reported supports as being more helpful than those reported by the ABS, whereby nearly one third (28.5%) did not have their need for counselling met or only had their need partially met and 26.1% did not have their need for information met or only had their need partially met. Of the 989,000 individuals aged 16-34 with a 12-month mental disorder who had consultations with health professionals for their mental health, 35.3% did not have their need for counselling met or only had their need partially met and 32% did not have their need for information met or only had their need partially met (ABS, 2022).

Gender differences in diagnoses were stark among survey participants, with men being four times more likely to be diagnosed with schizophrenia, while females were more likely to be diagnosed with anxiety, depression and/or eating disorder. This was similar for LGBTIQ+ participants who were also more likely to be diagnosed with personality disorder. Young people were more likely to report eating disorder, while older adults were more likely to be diagnosed with depression. The age at which diagnoses were made are important to consider with LGBTIQ+ being diagnosed as teenagers, while the remainder of participants from all other priority populations reported being diagnosed during their twenties. When considering the impact of the social determinants of mental health, the most prominent times for these to impact LGBTIQ+, First Nations, CALD and young people participants was during formative later childhood years, while all other groups experienced these during early working life. This demonstrates the need to consider the realm of these SDOMH at different ages for different groups. For LGBTIQ+ and young people, interpersonal determinants were most important in adolescence, while for men and women these were more important in middle life. For First Nations, the social determinants and for CALD the community determinants were most prominent.

The qualitative data provides rich insight into participants lived experiences, and most poignantly to the impact of trauma on increasing distress and declining mental health. Many of the participants had experienced long trauma histories, and when trying to seek help for their mental health these traumas were exacerbated rather than reduced. The importance of trauma informed; person centered care cannot be highlighted enough to ensure those who are already traumatized are not further damaged by the services that are set up to support them. For many the idea that a diagnosis would assist in improving mental health vanished as they moved through a system where diagnoses changed, treating teams changed and the need to tell and retell their histories became common place. Such challenges exist within physical health, as people with complex conditions move between treating health workers, and this is perhaps more accepted. Further, the trauma an individual has experienced is less likely to be in the forefront in a physical health condition, as it is with mental illness. Concerningly, where trauma was not present prior to the mental illness, the experience of declining mental health could become a traumatic event and particularly where this was precipitated by a significant life transition.

Limitations

While providing rich and deep insight into the experience of living with mental illness, this survey is not without limitation. The design of the survey was adapted to ensure maximum participation prior to demographic information to gain as much insight into experiences of mental illness, and to understand the psychosocial context of these experiences through the social determinants of health. Nevertheless, participants were only able to respond to the predetermined questions within the survey. Other than the consent question, no other question was mandatory to respond to, and thus some questions had low (around one third) of participant’s responses included. At the low end this resulted in open ended questions for the qualitative components only receiving ~400 responses. The recruitment for the survey was interrupted during the Australian federal election due to being a federal government funding body and, thus, a pause in recruitment was necessary and delayed the completion of the project.

Key Learnings

- The final survey, seeking to explore living experiences of mental illness, identified disparities relating to gendered experience of mental illness and organic aetiology.
- Trauma was commonly reported as happening prior to a mental illness diagnosis and could be either caused or exacerbated by the emerging mental illness.
- The survey data demonstrated gendered differences in diagnoses.
    - Men had higher odds of reporting a schizophrenia diagnosis compared to their counterpart.
    - Women had higher odds of reporting a diagnosis of anxiety, depression and eating disorder, compared to their counterpart.
    - Participants who identified as a member of the LGBTIQ+ community, compared to those who did not, had three times the odds of reporting a diagnosis of anxiety and over two times the odds of reporting a diagnosis of eating disorder or personality disorder.
    - Young individuals had statistically significant higher odds of reporting an eating disorder diagnosis, compared to their counterpart.
    - Older adults had twice the odds of reporting a diagnosis of depression, compared to those below the age of 65 years.
- When considering the social determinants of mental health, differences depending on group membership are noted.
    - For First Nations individuals, the most prominent social determinant of mental health was social factors.
    - For CALD individuals, the most prominent social determinant of mental health was community factors.
    - For other priority population groups, the most prominent social determinant of mental health across all life stages was interpersonal factors.
- Most experiences reflect on interactions with the mental health system as negative. However, good timely care was extremely helpful, especially when connecting with a General Practitioner, who had awareness of the persons’ care needs.
- Significant qualitative data reinforced the need for a diverse service offering, given what may work for one, may not work for others. Individuals have personal

preferences as to what best suits their needs, and these needs will change over time as people engage with transitions relating to lifespan and their mental illness.

- Services can improve by being more accessible, person-centred and trauma-informed; namely, normalising help-seeking and providing compassionate, holistic care.

References

Australian Bureau of Statistics. (2018). *National Health Survey: First Results 2017-2018.* ABS. https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release

Australian Bureau of Statistics. (2021). *Causes Of Death Australia.* ABS. https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/2020#key-statistics

Australian Bureau of Statistics. (2022). *National Study Of Mental Health And Wellbeing 2020-21.* ABS. https://www.abs.gov.au/statistics/health/mental-health/national-study-mental-health-and-wellbeing/latest-release

Australian Institute of Health and Welfare. (2020). *Australia's Health 2020 In Brief.* AIHW. https://www.aihw.gov.au/getmedia/2aa9f51b-dbd6-4d56-8dd4-06a10ba7cae8/aihw-aus-232.pdf.aspx?inline=true

Australian Institute of Health and Welfare. (2021). *Improving Mental Health Outcomes For Indigenous Australians In The Criminal Justice System.* Produced for the Indigenous Mental Health and Suicide Prevention Clearinghouse. Cat. no. IMH 2. Canberra: AIHW.

Australian Institute of Health and Welfare. (2022). *Mental Health Services In Australia*. AIHW. https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia

Almeida, O. P., Patel, H., Kelly, R., Ford, A., Flicker, L., Robinson, S., Araya, R., Gilbody, S., & Thompson, S. (2021). Preventing Depression Among Older People Living In Rural Areas: A Randomised Controlled Trial Of Behavioural Activation In Collaborative Care. *International Journal of Geriatric Psychiatry, 36*(4), 530-539. https://doi.org/10.1002/gps.5449

Australian Government. (2020). *National Suicide Prevention Adviser - Compassion First: Designing Our National Approach From The Lived Experience Of Suicidal Behaviour*. Australian Government. https://www.health.gov.au/resources/publications/national-suicide-prevention-adviser-compassion-first-designing-our-national-approach-from-the-lived-experience-of-suicidal-behaviour

Australian Government. (2021). *Mental Health And Suicide Prevention*. Australian Government. https://www.health.gov.au/health-topics/mental-health-and-suicide-prevention

Baldwin, P. A., Sanatkar, S., Clarke, J., Fletcher, S., Gunn, J., Wilhelm, K., Campbell, L., Zwar, N., Harris, M., Lapsley, H., Hadzi-Pavlovic, D., Christensen, H., & Proudfoot, J. (2020). A Web-Based Mental Health

Intervention To Improve Social And Occupational Functioning In Adults With Type 2 Diabetes (The Springboard Trial): 12-Month Outcomes Of A Randomized Controlled Trial. *Journal of Medical Internet Research, 22*(12), e16729. https://doi.org/10.2196/16729

Bartels, L., Oxman, L. N., & Hopkins, A. (2019). "I Would Just Feel Really Relaxed And At Peace": Findings From A Pilot Prison Yoga Program In Australia. *International Journal of Offender Therapy and Comparative Criminology, 63*(15-16), 2531-2549. https://doi.org/10.1177/0306624x19854869

Batterham, P. J., Calear, A. L., Farrer, L., McCallum, S. M., & Cheng, V. W. S. (2018a). FitMindKit: Randomised Controlled Trial Of An Automatically Tailored Online Program For Mood, Anxiety, Substance Use And Suicidality. *Internet Interventions*, 12, 91-99. https://doi.org/10.1016/j.invent.2017.08.002

Batterham, P. J., Christensen, H., Mackinnon, A. J., Gosling, J. A., Thorndike, F. P., Ritterband, L. M., Glozier, N., & Griffiths, K. M. (2018b). Trajectories Of Change And Long-Term Outcomes In A Randomised Controlled Trial Of Internet-Based Insomnia Treatment To Prevent Depression. *BJPsych Open, 3*(5), 228-235. https://doi.org/10.1192/bjpo.bp.117.005231

Batterham, P. J., Calear, A. L., Farrer, L., Gulliver, A., & Kurz, E. (2021a). Efficacy Of A Transdiagnostic Self-Help Internet Intervention For Reducing Depression, Anxiety, And Suicidal Ideation In Adults: Randomized Controlled Trial. *Journal of Medical Internet Research, 23*(1), e22698. https://doi.org/10.2196/22698

Batterham, P. J., Calear, A. L., Sunderland, M., Kay-Lambkin, F., Farrer, L. M., Christensen, H., & Gulliver, A. (2021b). A Brief Intervention To Increase Uptake And Adherence Of An Internet-Based Program For Depression And Anxiety (Enhancing Engagement With Psychosocial Interventions): Randomized Controlled Trial. *Journal of Medical Internet Research, 23*(7), e23029. https://doi.org/10.2196/23029

Bayer, J. K., Brown, A., Prendergast, L. A., Bretherton, L., Hiscock, H., Mihalopoulos, C., Nelson-Lowe, M., Gilbertson, T., Noone, K., Bischof, N., Beechey, C., Muliadi, F., & Rapee, R. M. (2022). Follow-Up Of The Cool Little Kids Translational Trial Into Middle Dhildhood. *Journal of Child Psychology and Psychiatry, 63*(1), 88-98. https://doi.org/10.1111/jcpp.13464

Bellairs-Walsh, I., Perry, Y., Krysinska, K., Byrne, S. J., Boland, A., Michail, M., Lamblin, M., Gibson, K. L., Lin, A., Li, T. Y., Hetrick, S., & Robinson, J. (2020). Best Practice When Working With Suicidal Behaviour And Self-Harm In Primary Care: A Qualitative Exploration Of Young People's Perspectives. *BMJ Open, 10*(10), e038855. https://doi.org/10.1136/bmjopen-2020-038855

Berman, A. L. (2018). Risk Factors Proximate To Suicide And Suicide Risk Assessment In The Context Of Denied Suicide Ideation. *Suicide and Life-Threatening Behavior, 48*(3), 340-352. https://doi.org/10.1111/sltb.12351

Bishop, L., Ransom, A., Laverty, M., & Gale, L. (2017). *Mental Health In Remote And Rural Communities*. Canberra: Royal Flying Doctor Service of Australia. https://www.aph.gov.au/DocumentStore.ashx?id=2c59a5b5-58bd-43ba-906e-948ecbf8a9d5&subId=566424

Blake, M., Waloszek, J. M., Schwartz, O., Raniti, M., Simmons, J. G., Blake, L., Murray, G., Dahl, R. E., Bootzin, R., Dudgeon, P., Trinder, J., & Allen, N. B. (2016). The SENSE Study: Post Intervention Effects Of A Randomized Controlled Trial Of A Cognitive-Behavioral And Mindfulness-Based Group Sleep Improvement Intervention Among At-Risk Adolescents. *Journal of Consulting and Clinical Psychology, 84*(12), 1039-1051. https://doi.org/10.1037/ccp0000142

Blignault, I., Saab, H., Woodland, L., & Comino, E. (2019). Evaluation Of The Acceptability And Clinical Utility Of An Arabic-Language Mindfulness CD In An Australian Community Setting. *Transcultural Psychiatry, 56*(3), 552-568. https://doi.org/10.1177/1363461519825880

Blignault, I., Saab, H., Woodland, L., & O'Callaghan, C. (2021a). Cultivating Mindfulness: Evaluation Of A Community-Based Mindfulness Program For Arabic-Speaking Women In Australia. *Current Psychology*. https://doi.org/10.1007/s12144-021-02146-z

Blignault, I., Saab, H., Woodland, L., Mannan, H., & Kaur, A. (2021b). Effectiveness Of A Community-Based Group Mindfulness Program Tailored For Arabic And Bangla-Speaking Migrants. *International Journal of Mental Health Systems, 15*(1), 32. https://doi.org/10.1186/s13033-021-00456-0

Blignault, I., Saab, H., Woodland, L., Giourgas, K., & Baddah, H. (2022). Promoting Mental Health And Wellbeing In Multicultural Australia: A Collaborative Regional Approach. *International Journal of Environmental Research and Public Health, 19*(5). https://doi.org/10.3390/ijerph19052723

Boardman, J., & Dave, S. (2020). Person-Centred Care And Psychiatry: Some Key Perspectives. *BJPsych International, 17*(3), 65-68. https://doi.org/10.1192/bji.2020.21

Bonabi, H., Müller, M., Ajdacic-Gross, V., Eisele, J., Rodgers, S., Seifritz, E., Rössler, W., & Rüsch, N. (2016). Mental Health Literacy, Attitudes To Help Seeking, And Perceived Need As Predictors Of Mental Health Service Use: A Longitudinal Study. *The Journal of Nervous and Mental Disease, 204*(4). https://doi.org/10.1097/nmd.0000000000000488

Borschmann, R., Carter, A, Butler, A., Southalan, L., Willoughby, M., Janca, E., & Kinner, S. A. (2020). *Interventions To Reduce Suicidal Thoughts And Behaviours In Individuals Who Have*. Produced for the National Suicide Prevention Adviser and the National Suicide Prevention Taskforce. https://www.suicidepreventionaust.org/wp-content/uploads/2020/11/SPA-review-Preventing-suicide-in-people-in-contact-with-the-justice-system-FINAL-1.pdf

Bradbury-Jones, C., Aveyard, H., Herber, O. R., Isham, L., Taylor, J., & O'Malley, L. (2021). Scoping Reviews: The PAGER Framework For Improving The Quality Of Reporting. *International Journal of Social Research Methodology*, 1-14. https://doi.org/10.1080/13645579.2021.1899596

Bryant, R. A., Dawson, K. S., Keyan, D., Azevedo, S., Yadav, S., Tran, J., Rawson, N., & Harvey, S. (2022). Effectiveness Of A Videoconferencing-Delivered Psychological Intervention For Mental Health Problems During COVID-19: A Proof-Of-Concept Randomized Clinical Trial. *Psychotherapy and Psychosomatics, 91*(1), 63-72. https://doi.org/10.1159/000520283

Calear, A. L., Christensen, H., Brewer, J., Mackinnon, A., & Griffiths, K. M. (2016). A Pilot Randomized Controlled Trial Of The e-Couch Anxiety And Worry Program In Schools. *Internet Interventions, 6*, 1-5. https://doi.org/10.1016/j.invent.2016.08.003

Castillo, E. G., Ijadi-Maghsoodi, R., Shadravan, S., Moore, E., Mensah, M. O., Docherty, M., Aguilera Nunez, M. G., Barcelo, N., Goodsmith, N., Halpin, L. E., Morton, I., Mango, J., Montero, A. E., Rahmanian Koushkaki, S., Bromley, E., Chung, B., Jones, F., Gabrielian, S., Gelberg, L., Greenberg, J. M., Kalofonos, I., Kataoka, S. H., Miranda, J., Pincus, H. A., Zima, B. T., & Wells, K. B. (2019). Community Interventions To Promote Mental Health And Social Equity. *Current Psychiatry Reports, 21*(5), 35-35. https://doi.org/10.1007/s11920-019-1017-0

Centers for Disease Control. (2021). *About Mental Health*. Retrieved 31 January from https://www.cdc.gov/mentalhealth/learn/index.htm

Chandler, D., & Munday, R. (2016). Lived Experience. In Oxford University Press (Ed. 2), *Oxford: A Dictionary of Media and Communication.* https://www.oxfordreference.com/view/10.1093/acref/9780191800986.001.0001/acref-9780191800986

Chen, J., Johnstone, K. M., & Kemps, E. (2022). A Randomised Controlled Trial Evaluating Two Universal Prevention Programs For Children: Building Resilience To Manage Worry. *Journal of Affective Disorders, 297*, 437-446. https://doi.org/10.1016/j.jad.2021.10.079

Christensen, H., Batterham, P. J., Gosling, J. A., Ritterband, L. M., Griffiths, K. M., Thorndike, F. P., Glozier, N., O'Dea, B., Hickie, I. B., & Mackinnon, A. J. (2016). Effectiveness Of An Online Insomnia

Program (Shuti) For Prevention Of Depressive Episodes (The Goodnight Study): A Randomised Controlled Trial. *Lancet Psychiatry, 3*(4), 333-341. https://doi.org/10.1016/s2215-0366(15)00536-2

Collins, D. A. J., Harvey, S. B., Lavender, I., Glozier, N., Christensen, H., & Deady, M. (2020). A Pilot Evaluation Of A Smartphone Application For Workplace Depression. *International Journal Of Environmental Research and Public Health, 17*(18). https://doi.org/10.3390/ijerph17186753

Commonwealth of Australia. (2017). *Fifth National Mental Health and Suicide Prevention Plan.* Commonwealth of Australia. https://www.mentalhealthcommission.gov.au/Monitoring-and-Reporting/Fifth-Plan

Commonwealth of Australia. (2017). *Royal Commission Into Institutional Responses To Child Sexual Abuse, Final Report: Making Institutions Child Safe*. Commonwealth of Australia. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQIDhAB&url=https%3A%2F%2Fclan.org.au%2Fwp-content%2Fuploads%2F2020%2F12%2Ffinal_report_-_volume_6_making_institutions_child_safe.pdf&usg=AOvVaw0RLiq9ckKU1OaXH4syqyg8

Commonwealth of Australia. (2018). *Accessibility And Quality Of Mental Health Services In Rural And Remote Australia*. Commonwealth of Australia. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj1tIyE0fH1AhVsF6YKHQ_bCKYQFnoECBcQAQ&url=https%3A%2F%2Fwww.aph.gov.au%2FParliamentary_Business%2FCommittees%2FSenate%2FCommunity_Affairs%2FMentalHealthServices%2F~%2Fmedia%2FCommittees%2Fclac_ctte%2FMentalHealthServices%2Freport.pdf&usg=AOvVaw2NH0nVO0A6Gc2CIrC6nFi3

Commonwealth of Australia. (2019). *Productivity Commission Draft Report Into Mental Health* (Vol 2). Commonwealth of Australia. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiP7tT_0fH1AhXPG6YKHSz6Bjk4FBAWegQIAxAB&url=https%3A%2F%2Fesf.com.au%2Fwp-content%2Fuploads%2F2020%2F05%2FPC-mental-health-vol.-2.pdf&usg=AOvVaw1PuOGl8kWnKb0ZG49F3Iug

Commonwealth of Australia. (2020). *Productivity Commission Inquiry Report Into Mental Health* (Vol 1). Commonwealth of Australia. https://www.pc.gov.au/inquiries/completed/mental-health/report

Commonwealth of Australia. (2021). *Preliminary Interim Report: Interim National Commissioner For Defence And Veteran Suicide Prevention*. Commonwealth of Australia. https://www.nationalcommissionerdvsp.gov.au/publications/interim-national-commissioner-defence-and-veteran-suicide-preventions-report

Community Affairs References Committee. (2018). *Accessibility And Quality Of Mental Health Services In Rural And Remote Australia*. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Community_Affairs/MentalHealthServices/Report

Cooper, R. (2020). *Bigger Role For Pharmacists In Mental Health Treatment*. Australian Pharmacist. https://www.australianpharmacist.com.au/bigger-role-for-pharmacists-mental-health-treatment/

Corscadden, L., Callander, E. J., & Topp, S. M. (2019). Who Experiences Unmet Need For Mental Health Services And What Other Barriers To Accessing Health Care Do They Face? Findings From Australia And Canada. *The International Journal of Health Planning and Management, 34*(2), 761-772. https://doi.org/10.1002/hpm.2733

Crane, M. F., Boga, D., Karin, E., Gucciardi, D. F., Rapport, F., Callen, J., & Sinclair, L. (2019). Strengthening Resilience In Military Officer Cadets: A Group-Randomized Controlled Trial Of Coping And Emotion Regulatory Self-Reflection Training. *Journal of Consulting and Clinical Psychology, 87*(2), 125-140. https://doi.org/10.1037/ccp0000356

Crane, M. F., Kho, M., Kangas, M., Griffin, B., Karin, E., Earl, J. K., & Harris, C. B. (2020). Strengthening Resilience In Over 50's: A Nested Clustered-Randomized Controlled Trial Of Adaptive Systematic Self-Reflection. *Anxiety, Stress, & Coping, 33*(6), 623-641. https://doi.org/10.1080/10615806.2020.1768375

Crawford, J., Wilhelm, K., & Proudfoot, J. (2019). Web-Based Benefit-Finding Writing For Adults With Type 1 Or Type 2 Diabetes: Preliminary Randomized Controlled Trial. *JMIR Diabetes, 4*(2), e13857. https://doi.org/10.2196/13857

Czyz, E. K., Horwitz, A. G., Arango, A., & King, C. A. (2019). Short-Term Change And Prediction Of Suicidal Ideation Among Adolescents: A Daily Diary Study Following Psychiatric Hospitalization. *Journal of Child Psychology and Psychiatry, 60*(7), 732-741. https://doi.org/10.1111/jcpp.12974

D'Cunha, N. M., McKune, A. J., Isbel, S., Kellett, J., Georgousopoulou, E. N., & Naumovski, N. (2019). Psychophysiological Responses In People Living With Dementia After An Art Gallery Intervention: An Exploratory Study. *Journal of Alzheimer's Disease, 72*(2), 549-562. https://doi.org/10.3233/jad-190784

Deady, M., Mills, K. L., Teesson, M., & Kay-Lambkin, F. (2016). An Online Intervention For Co-Occurring Depression And Problematic Alcohol Use In Young People: Primary Outcomes From A Randomized Controlled Trial. *Journal of Medical Internet Research, 18*(3), e71. https://doi.org/10.2196/jmir.5178

Deady, M., Johnston, D., Milne, D., Glozier, N., Peters, D., Calvo, R., & Harvey, S. (2018). Preliminary Effectiveness Of A Smartphone App To Reduce Depressive Symptoms In The Workplace: Feasibility And Acceptability Study. *JMIR Mhealth Uhealth, 6*(12), e11661. https://doi.org/10.2196/11661

Deady, M., Glozier, N., Calvo, R., Johnston, D., Mackinnon, A., Milne, D., Choi, I., Gayed, A., Peters, D., Bryant, R., Christensen, H., & Harvey, S. B. (2020). Preventing Depression Using A Smartphone App: A Randomized Controlled Trial. *Psychological Medicine, 52*(3), 457-466. https://doi.org/10.1017/s0033291720002081

Deans, C. L. (2021). Exploring The Impact Of A Large Gender-Sensitised Health Promotion Program: The Sons Of The West Program. *Public Health Research & Practice, 31*(1). https://doi.org/10.17061/phrp30012001

Dove, C., & Costello, S. (2017). Supporting Emotional Well-Being In Schools: A Pilot Study Into The Efficacy Of A Mindfulness-Based Group Intervention On Anxious And Depressive Symptoms In Children. *Advances in Mental Health, 15*(2), 172-182. https://doi.org/10.1080/18387357.2016.1275717

Dray, J., Bowman, J., Campbell, E., Freund, M., Hodder, R., Wolfenden, L., Richards, J., Leane, C., Green, S., Lecathelinais, C., Oldmeadow, C., Attia, J., Gillham, K., & Wiggers, J. (2017). Effectiveness Of A Pragmatic School-Based Universal Intervention Targeting Student Resilience Protective Factors In Reducing Mental Health Problems In Adolescents. *Journal of Adolescence, 57*, 74-89. https://doi.org/10.1016/j.adolescence.2017.03.009

Drew, R. J., Morgan, P. J., Collins, C. E., Callister, R., Kay-Lambkin, F., Kelly, B. J., & Young, M. D. (2021). Behavioral And Cognitive Outcomes Of An Online Weight Loss Program For Men With Low Mood: A Randomized Controlled Trial. *Annals of Behavioral Medicine*. https://doi.org/10.1093/abm/kaab109

Dudgeon, P., Derry, K. L., Mascall, C., & Ryder, A. (2022). Understanding Aboriginal Models Of Selfhood: The National Empowerment Project's Cultural, Social, And Emotional Wellbeing Program In Western Australia. *International Journal of Environmental Research and Public Health, 19*(7). https://doi.org/10.3390/ijerph19074078

Eather, N., Babic, M., Riley, N., Harris, N., Jung, M., Jeffs, M., Barclay, B., & Lubans, D. R. (2020). Integrating High-Intensity Interval Training Into The Workplace: The Work-HIIT Pilot RCT. *Scandinavian Journal of Medicine & Science in Sports, 30*(12), 2445-2455. https://doi.org/10.1111/sms.13811

Eather, N., Riley, N., Miller, A., Smith, V., Poole, A., Vincze, L., Morgan, P. J., & Lubans, D. R. (2019). Efficacy And Feasibility Of HIIT Training For University Students: The Uni-HIIT RCT. *Journal of Science and Medicine in Sport, 22*(5), 596-601. https://doi.org/10.1016/j.jsams.2018.11.016

Enticott, J., Dawadi, S., Shawyer, F., Inder, B., Fossey, E., Teede, H., Rosenberg, S., Ozols Am, I., & Meadows, G. (2022). Mental Health In Australia: Psychological Distress Reported In Six Consecutive Cross-Sectional National Surveys From 2001 To 2018. *Frontiers in Psychiatry, 13*, 815904. https://doi.org/10.3389/fpsyt.2022.815904

Falon, S. L., Karin, E., Boga, D., Gucciardi, D. F., Griffin, B., & Crane, M. F. (2021). A Clustered-Randomized Controlled Trial Of A Self-Reflection Resilience-Strengthening Intervention And Novel Mediators. *Journal of Occupational Health Psychology, 26*(1), 1-19. https://doi.org/10.1037/ocp0000268

Farrer, L. M., Gulliver, A., Katruss, N., Fassnacht, D. B., Kyrios, M., & Batterham, P. J. (2019). A Novel Multi-Component Online Intervention To Improve The Mental Health Of University Students: Randomised Controlled Trial Of The Uni Virtual Clinic. *Internet Interventions, 18*, 100276. https://doi.org/10.1016/j.invent.2019.100276

Fassnacht, D. B., Ali, K., van Agteren, J., Iasiello, M., Mavrangelos, T., Furber, G., & Kyrios, M. (2022). A Group-Facilitated, Internet-Based Intervention To Promote Mental Health And Well-Being In A Vulnerable Population Of University Students: Randomized Controlled Trial Of The Be Well Plan Program. *JMIR Mental Health, 9*(5), e37292. https://doi.org/10.2196/37292

Fortune, S., & Hetrick, S. (2022). Suicide risk assessments: Why Are We Still Relying On These A Decade After The Evidence Showed They Perform Poorly? *Australian & New Zealand Journal of Psychiatry*, 00048674221107316. https://doi.org/10.1177/00048674221107316

Fuller-Tyszkiewicz, M., Richardson, B., Little, K., Teague, S., Hartley-Clark, L., Capic, T., Khor, S., Cummins, R. A., Olsson, C. A., & Hutchinson, D. (2020). Efficacy Of A Smartphone App Intervention For Reducing Caregiver Stress: Randomized Controlled Trial. *JMIR Mental Health, 7*(7), e17541. https://doi.org/10.2196/17541

Gay and Lesbian Health Victoria, State of Victoria, & Our Watch. (2017). *Primary Prevention Of Family Violence Against People From LGBTI Communities*. Our Watch. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQIERAB&url=https%3A%2F%2Fmedia-cdn.ourwatch.org.au%2Fwp-content%2Fuploads%2Fsites%2F2%2F2019%2F11%2F07031955%2FPrimary-Prevention-of-FV-against-LGBTI-people-Report-Accessible-PDF.pdf&usg=AOvVaw0F-GSHlZ-Tsp--vt30mpme

Giallo, R., Evans, K., & Williams, L. A. (2018). A Pilot Evaluation Of 'Working Out Dads': Promoting Father Mental Health And Parental Self-Efficacy. *Journal of Reproductive and Infant Psychology, 36*(4), 421-433. https://doi.org/10.1080/02646838.2018.1472750

Giallo, R., Fogarty, A., Seymour, M., Skinner, L., Savopoulos, P., Bereznicki, A., Talevski, T., Ruthven, C., Bladon, S., Goldfeld, S., Brown, S. J., & Feinberg, M. (2021). Family Foundations To Promote Parent Mental Health And Family Functioning During The COVID-19 Pandemic In Australia: A Mixed Methods Evaluation. *Journal of Family Studies*, 1-20. https://doi.org/10.1080/13229400.2021.2019606

Ginn, S., & Horder, J. (2012). "One In Four" With A Mental Health Problem: The Anatomy Of A Statistic. *BMJ, 344*, e1302. https://doi.org/10.1136/bmj.e1302

Gold, C., Saarikallio, S., Crooke, A. H. D., & McFerran, K. S. (2017). Group Music Therapy As A Preventive Intervention For Young People At Risk: Cluster-Randomized Trial. *Journal of Music Therapy, 54*(2), 133-160. https://doi.org/10.1093/jmt/thx002

Grummitt, L. R., Debenham, J., Kelly, E., Barrett, E. L., Champion, K., Conrod, P., Teesson, M., & Newton, N. (2022). Selective Personality-Targeted Prevention Of Suicidal Ideation In Young Adolescents: Post Hoc Analysis Of Data Collected In A Cluster Randomised Controlled Trial. *The Medical Journal of Australia, 216*(10), 525-529. https://doi.org/10.5694/mja2.51536

Howells, K., Sivaratnam, C., Lindor, E., Hyde, C., McGillivray, J., Whitehouse, A., & Rinehart, N. (2020). Can Participation In A Community Organized Football Program Improve Social, Behavioural Functioning And Communication In Children With Autism Spectrum Disorder? A Pilot Study. *Journal of Autism and Developmental Disorders, 50*(10), 3714-3727. https://doi.org/10.1007/s10803-020-04423-5

Institute of Health Metrics and Evaluation. (2019). *Global Health Data Exchange (GHDx).* Retrieved on 28 July 2022 from https://vizhub.healthdata.org/gbd-results/

Johnson, C., & Wade, T. (2021). Acceptability And Effectiveness Of An 8-Week Mindfulness Program In Early- And Mid-Adolescent School Students: A Randomised Controlled Trial. *Mindfulness, 12*(10), 2473-2486. https://doi.org/10.1007/s12671-021-01716-3

Johnstone, K. M., Middleton, T., Kemps, E., & Chen, J. (2020). A Pilot Investigation Of Universal School-Based Prevention Programs For Anxiety And Depression Symptomology In Children: A Randomized Controlled Trial. *Journal of Clinical Psychology, 76*(7), 1193-1216. https://doi.org/10.1002/jclp.22926

Jordans, M. J. D., Luitel, N. P., Lund, C., & Kohrt, B. A. (2020). Evaluation Of Proactive Community Case Detection To Increase Help Seeking For Mental Health Care: A Pragmatic Randomized Controlled Trial. *Psychiatric Services, 71*(8), 810-815. https://doi.org/10.1176/appi.ps.201900377

Kahl, B. L., Miller, H. M., Cairns, K., Giniunas, H., & Nicholas, M. (2020). Evaluation Of Reachout.Com, An Unstructured Digital Youth Mental Health Intervention: Prospective Cohort Study. *JMIR Mental Health, 7*(10), e21280. https://doi.org/10.2196/21280

Keyes, K. M., Gary, D., O'Malley, P. M., Hamilton, A., & Schulenberg, J. (2019). Recent Increases In Depressive Symptoms Among US Adolescents: Trends From 1991 To 2018. *Social Psychiatry and Psychiatric Epidemiology, 54*(8), 987-996. https://doi.org/10.1007/s00127-019-01697-8

Khoury, E. (2019). Recovery Attitudes And Recovery Practices Have An Impact On Psychosocial Outreach Interventions In Community Mental Health Care. *Frontiers in Psychiatry, 10*. https://doi.org/10.3389/fpsyt.2019.00560

Kleiman, E. M., & Nock, M. K. (2018). Real-Time Assessment Of Suicidal Thoughts And Behaviors. *Current Opinion in Psychology, 22*, 33-37. https://doi.org/10.1016/j.copsyc.2017.07.026

Law, K. H., Dimmock, J. A., Guelfi, K. J., Nguyen, T., Bennett, E., Gibson, L., Tan, X. H., & Jackson, B. (2021). A Peer Support Intervention For First-Time Mothers: Feasibility And Preliminary Efficacy Of The Mummy Buddy Program. *Women and Birth, 34*(6), 593-605. https://doi.org/10.1016/j.wombi.2020.10.009

Law Council of Australia. (2020). *The Criminal Justice System – Issues Paper*. Produced for The Royal Commission Into Violence, Abuse, Negelect And Exploitation Of People With Disability. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwij-aHO0fH1AhWNKqYKHWw8B4Y4ChAWegQIDBAB&url=https%3A%2F%2Fdisability.royalcommission.gov.au%2Fsystem%2Ffiles%2Fsubmission%2FISS.001.00370_1.PDF&usg=AOvVaw1mdDCTWrmRog67W48bYal6

Leggett, A. N., Conroy, D. A., Blow, F. C., & Kales, H. C. (2018). Bright Light As A Preventive Intervention For Depression In Late-Life: A Pilot Study On Feasibility, Acceptability, And Symptom Improvement. *American Journal of Geriatric Psychiatry, 26*(5), 598-602. https://doi.org/10.1016/j.jagp.2017.11.007

Li, I., Chen, A. Z., Newby, J. M., Kladnitski, N., Haskelberg, H., Millard, M., & Mahoney, A. (2022a). The Uptake And Outcomes Of An Online Self-Help Mindfulness Programme During COVID-19. *Clinical Psychologist*, 1-14. https://doi.org/10.1080/13284207.2022.2045866

Li, I., Millard, M., Haskelberg, H., Hobbs, M., Luu, J., & Mahoney, A. (2022b). COVID-19 Related Differences In The Uptake And Effects Of Internet-Based Cognitive Behavioural Therapy For Symptoms Of

Obsessive-Compulsive Disorder. *Behavioural and Cognitive Psychotherapy, 50*(2), 219-236. https://doi.org/10.1017/s1352465821000448

Linde, K., Treml, J., Steinig, J., Nagl, M., & Kersting, A. (2017). Grief Interventions For People Bereaved By Suicide: A Systematic Review. *PLoS ONE, 12*(6), e0179496. https://doi.org/10.1371/journal.pone.0179496

Marshall, J. M., Dunstan, D. A., & Bartik, W. (2021). Smartphone Psychological Therapy During COVID-19: A Study On The Effectiveness Of Five Popular Mental Health Apps For Anxiety And Depression. *Frontiers in Psychology, 12*. https://www.frontiersin.org/articles/10.3389/fpsyg.2021.775775

Martin, G., Swannell, S., Harrison, J., Hazell, P., & Taylor, A. (2010). *The Australian National Epidemiological Study of Self-Injury (ANESSI)*. Centre for Suicide Prevention Studies: Brisbane, Australia.

McKenzie, R. J., Chambers, T. P., Nicholson-Perry, K., Pilgrim, J., & Ward, P. B. (2021). "Feels Good To Get Wet": The Unique Affordances Of Surf Therapy Among Australian Youth. *Frontiers in Psychology, 12*, 721238. https://doi.org/10.3389/fpsyg.2021.721238

McKeon, G., Tiedemann, A., Sherrington, C., Teasdale, S., Mastrogiovanni, C., Wells, R., Steel, Z., & Rosenbaum, S. (2021). Feasibility Of An Online, Mental Health-Informed Lifestyle Program For People Aged 60+ Years During The COVID-19 Pandemic. *Health Promotion Journal of Australia*. https://doi.org/10.1002/hpja.538

Macintyre, V. G, Mansell, W., Pratt, D., & Tai, S. J. (2021). The Psychological Pathway To Suicide Attempts: A Strategy Of Control Without Awareness. *Frontiers in Psychology. 12,* 588683. https://doi.org/10.3389/fpsyg.2021.588683

Metcalf, O., O'Donnell, M. L., Forbes, D., Bar-Haim, Y., Hodson, S., Bryant, R. A., McFarlane, A. C., Morton, D., Poerio, L., Naim, R., & Varker, T. (2022). Attention-Control Training As An Early Intervention For Veterans Leaving The Military: A Pilot Randomized Controlled Trial. *Journal of Traumatic Stress*. https://doi.org/10.1002/jts.22828

Millner, A. J., Lee, M. D., & Nock, M. K. (2015). Single-Item Measurement Of Suicidal Behaviors: Validity And Consequences Of Misclassification. *PLoS One, 10*(10), e0141606. https://doi.org/10.1371/journal.pone.0141606

Mok, K., Chen, N., Torok, M., McGillivray, L., Zbukvic, I., & Shand, F. (2021). Factors Associated With Help-Seeking For Emotional Or Mental Health Problems In Community Members At Risk Of Suicide. *Advances in Mental Health, 19*(3), 236-246. https://doi.org/10.1080/18387357.2020.1770109

Mrozynski, H., & Kuhn, E. (2022). Reasoning For Autonomous Suicide? A Qualitative Approach To Pre-Suicidal Decision-Making. *Social Science & Medicine (1982), 296*, 114764. https://doi.org/10.1016/j.socscimed.2022.114764

Murawski, B., Plotnikoff, R. C., Rayward, A. T., Oldmeadow, C., Vandelanotte, C., Brown, W. J., & Duncan, M. J. (2019). Efficacy Of An m-Health Physical Activity And Sleep Health Intervention For Adults: A Randomized Waitlist-Controlled Trial. *American Journal of Preventive Medicine, 57*(4), 503-514. https://doi.org/10.1016/j.amepre.2019.05.009

Naghavi, M. (2019). Global, Regional, And National Burden Of Suicide Mortality 1990 To 2016: Systematic Analysis For The Global Burden Of Disease Study 2016. *BMJ, 364*, l94. https://doi.org/10.1136/bmj.l94

Newton, N. C., Stapinski, L., Teesson, M., Slade, T., Champion, K. E., Barrett, E. L., Birrell, L., Kelly, E., Mather, M., & Conrod, P. J. (2020). Evaluating The Differential Effectiveness Of Social Influence And Personality-Targeted Alcohol Prevention On Mental Health Outcomes Among High-Risk Youth: A Novel Cluster Randomised Controlled Factorial Design Trial. *Australia & New Zealand Journal of Psychiatry, 54*(3), 259-271. https://doi.org/10.1177/0004867419877948

National Health and Medical Research Council. (2009). *NHMRC Levels Of Evidence And Grades For Recommendations For Developers Of Guidelines*. NHMRC. https://www.nhmrc.gov.au/sites/default/files/images/NHMRC%20Levels%20and%20Grades%20(2009).pdf

National Mental Health Commission. (n.d.). Additional Information. In *Vision 2030* (pp. 54). Australian Government.

O’Dea, B., King, C., Subotic-Kerry, M., Achilles, M. R., Cockayne, N., & Christensen, H. (2019). Smooth Sailing: A Pilot Study Of An Online, School-Based, Mental Health Service For Depression And Anxiety. *Frontiers in Psychiatry, 10*. https://doi.org/10.3389/fpsyt.2019.00574

O'Dea, B., Han, J., Batterham, P. J., Achilles, M. R., Calear, A. L., Werner-Seidler, A., Parker, B., Shand, F., & Christensen, H. (2020). A Randomised Controlled Trial Of A Relationship-Focussed Mobile Phone Application For Improving Adolescents' Mental Health. *Journal of Child Psychology and Psychiatry, 61*(8), 899-913. https://doi.org/10.1111/jcpp.13294

O'Dea, B., Subotic-Kerry, M., King, C., Mackinnon, A. J., Achilles, M. R., Anderson, M., Parker, B., Werner-Seidler, A., Torok, M., Cockayne, N., Baker, S. T. E., & Christensen, H. (2021a). A Cluster Randomised Controlled Trial Of A Web-Based Youth Mental Health Service In Australian Schools.

The Lancet Regional Health Western Pacific, 12, 100178. https://doi.org/10.1016/j.lanwpc.2021.100178

O'Dea, B., King, C., Achilles, M. R., Calear, A. L., & Subotic-Kerry, M. (2021b). Delivering A Digital Mental Health Service In Australian Secondary Schools: Understanding School Counsellors' And Parents' Experiences. *Health Services Insights, 14*, 11786329211017689. https://doi.org/10.1177/11786329211017689

Ogloff, J. R. P., Rose, A., Meyer, D., Benson, S., Shepherd, S. M., Pfeifer, J., Louise, S., Trounson, J., Skues, J., & Daffern, M. (2022). The Impact Of A Short-Term Mental Health Intervention Delivered In An Australian Prison: A Multi-Cultural Comparison. *International Journal of Forensic Mental Health*, 1-12. https://doi.org/10.1080/14999013.2022.2041772

Ombudsman Western Australia. (2020). *Preventing Suicide By Children And Young People 2020, Volume 1: Ombudsman's Foreword And Executive Summary*. Ombudsman Western Australia. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiP7tT_0fH1AhXPG6YKHSz6Bjk4FBAWegQIERAB&url=https%3A%2F%2Fombudsman.wa.gov.au%2FPublications%2FDocuments%2Freports%2FSuicide-by-young-people%2FOmbudsman-WA-Suicide-by-children-and-young-people-Report-2020-All-Volumes.pdf&usg=AOvVaw3yXHLk_2FhySQ2u6tXWBf-

O'Moore, K. A., Newby, J. M., Andrews, G., Hunter, D. J., Bennell, K., Smith, J., & Williams, A. D. (2018). Internet Cognitive-Behavioral Therapy For Depression In Older Adults With Knee Osteoarthritis: A Randomized Controlled Trial. *Arthritis Care & Research, 70*(1), 61-70. https://doi.org/10.1002/acr.23257

Orri, M., Vergunst, F., Turecki, G., Galera, C., Latimer, E., Bouchard, S., Domond, P., Vitaro, F., Algan, Y., Tremblay, R. E., Geoffroy, M. C., & Côté, S. M. (2022). Long-Term Economic And Social Outcomes Of Youth Suicide Attempts. *The British Journal of Psychiatry, 220*(2), 79-85. https://doi.org/10.1192/bjp.2021.133

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., Stewart, L. A., Thomas, J., Tricco, A. C., Welch, V. A., Whiting, P., & Moher, D. (2021). The PRISMA 2020 Statement: An Updated Guideline For Reporting Systematic Reviews. *BMJ, 372*, n71. https://doi.org/10.1136/bmj.n71

Pai, N., & Vella, S. (2020). Does The Australian Mental Health System Provide Mental Health Or Psychiatric Care? Returning To Engel 40 Years On. *Australasian Psychiatry, 29*(1), 35-36. https://doi.org/10.1177/1039856220933128

Parker, A., Dash, S., Bourke, M., Patten, R., Craike, M., Baldwin, P., Hosking, W., Levinger, I., Apostolopoulos, V., de Courten, M., Sharples, J., Naslund, M., Stavropoulos, V., Woessner, M., Sonn, C., Stansen, C., & Pascoe, M. (2022). A Brief, Daily, Online Mental Health And Well-Being Intervention For University Staff During The COVID-19 Pandemic: Program Description And Outcomes Using A Mixed Methods Design. *JMIR Formative Research, 6*(2), e35776. https://doi.org/10.2196/35776

Patalay, P., & Fitzsimons, E. (2018). Development And Predictors Of Mental Ill-Health And Wellbeing From Childhood To Adolescence. *Social Psychiatry and Psychiatric Epidemiology, 53*(12), 1311-1323. https://doi.org/10.1007/s00127-018-1604-0

Ponce, A. N., & Rowe, M. (2018). Citizenship And Community Mental Health Care. *American Journal of Community Psychology, 61*(1-2), 22-31. https://doi.org/https://doi.org/10.1002/ajcp.12218

Rasmussen, M. K., Donoghue, D. A., & Sheehan, N. W. (2018). Suicide /Self-Harm-Risk Reducing Effects Of An Aboriginal Art Program For Aboriginal Prisoners. *Advances in Mental Health, 16*(2), 141-151. https://doi.org/10.1080/18387357.2017.1413950

Rees, C. S., Craigie, M. A., Slatyer, S., Crawford, C., Bishop, M., McPhee, E., & Hegney, D. G. (2020). Pilot Study Of The Effectiveness Of A Mindful Self-Care And Resiliency Program For Rural Doctors In Australia. *Australian Journal of Rural Health, 28*(1), 22-31. https://doi.org/https://doi.org/10.1111/ajr.12570

Rehm, J., & Shield, K. D. (2019). Global Burden Of Disease And The Impact Of Mental And Addictive Disorders. *Current Psychiatry Reports, 21*(2), 10. https://doi.org/10.1007/s11920-019-0997-0

Roberts, C. M., Kane, R. T., Rooney, R. M., Pintabona, Y., Baughman, N., Hassan, S., Cross, D., Zubrick, S. R., & Silburn, S. R. (2018). Efficacy Of The Aussie Optimism Program: Promoting Pro-Social Behavior And Preventing Suicidality In Primary School Students. A Randomised-Controlled Trial. *Frontiers in Psychology, 8*, 1392-1392. https://doi.org/10.3389/fpsyg.2017.01392

Rosen, A., Gill, N. S., & Salvador-Carulla, L. (2020). The Future Of Community Psychiatry And Community Mental Health Services. *Current Opinion in Psychiatry, 33*(4). https://doi.org/10.1097/yco.0000000000000620

Ruocco, S., Freeman, N. C., & McLean, L. A. (2018). Learning To Cope: A CBT Evaluation Exploring Self-Reported Changes In Coping With Anxiety Among School Children Aged 5–7 Years. *The Educational and Developmental Psychologist, 35*(2), 67-87. https://doi.org/10.1017/edp.2018.8

Szalavitz, M., & Perry, B. D. (2011). *Born For Love: Why Empathy Is Essential—And Endangered*. Harper Business.

Sanatkar, S., Baldwin, P. A., Huckvale, K., Clarke, J., Christensen, H., Harvey, S., & Proudfoot, J. (2019). Using Cluster Analysis To Explore Engagement And e-Attainment As Emergent Behavior In Electronic Mental Health. *Journal of Medical Internet Research, 21*(11), e14728. https://doi.org/10.2196/14728

Savaglio, M., Yap, M. B. H., O'Donnell, R., & Skouteris, H. (2022). Targeted Community-Based Programmes For Children's Mental Health: A Systematic Review And Meta-Analysis Of The Australian Literature. *Australian & New Zealand Journal of Psychiatry*, 00048674221124506. https://doi.org/10.1177/00048674221124506

Sharrock, M. J., Mahoney, A. E. J., Haskelberg, H., Millard, M., & Newby, J. M. (2021). The Uptake And Outcomes Of Internet-Based Cognitive Behavioural Therapy For Health Anxiety Symptoms During The COVID-19 Pandemic. *Journal of Anxiety Disorders, 84*, 102494. https://doi.org/10.1016/j.janxdis.2021.102494

Singh, N., Minaie, M. G., Skvarc, D. R., & Toumbourou, J. W. (2019). Impact Of A Secondary School Depression Prevention Curriculum On Adolescent Social-Emotional Skills: Evaluation Of The Resilient Families Program. *Journal of Youth and Adolescence, 48*(6), 1100-1115. https://doi.org/10.1007/s10964-019-00992-6

Slewa-Younan, S., McKenzie, M., Thomson, R., Smith, M., Mohammad, Y., & Mond, J. (2020). Improving The Mental Wellbeing Of Arabic Speaking Refugees: An Evaluation Of A Mental Health Promotion Program. *BMC Psychiatry, 20*(1), 314. https://doi.org/10.1186/s12888-020-02732-8

Smith, J., Cvejic, E., Lal, T. J., Fisher, A., Tracy, M., & McCaffery, K. J. (2022). Impact Of Alternative Terminology For Depression On Help-Seeking Intention: A Randomized Online Trial. *J Clinical Psychology*. https://doi.org/10.1002/jclp.23410

Snodgrass, W. J., Rayner, V., Rice, S. M., Purcell, R., & Bowers, J. (2020). Evaluation Of A Culturally Sensitive Social And Emotional Well-Being Program For Aboriginal And Torres Strait Islanders. *Australian Journal of Rural Health, 28*(4), 327-337. https://doi.org/https://doi.org/10.1111/ajr.12656

Southalan, L., Carter, A., Meurk, C., Heffernan, E., Borschmann, R., Waterson, E., Young, J., & Kinner, S. (2020). *Mapping The Forensic Mental Health Policy Ecosystem In Australia: A National Audit Of Strategies, Policies And Plans*. Produced for the National Mental Health Commission. https://mspgh.unimelb.edu.au/__data/assets/pdf_file/0011/3487493/NMHC-audit-final-24.01.20.pdf

State of Victoria. (2017). *State Of Victoria's Children 2017: A Focus On Health And Wellbeing*. State of Victoria. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQIEBAB&url=https%3A%2F%2Fwww.education.vic.gov.au%2FDocuments%2Fabout%2Fresearch%2Fsovc-2017-report.docx&usg=AOvVaw3RZlaLvKvKReaz_-ap8xs5

State of Victoria. (2021). *Royal Commission Into Victoria's Mental Health System, Final Report, Volume 3: Promoting Inclusion And Addressing Inequities*. Parl Paper No. 202, Session 2018–21 (document 4 of 6).

Steel, Z., Marnane, C., Iranpour, C., Chey, T., Jackson, J. W., Patel, V., & Silove, D. (2014). The Global Prevalence Of Common Mental Disorders: A Systematic Review And Meta-Analysis 1980-2013. *International Journal of Epidemiology, 43*(2), 476-493. https://doi.org/10.1093/ije/dyu038

Thornicroft, G., Deb, T., & Henderson, C. (2016). Community Mental Health Care Worldwide: Current Status And Further Developments. *World Psychiatry, 15*(3), 276-286. https://doi.org/10.1002/wps.20349

Tighe, J., Shand, F., McKay, K., McAlister, T. J., Mackinnon, A., & Christensen, H. (2020). Usage And Acceptability Of The iBobbly App: Pilot Trial For Suicide Prevention In Aboriginal And Torres Strait Islander Youth. *JMIR Mental Health, 7*(12), e14296. https://doi.org/10.2196/14296

Torok, M., Han, J., McGillivray, L., Wong, Q., Werner-Seidler, A., O'Dea, B., Calear, A., & Christensen, H. (2022). The Effect Of A Therapeutic Smartphone Application On Suicidal Ideation In Young Adults: Findings From A Randomized Controlled Trial In Australia. *PLOS Medicine, 19*(5), e1003978. https://doi.org/10.1371/journal.pmed.1003978

Tracey, D., Gray, T., Truong, S., & Ward, K. (2018). Combining Acceptance And Commitment Therapy With Adventure Therapy To Promote Psychological Wellbeing For Children At-Risk. *Frontiers in Psychology, 9*, 1565. https://doi.org/10.3389/fpsyg.2018.01565

Tyndall, J. (2010). AACODS Checklist For Appraising Grey Literature. https://dspace.flinders.edu.au/jspui/bitstream/2328/3326/4/AACODS_Checklist.pdf

Van Spijker, B. A., Werner-Seidler, A., Batterham, P. J., Mackinnon, A., Calear, A. L., Gosling, J. A., Reynolds, J., Kerkhof, A. J., Solomon, D., Shand, F., & Christensen, H. (2018). Effectiveness Of A Web-Based Self-Help Program For Suicidal Thinking In An Australian Community Sample: Randomized Controlled Trial. *Journal of Medical Internet Research, 20*(2), e15. https://doi.org/10.2196/jmir.8595

Van Spijker, B. A., Salinas-Perez, J. A., Mendoza, J., Bell, T., Bagheri, N., Furst, M. A., Reynolds, J., Rock, D., Harvey, A., Rosen, A., & Salvador-Carulla, L. (2019). Service Availability And Capacity In Rural Mental Health In Australia: Analysing Gaps Using An Integrated Mental Health Atlas. *Australian & New Zealand Journal of Psychiatry, 53*(10), 1000-1012. https://doi.org/10.1177/0004867419857809

Vella, E., & McIver, S. (2019). Reducing Stress And Burnout In The Public-Sector Work Environment: A Mindfulness Meditation Pilot Study. *Health Promotion Journal of Australia, 30*(2), 219-227. https://doi.org/10.1002/hpja.192

Veritas Health Innovation. *Covidence Systematic Review Software.* In www.covidence.org

Viskovich, S., & Pakenham, K. I. (2020). Randomized Controlled Trial Of A Web-Based Acceptance And Commitment Therapy (ACT) Program To Promote Mental Health In University Students. *Journal of Clinical Psychology, 76*(6), 929-951. https://doi.org/10.1002/jclp.22848

Visvalingam, S., McHardy, H. L., Norder, S. J., Magson, N. R., & Norberg, M. M. (2022). A Mixed Methods Study Of An Online Intervention To Reduce Perfectionism. *Current Psychology*, 1-16. https://doi.org/10.1007/s12144-022-02953-y

Wicks, J. M., Cubillo, C., Moss, S. A., Skinner, T., & Schumann, B. (2018). Intensive Child-Centered Play Therapy In A Remote Australian Aboriginal Community. *International Journal of Play Therapy, 27*(4), 242-255. https://doi.org/10.1037/pla0000075

Wiens, K., Bhattarai, A., Pedram, P., Dores, A., Williams, J., Bulloch, A., & Patten, S. (2020). A Growing Need For Youth Mental Health Services In Canada: Examining Trends In Youth Mental Health From 2011 To 2018. *Epidemiology and Psychiatric Sciences, 29*, e115. https://doi.org/10.1017/S2045796020000281

Wilson, E. (2021). Novel Solutions To Student Problems: A Phenomenological Exploration Of A Single Session Approach To Art Therapy With Creative Arts University Students. *Frontiers in Psychology, 11*. https://doi.org/10.3389/fpsyg.2020.600214

World Health Organization. (2015). *WHO Global Strategy On People-Centred And Integrated Health Services: Interim Report*. WHO. https://apps.who.int/iris/handle/10665/155002

World Health Organization, & Calouste Gulbenkian Foundation. (2014). *Social Determinants Of Mental Health*. WHO. https://apps.who.int/iris/bitstream/handle/10665/112828/9789241506809_eng.pdf

Wright, K. M., Roberts, R., & Proeve, M. J. (2019). Mindfulness-Based Cognitive Therapy For Children (MBCT-C) For Prevention Of Internalizing Difficulties: A Small Randomized Controlled Trial With Australian Primary School Children. *Mindfulness, 10*(11), 2277-2293. https://doi.org/10.1007/s12671-019-01193-9

Yap, M. B. H., Mahtani, S., Rapee, R. M., Nicolas, C., Lawrence, K. A., Mackinnon, A., & Jorm, A. F. (2018). A Tailored Web-Based Intervention To Improve Parenting Risk And Protective Factors For Adolescent Depression And Anxiety Problems: Postintervention Findings From A Randomized Controlled Trial. *Journal of Medical Internet Research, 20*(1), e17-e17. https://doi.org/10.2196/jmir.9139

Young, C. L., Mohebbi, M., Staudacher, H., Berk, M., Jacka, F. N., & O'Neil, A. (2021). Assessing The Feasibility Of An M-Health Intervention For Changing Diet Quality And Mood In Individuals With Depression: The My Food & Mood Program. *International Review of Psychiatry, 33*(3), 266-279. https://doi.org/10.1080/09540261.2020.1854193

Appendix 1: Full Search Strategy

Name of database platform	Title of the database searched	Database date range	Complete search strategy
Web of Science	Medline	1950-present	Query #1 MHX=(suicide OR suicidal ideation OR suicide, attempted OR mental disorders OR mental health) AND MHX=(Community mental health services OR community health services OR mental health services OR early intervention (education) OR Preventive health services OR health services OR health plan implementation OR health promotion OR pilots OR pilot projects) AND MHX=(Program evaluation OR Evaluation studies as topic OR Health services research OR evaluation studies) Query #2 (((TS=(Suicid* OR suicide prevention OR mental health OR mental disorder OR mental disorders OR depress* OR anxiety OR psychiat*)) AND TS=(interven* OR programme OR program OR service OR project OR campaign OR implement* OR intervention study OR prevent* OR mental health promotion OR pilot project)) AND TS=(effectiveness OR efficacy OR benefit* OR outcome* OR trial* OR evaluat*)) Query #3 MHX=(Australia OR Western Australia OR South Australia OR New South Wales OR Victoria OR Tasmania OR Northern Territory OR Queensland) OR TS=(Australia* OR New South Wales OR Victoria OR Queensland OR Western Australia OR South Australia OR Tasmania OR Northern Territory OR Melbourne OR Sydney OR Canberra)

Appendix 1: Full Search Strategy

Name of database platform	Title of the database searched	Database date range	Complete search strategy
			Query #4 (#1 OR #2) AND #3
Web of Science	Social Sciences Citation Index	1900-present	Query #1 (((TS=(Suicid* OR suicide prevention OR mental health OR mental disorder OR mental disorders OR depress* OR anxiety OR psychiat*)) AND TS=(interven* OR programme OR program OR service OR project OR campaign OR implement* OR intervention study OR prevent* OR mental health promotion OR pilot project)) AND TS=(effectiveness OR efficacy OR benefit* OR outcome* OR trial* OR evaluat*)) Query #2 TS=(Australia* OR New South Wales OR Victoria OR Queensland OR Western Australia OR South Australia OR Tasmania OR Northern Territory OR Melbourne OR Sydney OR Canberra) Query #3 #1 AND #2
Ovid	Embase classic + Embase	1947 to present	Query #1 exp suicide attempt/ or exp suicide/ or exp suicidal ideation/ or exp mental health/ or exp mental disease/ Query #2 exp community mental health service/ or exp mental health/ or exp community care/ or exp mental health service/ or exp community mental health/ or exp community mental health center/ or exp early intervention/ or exp preventive health service/ or exp health service/ or exp health promotion/ or exp pilot study/

Appendix 1: Full Search Strategy

Name of database platform	Title of the database searched	Database date range	Complete search strategy
			Query #3 exp program evaluation/ or exp evaluation study/ or exp evaluation study/ Query #4 1 and 2 and 3 Query #5 (Suicid* or suicide prevention or mental health or mental disorder or mental disorders or depress* or anxiety or psychiat*).tw. Query #6 (interven* or programme or program or service or project or campaign or implement* or intervention study or prevent* or mental health promotion or pilot project).tw. Query #7 (effectiveness or efficacy or benefit* or outcome* or trial* or evaluat*).tw. Query #8 5 and 6 and 7 Query #9 4 or 8 Query #10

Appendix 1: Full Search Strategy

Name of database platform	Title of the database searched	Database date range	Complete search strategy
			(Australia* or New South Wales or Victoria or Queensland or Western Australia or South Australia or Tasmania or Northern Territory or Melbourne or Sydney or Canberra).tw. Query #11 exp South Australia/ or exp Australia/ or "Australia and New Zealand"/ or exp Western Australia/ or exp New South Wales/ or exp Victoria/ or exp Queensland/ or exp Tasmania/ or exp Northern Territory/ Query #12 10 or 11 Query #13 9 and 12
EBSCOhost	CINAHL Plus	1937-present	Query #1 (MH "Suicide+") OR (MH "Suicide, Attempted") OR (MH "Suicidal Ideation") OR (MH "Suicide Prevention (Iowa NIC)") OR (MH "Mental Health") OR (MH "Mental Disorders+") Query #2 (MH "Community Mental Health Services+") OR (MH "Community Health Services+") OR (MH "Mental Health Services+") OR (MH "Early Intervention+") OR (MH "Preventive Health Care+") OR (MH "Health Services+") OR (MH "Health Promotion+") OR (MH "Pilot Studies") OR (MH "Pilots") Query #3 (MH "Program Evaluation") OR (MH "Evaluation Research+") OR (MH "Health Services Research+")

Appendix 1: Full Search Strategy

Name of database platform	Title of the database searched	Database date range	Complete search strategy
			Query #4
			S1 AND S2 AND S3
			Query #5
			TI (Suicid* OR "suicide prevention" OR "mental health" OR "mental disorder" OR "mental disorders" OR depress* OR anxiety OR psychiat*) OR AB (Suicid* OR "suicide prevention" OR "mental health" OR "mental disorder" OR "mental disorders" OR depress* OR anxiety OR psychiat*)
			Query #6
			TI (interven* OR programme OR program OR service OR project OR campaign OR implement* OR "intervention study" OR prevent* OR "mental health promotion" OR "pilot project") OR AB (interven* OR programme OR program OR service OR project OR campaign OR implement* OR "intervention study" OR prevent* OR "mental health promotion" OR "pilot project")
			Query #7
			TI (effectiveness OR efficacy OR benefit* OR outcome* OR trial* OR evaluat*) OR AB (effectiveness OR efficacy OR benefit* OR outcome* OR trial* OR evaluat*)
			Query #8
			S5 AND S6 AND S7
			Query #9
			S4 OR S8

Appendix 1: Full Search Strategy

Name of database platform	Title of the database searched	Database date range	Complete search strategy
			Query #10 (MH "Australia+") OR (MH "Western Australia") OR (MH "South Australia") OR (MH "New South Wales") OR (MH "Victoria") OR (MH "Tasmania") OR (MH "Tasmania") OR (MH "Northern Territory") OR (MH "Queensland") OR TI (Australia* OR "New South Wales" OR Victoria OR Queensland OR "Western Australia" OR "South Australia" OR Tasmania OR "Northern Territory" OR Melbourne OR Sydney OR Canberra) OR AB (Australia* OR "New South Wales" OR Victoria OR Queensland OR "Western Australia" OR "South Australia" OR Tasmania OR "Northern Territory" OR Melbourne OR Sydney OR Canberra) Query #11 S9 AND S10
Informit	Aboriginal and Torres Strait Islander Health Baibliography	1900-present	[All Fields: suicid* OR All Fields: 'suicide prevention' OR All Fields: 'mental health' OR All Fields: 'mental disorder' OR All Fields: 'mental disorders' OR All Fields: depress* OR All Fields: anxiety OR All Fields: psychiat*] AND [All Fields: interven* OR All Fields: programme OR All Fields: program OR All Fields: service OR All Fields: project OR All Fields: campaign OR All Fields: implement* OR All Fields: 'intervention study' OR All Fields: prevent* OR All Fields: 'mental health promotion' OR All Fields: 'pilot project'] AND [All Fields: effectiveness OR All Fields: efficacy OR All Fields: benefit* OR All Fields: outcome* OR All Fields: trial* OR All Fields: evaluat*]

Appendix 1: Full Search Strategy

Name of database platform	Title of the database searched	Database date range	Complete search strategy
Elsevier	Scopus	1788–present	(((TITLE-ABS-KEY (suicid* OR "suicide prevention" OR "mental health" OR "mental disorder" OR "mental disorders" OR depress* OR anxiety OR psychiat*) AND TITLE-ABS-KEY (interven* OR programme OR program OR service OR project OR campaign OR implement* OR "intervention study" OR prevent* OR "mental health promotion" OR "pilot project") AND TITLE-ABS-KEY (effectiveness OR efficacy OR benefit* OR outcome* OR trial* OR evaluat*) AND TITLE-ABS-KEY (australia* OR "New South Wales" OR victoria OR queensland OR "Western Australia" OR "South Australia" OR tasmania OR "Northern Territory" OR melbourne OR sydney OR canberra))) OR ((INDEXTERMS (suicide OR "suicidal ideation" OR "suicide, attempted" OR "mental disorders" OR "mental health")) AND (INDEXTERMS ("Community mental health services" OR "community health services" OR "mental health services" OR "early intervention" (education) OR "Preventive health services" OR "health services" OR "health plan implementation" OR "health promotion" OR pilots OR "pilot projects")) AND (INDEXTERMS ("Program evaluation" OR "Evaluation studies as topic" OR "Health services research" OR "evaluation studies")))) AND ((INDEXTERMS (australia OR "Western Australia" OR "South Australia" OR "New South Wales" OR victoria OR tasmania OR "Northern Territory" OR queensland)) OR (TITLE-ABS-KEY (australia* OR "New South Wales" OR victoria OR queensland OR "Western Australia" OR "South Australia" OR tasmania OR "Northern Territory" OR melbourne OR sydney OR canberra))) AND (LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-

Appendix 1: Full Search Strategy

Name of database platform	**Title of the database searched**	**Database date range**	**Complete search strategy**
			TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2017)) AND (LIMIT-TO (LANGUAGE , "English"))
Google	Google Scholar	N/A	“Suicide prevention” "mental health" "mental disorder" suicide effectiveness efficacy Australia “New South Wales” Victoria Queensland “Western Australia” “South Australia” Tasmania “Northern Territory” Melbourne Sydney Canberra https://scholar.google.com.au/scholar?start=0&q=Suicide+OR+%22suicide+prevention%22+OR+%22mental+health%22+OR+%22mental+disorder%22+OR+%22mental+disorders%22+OR+depression+OR+anxiety+OR+psychiatry+Australia+OR+OR+OR+%22New+South+Wales%22+OR+OR+OR+Victoria+OR+OR+OR+Queensland+OR+OR+OR+%22Western+Australia%22+OR+OR+OR+%22South+Aus&hl=en&as_sdt=0,5&as_ylo=2017&as_yhi=2021&as_vis=1

Note: All searches were limited to English.

Appendix 2: PRISMA Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Page 19
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Page 19-20
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Page 20-21
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Page 22
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Page 22-23
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Page 22 & Appendix 1
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Appendix 1
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Page 23-24
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Page 25-26

Section and Topic	Item #	Checklist item	Location where item is reported
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Page 25
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Page 25
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Page 25-26
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Page 25-26
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Page 26
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Page 26
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Page 26
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Page 26
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	N/a
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	N/a
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Page 25-26
Certainty	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Page 25-

Section and Topic	Item #	Checklist item	Location where item is reported
assessment			26
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Page 24
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Page 24
Study characteristics	17	Cite each included study and present its characteristics.	Page 27-38
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Page 40-62
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	N/a
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Page 39
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	N/a
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	N/a
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	N/a
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	N/a
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	N/a
DISCUSSION			

Section and Topic	Item #	Checklist item	Location where item is reported
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Page 75-76
	23b	Discuss any limitations of the evidence included in the review.	Page 81
	23c	Discuss any limitations of the review processes used.	Page 81
	23d	Discuss implications of the results for practice, policy, and future research.	Page 76-80
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Page 22
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Page 22
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	N/a
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Page 2
Competing interests	26	Declare any competing interests of review authors.	Will include in final manuscript to journal
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Will include in final manuscript to journal

Appendix 3: An Overview of Included and Excluded Reports or Articles from the Grey Literature Review

Title	Author	Publication Year	URL
Included Reports or Articles			
Fifth National Mental Health and Suicide Prevention Plan	Commonwealth of Australia	2017	https://www.mentalhealthcommission.gov.au/getmedia/0209d27b-1873-4245-b6e5-49e770084b81/Fifth-National-Mental-Health-and-Suicide-Prevention-Plan
Interventions To Reduce Suicidal Thoughts And Behaviours In Individuals Who Have	Borschmann, R., Carter, A, Butler, A., Southalan, L., Willoughby, M., Janca, E., & Kinner, S. A.	2020	https://www.suicidepreventionaust.org/wp-content/uploads/2020/11/SPA-review-Preventing-suicide-in-people-in-contact-with-the-justice-system-FINAL-1.pdf
Productivity Commission Inquiry Report Into Mental Health: Volume 1	Commonwealth of Australia	2020	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj1tIyE0fH1AhVsF6YKHQ_bCKYQFnoECAYQAQ&url=https%3A%2F%2Fwww.pc.gov.au%2Finquiries%2Fcompleted%2Fmental-health%2Freport%2Fmental-health.pdf&usg=AOvVaw0rzOgoW9X3Bqoar5S8Qt9V
Productivity Commission Draft Report Into Mental Health: Volume 2	Commonwealth of Australia	2019	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ve

Title	Author	Publication Year	URL
			d=2ahUKEwiP7tT_0fH1AhXPG6YKHSz6Bjk4FBAWegQIAxAB&url=https%3A%2F%2Fesf.com.au%2Fwp-content%2Fuploads%2F2020%2F05%2FPC-mental-health-vol.-2.pdf&usg=AOvVaw1PuOGl8kWnKb0ZG49F3Iug
Improving Mental Health Outcomes For Indigenous Australians In The Criminal Justice System	AIHW	2021	https://www.indigenousmhspc.gov.au/getattachment/15fbcd00-30f1-4170-acd3-206c3b884a61/aihw-2021-criminal-justice-system-20210802.pdf
Mapping The Forensic Mental Health Policy Ecosystem In Australia: A National Audit Of Strategies, Policies And Plans	Southalan, L., Carter, A., Meurk, C., Heffernan, E., Borschmann, R., Waterson, E., Young, J., & Kinner, S.	2020	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj1tIyE0fH1AhVsF6YKHQ_bCKYQFnoECBgQAQ&url=https%3A%2F%2Fmspgh.unimelb.edu.au%2F__data%2Fassets%2Fpdf_file%2F0011%2F3487493%2FNMHC-audit-final-24.01.20.pdf&usg=AOvVaw3d-ETKwezCCTCWD45698LG

Title	Author	Publication Year	URL
Accessibility And Quality Of Mental Health Services In Rural And Remote Australia	Commonwealth of Australia	2018	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj1tIyE0fH1AhVsF6YKHQ_bCKYQFnoECBcQAQ&url=https%3A%2F%2Fwww.aph.gov.au%2FParliamentary_Business%2FCommittees%2FSenate%2FCommunity_Affairs%2FMentalHealthServices%2F~%2Fmedia%2FCommittees%2Fclac_ctte%2FMentalHealthServices%2Freport.pdf&usg=AOvVaw2NH0nVO0A6Gc2CIrC6nFi3
Mental Health In Remote And Rural Communities	Bishop, L., Ransom, A., Laverty, M., & Gale, L.	2017	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwij-aHO0fH1AhWNKqYKHWw8B4Y4ChAWegQIAxAB&url=https%3A%2F%2Fnacchocommunique.com%2Fwp-content%2Fuploads%2F2017%2F06%2Frn031_mental_health_d5.pdf&usg=AOvVaw13P00jPp56R6uH8-Pd10GV

Title	Author	Publication Year	URL
The Criminal Justice System – Issues Paper	Law Council of Australia	2020	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwij-aHO0fH1AhWNKqYKHWw8B4Y4ChAWegQIDBAB&url=https%3A%2F%2Fdisability.royalcommission.gov.au%2Fsystem%2Ffiles%2Fsubmission%2FISS.001.00370_1.PDF&usg=AOvVaw1mdDCTWrmRog67W48bYal6
Preliminary Interim Report: Interim National Commissioner For Defence And Veteran Suicide Prevention	Commonwealth of Australia	2021	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiP7tT_0fH1AhXPG6YKHSz6Bjk4FBAWegQIAhAB&url=https%3A%2F%2Fdfwa.org.au%2Fwp-content%2Fuploads%2F2021%2F11%2Fpreliminary-interim-report.pdf&usg=AOvVaw1qBhIjbFKvlbijGa7usmfu
Royal Commission Into Victoria's Mental Health System, Final Report,	State of Victoria	2021	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiP7tT_0fH1AhXPG6YKHSz6Bjk

Title	Author	Publication Year	URL
Volume 3: Promoting Inclusion And Addressing Inequities			4FBAWegQIBBAB&url=https%3A%2F%2Ffinalreport.rcvmhs.vic.gov.au%2Fwp-content%2Fuploads%2F2021%2F02%2FRCVMHS_FinalReport_Vol3_Accessible.pdf&usg=AOvVaw2MxfzRUvpv1z2mW22-jfPM
Preventing Suicide By Children And Young People 2020, Volume 1: Ombudsman's Foreword And Executive Summary	Ombudsman Western Australia	2020	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiP7tT_0fH1AhXPG6YKHSz6Bjk4FBAWegQIERAB&url=https%3A%2F%2Fombudsman.wa.gov.au%2FPublications%2FDocuments%2Freports%2FSuicide-by-young-people%2FOmbudsman-WA-Suicide-by-children-and-young-people-Report-2020-All-Volumes.pdf&usg=AOvVaw3yXHLk_2FhySQ2u6tXWBf-
Primary Prevention Of Family Violence Against People From LGBTI Communities	Gay and Lesbian Health Victoria, State of Victoria, & Our Watch	2017	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQIERAB&url=https%3A%2F%2Fmedia-cdn.ourwatch.org.au%2Fwp-

Title	Author	Publication Year	URL
			content%2Fuploads%2Fsites%2F2%2F2019%2F11%2F07031955%2FPrimary-Prevention-of-FV-against-LGBTI-people-Report-Accessible-PDF.pdf&usg=AOvVaw0F-GSHlZ-Tsp--vt30mpme
State Of Victoria's Children 2017: A Focus On Health And Wellbeing	State of Victoria	2017	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQIEBAB&url=https%3A%2F%2Fwww.education.vic.gov.au%2FDocuments%2Fabout%2Fresearch%2Fsovc-2017-report.docx&usg=AOvVaw3RZlaLvKvKReaz_-ap8xs5
The Australian National Epidemiological Study of Self-Injury (ANESSI) Final Report	Martin, G., Swannel, S., Harrison, J., Hazell, P., & Taylor, A.	2010	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQICxAB&url=https%3A%2F%2Fwww.researchgate.net%2Fpublication%2F320841702_Australian_National_Epidemiological_Study_of_Self-

Title	Author	Publication Year	URL
			Injury_ANESSI_Final_Report&usg=AOvVaw1thvDUWZVOGDY-OzAww70F
Royal Commission Into Institutional Responses To Child Sexual Abuse, Final Report: Making Institutions Child Safe	Commonwealth of Australia	2017	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQIDhAB&url=https%3A%2F%2Fclan.org.au%2Fwp-content%2Fuploads%2F2020%2F12%2Ffinal_report_-_volume_6_making_institutions_child_safe.pdf&usg=AOvVaw0RLiq9ckKU1OaXH4syqyg8
Bigger Role For Pharmacists In Mental Health Treatment	Cooper, R.	2020	https://www.australianpharmacist.com.au/bigger-role-for-pharmacists-mental-health-treatment/
Excluded Reports or Articles			
The Royal Australian And New Zealand College Of Psychiatrists Abstracts	N/a	2021	https://journals.sagepub.com/doi/10.1177/00048674211004750?icid=int.sj-abstract.similar-articles.3
Acronyms And Glossary	The Department Of Health And Aged Care	last updated 18/10/2017	https://www1.health.gov.au/internet/main/publishing.nsf/Content/Glossary

Title	Author	Publication Year	URL
		(viewed 08/08/2022)	
Determining A Suicide Under Australian Law	Jowett, S., Carpenter, B., & Tait, G.	2018	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwij-aHO0fH1AhWNKqYKHWw8B4Y4ChAWegQIDRAB&url=https%3A%2F%2Fwww.unswlawjournal.unsw.edu.au%2Fwp-content%2Fuploads%2F2018%2F04%2FUNSWLJ_41_2_JOWETT-CARPENTER-AND-TAIT_advance.pdf&usg=AOvVaw2Ic2fPGjwo08blZRVEuuWo
Summary Of Results: Grant Application Round 140921	National Health And Medical Research Council	2021	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwij-aHO0fH1AhWNKqYKHWw8B4Y4ChAWegQIDhAB&url=https%3A%2F%2Fwww.nhmrc.gov.au%2Ffile%2F17409%2Fdownload%3Ftoken%3DlfDOfy5i&usg=AOvVaw3md142KAcXPAIPYcWwpt6v

Title	Author	Publication Year	URL
Book Of Abstracts	TheMHS Learning Network	2017	https://www.themhs.org/wp-content/uploads/2019/06/Abstract_Book_170817.pdf
31st World Congress: Book Of Abstracts, Programme And Presenters	International Association For Suicide Prevention	2021	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiP7tT_0fH1AhXPG6YKHSz6Bjk4FBAWegQIDhAB&url=https%3A%2F%2Fwww.iasp.info%2Fwp-content%2Fuploads%2FAbstract-Book_Master-Version-.pdf&usg=AOvVaw2atdaPAOYQA8yUI9SF8L00
Conference Abstracts	Australasian Professional Society On Alcohol & Other Drugs (APSAD)	2018	https://onlinelibrary.wiley.com/doi/full/10.1111/dar.12862
A Multi-Study Evaluation Of The Mental Health Of Trans And Gender Diverse Young Individuals And Options Of Care In Australia	Strauss, P. K. S. N.	2020	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiP7tT_0fH1AhXPG6YKHSz6Bjk4FBAWegQIDRAB&url=https%3A%2F%2Fresearch-

Title	Author	Publication Year	URL
			repository.uwa.edu.au%2Ffiles%2F105992470%2FTHESIS_DOCTOR_OF_PHILOSOPHY_STRAUSS_Penelope_Kate_Stauffer_Nebbia_2020_Part_1.pdf&usg=AOvVaw3BgH2zRXhcM4bKV5mepp1r
Children's Rights Report 2019—In Their Own Right: Children's Rights in Australia	Australian Human Rights Commission	2019	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiP7tT_0fH1AhXPG6YKHSz6Bjk4FBAWegQIEBAB&url=https%3A%2F%2Fhumanrights.gov.au%2Fsites%2Fdefault%2Ffiles%2Fdocument%2Fpublication%2Fchildrensrightsreport_2019_ahrc.docx&usg=AOvVaw2QLcunqToVmolKV6ujttt0
Approved Aihw Linkage Projects	AIHW	Last updated 18/08/2022 (viewed 08/08/2022)	https://www.aihw.gov.au/our-services/data-linkage/approved-aihw-linkage-projects
Ambulance Employees Association—Scoping Literature Reviews Drawing On Qualitative Literature To Address	Lawn, S., Willis, E., Roberts, L., Couzner, L.,	2019	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4

Title	Author	Publication Year	URL
The Physical, Psychological, Psychobiological, And Psychosocial Health Of Operational Ambulance Staff And Interventions To Address The Impact Of Workplace Stressors	Mohammadi, L., & Goble, E.		HhAWegQIAxAB&url=https%3A%2F%2Fwww.aeasa.com.au%2Fwp-content%2Fuploads%2F2019%2F06%2FAmbulance-Union-Literature-Review-Report-Final-May-2019.pdf&usg=AOvVaw0HiNuOnUAz1O_wT7KvQsOH
LGBTQIA	O&G Magazine	2018	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQIAhAB&url=https%3A%2F%2Fwww.ogmagazine.org.au%2Fwp-content%2Fuploads%2F2018%2F11%2FOG-Summer-2018-LGBTQIA-Web-1-2.pdf&usg=AOvVaw0sg8u00bbF2xRxey-xMQXQ
United Nations Committee On Economic, Social And Cultural Rights—Review Of Australia Fifth Periodic Report Under The International	National Association Of Community Legal Centres, Kingsford Legal Centre	2017	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQIBxAB&url=https%3A%2F%2Fmy

Title	Author	Publication Year	URL
Covenant On Economic, Social And Cultural Rights			an.org.au%2Fwp-content%2Fuploads%2F2018%2F11%2Ficescr-final-submission-may17.pdf&usg=AOvVaw2i2M9TWRB-Dmvs-ORDe4U9
53rd Conference: Presenters	Australian Association of Gerontology	2020	https://aag.eventsair.com/2020-aag-conference/
The Relationship Between Gambling And Intimate Partner Violence Against Women	Hing, N., O'Mullan, C., Nuske, E., Breen, H., Mainey, L., Taylor, A., Frost, A., Greer, N., Jenkinson, R., Jatkar, U., Deblaquiere, J., Rintoul, A., Thomas, A., Langham, E., Jackson, A., Lee, J., & Rawat, V.	2020	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4HhAWegQIDxAB&url=https%3A%2F%2F20ian81kynqg38bl3l3eh8bf-wpengine.netdna-ssl.com%2Fwp-content%2Fuploads%2F2020%2F09%2FRP.17.01-RR-Hing-GamblingDFV.pdf&usg=AOvVaw2_F7HZ9aAI6Ew6pScVh8SY
Re-Conceptualising Mental Health Social Work Education And Practice In	Jarvis, A., W.	2017	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj77t6v0vH1AhVpyosBHflOBSQ4

Title	Author	Publication Year	URL
Australia: Toward A Critical Emancipatory Approach			HhAWegQIDRAB&url=https%3A%2F%2Fflex.flinders.edu.au%2Fitems%2F60f94305-7a75-4c04-94f7-07c92d3f53e8%2F1%2F%3F.vi%3Dfile%26attachment.uuid%3Da13253bc-9228-4b6b-8682-4fb85cdb3947&usg=AOvVaw1Div47DXDZsEWcqLgvGYKV
Bullying In Australia: Prevalence, Health Outcomes, Cost Outcomes, And Economic Evaluation Of Bullying Prevention	Jadambaa, A.	2020	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi48YHy0vH1AhVC6XMBHUoMAGU4KBAWegQIAhAB&url=https%3A%2F%2Feprints.qut.edu.au%2F206147%2F1%2FAmarzaya_Jadambaa_Thesis.pdf&usg=AOvVaw2ZHvQD2mw3Q8XLJt7h-jXW
Mental Health Care: 3rd Edition	Hungerford, C.	2018	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi48YHy0vH1AhVC6XMBHUoMAGU4KBAWegQIBBAB&url=https%3A%2F%2Fdokumen.pub%2Fmental-health-care-3rd-edition-3nbsped-9781405124553-

Title	Author	Publication Year	URL
			9780730344612.html&usg=AOvVaw2skE33s2oZWGOU3sBj3sDo
HSC PDHPE: Health Of Young People Option 1	Thinkswap	2019	https://www.thinkswap.com/au/hsc/personal-development-health-and-physical-education/year-12/hsc-pdhpe-health-young-people
Items Where Year Is 2019	James Cook University	2019	https://researchonline.jcu.edu.au/view/year/2019.default.html
Contribution Of Stress To Construction Site Accidents, Dangerous Occurrences And Near Misses	Adinyira, E.	2017	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi48YHy0vH1AhVC6XMBHUoMAGU4KBAWegQIDBAB&url=https%3A%2F%2Fwww.academia.edu%2F34779594%2FContribution_of_Stress_to_Construction_Site_Accidents_Dangerous_Occurrences_and_Near_Misses&usg=AOvVaw0RPI2UioW_lk61J_PpxUPX
Australian Institute Of Criminology—Annual Report 2014-15	Australian Institute Of Criminology	2015	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi48YHy0vH1AhVC6XMBHUoMAGU4KBAWegQIDRAB&url=https%3A%2F

Title	Author	Publication Year	URL
			%2Fwww.aic.gov.au%2Fsites%2Fdefault%2Ffiles%2F2020-05%2Fannual_report_2015.pdf&usg=AOvVaw2d5i_g6nwLEGarOHj85JNK