Exploring gaps in pathways to care for psychosis: rural populations and the voluntary sector.

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Submission date: March 5th, 2024

Thesis portfolio word count: 15,586

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Thesis Portfolio Abstract

Background: Timely access to treatment, particularly for young people, has been shown to reduce the risk of transition to psychosis and duration of untreated psychosis (DUP). Help-seeking and recognition of symptoms is vital to early detection. Whilst there has been much research into psychosis in urban settings and statutory services' involvement in early detection of symptoms, the help-seeking experiences of young people from rural populations and voluntary sector involvement is not as well understood.

Methods: A mixed-methods systematic review and narrative synthesis was conducted to synthesise the quantitative and qualitative evidence-base on barriers and facilitators to help-seeking for young people aged 16-25 from rural populations. The empirical study utilised a vignette-based survey to collect data from VSO staff. The Mental Health Literacy Survey was adapted to assess ability to recognise depression, psychosis, and ARMS, appropriate treatment and medicines.

Results: Fifteen studies met the inclusion criteria (n=9 quantitative, n=5 qualitative, n=1 mixed methods). Family was a key facilitator of help-seeking. Stigma from social visibility and difficulty maintaining confidentiality was a barrier due to the interconnectedness of rural communities. Rural male youth were less likely to seek help. Remote interventions to counteract distance were not favourable. In the empirical study, VSOs had the highest recognition of depression (67.7%), then psychosis (39.0%), but lowest recognition of ARMS (8.1%). Traditional psychiatric medications were considered less helpful compared to 'vitamins/minerals/tonics/herbal medicine'.

Conclusion: Service provision, particularly a commitment to confidentiality requires careful consideration in rural communities. The empirical findings highlight the importance of improving mental health literacy, especially for ARMS, within VSOs to address wider

national policy recommendations to improve early detection and treatment for individuals at high risk of psychosis.

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Acknowledgements

I would like to thank my supervisor Dr Joanne Hodgekins, for her invaluable expertise, patience and encouragement from the inception to the completion of this thesis portfolio. I want to also thank my secondary supervisor Dr Sheri Oduola for sharing her passion for research with me, and for her expertise and guidance. I want to also extend a thank you to Dr Emma Coombes, it was an absolute pleasure to work alongside her during the initial search and screening process for the rapid review, and what would later become the foundation to the systematic review.

My deepest gratitude goes to the voluntary sector staff and volunteers who took time out of their busy day to be part of the empirical study. A huge thank you also to my co-producers from both the voluntary sector and NHS, who were generous with their time and expertise. The project could not have been possible without you.

I am ever grateful to my four-legged old friend, Pasha. Thank you for keeping me company during late night writing sessions, and for reminding me to take joy in the simpler things. And to my feathered friends, Kesha, Billy and Shiro, thank you for making sure our home was always chirpy and cheerful.

To my dearest friends, thank you for being there when I needed you most and for always finding a way to make me laugh. I could not have done it without you.

Finally, thank you to my parents, my biggest cheerleaders, and to whom I owe everything.

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List of Abbreviations

ARMS	At-risk Mental States (also prodromal psychosis)
CBT	Cognitive Behavioural Therapy
CQC	Care Quality Commission
EIP	Early Intervention in Psychosis
FMH	Faculty of Medicine and Health
FEP	First Episode Psychosis
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
UEA	University of East Anglia
VSO	Voluntary Sector Organisation (also: charity, third sector or non-profit)

CHAPTER ONE: Systematic Review and Narrative Synthesis

Prepared for submission to Health Promotion International

(See appendix for author guidelines)

Word count

Title: 15

Abstract: 246

Contribution to Health Promotion statement: 98

Text body: 6,976

Tables: 2

Figures: 2

Rural young people's help-seeking barriers and facilitators for mental health difficulties: a mixed-methods systematic review.

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Abstract

Aims: Help-seeking experiences for mental health issues among rural adolescents and young people are less understood than those in urban areas, especially in the UK. Timely access to treatment has been shown to improve outcomes and reduce risk of transition to severe and enduring conditions, like psychosis. This systematic review aimed to synthesise the available literature from high-income countries on barriers and facilitators of help-seeking, including informal and formal sources in rural areas. A broad definition of help-seeking was adopted given the scarcity of research in this area and encompasses efforts by individuals or significant others to seek help for distress, and also how services and agencies respond.

Method: A mixed-methods systematic review was conducted using a comprehensive search in the following bibliographic databases: PubMed, Medline, EMBASE, CINAHL, PsycINFO, PsycARTICLES, Applied Social Sciences Index and Abstracts (ASSIA) and Scopus between January 1990 – October 2022 and limited to peer-reviewed papers in English.

Results: Fifteen studies were included (n = 9 quantitative, n = 5 qualitative, n = 1 mixed methods). Included studies were primarily from Australia, Canada and USA, providing limited data on rural minority ethnic youth.

Conclusion: The interconnectedness of rural communities both aids and poses a challenge to help-seeking. Service provision, particularly a commitment to confidentiality requires careful consideration, which includes location of service. Lack of evidence on remote access and online service provision for this population warrants further research given this is becoming a common medium for patient engagement following the recent Covid-19 pandemic.

Keywords: Pathways to care; help-seeking; young people; mental health; rural; high income countries

Contribution to Health Promotion

- Health promotions influence help-seeking patterns and behaviours for mental health issues. Better understanding these patterns, such as the barriers and facilitators, can help produce targeted health promotion initiatives and campaigns.
- Help-seeking among rural adolescents and young people are less understood than those in urban areas. This review identified fifteen papers that examined help-seeking barriers and facilitators for mental health difficulties in this population.
- Rural communities, though close-knit and facilitate support, also create barriers to privacy and accessing professional help. Rural male youth may be experiencing greater challenges to help-seeking and could benefit from targeted mental health promotional efforts.

Introduction

Background and impact of mental health disorders

Of those with a mental health difficulty, fifty percent will experience its onset by age 14, and 70% by age 24, making the age 16 to 25 an especially vulnerable time (Kessler et al., 2005). Since the Covid-19 pandemic there has also been a 25% increase in depression and anxiety globally, with increased suicidality for younger people (Castaldelli-Maia et al., 2021; World Health Organization, 2022). Mental health difficulties have a profound and negative impact on various aspects of young people's lives. These challenges can hinder social and cognitive development, strain relationships, affect physical health, and expose young people to stigma and discrimination (Henderson & Thornicroft, 2009; Knapp et al., 2011; Wykes et al., 2011). Additionally, it can lead to substance use and create obstacles to daily activities, education, and employment (Hodgekins et al., 2015; Public Health England, 2018; World Health Organization, 2020). Over time, these difficulties can result in a lower quality of life and an increased risk of experiencing persistent and enduring symptoms (Office for Health Improvement & Disparities, 2023). Age 16 is a transitionary period for young people in the UK as they leave school, and are expected to go onto to further education, traineeships, or apprenticeships. This transition can pose as a great difficulty in the absence of routine and structure school can provide, and which is often the case in tertiary educational or other settings (Broglia et al., 2023; Campbell et al., 2022).

Importance of help-seeking

Help-seeking for mental health difficulties is multifaceted and not a linear process, involving several steps from recognising symptoms, deciding from whom to seek help from, consulting friends and family, to engaging or disengaging with more formal services. Rickwood and Thomas (2012) broadly define help-seeking in the mental health context as “an adaptive coping process that is the attempt to obtain external assistance to deal with a mental health

concern" (pp. 180, Rickwood & Thomas, 2012). Identifying barriers and facilitators of this help-seeking process is key to implementing early intervention approaches, reduce treatment delays, and promote timely access to the right support to improve clinical outcomes (Fusar-Poli et al., 2021; NHS England, 2023; Oliver et al., 2018). However, help-seeking in young people (ages 16-24) has been shown to generally be lower, with fewer mental health programmes, including specialist services, targeted at this age group, highlighting the discrepancy between need and access for this age group (Biddle et al., 2004; Reupert et al., 2013).

Rural mental health

Young people living in rural areas face specific challenges to accessing healthcare in comparison to their urban counterparts. Rural populations suffer from poor infrastructure impacting i.e., transportation, and have the worst access to healthcare, public health and social care services (PHE; Public Health England, 2017), where the average time to travel to a GP Surgery is significantly longer than in urban areas (DEFRA; Department for Environment, Food & Rural Affairs, 2023). 'Distance decay' is a geographical phenomenon whereby the interaction between two places decreases as the distance between them increases, and this association has been observed between populations living further away from health services and having generally poorer health outcomes (Kelly et al., 2016). Distance to services is also an evidenced determinant of delay to accessing mental health treatment, further prolonging the duration of untreated symptoms (Kvig et al., 2017). Digital interventions and online health provision are a viable alternative to in-person care, however, this does not come without its own challenges. Recent government reports highlighted that broadband coverage and speed is limited in rural areas compared to urban (DEFRA, 2023; PHE, 2019).

Issues affecting rural populations will also affect younger people. Specific challenges include being at higher risk of experiencing particular mental health difficulties and inequalities in accessing mental health services, with many organisations located in urban settings (Boydell et al., 2006; Middleton et al., 2003; Richardson et al., 2018; Robards et al., 2018).

Example of barriers from previous studies and systematic reviews show that young people in rural settings are contending with a culture of stoicism and self-reliance; mental health stigma and increased social visibility when accessing local services. Additionally, limited knowledge of mental health services, language barriers, mistrust of professionals, and confidentiality concerns further hinder help-seeking (Crumb et al., 2019; Gulliver et al., 2010; Hernan et al., 2010; Robards et al., 2018). While previous systematic reviews have touched on the experiences of rural youth, this is limited and does not provide a comprehensive overview to inform clinical recommendations.

UK policy and clinical landscape

In the UK, the provision of mental health services is governed by national clinical guidelines that are grounded in evidence-based practices. The National Health Service (NHS) offers a range of effective and varied treatments to support young people i.e., Child and Adolescent Mental Health Services (CAMHS) and more specialist services such as Early Intervention in Psychosis (EIP) services, some of which are offered to adolescents as young as 14-years old. Recent qualitative findings provide a glimpse into the experiences of rural youth with statutory mental health services in a UK setting (Oduola et al. 2024), and highlights several issues such as lengthy waiting times, high staff turnover, poor therapeutic relationships and the importance of family relationships in help-seeking. Despite these insights, there is still a critical gap in our understanding of young people's experiences of help seeking in rural populations. This is concerning given that timely detection, access and early intervention to

specialist mental healthcare is paramount and has been shown to reduce the likelihood of poor clinical outcomes (Bhui et al., 2014; Mcgorry et al., 2008).

Rationale

To our knowledge, there is no systematic review specifically synthesising the evidence-base on barriers and facilitators to help-seeking among rural youth in high-income countries to inform future policy and clinical practice, given the growing evidence base of the impact of rurality on access to healthcare

Objectives

The systematic review aims to examine the pattern of help seeking for mental health difficulties among young people from rural populations and to identify the barriers and facilitators to receiving support.

Our aims were guided by the following question:

What are the barriers and facilitators of help-seeking for young people aged 16-25 from rural populations in high-income countries?

Methods

A mixed-methods systematic review was conducted following the updated PRISMA guidelines (Page et al., 2021). A systematic review protocol was developed and registered with PROSPERO (CRD42022328499).

Search strategy

Relevant papers were identified by searching titles and abstracts in the following bibliographic databases: Medline, PubMed, EMBASE, CINAHL, PsycINFO, PsycARTICLES, Applied Social Sciences Index and Abstracts (ASSIA) and Scopus (search date: October 8th, 2022). Secondary sources were used to identify any additional papers, for example, reference lists of included studies were hand-searched. As this research will be contextualised within the early intervention for psychosis evidence base, searches were limited to those from January 1990 to capture the period following the increase in research on symptoms of psychosis and 'duration of untreated psychosis' (DUP) which ultimately led to the development of early intervention services (Bentall, 1992; Drake et al., 2000).

Search terms included "mental health", "anxiety", "prodromal", "pathway", "help-seek", "rural health", "remote", "adolescent" and "young people" (see supplementary material 1 for example search strategy for PubMed). Search terms were expanded using Medical Subject Headings (MeSH) terms e.g., "mental health" to include all relevant terms.. Initial screening of titles, abstracts and full text papers identified through PubMed was independently carried out by EC and NA with a Cohen's kappa coefficient of 0.94 (95% CI 0.936 - 0.944) suggesting a strong or "almost perfect" inter-rater agreement (McHugh, 2012). Search terms were modified and applied to the remaining databases, and papers were screened by NA only. Consensus for included papers was achieved through discussion with EC, SO, JH and AJ. Due to resource constraints papers not in English were excluded.

Eligibility criteria

- Population: young people aged 16 to 25 years, at high risk and least likely to seek help for mental health issues (Dykxhoorn et al., 2023; Kessler et al., 2005), described as residing in a "rural" setting within a 'high-income country' (World Bank, 2022).
- Outcomes: attitudes toward help-seeking for emotional distress, awareness of problems and behaviours that followed, common characteristics of help-seekers, professionals as barriers and facilitators, or some description of their personal experiences of being on the pathway to care from recognition of a mental health problem to accessing care.
- Peer-reviewed papers with quantitative, qualitative and mixed methodology providing a description, analysis or assessment to better understand of help-seeking for mental health difficulties, including attitudes toward help-seeking for emotional distress, to help-seeking from statutory services (Rickwood & Thomas, 2012).
- Studies were excluded if data could not be stratified by rural/urban settings, or if the age range extended beyond 16 to 25.

Quality assessment

The Mixed Methods Appraisal Tool (MMAT) and guidance was selected to critically appraise the methodological quality of included studies due to its suitability for combining criteria from randomised, non-randomised, quantitative descriptive, qualitative and mixed-methods designs (Hong et al., 2018). All included papers were assessed by NA, with 13% (n=2) of randomly selected papers were independently assessed by MM masked to NA's scores with one disagreement rating and an observed agreement of 90% where nine of ten items were agreed on, with one discrepancy: one person rated "no" and other "can't tell".

This gave a Cohen's kappa (κfree) coefficient 0.85 (95% CI 0.56-1.00) suggesting an 'almost perfect' inter-rater agreement (see supplementary material 2 for MMAT ratings and supplementary material 3 for MMAT rater comments).

Data extraction and synthesis

Data extraction was conducted by NA for all included papers and was cross-checked for accuracy with papers matched with EC, disagreements were discussed with SO. Extracted study characteristics included aims, sample (n, gender, age, ethnicity, location, diagnosis or problem) and definition of rural area if given. Outcomes extracted were key pathway-to-care contacts, help-seeking initiated by, treatment or access to care delay and barriers and facilitators. Extracted qualitative data included themes and subthemes with corresponding quotes.

Synthesis of quantitative and qualitative data

Qualitative findings were collated and entered verbatim into NVivo software for coding and developing descriptive themes (Thomas & Harden, 2008). This iterative process followed three stages as outlined by Thomas & Harden (2008): 1. line-by-line coding 2. organisation of codes for 'descriptive' themes, an iterative process to identify patterns and variations 3. development of deductive inferences ('theory-driven') which involved NA inferring barriers and facilitators based on theories of help-seeking (Adams et al., 2022; Andersen, 1995; Rogler & Cortes, 1993).

A meta-analysis for the quantitative data was deemed inappropriate due to study heterogeneity. Guidance by Popay et al. (2006) on narrative synthesis for systematic reviews was used to synthesise the quantitative data. This involved identifying similarities and differences across results by study design (e.g., cross-sectional vs. retrospective cohort), participant (e.g., gender, mental health condition, young person vs. family accounts), and data type (i.e., perceptions of help-seeking vs. lived-experience of help-seeking).

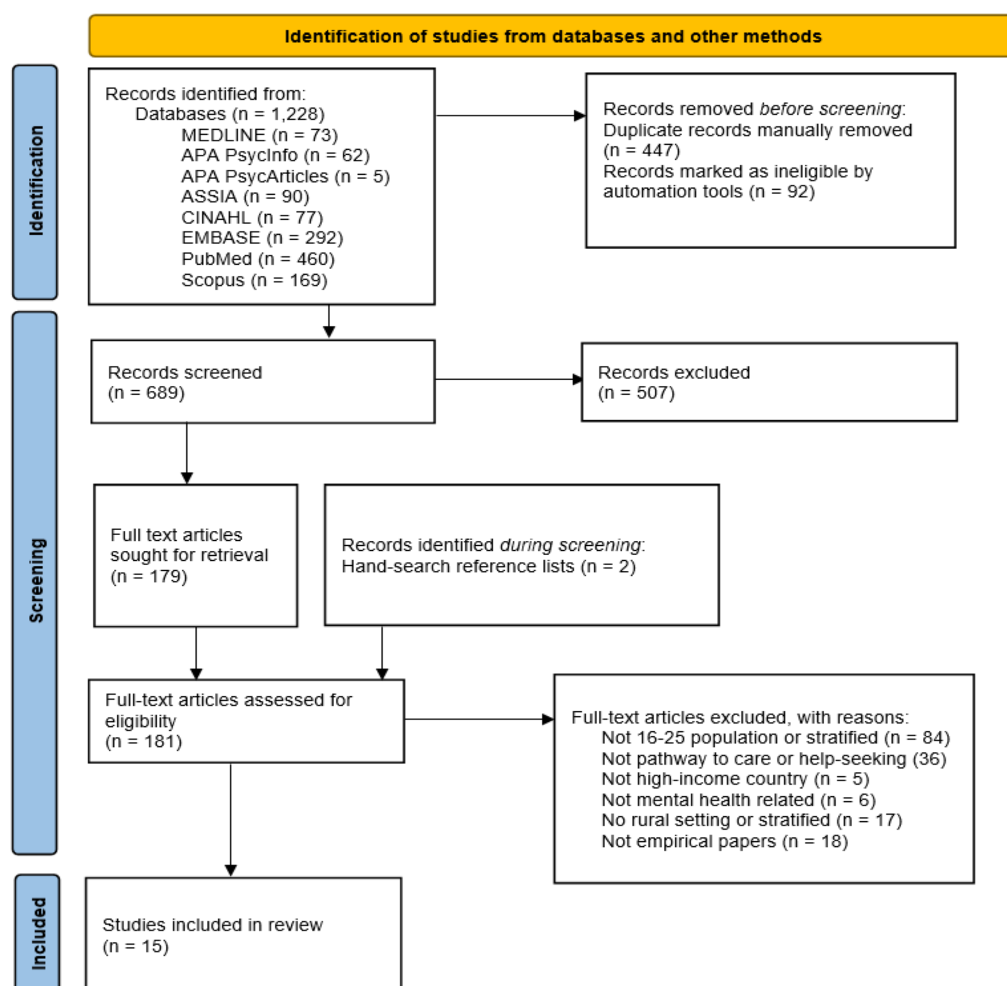
Quantitative data was organised under each qualitative theme where they were integrated to provide richness and depth, for example, by addressing any divergences and inconsistencies across the evidence-base (Thomas & Harden, 2008). Findings were then mapped onto sociological framework to highlight barriers and facilitators at the individual, relationship, community and systemic levels, see supplementary material 4 and 5 for the stages of synthesis and an example coding framework (Bronfenbrenner, 1974).

Results

The database searches produced a total of 1,228 titles and abstracts, of which 668 were screened after removing duplicates. A further two papers were identified through a hand-search of a reference list from a previous systematic review (Robards et al., 2018). The number of full-text papers retrieved and screened was 181, with 15 papers meeting inclusion criteria. The majority of full-text papers were excluded due to not meeting the age criteria, or to be stratified, accordingly. Figure 1 shows a PRISMA flow diagram of the search and screening process.

Figure 1

PRISMA 2020 flow diagram of identification of included studies.



Study characteristics

A total of 175,168 participants took part in the included studies, with sample size ranging from 3 to 140,124. Table 1 shows the characteristics of the included studies. Studies were primarily from Australia, Canada and USA, with one paper from England and Wales, and one from Republic of Ireland.

Only five papers reported ethnicity data (Bradley et al., 2010; Pisani et al., 2012; Reeb & Conger, 2011; Russell et al., 2004) and of those, just one reported on outcomes by ethnicity limiting the generalisability of findings (Seidler et al., 2020a). The majority of participants were “White”, “European-American” or “Caucasian”. Other ethnic and cultural groups included “Hispanic/Latino”, “Black/African American”, Irish, Scottish, Aboriginal or Torres Strait Islander.

Fifteen studies were included of which nine were quantitative, five were qualitative and one used a mixed methodology. Quantitative data consisted of health service data (Gunnell & Martin, 2004; Seidler et al., 2020a), observer ratings of a family discussion (Reeb & Conger, 2011), cross-sectional surveys of which five were conducted in-person (Bradley et al., 2010; Church et al., 2020; Pisani et al., 2012; Russell et al., 2004; Sears, 2004), one online (Ronis & Slaunwhite, 2019). Qualitative data was collected through focus groups (Boyd et al., 2011; Calloway et al., 2012) and individual semi-structured interviews (Aisbett et al., 2007; Boyd et al., 2007; Orlowski et al., 2016; Wilson et al., 2012).

Quality Assessment

Qualitative studies demonstrated strong coherence across data sources, data collection, analyses and interpretation, with four of the five studies (Aisbett, 2007; Boyd, 2007; Calloway, 2012; Wilson, 2012) achieved the highest MMAT rating of 5. Only one qualitative study scored a 4, primarily due to an unclear theoretical rationale. In contrast, the

single mixed methods study (Boyd, 2011) received a score of 2, mainly due to issues with the integration of qualitative and quantitative findings and non-representative sampling. Quantitative descriptive studies displayed a broader range of quality, with scores ranging from 1 to 5. Higher-scoring quantitative studies (Gunnell, 2004; Pisani, 2012; Seidler, 2020) were characterised by well-defined samples and robust statistical analyses, whereas lower-scoring studies (Bradley, 2010; Sears, 2004) often struggled with sampling methods and measurement validation.

Table 1

Overview of included studies.

	Study ID	Location	Title	Aims of study	Information source	Findings	Sample	Age range	Sample size	Quality Assessment Rating (MMAT)	
Clinical – lived-experience of formal help-seeking											
QL	Aisbett 2007	Australia	Understanding barriers to mental health service utilization for adolescents in rural Australia	To understand barriers to mental health service utilization for young people in rural communities	Semi-structured interviews	Main themes: 1. accessibility issues - transportation difficulties, perceived lack of qualified mental health professionals who specialise in child and adolescent mental health, hours of operation and implications of extended waiting lists 2. stigma and social exclusion: social stigma and exclusion, self-stigma, fear of social stigma 3. characteristics of rural communities: rural gossip networks, social visibility.	clinical	15-17	3	5	High
QL	Boyd 2007	Australia	Australian rural adolescents' experiences of accessing psychological help for a mental health problem	To gain a perspective on university students' experiences of seeking help for mental health problems within a rural context.	Semi-structured interviews	Key pathway to care contacts included counsellor/ psychologist, people in support network that picked up on student's distress and offered non-judgemental support. Themes reported in-text.	clinical	17-21	6	5	High
QL	Orlowski 2016	Australia	A Rural Youth Consumer Perspective of Technology to Enhance Face-to-Face Mental Health Services	To investigate the perspectives on utility of technology as an adjunct to rural face-to-face mental health help-seeking for rural youth who are currently seeking help at a mental health service	Semi-structured interviews	Themes included isolation as a barrier and the importance of self-determination during the course of access and engagement with mental health services.	clinical	16-22	10	4	Moderate-High

QL	Wilson 2012	Australia	Experiences of families who help young rural men with emergent mental health problems in a rural community in New South Wales, Australia	To understand the barriers to help-seeking among young rural men with emergent mental health problems.	Semi-structured interviews	Rural young men and families have difficulty identifying seeking help for mental health problems due to a lack of awareness of the language used. Families tend to understand difficulties as a behavioural problem. Due to a lack of support, family relationships are strained.	clinical	21-23	3	5	High
QTT	Gunnell 2004	England and Wales	Patterns of General Practitioner consultation for mental illness by young people in rural areas. A cross-sectional study	To investigate (a) whether urban-rural differences in the population prevalence of mental illness in Britain are reflected in differences in patterns of General Practitioner consultation, and (b) whether any differences were due to the different socio-economic characteristics of residents of rural and urban areas.	Health service data; National Survey of Morbidity in General Practice	Young people living in rural areas are less likely to consult their GP about mental health difficulties compared to urban population, which was worse for 16–24-year-old males.	clinical	16-39	140124	5	High
QTT	Seidler 2020	Australia	Patterns of youth mental health service use and discontinuation: Population data from Australia's headspace model of care	To explore sociodemographic predictors of attendance and discontinuation of mental health services in a large, population-based sample.	Health service data	Overall discontinuation rate of 71.2%. Those who were most at risk of discontinuation were older (ages 18–25), male, heterosexual, Aboriginal or Torres Strait Islander, and living in a rural location.	clinical	>18	30537	5	High
Non-clinical – self-reported perceived attitudes to help-seeking											
MX	Boyd 2011	Australia	Preferences and intention of rural adolescents toward seeking help for mental health problems	To investigate the preferences and intentions of rural Australian youth towards seeking help for mental health problems; determine predictors of help-seeking intention among rural adolescents; and verify results from	Focus groups and survey	55.7% of participants indicated that they would seek help for a mental health problem, with most having strong preferences for seeking help from a school counsellor.	non-clinical	15-18	201	2	Low-Moderate

				previous qualitative research on the barriers to help-seeking in a rural context.							
QL	Calloway 2012	USA	Stressors and barriers to help seeking for psychological distress among students attending a rural university	The goal of this exploratory study was to identify the perceived barriers to help-seeking for psychological distress among students attending a small, rural university and to identify stressors that may be unique to this population.	Focus groups	Themes identified as barriers to help-seeking on a rural university campus stigma, confidentiality, self-reliance, treatment concerns and lack of awareness of services.	non-clinical	18-27	37	5	High
QTT	Bradley 2010	Canada	Adolescents' attitudes and opinions about depression treatment	To determine adolescent preferences for depression treatment	In-person survey	Adolescents preferred psychotherapy than antidepressants. Pathway to care contacts included family doctor, school, psychologist, psychiatrist, social worker, nurse, religious figure.	non-clinical	15-21	156	1	Low
QTT	Church 2020	Canada	Perceived barriers to accessing mental health services for rural and small city Cape Breton youth	To examine principal individual, community, and systemic barriers to help-seeking, and compared barriers by population density (rural/small city), gender, age, and mental health status.	In-person survey	Youth were more likely to view systems level barriers (M = 2.3; SD = 0.6) and community level barriers (M = 2.4; SD = 0.7) as significantly greater obstacles to accessing mental health services than individual level.	non-clinical	15-20	83	3	Moderate
QTT	Pisani 2012	USA	Associations between suicidal high school students' help-seeking and their attitudes and perceptions of social environment	To examine patterns and predictors of help-seeking behaviour among adolescents who seriously considered suicide in the past year	In-person survey	Students were twice as likely to disclose their suicidal ideation to peers (54 %) than to adults (23 %).	non-clinical	16-17	2737	5	High
QTT	Reeb 2011	USA	Mental health service utilization in a community sample of rural adolescents:	To examine interpersonal processes between the father and adolescent which may influence	Survey and semi-structured	Observer ratings of family discussions provide some evidence that children with fathers who show them support	non-clinical	17-19	298	3	Moderate

			The role of father-offspring relations	adolescent mental health treatment seeking.	family discussion	and warmth is a long-term predictor of help-seeking behaviours.					
QTT	Ronis 2019	Canada	Gender and geographic predictors of cyberbullying victimization, perpetration, and coping modalities among youth	The objective of this project was to determine whether gender and geography, in combination with mental health and socioeconomic status, predicted cyberbullying victimization, perpetration, and patterns of coping and help seeking.	Online survey	Female and male victims of cyberbully differed in help-seeking behaviours. Avoidance coping strategies to deal with distress from cyberbullying was most commonly observed in male victims.	non-clinical	16-19	258	4	Moderate-High
QTT	Russell 2004	Ireland	Problems experienced by young men and attitudes to help-seeking in a rural Irish community	To explore the difficulties facing young men in a rural setting with a view to planning local action to prevent suicide.	In-person survey	Friends and family are the preferred sources of support for young men compared to professional help.	non-clinical	16-30	71	4	Moderate-High
QTT	Sears 2004	Canada	Adolescents in rural communities seeking help: who reports problems and who sees professionals?	To examine whether adolescents who were at various stages of the help-seeking process differed on demographic characteristics, use of informal helpers, and markers of emotional and behavioural adjustment.	In-person survey	Young people's sought help from friends and family for different reasons. Senior youth were more likely to seek professional help and were also more likely to speak to friends about their problems.	non-clinical	16-19	644	2	Low-Moderate

Methodology type: MX, mixed; QL, qualitative, QTT, quantitative.
'Clinical' described participants with either past of present experience of help-seeking, accessing and use of mental health services for mental health problems. 'Non-clinical' describes participants that reported perceived barriers and facilitators to help-seeking.
Quality assessment ratings using the MMAT (mixed methodology appraisal tool), ratings indicating percentage of quality criteria met 1=20% "Low", 2=40% "Low-Moderate", 3=60% "Moderate", 4=80%"Moderate-High", 5=100% "High".

Data source

Six papers included population samples (n = 170,683) with lived-experience of formal help-seeking for mental health difficulties (labelled 'clinical' for ease of comparison hereon) which were identified through mental health services, a university counselling service, GP practices and one through community advertisements followed by purposive sampling. Issues and diagnoses included clinical depression, anxiety disorders, bereavement, non-specified mental disorders, bipolar disorder, trauma, anger-related issues and psychotic symptoms (Aisbett et al., 2007; Boyd et al., 2007; Gunnell & Martin, 2004; Orlowski et al., 2016; Seidler et al., 2020a; Wilson et al., 2012).

The remaining papers (n=10) examined hypothetical help-seeking influencing and predictive factors, intentions, treatment preferences, and perceived barriers and facilitators (labelled 'non-clinical'). Five of those used standardised self-report measures to screen for depression, anxiety, low self-esteem, suicidal ideation to examine current mental health status as a predictive factor (Boyd et al., 2011; Bradley et al., 2010; Pisani et al., 2012; Reeb & Conger, 2011; Sears, 2004). The precision of reported experiences may be greater for the clinical population, which included both confirmed and self-reported help-seeking, compared to the 'non-clinical' population that relied solely on personal accounts.

Definitions and measures of help-seeking

The spectrum of help-seeking behaviours as defined and measured by quantitative papers (n=10) ranged from the initial recognition and discussion of a problem (Sears, 2004), intentions and willingness to seek treatment dependent on preferences and preconceptions (Boyd et al., 2011; Bradley et al., 2010; Church et al., 2020), consulting healthcare professionals (Gunnell & Martin, 2004; Pisani et al., 2012; Ronis & Slaunwhite, 2019) and finally, discontinuation and reengagement with service providers (Seidler et al., 2020a). Only

two papers provided explicit use of conceptual and theoretical frameworks of help-seeking that informed their research hypotheses (Pisani et al., 2012; Sears, 2004).

The majority of measures were adapted for use or created by authors as shown in Table 2. Eight papers included data from self-report measures, and only two papers reported data collected from services (Gunnell & Martin, 2004; Seidler et al., 2020a).

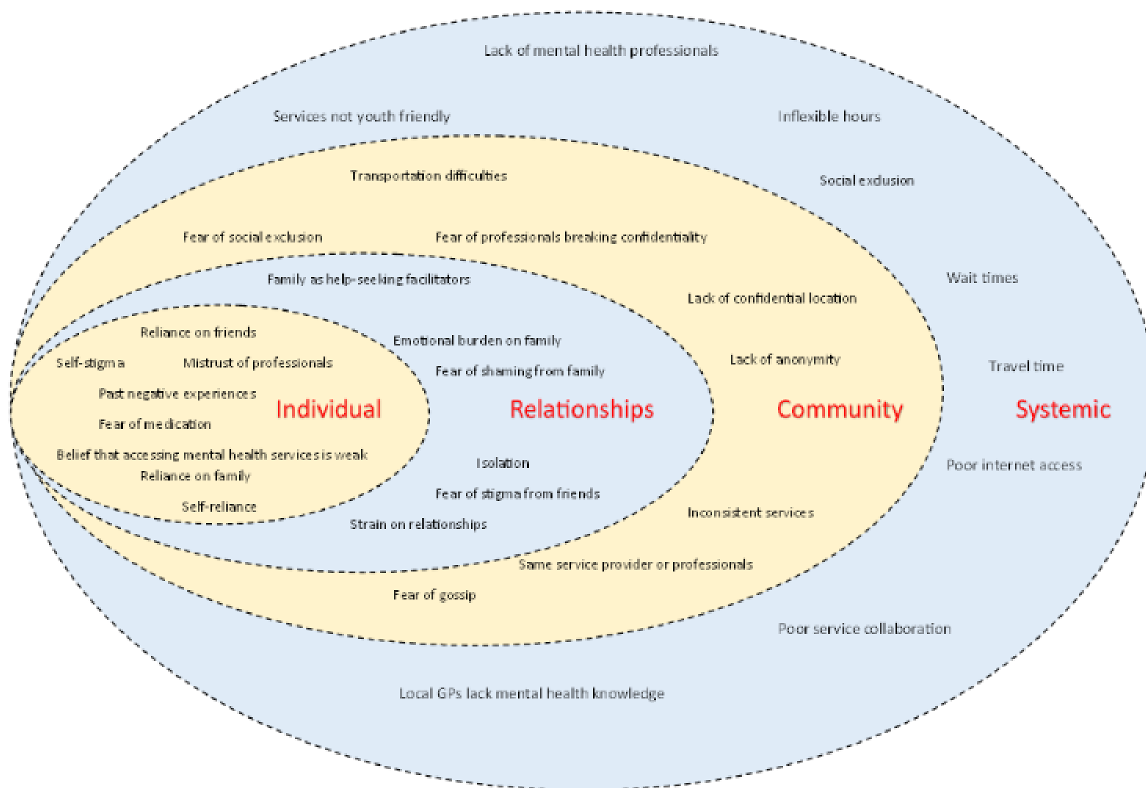
Table 2

Overview of measuring help-seeking from quantitative data

Author code	Measuring help-seeking
Bradley 2010	General Willingness to Seek Treatment Scale looked at preferences for treatment.
Boyd 2011	Open-Ended Survey of the Help-Seeking Preferences and Intentions of Rural Youth
Church 2020	A 30-item instrument that integrated barriers to accessing mental health services reported in prior research.
Gunnell 2004	Fourth National Survey of Morbidity in General Practice looking at rural-urban differences in consultation for mental illness.
Pisani 2012	Attitudes about Seeking Help scales developed by authors. The Help-Seeking Acceptability at School scale (Schmeelk-Cone et al. 2012; Wyman et al. 2010).
Reeb 2011	Mental health service utilisation on a 4-point scale ranging from 1 (never) to 4 (often), adolescents reported on the frequency of treatment seeking during the 12 months preceding the interview.
Ronis 2019	13-item survey that assessed how youth coped with cyberbullying experiences and victimization - nine items that assessed help-seeking behaviours oriented toward problem solving: (a) ask a parent or guardian for help, (b) ask a teacher for help, (c) ask another adult for help, (d) talk to a friend or ask a friend for help, (e) private message the person responsible, (f) talk to the person responsible face-to-face or in person, (g) contact police, (h) talk to a counsellor or social worker, and (i) call a youth help line. Cronbach's alpha, α=0.86.
Russell 2004	Survey questions looked at types and extent of difficulties, perceived indicators of a young person in crisis, rating availability and access to support from a list of non-professional and professional sources.
Sears 2004	Help-seeking scale adapted from previous research. Help-seeking items included: Have you had any serious problems (emotional, behavioural, or physical) in the past year? (four response options). When you have problems, do you talk about them with anyone? (yes/no). Asked who they would go to first for help for each of the listed problems (family, same-sex friend, school, depression, alcohol and drug use).
Seidler 2020	Determined young people's service use and discontinuation rate from health service data.

Figure 2

Barriers to help-seeking for rural young people within a socio-ecological model (Bronfenbrenner, 1974)



Barriers and facilitators of help-seeking

The synthesis of qualitative data revealed a range of barriers which have been contextualised and mapped onto Bronfenbrenner's ecological model in Figure 2. Each layer of this model will now be considered for both barriers and facilitators, integrating the synthesised qualitative and quantitative data.

Individual factors and characteristics

All papers with quantitative data (n=10) examined individual effects on help-seeking i.e. gender, age, location, including the one mixed-methods study.

According to a GP survey in England and Wales, young people living in rural areas were less likely to consult GPs regarding mental health difficulties (rural males:9.2 per 1000

vs. nationwide:12.8 per 1000; rural females:27.1 per 1000 vs. nationwide:39.0 per 1000) which was found to be even greater in young males (Gunnell & Martin, 2004).

Other papers examining gender with ‘Moderate’ to ‘High’ quality ratings, reported that young men and boys from rural areas were less likely to utilise mental health services and to seek treatment when experiencing a problem (Reeb & Conger, 2011) and responded to adversity such as cyberbullying with avoidance or in a reactive manner (Ronis & Slaunwhite, 2019). Young men seeking help preferred psychologists more than their female counterparts (Boyd et al., 2007), but their first choice was usually friends and family (Russell et al., 2004).

A high-quality Australian study found that older male youth (18-25) in rural areas, heterosexual, and from marginalised communities, particularly Aboriginal or Torres Strait Islander, were at higher risk of service discontinuation (Seidler et al., 2020a). No other papers reported on the role of ethnicity on help-seeking outcomes.

Self-stigma affected young people in different ways when considering seeking help from friends, family and professionals, as reflected in six papers (Aisbett et al., 2007; Boyd et al., 2007, 2011; Calloway et al., 2012; Church et al., 2020; Wilson et al., 2012) and a driver of their perceived stigma from others (Boyd et al., 2007). Living in a rural culture that values self-reliance, asking for help or accessing mental health services was perceived as a sign of weakness of character, deterring young people due to fear of social exclusion and further compounded by social pressures to conform to gender norms (Boyd et al., 2007; Boyd et al., 2011; Calloway et al., 2012; Church et al., 2020; Wilson et al., 2012).

The role of family

Eight papers reported on family involvement in help-seeking (Boyd et al., 2011, 2011; Bradley et al., 2010; Calloway et al., 2012; Church et al., 2020; Orlowski et al., 2016; Reeb & Conger, 2011; Sears, 2004; Wilson et al., 2012). One paper reported ‘fear of shaming

[from] family' (51.4%) being a barrier (Church et al., 2020), while for others, family acted as help-seeking facilitators and were a reliable source of support (Calloway et al., 2012; Reeb & Conger, 2011; Sears, 2004). Rural Australian youth from a 'non-clinical' sample were statistically more likely to seek help from family in early adolescence compared to late adolescence, however it is important to note how generalisable this finding is as they were collected from a homogenous population with a quality assessment rating of 'Low-Moderate' (Boyd et al., 2011).

Family was also reported as a mediator of future help-seeking, for example, Reeb & Conger (2011) reported that having a warm and supportive father was a marginally significant predictor of help-seeking and service utilisation in rural youth. Qualitative findings from a 'clinical' population reported a family history of mental illness, dysfunction and complex family relationships made it difficult to integrate into local communities to make friends, furthering self-isolation and reliance on extended family for support (Orlowski et al., 2016).

A further qualitative paper, Wilson et al. (2012), reported that family was often the first point of help-seeking for young men, though it could also lead to parental distress and hopelessness. Families reported attributing their sons' difficulties to behavioural issues due to low mental health literacy. Families also reported seeking support on behalf of their son through GPs and the emergency department, however they reported treatment delays in the absence of physical injuries.

Community interconnectedness

In the context of isolation, young people reported that it was through personal connections and close proximity within rural communities that facilitated help-seeking from family members, school and community members (Boyd et al., 2007; Orlowski et al., 2016).

While eight papers reported social visibility being a major barrier to help-seeking at an individual, relationship and community level (see Figure 2). For example, close proximity of social networks was a problem as gossiping culture ("word travels fast") was prevalent, risking privacy and confidentiality (Aisbett et al., 2007; Calloway et al., 2012; Orlowski et al., 2016). Young people at a rural university reported having limited choice for support as mental health professionals accessible to them on campus were close acquaintances or were related to people they knew (Calloway et al., 2012).

A high-quality qualitative paper on young people's lived experience of help-seeking reported that there was also determination to seek help despite the negative impact of stigma, and that this did not "deter" them (Orlowski et al., 2016). A high-quality qualitative study confirmed that young people seeking support continued to do so despite social stigma and fears of exclusion, for example from friends' groups, which further reinforced self-isolation and "stay[ing] home" and avoidance of social settings (Aisbett et al., 2007). Both papers had small sample sizes (n=3, n=6 respectively).

A highly rated qualitative paper reported the location of appointments was important for privacy; participants preferred embedded services, such as in a hospital, where the purpose of their visit wasn't obviously tied to mental health services (Aisbett et al., 2007). Another lower quality quantitative paper reported 'private office' the preferred location (Bradley et al., 2010), with both papers emphasising the anonymity such locations provide. This is further supported by quantitative data on perceived barriers , 80.7% of young people from a rural Canadian school rated 'fear of gossip' as a barrier to help-seeking, followed by 'fear of social exclusion' (73.6%), 'lack of confidential location' (66.3%) and 'fear of stigma from friends' (63.5%), 'inconsistent mental health services' (56.6%) and 'lack of anonymity' (55.8%) (Church et al., 2020).

Organisational and systemic factors

In a Moderate-High (rating 4/5) quality qualitative interview, rural youth reported that non-youth friendly settings, professionals and services further compounded feelings of isolation, marginalisation and disconnection (Orlowski et al., 2016). Quantitative data indicated that rigid service hours and long wait times were perceived barriers to help-seeking among 'non-clinical' populations (Boyd et al., 2011; Church et al., 2020; Russell et al., 2004). Qualitative data (rated 'Moderate-High' or 'High') from Australia and the USA showed that barriers like negative past experiences deterred 'clinical' populations from seeking further support (Aisbett et al., 2007; Calloway et al., 2012; Orlowski et al., 2016; Wilson et al., 2012).

Further barriers for rural 'clinical' populations included poor information sharing between services, leading to repeated storytelling and "re-living" negative experiences. Other challenges included maintaining a consistent relationship with a mental health worker due to geographical constraints related to distance and travel (Orlowski et al., 2016).

Mistrust of services and disengagement was reported following negative past experiences and perceived as promoting a lack of agency, particularly concerning confidentiality like the poor handling of personal data and information sharing between services and professionals, transitions when aging out or moving between services, having difficulty booking appointments due to mental health difficulties not being taken seriously over physical health problems, or treatment preferences not being adhered to (Boyd et al., 2007; Church et al., 2020; Wilson et al., 2012). Conversely, a commitment to confidentiality facilitated feelings of comfort and assurance (Boyd et al., 2007; Wilson et al., 2012).

Other than geographical distance, it is unclear from the evidence-base how specific these organisational barriers are to help-seeking in rural settings in the absence of comparison data from urban settings.

Geographical limitations and access

Five papers reported on distance and transportation as a barrier to help-seeking and accessing services (Aisbett et al., 2007; Boyd et al., 2007, 2011; Calloway et al., 2012; Church et al., 2020). Church et al., (2020) reported that 53.1% of rural young people perceived lack of transportation as a barrier to help-seeking (quality rating: moderate). A further two high-quality qualitative papers included quotes from young people reporting that travelling also meant reliance on family members for transport, fuel costs and extra time spent travelling to access services outside of their community (Aisbett et al., 2007; Boyd et al., 2011).

Telephone (M=1.33, SD=2.47) and internet (M=1.56, SD=2.70) were amongst the lowest rated out of ten (10=highest rating) locations for treatment compared to in-person options like a 'private office' (M=6.44, SD=4.17), 'mental health clinic' (M=3.42, SD=3.89), as reported by one paper from Canada(Bradley et al., 2010). This paper had a low-quality rating and a completion rate of 44.6%.

A moderately-high quality qualitative paper included rural young people who reported the delivery of services and online support through applications and websites as a barrier due to limited or sporadic internet connections, financial constraints, privacy issues at home and concerns around isolation. However, for those hesitant to speak with a professional, online support was preferred, especially when leaving home was challenging (Orlowski et al., 2016).

Preferences for helpers as barriers and facilitators

Reported key help-seeking contacts rural youth varied and included: GPs, emergency department, school and university staff namely counsellors and nurses, psychologists, psychiatrists, social workers or a religious figure i.e., priest, chaplain (Boyd et al., 2007; Boyd et al., 2011; Bradley et al., 2010; Calloway et al., 2012; Gunnell & Martin, 2004; Orlowski et al., 2016; Pisani et al., 2012; Russell et al., 2004; Sears, 2004; Seidler et al., 2020; Wilson et al., 2012). GPs, local teachers and local clergy were reported as the "most accessible" professionals in an Irish rural context, with religious figures reported as the least preferred by the same paper and another from England and Wales (Gunnell & Martin, 2004; Russell et al., 2004). School-goers preferred a school counsellor (29%), local GP (27%) and a psychologist (13%) (Boyd et al., 2011). Friends and family, were the preferred point of initial contact (Orlowski et al., 2016; Pisani et al., 2012; Ronis & Slaunwhite, 2019; Russell et al., 2004; Sears, 2004; Seidler et al., 2020; Wilson et al., 2012) however this could vary depending on the problem being experienced or if they were approached by someone who had picked up on the young person's distress first (Boyd et al., 2007; Sears, 2004).

GPs were the most commonly reported first point of contact or professional to seek help from for mental health difficulties for rural youth across all papers. However, despite this, GP consultation rates were lower in rural areas when compared to urban settings in England and Wales (Gunnell & Martin, 2004). Two high quality papers reported that rural young people found seeking help from a GP difficult if it was not related to a physical health problem, and reported experiences of not being prioritised (Boyd et al., 2007; Wilson et al., 2012).

Characteristics of helpers included those who could pick up on distress and facilitate help-seeking, non-judgemental, genuine, young professionals and/or youth-friendly, authentic, maintained privacy and trustworthy (Boyd et al., 2007; Orlowski et al., 2016).

There were no urban comparisons, so it is unclear to what extent this is solely relevant to rural youth.

Preferences for treatment

Young people had a preference for talking therapy over taking antidepressant medication (Bradley et al., 2010). When asked about a "fear of medication" as a perceived barrier to help-seeking, 35.8% agreed ('agree' 25.5% and 'strongly agree' 10.3%) and 48.3% disagreed ('disagree' 22.8% and 25.5% 'strongly disagree').

Discussion

This is the first systematic review to examine both perceived and experienced barriers and facilitators to help-seeking for mental health difficulties among rural young people in high-income countries. Previous reviews have focused on only perceived barriers and facilitators (Gulliver et al., 2010), adolescence only (10-19; Aguirre Velasco et al., 2020), out-of-home care (looked after children; Powell et al., 2021), types of helping relationships (Lynch et al., 2021), marginalised young people (Robards et al., 2018) and digital interventions (Garrido et al., 2019). While some mention rural populations, this review specifically focuses on rural settings and the barriers and facilitators to help-seeking for older and working-age adolescents and young adults.

Main findings

The synthesised evidence supports the notion that rural youth have distinct barriers and facilitators to help-seeking compared to their urban counterparts. The close-knit nature of rural communities played a dual role, it led to issues with social visibility and maintaining confidentiality but also served as a buffer to accessing help, and a common primary source of social support. Other barriers included being male, as they were significantly less likely to consult GPs or use mental health services, instead preferring help from friends and family. Self-stigma and a fear of social exclusion were barriers as there was a cultural emphasis on self-reliance which viewed seeking help as “weakness”, and exacerbated feelings of isolation. Geographical distance and transport issues presented barriers, primarily due to the costs associated with time and finances, and a further reliance on family to travel to appointments. Distance was also a barrier to building conducive relationships with mental health professionals. Telephone and online services received poor ratings from rural youth, who showed a preference for in-person locations, which was compounded by sporadic internet connections. Facilitators of help-seeking included being able to maintain anonymity by

attending service locations that were embedded with other services, and where people demonstrated a commitment to confidentiality. Rural youth preferred to confide in friends and family, whilst their most preferred formal support was from school counsellors and GPs.

Interpretation of findings – barriers and facilitators to help-seeking

Individual characteristics

Rural male youth were less likely to seek support, which was worse for those from an ethnically minoritised background, i.e., Aboriginal or Torres Strait Islander (Seidler et al., 2020a). This group also preferred seeking help from friends and family and had higher rates of disengagement and discontinuation compared to their urban counterparts. This review's findings support the evidence-base on the impact of low help-seeking behaviours on male mental health (Gough & Novikova, 2020), and confirms that this pattern of behaviour is evident from a younger age. It also reflects the underrepresentation of boys and men receiving care from mental health services (NHS Digital, 2022). This has severe implications: in 2022 the suicide rate for males in England and Wales was significantly greater (16.4 deaths per 100,000) compared to those for female deaths (5.4 deaths per 100,000). A recent study across four high-income countries confirmed that males living in rural areas were more likely to complete suicide compared to their urban counterparts (Barry et al., 2020). Furthermore, the male identity is significant for service engagement and therapeutic relationships. A recent study where Australian mental health professionals were asked how to engage male adolescents in counselling and psychotherapy showed that rapport-building was approached differently with male adolescents and posed unique challenges due to vulnerability being compromised due to their sense of masculinity, therefore impacting the nature of building trust in the therapeutic relationship (Boerma et al., 2023). How this may interplay with more rural cultural beliefs around self-reliance. This review found that, compared to their urban

counterparts, rural male youth had barriers to help-seeking and engaging with services, however further research on population level data is needed to confirm the impact.

Only five papers described some aspect of the ethnic or cultural makeup of the sample population and fewer papers mentioned socio-economic status of participants or the rural settings, despite well-known determinants of mental health disorders such as the urbanicity effect, ethnic density effect and the impact of neighbourhood disadvantage on incidence and prevalence of mental disorders (Baker et al., 2021; Bakolis et al., 2023; Das-Munshi et al., 2010; C. Morgan et al., 2019; Schneiders, 2003).

Structural level

Geographical isolation from services is a problem in rural living that impacts mental and physical wellbeing (Public Health England, 2023). For young people in this review, geographical distance and transport also posed barriers to help-seeking and accessing services. This was reported as both a perceived and experienced barrier to help-seeking. Whilst distance was an issue, primary reasons given by young people from qualitative findings were the costs associated with time and financial constraints. Additionally, there was further reliance on family members, such as needing them to drive to appointments. There was evidence to suggest that this conflicted with the need for anonymity and valuing self-reliance (Aisbett et al., 2007; Boyd et al., 2011).

Telephone and online services were rated poorly by rural youth, who preferred in-person locations. Young people raised concerns about digital interventions and maintaining confidentiality, also reported elsewhere (Pretorius et al., 2019; Robards et al., 2018). Young people included in this review acknowledged that remote appointments could be helpful when struggling to leave home. This reflects the evidence-base, however, early evidence

suggest remote appointments do not necessarily improve engagement, and attendance is on par with in-person outpatient appointments (Kerr et al., 2023).

Other barriers identified were sporadic internet connections and the financial barriers to internet access. Ofcom estimates 77-85% of rural areas have internet coverage, compared to 96-98% in urban areas (Ofcom, 2022). Reduced connectivity and high internet costs increase the risk of digital exclusion for this population (Walker, 2022). This review found limited data on digital help-seeking among rural youth. While digital interventions may supplement help-seeking and access to support provision, future initiatives should consider the limited evidence-base for its effectiveness in this setting (Lehtimaki et al., 2021; Piers et al., 2023).

Preferred people as facilitators of help-seeking

Rural youth primarily sought support from GPs, which they preferred despite their varied experiences. This is in keeping with the evidence-base, for example, a recent study found that up to 60% of young people visited their GP annually, which was higher for those with preexisting conditions (Solmi et al., 2020). This underscores GPs' crucial role in mental health prevention and detection. While GPs are trained to identify at-risk patients, they can rely on personal experience over evidence-based methods, suggesting a need for specialised training (O'Brien & Creswell, 2019). A previous GP education programme was able to enhance detection of first-episode psychosis and referral rates. However detection rates for ARMS did not improve (Power et al., 2007) which young people are at increased risk of experiencing and during which early intervention is crucial (Fusar-Poli, 2012). Given the reliance on GPs in rural settings, context-driven specialised training (i.e., awareness of early warning signs, local services) and integrated routine mental health screening could improve timely access for young people in rural settings.

Interconnectedness of rural communities

Synthesised findings highlighted the importance of family and close social networks e.g., in the context of isolation, families often facilitated help-seeking and navigating access to help. Conversely, perceived stigma, from peers and community gossip created a fear of social exclusion and was compounded by help-seeking. Although strong bonds in smaller communities can be protective, stigma is reported to be higher in rural settings (Hoyt et al., 1997). Emerging evidence suggests that prevalent stoic attitudes (self-reliance; seeking help is "weakness") may mediate this perceived stigma (Keller, 2022, unpublished results), as supported by this review.

Social exclusion and isolation are implicated in addiction, affective disorders and psychoses, and must be seriously considered when contemplating methods to increase rural young people's help-seeking behaviours (C. Morgan et al., 2007; Reinhard et al., 2020; Wesselmann & Parris, 2021).

Four papers reported lack of awareness of mental health as a barrier. Awareness and knowledge of mental health (mental health literacy) is associated with lower mental health stigma (Crumb et al., 2019; Ma et al., 2022; Reavley & Jorm, 2011b), which may be lower in rural communities due to less exposure to mental health services, as well as other demographic characteristics (K. M. Griffiths et al., 2009). Future research and interventions will need to address this major barrier within the social complexities and connectedness of rural settings, particularly given the growing evidence that public mental health campaigns and interventions do challenge mental health stigma (A. J. Morgan et al., 2018; Sampogna et al., 2017; Waqas et al., 2020). The specific characteristics and challenges of rurality vary significantly across countries and regions (Australian Institute of Health and Welfare, 2024; Luck et al., 2010; Marino & Tebala, 2022), and this will also need to be considered for future initiatives and research in this area. For example, rural Australia has a lower population

density and a significant presence of indigenous populations, while rural UK areas often have an older White population. The geographical distances in Australia and USA mean that the distance to services is far greater compared to the UK. These variations, along with other factors such as agriculture, environmental risks like flooding, economic opportunities and infrastructure, affect rural living and the contextual reality for young people differently in each country.

Strengths and limitations

The search strategy was developed and reviewed by experts and the review protocol was pre-registered with PROSPERO. A robust and systematic search was used to identify the included papers, including the screening of a high number of full-text papers. Despite identifying some grey literature during the screening process (i.e., conference papers and dissertations), a formal search was not performed. Instead, a scoping search was performed on Google Scholar and the reference lists of included papers was hand-searched to confirm or identify further peer-reviewed papers. While samples from qualitative papers were understandably small, sample size varied greatly for papers with quantitative findings (range 71 to 140,124). There was a significant scarcity of data on rural minority ethnic youth. The nature of thematic analysis involves subjective interpretations. For clarity, the papers that underpinned the main author’s knowledge of help-seeking theory were reported. While the search criteria was open to wider high-income countries, the majority of included papers came from Australia and USA, also noted elsewhere in the literature (Aguirre Velasco et al., 2020; Gulliver et al., 2010; Oduola et al., 2024; Radez et al., 2021). Also, there was diversity and variability of study types, settings, outcome measures and time points across studies, as well as geographical and cultural contexts and, generalising these findings must be approached with caution. Unfortunately, due to resource constraints it was not possible to have a second rater to assess more than 13% of included papers (n=2).

Clinical implications

Clinical efforts are needed at the individual, relationship, community and systemic and organisational levels to support rural youth facing help-seeking barriers. Since community interconnectedness and family relationships facilitate help-seeking, future initiatives should consider mental health awareness and literacy of rural communities and provide emotional support for families to minimise carer distress and burnout.

Our findings echo existing evidence on mental health challenges faced by rural male youth, including poor service engagement and low help-seeking. Rural areas may exacerbate these challenges due to cultural and gender norms that discourage help-seeking. Targeted outreach and initiatives to normalise male help-seeking, peer support and fostering relationships with trusted community figures may encourage help-seeking.

Culturally, self-reliance is important to rural youth, future support provision should account for this, seek to empower young people’s voices, and promote agency wherever possible, particularly where families may be involved.

GPs and religious figures were the most accessible source of help-seeking, while educational institutions were preferred by students. Embedding support within existing infrastructure, like mental health professionals in schools or providing training to community members, may improve problem detection. Also, greater visibility of mental health support is likely to promote normalisation of help-seeking and address barriers related to stigma.

Digital interventions were rated as least preferred by rural youth, however, they acknowledged its usefulness. Given geographic distances, hybrid mental health provision could be key, as rural youth noted it effectively supplemented the existing support where strong working relationships were present.

Future research

More research is needed to understand the help-seeking patterns of UK-based rural young people. A review found that between 2003 and 2020 only 44.2% of children and adolescents with mental health disorders in high-income countries sought treatment (Barican et al., 2022). This highlights a significant gap in health provision and our understanding of help-seeking behaviours. There is a critical need for further research into the help-seeking behaviours of young people to enhance clinical practices and service development to be able to reach this vulnerable demographic sooner. Our review highlights that young people from rural populations do require special attention, where data is especially scarce, a concern that is also mirrored in the current national statistics. Our review also highlights a need for more empirical data on what constitutes effective remote health provision for this population.

Green Paper on 'Transforming Children and Young People's Mental Health Provision' pledged Mental Health Support Teams (MHSTs) in schools "to cover at least 50% of pupils in England, UK by the end of 2024 to 2025 financial year". Despite recommendations to include all rural schools and colleges, the extent of this remains unclear. The UK Government recently responded to calls for more initiatives for mental health care in rural areas, by claiming existing provisions are sufficient. Further research may be needed to quantify rural-specific needs to strengthen the case for more provisions (Public Health England, 2023).

Conclusions

This review highlights the distinct barriers and facilitators to help-seeking for young people from rural communities, distinguishing them from their urban counterparts. Rural communities, while tight-knit, can pose challenges to privacy and accessing professional help. Moreover, cultural norms emphasising self-reliance often deters young people from seeking help, perpetuating feelings of isolation and stigma. This was particularly the case for rural male youth, which is in line with the existing evidence-base on male help-seeking.

Those that did seek help, emphasised the significance of family support. Additionally, factors like distance, transportation costs, and limited digital resources further hindered access to help and services and demonstrated a need for more research. To address these disparities, targeted initiatives that leverage existing rural infrastructure, particularly for rural male youth, and provide an explicit commitment to confidentiality can improve help-seeking and accessibility to ensure rural youth receive the support they need.

Acknowledgements

Thank you to Dr Andy Jones for his contributions during the conception of the work and to Maisha Murshed for assisting with the quality assessment.

References

Adams, C., Gringart, E., & Strobel, N. (2022). Explaining adults' mental health help-seeking through the lens of the theory of planned behavior: A scoping review. *Systematic Reviews*, *11*(1), 160. https://doi.org/10.1186/s13643-022-02034-y

Aguirre Velasco, A., Cruz, I. S. S., Billings, J., Jimenez, M., & Rowe, S. (2020). What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A systematic review. *BMC Psychiatry*, *20*(1), 293. https://doi.org/10.1186/s12888-020-02659-0

Aisbett, D., Boyd, C., Francis, K., Newnham, K., & newnham, K. (2007). Understanding barriers to mental health service utilization for adolescents in rural Australia. *Rural and Remote Health*. https://doi.org/10.22605/RRH624

Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior [1]. *Journal of Applied Social Psychology*, *32*(4), 665–683. https://doi.org/10.1111/j.1559-1816.2002.tb00236.x

Alexander, L., Malone, K., Counihan, E., Kennedy, J., Roddy, D., & Delaney, L. (2020). Assessing Public Attitudes to Electroconvulsive Therapy: Validation of the Modified ECT Attitudes Questionnaire Using a Systematic Analysis. *The Journal of ECT*, *36*(1), 47–53. https://doi.org/10.1097/YCT.0000000000000612

Allan, S. M., Hodgekins, J., Beazley, P., & Oduola, S. (2021). Pathways to care in AT-RISK mental states: A systematic review. *Early Intervention in Psychiatry*, *15*(5), 1092–1103. https://doi.org/10.1111/eip.13053

American Psychiatric Association. (2013). *DSM-5® Handbook of Differential Diagnosis*. American Psychiatric Publishing. https://doi.org/10.1176/appi.books.9781585629992

Andersen, R. M. (1995). Revisiting the Behavioral Model and Access to Medical Care: Does it Matter? *Journal of Health and Social Behavior*, *36*(1), 1. https://doi.org/10.2307/2137284

Angermeyer, M. C., van der Auwera, S., Carta, M. G., & Schomerus, G. (2017). Public attitudes towards psychiatry and psychiatric treatment at the beginning of the 21st century: A systematic review and meta-analysis of population surveys. *World Psychiatry*, *16*(1), 50–61. https://doi.org/10.1002/wps.20383

Australian Institute of Health and Welfare. (2024, April 30). *Rural and remote health*. Australian Institute of Health and Welfare. https://www.aihw.gov.au/reports/rural-remote-australians/rural-and-remote-health

Baker, S. J., Jackson, M., Jongsma, H., & Saville, C. W. N. (2021). The ethnic density effect in psychosis: A systematic review and multilevel meta-analysis. *The British Journal of Psychiatry*, *219*(6), 632–643. https://doi.org/10.1192/bjp.2021.96

Bakolis, I., Murray, E. T., Hardy, R., Hatch, S., & Richards, M. (2023). Area disadvantage and mental health over the life course: A 69-year prospective birth cohort study. *Social Psychiatry and Psychiatric Epidemiology*, *58*.

Barican, J. L., Yung, D., Schwartz, C., Zheng, Y., Georgiades, K., & Waddell, C. (2022). Prevalence of childhood mental disorders in high-income countries: A systematic review and meta-analysis to inform policymaking. *Evidence Based Mental Health*, *25*(1), 36–44. https://doi.org/10.1136/ebmental-2021-300277

Barnaby, N., Alison, Y., Connie, M., & Mandie, N. (2014). *The CAARMS: assessing young people at ultra high risk of psychosis.* Orygen Youth Health Research Centre. https://www.orygen.org.au/Training/Resources/Psychosis/Manuals/Manual-PDF-files/orygen-the-caarms-pdf.aspx

Barry, R., Rehm, J., De Oliveira, C., Gozdyra, P., & Kurdyak, P. (2020). Rurality and Risk of Suicide Attempts and Death by Suicide among People Living in Four English-speaking High-income Countries: A Systematic Review and Meta-analysis. *The Canadian Journal of Psychiatry*, *65*(7), 441–447. https://doi.org/10.1177/0706743720902655

Bentall, R. P. (Ed.). (1992). *Reconstructing schizophrenia*. Routledge.

Bhui, K., Ullrich, S., & Coid, J. W. (2014). Which pathways to psychiatric care lead to earlier treatment and a shorter duration of first-episode psychosis? *BMC Psychiatry*, *14*(1), 72. https://doi.org/10.1186/1471-244X-14-72

Biddle, L., Gunnell, D., Sharp, D., & Donovan, J. L. (2004). Factors influencing help seeking in mentally distressed young adults: A cross-sectional survey. *British Journal of General Practice*, *54(501)*, 248–253.

Boerma, M., Beel, N., Jeffries, C., & Krishnamoorthy, G. (2023). 'It's all about rapport': Australian therapists' recommendations for engaging adolescent males in counselling and psychotherapy. *Counselling and Psychotherapy Research*, capr.12716. https://doi.org/10.1002/capr.12716

Boyd, C., Francis, K., Aisbett, D., Newnham, K., Sewell, J., Dawes, G., & Nurse, S. (2007). Australian rural adolescents' experiences of accessing psychological help for a mental health problem. *The Australian Journal of Rural Health*, *15*(3), 196–200. https://doi.org/10.1111/j.1440-1584.2007.00884.x

Boyd, C., Hayes, L., Nurse, S., Aisbett, D. L., Francis, K., Newnham, K., & Sewell, J. (2011). Preferences and intention of rural adolescents toward seeking help for mental health problems. *Rural and Remote Health*, *11*(1), 1582.

Boydell, K. M., Pong, R., Volpe, T., Tilleczek, K., Wilson, E., & Lemieux, S. (2006). Family perspectives on pathways to mental health care for children and youth in rural communities. *The Journal of Rural Health: Official Journal of the American Rural Health Association and the National Rural Health Care Association*, *22*(2), 182–188. https://doi.org/10.1111/j.1748-0361.2006.00029.x

Bradley, K. L., McGrath, P. J., Brannen, C. L., & Bagnell, A. L. (2010). Adolescents' attitudes and opinions about depression treatment. *Community Mental Health Journal*, *46*(3), 242–251. https://doi.org/10.1007/s10597-009-9224-5

Broglia, E., Nisbet, K., Bone, C., Simmonds-Buckley, M., Knowles, L., Hardy, G., Gibbon, L., & Barkham, M. (2023). What factors facilitate partnerships between higher education and local mental health services for students? A case study collective. *BMJ Open*, *13*(12), e077040. https://doi.org/10.1136/bmjopen-2023-077040

Bronfenbrenner, U. (1974). Developmental Research, Public Policy, and the Ecology of Childhood. *Child Development*, *45*(1), 1. https://doi.org/10.2307/1127743

Calloway, S. J., Kelly, P., & Ward-Smith, P. (2012). Stressors and barriers to help seeking for psychological distress among students attending a rural university. *Journal of Rural Mental Health*, *36*(1), 3–10. https://doi.org/10.1037/h0094774

Campbell, F., Blank, L., Cantrell, A., Baxter, S., Blackmore, C., Dixon, J., & Goyder, E. (2022). Factors that influence mental health of university and college students in the UK: A systematic review. *BMC Public Health*, *22*(1), Article 1. https://doi.org/10.1186/s12889-022-13943-x

Care Quality Commission. (2012). *CQC launch "State of Care" report 2012*. https://www.cqc.org.uk/news/releases/cqc-launch-state-care-report-2012

Cecil, C. A. M. (2020). Biopsychosocial pathways to mental health and disease across the lifespan: The emerging role of epigenetics. In J. Savulescu, R. Roache, & W. Davies (Eds.), *Psychiatry reborn: Biopsychosocial psychiatry in modern medicine* (pp. 190–206). Oxford university press.

Chapman, T., & Wistow, J. (2023). *Local health and social wellbeing: The contribution of the voluntary sector, community and social enterprise sector in Buckinghamshire, Oxfordshire and Berkshire West*. Durham University. https://www.stchads.ac.uk/wp-content/uploads/2023/06/FULL-REPORT-The-contribution-of-the-VCSE-sector-to-local-health-and-social-wellbeing-in-Buckinghamshire-Oxfordshire-and-Berkshire-West-June-2023.pdf

Cheung, O., Baker, M., & Tabraham, P. (2022). Improving attitudes toward electroconvulsive therapy. *BJPsych Bulletin*, *46*(1), 4–10. https://doi.org/10.1192/bjb.2021.5

Church, M., Ellenbogen, S., & Hudson, A. (2020). Perceived barriers to accessing mental health services for rural and small city Cape Breton youth. *Social Work in Mental Health*, *18*(5), 554–570. https://doi.org/10.1080/15332985.2020.1801553

Correll, C. U., Galling, B., Pawar, A., Krivko, A., Bonetto, C., Ruggeri, M., Craig, T. J., Nordentoft, M., Srihari, V. H., Guloksuz, S., Hui, C. L. M., Chen, E. Y. H., Valencia, M., Juarez, F., Robinson, D. G., Schooler, N. R., Brunette, M. F., Mueser, K. T., Rosenheck, R. A., … Kane, J. M. (2018). Comparison of Early Intervention Services vs Treatment as Usual for Early-Phase Psychosis: A Systematic Review, Meta-analysis, and Meta-regression. *JAMA Psychiatry*, *75*(6), 555–565. https://doi.org/10.1001/jamapsychiatry.2018.0623

Craig, T. K. J., Garety, P., Power, P., Rahaman, N., Colbert, S., Fornells-Ambrojo, M., & Dunn, G. (2004). The Lambeth Early Onset (LEO) Team: Randomised controlled trial of the

effectiveness of specialised care for early psychosis. *BMJ*, *329*(7474), 1067. https://doi.org/10.1136/bmj.38246.594873.7C

Crumb, L., Mingo, T. M., & Crowe, A. (2019). "Get over it and move on": The impact of mental illness stigma in rural, low-income United States populations. *Mental Health & Prevention*, *13*, 143–148. https://doi.org/10.1016/j.mhp.2019.01.010

Das-Munshi, J., Becares, L., Dewey, M. E., Stansfeld, S. A., & Prince, M. J. (2010). Understanding the effect of ethnic density on mental health: Multi-level investigation of survey data from England. *BMJ*, *341*(oct21 1), c5367–c5367. https://doi.org/10.1136/bmj.c5367

Das-Munshi, J., Leavey, G., Stansfeld, S. A., & Prince, M. J. (2012). Migration, social mobility and common mental disorders: Critical review of the literature and meta-analysis. *Ethnicity & Health*, *17*(1–2), 17–53. https://doi.org/10.1080/13557858.2011.632816

Das-Munshi, J., Schofield, P., Bhavsar, V., Chang, C.-K., Dewey, M. E., Morgan, C., Stewart, R., Thornicroft, G., & Prince, M. J. (2019). Ethnic density and other neighbourhood associations for mortality in severe mental illness: A retrospective cohort study with multi-level analysis from an urbanised and ethnically diverse location in the UK. *The Lancet Psychiatry*, *6*(6), 506–517. https://doi.org/10.1016/S2215-0366(19)30126-9

Department for Environment, Food & Rural Affairs. (2023). *Statistical Digest of Rural England: 5 – Connectivity and Accessibility*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1142327/5__Connectivity_and_Accessibility.pdf

Drake, R. J., Haley, C. J., Akhtar, S., & Lewis, S. W. (2000). Causes and consequences of duration of untreated psychosis in schizophrenia. *British Journal of Psychiatry*, *177*(6), 511–515. https://doi.org/10.1192/bjp.177.6.511

Dykxhoorn, J., Osborn, D., Walters, K., Kirkbride, J. B., Gnani, S., & Lazzarino, A. I. (2023). Temporal patterns in the recorded annual incidence of common mental disorders over two decades in the United Kingdom: A primary care cohort study. *Psychological Medicine*, 1–12. https://doi.org/10.1017/S0033291723002349

Ferrier, I. N., & Waite, J. (Eds.). (2019). *The ECT Handbook* (4th ed.). Cambridge University Press. https://doi.org/10.1017/9781911623175

Foster, A., O'Cathain, A., & Harris, J. (2020). How do third sector organisations or charities providing health and well-being services in England implement patient-reported outcome measures (PROMs)? A qualitative interview study. *BMJ Open*, *10*(10), e039116. https://doi.org/10.1136/bmjopen-2020-039116

Fusar-Poli, P. (2012). Predicting Psychosis: Meta-analysis of Transition Outcomes in Individuals at High Clinical Risk. *Archives of General Psychiatry*, *69*(3), 220. https://doi.org/10.1001/archgenpsychiatry.2011.1472

Fusar-Poli, P., Correll, C. U., Arango, C., Berk, M., Patel, V., & Ioannidis, J. P. A. (2021). Preventive psychiatry: A blueprint for improving the mental health of young people. *World Psychiatry*, *20*(2), 200–221. https://doi.org/10.1002/wps.20869

Fusar-Poli, P., McGorry, P. D., & Kane, J. M. (2017). Improving outcomes of first-episode psychosis: An overview. *World Psychiatry*, *16*(3), 251–265. https://doi.org/10.1002/wps.20446

Garety, P. A., Kuipers, E., Fowler, D., Freeman, D., & Bebbington, P. E. (2001). A cognitive model of the positive symptoms of psychosis. *Psychological Medicine*, *31*(2), 189–195. https://doi.org/10.1017/S0033291701003312

Garrido, S., Millington, C., Cheers, D., Boydell, K., Schubert, E., Meade, T., & Nguyen, Q. V. (2019). What Works and What Doesn't Work? A Systematic Review of Digital Mental Health Interventions for Depression and Anxiety in Young People. *Frontiers in Psychiatry*, *10*, 759. https://doi.org/10.3389/fpsyt.2019.00759

Ghiara, V. (2020). Disambiguating the Role of Paradigms in Mixed Methods Research. *Journal of Mixed Methods Research*, *14*(1), 11–25. https://doi.org/10.1177/1558689818819928

Global Burden of Disease Collaborative Network. (2021). *Global Burden of Disease Study 2019 (GBD 2019) Reference Life Table* [Dataset]. Institute for Health Metrics and Evaluation (IHME). https://doi.org/10.6069/1D4Y-YQ37

Gough, B., & Novikova, I. (2020). *Mental health, men and culture: How do sociocultural constructions of masculinities relate to men's mental health help-seeking behaviour in the WHO European region?* WHO Regional Office for Europe.

Greenhalgh, K. T., & Shanley, D. C. (2017). Recognising an at Risk Mental State for Psychosis: Australian Lay People and Clinicians' Ability to Identify a Problem and Recommend Help Across Vignette Types. *Australian Psychologist*, *52*(6), 524–532. https://doi.org/10.1111/ap.12238

Griffiths, C., & O'Neill-Kerr, A. (2019). Patients', Carers', and the Public's Perspectives on Electroconvulsive Therapy. *Frontiers in Psychiatry*, *10*, 304. https://doi.org/10.3389/fpsyt.2019.00304

Griffiths, K. M., Christensen, H., & Jorm, A. F. (2009). Mental health literacy as a function of remoteness of residence: An Australian national study. *BMC Public Health*, *9*(1), 92. https://doi.org/10.1186/1471-2458-9-92

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry*, *10*(1), 113. https://doi.org/10.1186/1471-244X-10-113

Gunnell, D., & Martin, R. M. (2004). Patterns of General Practitioner consultation for mental illness by young people in rural areas. A cross-sectional study. *Health Statistics Quarterly*, *21*, 30–33.

Harwood, T. G., & Garry, T. (2003). An Overview of Content Analysis. *The Marketing Review*, *3*(4), 479–498. https://doi.org/10.1362/146934703771910080

Henderson, C., & Gronholm, P. C. (2018). Mental Health Related Stigma as a 'Wicked Problem': The Need to Address Stigma and Consider the Consequences. *International Journal of Environmental Research and Public Health*, *15*(6), Article 6. https://doi.org/10.3390/ijerph15061158

Henderson, C., & Thornicroft, G. (2009). Stigma and discrimination in mental illness: Time to Change. *The Lancet*, *373*(9679), 1928–1930. https://doi.org/10.1016/S0140-6736(09)61046-1

Hernan, A., Philpot, B., Edmonds, A., & Reddy, P. (2010). Healthy minds for country youth: Help-seeking for depression among rural adolescents. *Australian Journal of Rural Health*, *18*(3), 118–124. https://doi.org/10.1111/j.1440-1584.2010.01136.x

Hodgekins, J., French, P., Birchwood, M., Mugford, M., Christopher, R., Marshall, M., Everard, L., Lester, H., Jones, P., Amos, T., Singh, S., Sharma, V., Morrison, A. P., & Fowler, D. (2015). Comparing time use in individuals at different stages of psychosis and a non-clinical comparison group. *Schizophrenia Research*, *161*(2–3), 188–193. https://doi.org/10.1016/j.schres.2014.12.011

Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.-C., Vedel, I., & Pluye, P. (2018). The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. *Education for Information*, *34*(4), 285–291. https://doi.org/10.3233/EFI-180221

Hoyt, D. R., Conger, R. D., Valde, J. G., & Weihs, K. (1997). Psychological Distress and Help Seeking in Rural America. *American Journal of Community Psychology*, *25*(4), 449–470. https://doi.org/10.1023/A:1024655521619

Jorm, A. F., Kitchener, B. A., & Reavley, N. J. (2019). Mental Health First Aid training: Lessons learned from the global spread of a community education program. *World Psychiatry*, *18*(2), 142–143. https://doi.org/10.1002/wps.20621

Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). "Mental health literacy": A survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, *166*(4), 182–186. https://doi.org/10.5694/j.1326-5377.1997.tb140071.x

Karnilowicz, W., Ali, L., & Phillimore, J. (2014). Community research within a social constructionist epistemology: Implications for "Scientific Rigor". *Community Development*, *45*(4), 353–367. https://doi.org/10.1080/15575330.2014.936479

Keller, E. M. (2022). Understanding Help-Seeking in Rural Counties: A Serial Mediation Model of Self-Reliance, Stigma, and Attitudes toward Psychologists. *Unpublished Doctoral Thesis*. https://trace.tennessee.edu/utk_graddiss/6924

Kelly, C., Hulme, C., Farragher, T., & Clarke, G. (2016). Are differences in travel time or distance to healthcare for adults in global north countries associated with an impact on health outcomes? A systematic review. *BMJ Open*, *6*(11), e013059. https://doi.org/10.1136/bmjopen-2016-013059

Kerr, G., Greenfield, G., Hayhoe, B., Gaughran, F., Halvorsrud, K., Pinto da Costa, M., Rehill, N., Raine, R., Majeed, A., Costelloe, C., Neves, A. L., & Beaney, T. (2023). Attendance at remote versus in-person outpatient appointments in an NHS Trust. *Journal of Telemedicine and Telecare*, 1357633X231216501. https://doi.org/10.1177/1357633X231216501

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*(6), 593. https://doi.org/10.1001/archpsyc.62.6.593

Kickbusch, I. (2013). *Health Literacy, the solid facts*. World Health Organization.

Knapp, M., King, D., Healey, A., & Thomas, C. (2011). Economic outcomes in adulthood and their associations with antisocial conduct, attention deficit and anxiety problems in childhood. *The Journal of Mental Health Policy and Economics*, *14*(3), 137–147.

Kvig, E. I., Brinchmann, B., Moe, C., Nilssen, S., Larsen, T. K., & Sørgaard, K. (2017). Geographical accessibility and duration of untreated psychosis: Distance as a determinant of treatment delay. *BMC Psychiatry*, *17*(1), 176. https://doi.org/10.1186/s12888-017-1345-8

Lehtimaki, S., Martic, J., Wahl, B., Foster, K. T., & Schwalbe, N. (2021). Evidence on Digital Mental Health Interventions for Adolescents and Young People: Systematic Overview. *JMIR Mental Health*, *8*(4), e25847. https://doi.org/10.2196/25847

Luck, G. W., Black, R., & Race, D. (2010). Demographic Change in Rural Australia: Future Opportunities and Challenges. In G. W. Luck, R. Black, & D. Race (Eds.), *Demographic Change in Australia's Rural Landscapes: Implications for Society and the Environment* (pp. 375–384). Springer Netherlands. https://doi.org/10.1007/978-90-481-9654-8_16

Lynch, L., Moorhead, A., Long, M., & Hawthorne-Steele, I. (2021). What Type of Helping Relationship Do Young People Need? Engaging and Maintaining Young People in Mental Health Care—A Narrative Review. *Youth & Society*, *53*(8), 1376–1399. https://doi.org/10.1177/0044118X20902786

Ma, K. K. Y., Anderson, J. K., & Burn, A. (2022). Review: School-based interventions to improve mental health literacy and reduce mental health stigma – a systematic review. *Child and Adolescent Mental Health*, camh.12543. https://doi.org/10.1111/camh.12543

Mahase, E. (2020). Coronavirus: Covid-19 has killed more people than SARS and MERS combined, despite lower case fatality rate. *BMJ*, m641. https://doi.org/10.1136/bmj.m641

March, D., Hatch, S. L., Morgan, C., Kirkbride, J. B., Bresnahan, M., Fearon, P., & Susser, E. (2008). Psychosis and Place. *Epidemiologic Reviews*, *30*(1), 84–100. https://doi.org/10.1093/epirev/mxn006

Marino, D., & Tebala, D. (2022). Rural Areas and Well-Being in EU Countries + UK: A Taxonomy and a Cluster Analysis. *Sustainability*, *14*(22), Article 22. https://doi.org/10.3390/su142215213

McCann, T. V., Savic, M., Ferguson, N., Cheetham, A., Witt, K., Emond, K., Bosley, E., Smith, K., Roberts, L., & Lubman, D. I. (2018). Recognition of, and attitudes towards, people with depression and psychosis with/without alcohol and other drug problems: Results from a national survey of Australian paramedics. *BMJ Open*, *8*(12), e023860. https://doi.org/10.1136/bmjopen-2018-023860

McChesney, K., & Aldridge, J. (2019). Weaving an interpretivist stance throughout mixed methods research. *International Journal of Research & Method in Education*, *42*(3), 225–238. https://doi.org/10.1080/1743727X.2019.1590811

McCulloch, A., Goldie, I., & Bridger, S. (2014). Early Intervention in Mental Health Problems: The Role of the Voluntary Sector. In P. Byrne & A. Rosen (Eds.), *Early Intervention in Psychiatry* (1st ed., pp. 134–146). Wiley. https://doi.org/10.1002/9781118557174.ch12

Mcgorry, P. D., Killackey, E., & Yung, A. (2008). Early intervention in psychosis: Concepts, evidence and future directions. *World Psychiatry*, *7*(3), 148–156. https://doi.org/10.1002/j.2051-5545.2008.tb00182.x

McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, *22*(3), 276–282.

Michael, N., Erfurth, A., Ohrmann, P., Arolt, V., Heindel, W., & Pfleiderer, B. (2003). Neurotrophic Effects of Electroconvulsive Therapy: A Proton Magnetic Resonance Study of the Left Amygdalar Region in Patients with Treatment-Resistant Depression. *Neuropsychopharmacology*, *28*(4), 720–725. https://doi.org/10.1038/sj.npp.1300085

Middleton, N., Gunnell, D., Frankel, S., Whitley, E., & Dorling, D. (2003). Urban–rural differences in suicide trends in young adults: England and Wales, 1981–1998. *Social Science & Medicine*, *57*(7), 1183–1194. https://doi.org/10.1016/S0277-9536(02)00496-3

Mind. (2011). *An independent inquiry into acute and crisis mental healthcare*. https://www.mind.org.uk/media-a/4377/listening_to_experience_web.pdf

Morgan, A. J., Reavley, N. J., Ross, A., Too, L. S., & Jorm, A. F. (2018). Interventions to reduce stigma towards people with severe mental illness: Systematic review and meta-analysis. *Journal of Psychiatric Research*, *103*, 120–133. https://doi.org/10.1016/j.jpsychires.2018.05.017

Morgan, C., Burns, T., Fitzpatrick, R., Pinfold, V., & Priebe, S. (2007). Social exclusion and mental health: Conceptual and methodological review. *British Journal of Psychiatry*, *191*(6), 477–483. https://doi.org/10.1192/bjp.bp.106.034942

Morgan, C., Charalambides, M., Hutchinson, G., & Murray, R. M. (2010). Migration, Ethnicity, and Psychosis: Toward a Sociodevelopmental Model. *Schizophrenia Bulletin*, *36*(4), 655–664. https://doi.org/10.1093/schbul/sbq051

Morgan, C., Knowles, G., & Hutchinson, G. (2019). Migration, ethnicity and psychoses: Evidence, models and future directions. *World Psychiatry*, *18*(3), 247–258. https://doi.org/10.1002/wps.20655

National Institute for Health and Care Excellence. (2009). *Guidance on the use of electroconvulsive therapy*. National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/ta59

National Institute for Health and Care Excellence. (2014). *Psychosis and schizophrenia in adults: Prevention and management*. National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/cg178

National Institute for Health and Care Excellence. (2022). *Depression in adults: Recognition and management (NICE Guideline No. 222)*. National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/ng222

Nelson, B., Alison, Y., Connie, M., & Mandie, N. (2014). *The CAARMS: assessing young people at ultra high risk of psychosis.*

Newbigging, K., Rees, J., Ince, R., Mohan, J., Joseph, D., Ashman, M., Norden, B., Dare, C., Bourke, S., & Costello, B. (2020). The contribution of the voluntary sector to mental health

crisis care: A mixed-methods study. *Health Services and Delivery Research*, *8*(29), Article 29.

Newbury, J. B., Arseneault, L., Caspi, A., Moffitt, T. E., Odgers, C. L., Belsky, D. W., Sugden, K., Williams, B., Ambler, A. P., Matthews, T., & Fisher, H. L. (2022). Association between genetic and socioenvironmental risk for schizophrenia during upbringing in a UK longitudinal cohort. *Psychological Medicine*, *52*(8), 1527–1537. https://doi.org/10.1017/S0033291720003347

NHS Digital. (2022). *Psychological Therapies, Annual report on the use of IAPT services, 2021-22* [Dataset].

NHS England. (2014). *FIVE YEAR FORWARD VIEW*. https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf.

NHS England. (2019). *The NHS Long Term Plan*. https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf

NHS England. (2021). *Annual Report and Accounts 2019/20*. https://www.england.nhs.uk/wp-content/uploads/2021/01/nhs-england-annual-report-2019-20-full.pdf

NHS England. (2023). *Implementing the early intervention in psychosis access and waiting time standard*. https://www.england.nhs.uk/wp-content/uploads/2023/03/B1954-implementing-the-early-intervention-in-psychosis-access-and-waiting-time-standard.pdf

O'Brien, D., & Creswell, C. (2019). *Children with anxiety disorders in primary care: The views of general practitioners II (CADPC II)* [Dataset]. University of Reading. https://doi.org/10.17864/1947.192

Oduola, S., Coombes, E., Hodgekins, J., & Jones, A. (2024). *Perspectives of young people, family carers and voluntary sector staff on help-seeking for mental health difficulties in a rural region of the United Kingdom—A qualitative study* (p. 2024.01.04.24300825). medRxiv. https://doi.org/10.1101/2024.01.04.24300825

Oduola, S., Craig, T. K. J., Das-Munshi, J., Bourque, F., Gayer-Anderson, C., & Morgan, C. (2019). Compulsory admission at first presentation to services for psychosis: Does ethnicity still matter? Findings from two population-based studies of first episode psychosis. *Social Psychiatry and Psychiatric Epidemiology*, *54*(7), 871–881. https://doi.org/10.1007/s00127-019-01685-y

Ofcom. (2022). *Connected nations 2022: UK report*.

Office for Health Improvement & Disparities. (2023). *Premature mortality in adults with severe mental illness (SMI)*.

Office for National Statistics (ONS). (2022). *Suicides in England and Wales: 2022 registrations* [Statistical bulletin]. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2022registrations#suicides-in-england-and-wales

Oliver, D., Davies, C., Crossland, G., Lim, S., Gifford, G., McGuire, P., & Fusar-Poli, P. (2018). Can We Reduce the Duration of Untreated Psychosis? A Systematic Review and Meta-Analysis of Controlled Interventional Studies. *Schizophrenia Bulletin*, *44*(6), 1362–1372. https://doi.org/10.1093/schbul/sbx166

Orlowski, S., Lawn, S., Antezana, G., Venning, A., Winsall, M., Bidargaddi, N., & Matthews, B. (2016). A Rural Youth Consumer Perspective of Technology to Enhance Face-to-Face Mental Health Services. *Journal of Child and Family Studies*, *25*(10), 3066–3075. https://doi.org/10.1007/s10826-016-0472-z

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., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, n71. https://doi.org/10.1136/bmj.n71

Perez, J., Jin, H., Russo, D. A., Stochl, J., Painter, M., Shelley, G., Jackson, E., Crane, C., Graffy, J. P., Croudace, T. J., Byford, S., & Jones, P. B. (2015). Clinical effectiveness and cost-effectiveness of tailored intensive liaison between primary and secondary care to identify individuals at risk of a first psychotic illness (the LEGs study): A cluster-randomised controlled trial. *The Lancet Psychiatry*, *2*(11), 984–993. https://doi.org/10.1016/S2215-0366(15)00157-1

Piers, R., Williams, J. M., & Sharpe, H. (2023). Review: Can digital mental health interventions bridge the 'digital divide' for socioeconomically and digitally marginalised youth? A systematic review. *Child and Adolescent Mental Health*, *28*(1), 90–104. https://doi.org/10.1111/camh.12620

Pisani, A. R., Schmeelk-Cone, K., Gunzler, D., Petrova, M., Goldston, D. B., Tu, X., & Wyman, P. A. (2012). Associations between suicidal high school students' help-seeking and their attitudes and perceptions of social environment. *Journal of Youth and Adolescence*, *41*(10), 1312–1324. https://doi.org/10.1007/s10964-012-9766-7

Plana-Ripoll, O., Di Prinzio, P., McGrath, J. J., Mortensen, P. B., & Morgan, V. A. (2021). Factors that contribute to urban–rural gradients in risk of schizophrenia: Comparing Danish and Western Australian registers. *Australian & New Zealand Journal of Psychiatry*, *55*(12), 1157–1165. https://doi.org/10.1177/00048674211009615

Powell, K., Huxley, E., & Townsend, M. L. (2021). Mental health help seeking in young people and carers in out of home care: A systematic review. *Children and Youth Services Review*, *127*, 106088. https://doi.org/10.1016/j.childyouth.2021.106088

Power, P., Iacoponi, E., Reynolds, N., Fisher, H., Russell, M., Garety, P. A., McGuire, P. K., & Craig, T. (2007). The Lambeth Early Onset Crisis Assessment Team Study: General practitioner education and access to an early detection team in first-episode psychosis. *British Journal of Psychiatry*, *191*(S51), s133–s139. https://doi.org/10.1192/bjp.191.51.s133

Pretorius, C., Chambers, D., & Coyle, D. (2019). Young People's Online Help-Seeking and Mental Health Difficulties: Systematic Narrative Review. *Journal of Medical Internet Research*, *21*(11), e13873. https://doi.org/10.2196/13873

Public Health England. (2017). *Health and wellbeing in rural areas*. https://www.local.gov.uk/sites/default/files/documents/1.39_Health%20in%20rural%20areas_WEB.pdf

Public Health England. (2018). *Severe mental illness (SMI) and physical health inequalities: Briefing*.

Public Health England. (2019). *An evidence summary of health inequalities in older populations in coastal and rural areas: Executive summary and main messages*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/824717/Health_Inequalities_in_Ageing_in_Rural_and_Coastal_Areas-Messages_and_summary.pdf

Public Health England. (2023). *Rural Mental Health: Fourth Report of Session 2022–23*.

Radez, J., Reardon, T., Creswell, C., Lawrence, P. J., Evdoka-Burton, G., & Waite, P. (2021). Why do children and adolescents (not) seek and access professional help for their mental

health problems? A systematic review of quantitative and qualitative studies. *European Child & Adolescent Psychiatry*, *30*(2), 183–211. https://doi.org/10.1007/s00787-019-01469-4

Read, J., Cunliffe, S., Jauhar, S., & McLoughlin, D. M. (2019). Should we stop using electroconvulsive therapy? *BMJ*, k5233. https://doi.org/10.1136/bmj.k5233

Reavley, N. J., & Jorm, A. F. (2011a). Recognition of Mental Disorders and Beliefs about Treatment and Outcome: Findings from an Australian National Survey of Mental Health Literacy and Stigma. *Australian & New Zealand Journal of Psychiatry*, *45*(11), 947–956. https://doi.org/10.3109/00048674.2011.621060

Reavley, N. J., & Jorm, A. F. (2011b). Stigmatizing Attitudes towards People with Mental Disorders: Findings from an Australian National Survey of Mental Health Literacy and Stigma. *Australian & New Zealand Journal of Psychiatry*, *45*(12), 1086–1093. https://doi.org/10.3109/00048674.2011.621061

Reavley, N. J., McCann, T. V., & Jorm, A. F. (2012). Mental health literacy in higher education students. *Early Intervention in Psychiatry*, *6*(1), 45–52. https://doi.org/10.1111/j.1751-7893.2011.00314.x

Reavley, N. J., Morgan, A. J., & Jorm, A. F. (2014). Development of scales to assess mental health literacy relating to recognition of and interventions for depression, anxiety disorders and schizophrenia/psychosis. *Australian & New Zealand Journal of Psychiatry*, *48*(1), 61–69. https://doi.org/10.1177/0004867413491157

Reeb, B. T., & Conger, K. J. (2011). Mental Health Service Utilization in a Community Sample of Rural Adolescents: The Role of Father-Offspring Relations. *Journal of Pediatric Psychology*, *36*(6), 661–668. https://doi.org/10.1093/jpepsy/jsr016

Reinhard, M. A., Dewald-Kaufmann, J., Wüstenberg, T., Musil, R., Barton, B. B., Jobst, A., & Padberg, F. (2020). The vicious circle of social exclusion and psychopathology: A systematic review of experimental ostracism research in psychiatric disorders. *European Archives of Psychiatry and Clinical Neuroscience*, *270*(5), 521–532. https://doi.org/10.1007/s00406-019-01074-1

Reupert, A. E., Cuff, R., Drost, L., Foster, K., Van Doesum, K. T. M., & Van Santvoort, F. (2013). Intervention programs for children whose parents have a mental illness: A review. *Medical Journal of Australia*, *199*(S3). https://doi.org/10.5694/mja11.11145

Richardson, L., Hameed, Y., Perez, J., Jones, P. B., & Kirkbride, J. B. (2018). Association of Environment With the Risk of Developing Psychotic Disorders in Rural Populations: Findings from the Social Epidemiology of Psychoses in East Anglia Study. *JAMA Psychiatry*, *75*(1), 75–83. https://doi.org/10.1001/jamapsychiatry.2017.3582

Rickwood, D., & Thomas, K. (2012). Conceptual measurement framework for help-seeking for mental health problems. *Psychology Research and Behavior Management*, *5*, 173–183. https://doi.org/10.2147/PRBM.S38707

Roache, R. (2020). The biopsychosocial model in psychiatry: Engel and beyond. In J. Savulescu, R. Roache, & W. Davies (Eds.), *Psychiatry reborn: Biopsychosocial psychiatry in modern medicine* (pp. 6–22). Oxford university press.

Robards, F., Kang, M., Usherwood, T., & Sanci, L. (2018). How Marginalized Young People Access, Engage With, and Navigate Health-Care Systems in the Digital Age: Systematic Review. *Journal of Adolescent Health*, *62*(4), 365–381. https://doi.org/10.1016/j.jadohealth.2017.10.018

Rogler, L. H., & Cortes, D. E. (1993). Help-seeking pathways: A unifying concept in mental health care. *American Journal of Psychiatry*, *150*(4), 554–561. https://doi.org/10.1176/ajp.150.4.554

Ronis, S., & Slaunwhite, A. (2019). Gender and geographic predictors of cyberbullying victimization, perpetration, and coping modalities among youth. *Canadian Journal of School Psychology*, *34*(1), 3–21. https://doi.org/10.1177/0829573517734029

Rose, D. (2003). Patients' perspectives on electroconvulsive therapy: Systematic review. *BMJ*, *326*(7403), 1363–0. https://doi.org/10.1136/bmj.326.7403.1363

Russell, V., Gaffney, P., Collins, K., Bergin, A., & Bedford, D. (2004). Problems experienced by young men and attitudes to help-seeking in a rural Irish community. *Irish Journal of Psychological Medicine*, *21*(1), 6–10. https://doi.org/10.1017/S0790966700008065

Salazar De Pablo, G., Radua, J., Pereira, J., Bonoldi, I., Arienti, V., Besana, F., Soardo, L., Cabras, A., Fortea, L., Catalan, A., Vaquerizo-Serrano, J., Coronelli, F., Kaur, S., Da Silva, J., Shin, J. I., Solmi, M., Brondino, N., Politi, P., McGuire, P., & Fusar-Poli, P. (2021). Probability of Transition to Psychosis in Individuals at Clinical High Risk: An Updated Meta-analysis. *JAMA Psychiatry*, *78*(9), 970. https://doi.org/10.1001/jamapsychiatry.2021.0830

Sampogna, G., Bakolis, I., Evans-Lacko, S., Robinson, E., Thornicroft, G., & Henderson, C. (2017). The Impact of Social Marketing Campaigns on Reducing Mental Health Stigma: Results From the 2009–2014 Time to Change Programme. *European Psychiatry*, *40*, 116–122. https://doi.org/10.1016/j.eurpsy.2016.08.008

Sayer, A. (1997). Essentialism, Social Constructionism, and beyond. *The Sociological Review*, *45*(3), 453–487. https://doi.org/10.1111/1467-954X.00073

Schneiders, J. (2003). Neighbourhood socioeconomic disadvantage and behavioural problems from late childhood into early adolescence. *Journal of Epidemiology & Community Health*, *57*(9), 699–703. https://doi.org/10.1136/jech.57.9.699

Schofield, P., Thygesen, M., Das-Munshi, J., Becares, L., Cantor-Graae, E., Pedersen, C., & Agerbo, E. (2017). Ethnic density, urbanicity and psychosis risk for migrant groups – A population cohort study. *Schizophrenia Research*, *190*, 82–87. https://doi.org/10.1016/j.schres.2017.03.032

Sears, H. A. (2004). Adolescents in rural communities seeking help: Who reports problems and who sees professionals? *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, *45*(2), 396–404. https://doi.org/10.1111/j.1469-7610.2004.00230.x

Seidler, Z. E., Rice, S. M., Dhillon, H. M., Cotton, S. M., Telford, N. R., McEachran, J., & Rickwood, D. J. (2020a). Patterns of Youth Mental Health Service Use and Discontinuation: Population Data from Australia's Headspace Model of Care. *Psychiatric Services*, *71*(11), 1104–1113. https://doi.org/10.1176/APPI.PS.201900491

Seidler, Z. E., Rice, S. M., Dhillon, H. M., Cotton, S. M., Telford, N. R., McEachran, J., & Rickwood, D. J. (2020b). Patterns of youth mental health service use and discontinuation: Population data from Australia's headspace model of care. *Psychiatric Services*, *71*(11), 1104–1113. https://doi.org/10.1176/appi.ps.201900491

Sibley, C. G., & Barlow, F. K. (Eds.). (2016). *The Cambridge Handbook of the Psychology of Prejudice* (1st ed.). Cambridge University Press. https://doi.org/10.1017/CBO9781316161579

Solmi, M., Durbaba, S., Ashworth, M., & Fusar-Poli, P. (2020). Proportion of young people in the general population consulting general practitioners: Potential for mental health

screening and prevention. *Early Intervention in Psychiatry*, *14*(5), 631–635. https://doi.org/10.1111/eip.12908

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, *8*(1), 45. https://doi.org/10.1186/1471-2288-8-45

Tomczyk, S., Schomerus, G., Stolzenburg, S., Muehlan, H., & Schmidt, S. (2020). Ready, Willing and Able? An Investigation of the Theory of Planned Behaviour in Help-Seeking for a Community Sample with Current Untreated Depressive Symptoms. *Prevention Science*, *21*(6), 749–760. https://doi.org/10.1007/s11121-020-01099-2

VCSE Health and Wellbeing Alliance. (2024). *Keep it Local for Better Health: How Integrated Care Systems can unlock the power of community*. https://locality.org.uk/assets/images/Keep-it-Local-for-Better-Health.pdf

Waldmann, T., Staiger, T., Oexle, N., & Rüsch, N. (2020). Mental health literacy and help-seeking among unemployed people with mental health problems. *Journal of Mental Health*, *29*(3), 270–276. https://doi.org/10.1080/09638237.2019.1581342

Walker, T. (2022). *Digital Poverty Transformation: Accessing Digital Services in Rural North West Communities—Regional Policy Briefing*. Work Foundation, Lancaster University.

Waqas, A., Malik, S., Fida, A., Abbas, N., Mian, N., Miryala, S., Amray, A. N., Shah, Z., & Naveed, S. (2020). Interventions to Reduce Stigma Related to Mental Illnesses in Educational Institutes: A Systematic Review. *Psychiatric Quarterly*, *91*(3), 887–903. https://doi.org/10.1007/s11126-020-09751-4

Wesselmann, E. D., & Parris, L. (2021). Exploring the Links Between Social Exclusion and Substance Use, Misuse, and Addiction. *Frontiers in Psychology*, *12*, 674743. https://doi.org/10.3389/fpsyg.2021.674743

Wilson, R. L., Cruickshank, M., & Lea, J. (2012). Experiences of families who help young rural men with emergent mental health problems in a rural community in New South Wales, Australia. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, *42*(2), 167–177. https://doi.org/10.5172/conu.2012.42.2.167

World Bank. (2022). *High income—World Bank Data 2021/2022*. https://data.worldbank.org/country/XD

World Health Organization. (2020). *World Drug Report 2020: Drug use and health consequences*. https://wdr.unodc.org/wdr2020/field/WDR20_Booklet_2.pdf

Wright, A., Harris, M. G., Jorm, A. F., Cotton, S. M., Harrigan, S. M., McGorry, P. D., Wiggers, J. H., & Hurworth, R. E. (2005). Recognition of depression and psychosis by young Australians and their beliefs about treatment. *Medical Journal of Australia*, *183*(1), 18–23. https://doi.org/10.5694/j.1326-5377.2005.tb06881.x

Wykes, T., Huddy, V., Cellard, C., McGurk, S. R., & Czobor, P. (2011). A Meta-Analysis of Cognitive Remediation for Schizophrenia: Methodology and Effect Sizes. *American Journal of Psychiatry*, *168*(5), 472–485. https://doi.org/10.1176/appi.ajp.2010.10060855

Yung, A. R., & McGorry, P. D. (1996). The Initial Prodrome in Psychosis: Descriptive and Qualitative Aspects. *Australian & New Zealand Journal of Psychiatry*, *30*(5), 587–599. https://doi.org/10.3109/00048679609062654

Zorrilla, M. M., Modeste, N., Gleason, P. C., Sealy, D.-A., Banta, J. E., & Sang Leng Trieu. (2019). Assessing Depression-Related Mental Health Literacy among Young Adults.

Californian Journal of Health Promotion, *17*(1), 71–83.

https://doi.org/10.32398/cjhp.v17i1.2225

CHAPTER TWO: Empirical Paper

Prepared for submission to Schizophrenia Research

(See appendix for author guidelines)

Word count

Abstract: 248

Text body: 3,797

Tables: 11

Figures: 1

Knowledge and recognition of psychosis and At-Risk Mental States (ARMS) in voluntary sector organisations: a vignette-based national survey

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Abstract

Background: Psychosis is a leading cause of disability globally. Voluntary sector organisations (VSOs) are vital in supporting vulnerable communities, yet their capacity to recognise psychosis remains underexplored. Primary aim: to determine the proportion of VSO staff that can correctly recognise depression, At-Risk Mental States (ARMS), and psychosis in a case-study vignette. The study also investigates awareness of effective help, medicines and treatment and possible factors associated with a correct recognition.

Methods: Purposive sampling was used to collect data from staff working in VSOs across England via an online cross-sectional survey. The Mental Health Literacy (MHL) Survey was adapted to assess participants' ability to recognise depression, psychosis, and ARMS and appropriate treatment and medicines based on vignettes.

Results: There was the highest recognition of depression (67.7%), then psychosis (39.0%), and lowest recognition of ARMS (8.1%), with no significant differences in recognition based on demographic factors. However, staff from mental health charities showed better recognition of ARMS and psychosis than staff from non-mental health charities. Lifestyle changes and consulting GPs, psychiatrists, and psychologists were deemed most beneficial across all conditions. Traditional psychiatric medications were considered less helpful compared to ‘vitamins/minerals/tonics/herbal medicine’.

Conclusion: There was 39.0% recognition of psychosis and lowest recognition of ARMS, matching existing literature. There was low endorsement of evidence-based medicines and treatments. The study highlights the importance of improving mental health literacy, especially for ARMS, within VSOs to address wider national policy recommendations to improve early detection and treatment for individuals with at risk of psychosis.

Keywords: mental health literacy; voluntary sector; psychosis; schizophrenia; At-Risk

Mental States.

Introduction

Psychosis is a leading cause of disability globally (Fusar-Poli et al., 2017; Global Burden of Disease Collaborative Network, 2021). It is well established that early intervention services that reduce the duration of untreated psychosis (DUP) are crucial for improving treatment outcomes(Craig et al., 2004; Garety et al., 2001), and integral for the prevention and management of psychosis in the UK (NICE, 2014). Furthermore, there is evidence of strong associations between delays and low levels of help-seeking for psychosis and social factors such as stigma, social capital, ethnicity, and levels of urbanicity (Allan et al., 2021; Das-Munshi et al., 2012; Hodgekins et al., 2015; Oduola et al., 2019; Schofield et al., 2017). Therefore, reducing delays in psychosis is associated with managing and reducing the risk factors associated with the onset of psychosis, such as social isolation, homelessness, drug and alcohol use, unemployment, and vulnerability to various types of abuse, as per the socio-developmental model of psychosis (C. Morgan et al., 2010). These are key areas that involve a range of organisations, both within and outside of traditional mental health services, including voluntary sector organisations (VSOs).

An era of austerity compounded by the Covid-19 pandemic (Mahase, 2020) has increased pressure on statutory services and VSOs (Newbigging et al., 2020). VSOs are integral to the provision of support for people in need (NHS England, 2014, 2021). VSOs fill gaps in statutory provision, particularly in mental health, and carry out more targeted work with disadvantaged communities, some of which are at a higher risk of psychosis (Care Quality Commission, 2012; Mind, 2011; C. Morgan et al., 2010; Oduola et al., 2019). Whilst the support offered by VSOs often addresses social determinants of psychosis, the extent to which VSO staff can recognise psychosis is unknown.

Awareness of psychosis is important to reducing delays to treatment, and initiatives targeting primary care show promise. The Liaison and Education in General Practices (LEGs) study sought to improve the detection of first-episode psychosis (FEP) with GPs through improving primary-secondary care communication. Awareness of FEP increased referral rates and was cost effective (Perez et al., 2015). In comparison, VSO referral processes are under-researched with no standardised processes despite VSOs offering mental health support from helplines, to providing crisis care, and integral to the UK's mental health provision (Newbigging et al., 2020).

Vignettes with a psychosis presentation used in cross-sectional surveys are shown to be effective in identifying mental health literacy in various populations, including the public (Reavley & Jorm, 2011a), young people (Wright et al., 2005), unemployed people (Waldmann et al., 2020), and health professionals (McCann et al., 2018; Reavley et al., 2014). However, no study has explored this within VSOs. Therefore, this research study aims to investigate the extent to which VSO staff in England can recognise psychosis and those at risk of psychosis through a vignette-based survey which is modelled on the Mental Health Literacy (MHL) scale developed by Neavley and colleagues (2011).

Research Questions

Primary

1. What proportion of voluntary sector staff can correctly identify psychosis, at-risk Mental States (ARMS) and depression in a vignette-based survey?

Secondary

2. What proportion of voluntary sector staff can correctly identify best forms of help for psychosis, ARMS and depression?

3 What factors are associated with a correct identification of psychosis, ARMS and depression?

4. What training, policies and procedures (e.g. interventions and referral processes) are VSO staff guided by when working with people similar to those in the vignettes?

Methods

Design

Data was gathered using purposive sampling with staff working in VSOs in England through an online cross-sectional survey.

Participants and recruitment

VSOs were initially identified through an online charity directory. Recruitment targeted community-based VSO staff (voluntary or paid) who advise and support people in need. Participants were 18-years or older, able to understand and read English, and lived and worked in England.

Promotional materials and anonymous survey links were advertised using social media and email. Gatekeeper consent was sought to protect staff anonymity, who distributed materials within their organisations. Participants could enter a £20 Amazon gift voucher prize draw through a separate online link.

Measures

Sociodemographic data

Participants who consented were asked for the following sociodemographic information: age, education level, VSO type, ethnicity, and location.

Mental Health Literacy (MHL) Survey

The survey was based on the MHL survey developed by Reavley and colleagues, and considered to have content (expert consultations) and construct validity (Reavley et al., 2014). The depression and psychosis vignettes were used verbatim from the survey. As ARMS is commonly assessed using the Comprehensive Assessment of ARMS (CAARMS) within England's EIP services, a vignette provided in a training manual was modified for use

in the current survey and reviewed by an EIP specialist clinical psychologist to ensure it aligned with present diagnostic criteria (Nelson et al., 2014). Vignettes are outlined in Table 1.

After being presented with a vignette, participants were given an open-ended question asking what, if anything, was wrong with the person. For each vignette, they were then asked to rate the helpfulness of various interventions, and medicines, using the following options, ‘helpful’, ‘neither’, ‘harmful’, ‘depends’ or ‘don’t know’.

Additional questions

The survey included additional questions asking participants if they had worked with someone like the vignette's description (yes/no), frequency (1-5 Likert scale: never, rarely, occasionally, frequently, always), received relevant training (yes/no), and open-ended questions on what actions they would take, and whether their organisation had specific policies, guidance or programmes to support or advise the person in the vignette. They also rated their confidence in working with similar individuals on a scale of 1-10.

Procedure

Participants accessed the survey via an online link, which took approximately 20-minutes to complete. To minimise order effects, randomised sequencing was used to present vignettes. On each survey webpage, participants could exit to the debriefing page where support information was available and a link to enter the prize draw.

Table 1

Vignettes: depression, psychosis and ARMS

Vignette
Depression (Reavley, Morgan and Jorm, 2014) John is 30 years old. He has been feeling unusually sad and miserable for the last few weeks. Even though he is tired all the time, he has trouble sleeping nearly every night. John doesn't feel like eating and has lost weight. He can't keep his mind on his work and puts off making any decisions. Even day-to-day tasks seem too much for him. This has come to the attention of John's boss who is concerned about his lowered productivity. John feels he will never be happy again and believes his family would be better off without him. John has been so desperate, he has been thinking of ways to end his life.
Psychosis ('chronic schizophrenia' from Reavley, Morgan and Jorm, 2014) Jenny is 44 years old. She is living in a boarding house in an industrial area. She has not worked for years. She wears the same clothes in all weathers and has left her hair to grow long and untidy. She is always on her own and is often seen sitting in the park talking to herself. At times she stands and moves her hands as if to communicate to someone in nearby trees. She rarely drinks alcohol. She speaks carefully using uncommon and sometimes made-up words. She is polite but avoids talking with other people. At times she accuses shopkeepers of giving information about her to other people. She has asked her landlord to put extra locks on her door and to remove the television set from her room. She says spies are trying to keep her under observation because she has secret information about international computer systems which control people through television transmitters. Her landlord complains that she will not let him clean the room which is increasingly dirty and filled with glass objects. Jenny says she is using these "to receive messages from space".
At-Risk Mental States (Barnaby et al., 2014) Beth is a 20-year-old history student at university. She has been very stressed at university, has been feeling anxious and like she cannot cope with the pressure of doing a thesis and coursework. On most days, she feels as though people are looking at her and laughing at her when she is in lectures and walking around on-campus, however when she calms herself down she realises this is not true, though it continues to happen the next day. Beth has stopped going to lectures and has begun handing in her coursework late or sometimes not at all. She has also been refusing invitations from friends to go out as she is worried that she will become overwhelmed. Also during this time, Beth hears her name being called and sometimes hears whispering noises for a few seconds, and mostly at night. She realises it is her mind playing tricks on her and attributes it to stress.

Table 2

Summary of diagnostic criteria and treatment guidelines for depression, ARMS and psychosis

	Depression	ARMS	Psychosis
Diagnosis criteria	Persistent low mood, loss of interest and enjoyment, reduced energy leading to diminished activity. Other symptoms include disturbed sleep, poor concentration, low self-esteem, poor or increased appetite, and suicidal thoughts (American Psychiatric Association, 2013).	Symptoms indicating a potentially high risk of developing psychosis, such as transient or attenuated psychotic symptoms, changes in thoughts, perceptions, and behaviour (Yung & McGorry, 1996).	Presence of hallucinations, delusions, disorganised speech, grossly disorganised or catatonic behaviour, negative symptoms such as diminished emotional expression (American Psychiatric Association, 2013).
Treating professionals	GPs, psychiatrists, psychologists, mental health nurses, social workers.	GPs, psychiatrists, psychologists, early intervention teams.	Psychiatrists, psychologists, mental health nurses, social workers, occupational therapists.
Pharmacological treatment	Antidepressants (e.g., SSRIs), considering patient's preference, clinical context, and potential side effects.	Pharmacotherapy is generally not recommended for ARMS. Exceptions may include when symptoms are distressing, or risk of harm is high.	Antipsychotic medication, chosen based on patient's preference, side-effect profile, and clinical situation.
Psychological treatment	Cognitive Behavioural Therapy (CBT), Interpersonal Therapy (IPT), Short-term psychodynamic psychotherapy (STPP), counselling, mindfulness-based cognitive therapy for recurrent depression.	CBT, psychoeducational interventions, family intervention, monitoring and supportive therapy.	CBT, family therapy, psychosocial interventions, arts therapies, supportive psychotherapy

Depression treatment guidance (NICE, 2022); ARMS and psychosis treatment guidance (NICE, 2014)

Coding of open-ended responses

Open-ended responses for problem recognition were coded by NA following official clinical guidance (refer to Table 2). Content analysis identified the diversity of responses across four coding levels. ‘Level-0’ indicated incorrect responses, Level-1 involved mentions of a mental health problem or condition, a correct recognition of symptoms was ‘level-2’, and a correct recognition was ’level-3’, this included alternative terms e.g., low mood for depression, early psychosis for ARMS, schizophrenia for psychosis vignette.

Data analyses

Research question 1 – problem recognition

Following the coding of open-ended responses (level 3 only), the proportion of correct responses for each mental health condition was calculated, along with 95% confidence intervals.

Research question 2 – best forms of help, medicine and treatment

For each item, the proportion of participants who rated items as 'helpful' were calculated along with 95% confidence intervals.

Research question 3 – factors associated with a correct diagnostic recognition

Chi-square analyses were utilised to explore the association between sociodemographic variables, sector type (mental health-related or not), exposure to problem, presence of organisation training, policies and procedures. To overcome small samples sizes within variable groups, post-hoc analysis included combining groups to ensure statistical validity. Where this was not possible, Fisher's exact test is reported as an alternative to observing associations between variables.

Research question 4 – training, policies and procedures, and support

Content analyses (Harwood & Garry, 2003) was used to identify patterns, similarities and differences, and to group them accordingly for the remaining open-ended questions on training, policies and procedures, and advice and support they would offer.

Results

In addition to social media recruitment, eighty-two charities were directly contacted, of which twelve became involved. In total, two hundred and thirty-four people accessed the survey, with ninety-seven participants (41.45%) completing it. Forty-eight participants completed all three vignettes and 47 completed only one of the three vignettes. This gave the following numbers for each vignette: depression, n=62; ARMS, n=74 and psychosis, n=83 (see Figure 1). As different numbers of participants completed each vignette, analyses were conducted for each vignette separately rather than comparing responses between vignettes.

Demographic details are in Table 3. Most participants were White, about two-thirds were aged 18-34, a third were from Southern England, and 69% had a university degree. Older participants and those from minority backgrounds were underrepresented.

Figure 1 – Recruitment and survey completion flow diagram

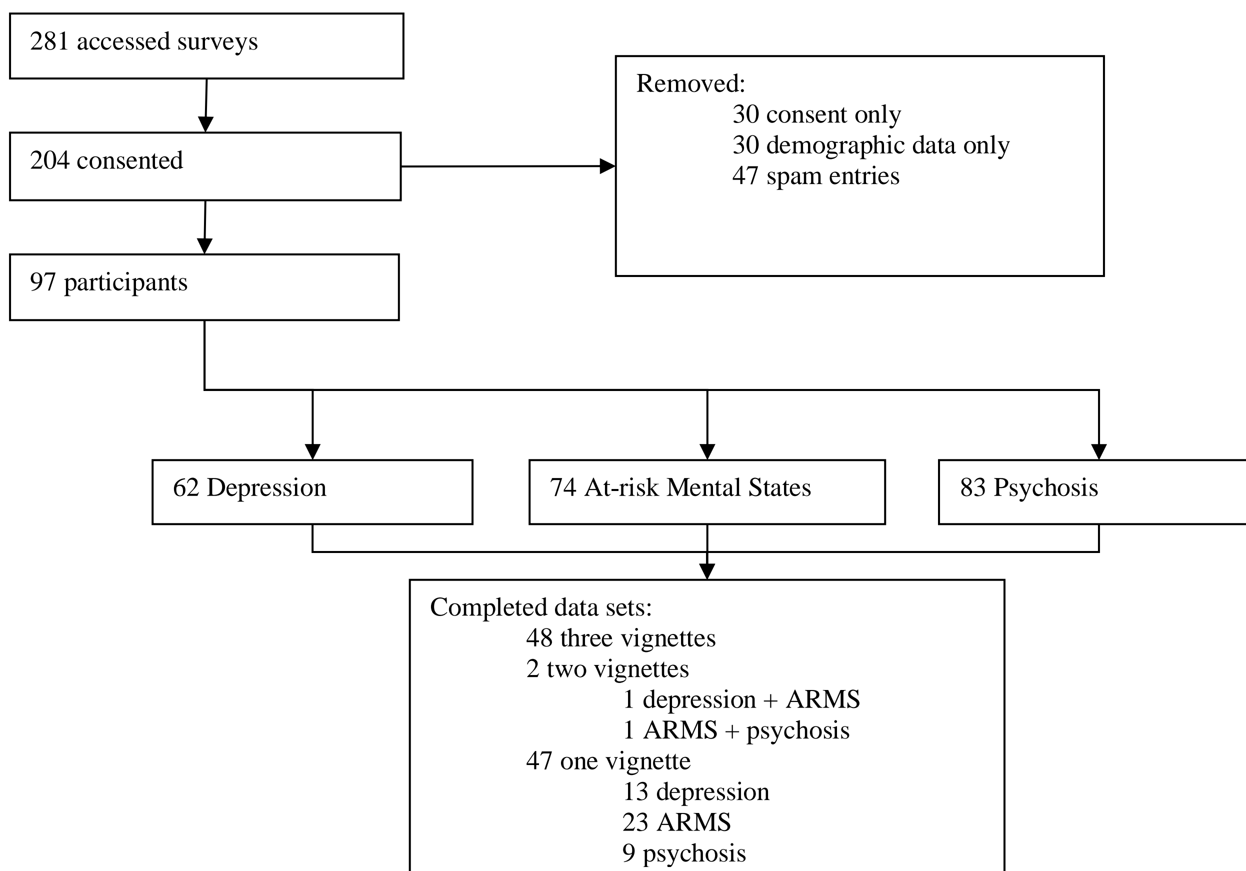

Table 3

Frequencies of socio-demographic characteristics

		Frequency	%
Ethnicity			
	Any White	68	70.1
	Any Mixed	21	21.6
	Any Black	1	1.0
	Any Asian	5	5.2
	All Other	2	2.1
Age			
	18 to 34	58	61.7
	35 to 44	21	22.3
	45 to 54	10	10.6
	55 plus	5	5.3
Sector Type			
	Mental Health	11	11.3
	Non-Mental Health	86	88.7
Region			
	East of England	22	22.7
	Greater London	15	15.5
	Midlands	6	6.2
	North of England	18	18.6
	South of England	36	37.1
Education Level			
	School	29	30.2
	Undergraduate	49	51.0
	Postgraduate (PG)	18	18.8

All variable categories are combined as sample sizes were zero or too small for valid statistical testing.

Research Question 1: Problem recognition

In response to the open-ended question, ‘What, if anything, would you say is wrong with John/Beth/Jenny?’, 67.7% of participants recognised depression correctly, 39.0% recognised psychosis and only 8.1% recognised ARMS (see Table 4).

Whilst an additional 18.6% did not recognise psychosis as a diagnostic label, they named symptoms like paranoia. Similarly, for the ARMS vignette, 23.0% mentioned psychosis or related symptoms, and 47.3% mentioned anxiety or another likely problem. Although few identified ARMS, many recognised common co-morbidities of ARMS and early psychosis.

Psychosis was correctly identified by 27.7% of participants, and a further 18.6% were able to name a psychotic symptom such as hallucinations, paranoia or delusions. Terms used to describe the psychosis vignette included schizophrenia, paranoid schizophrenia, psychosis, symptoms of psychosis, psychotic episode.

Table 4

Responses (%, n) by vignette and by coding levels

	Depression	ARMS	Psychosis
Total completed, n	62	74	59
Total correct, n	42	6	23
		Proportion (95% CI)	
Correct recognition of problem Level-3	67.7 (55.3 - 78.1)	8.1 (3.5 – 16.9)	39.0 (27.6 – 51.8)
Recognition of a symptom level-2	6.5 (2.1 – 15.9)	23.0 (14.8 - 33.8)	18.6 (10.7 - 30.4)
Recognition of mental health problem or other level-1	17.7 (10.0 – 29.2)	54.1 (42.8 – 64.9)	33.9 (23.1 – 46.7)
Terms used to describe the problem	depression, low mood, suicidal thoughts, disordered eating, inertia, hallucinations, personal stress, financial stress, and ADHD.	anxiety, anxiety disorders, stress, social anxiety, paranoid fears, feeling alone, hearing voices, potential depression, low self-esteem and low confidence, schizophrenia, auditory hallucinations, mental block, delusional disorder, stress and self-consciousness, excessive pressure and tension, sleep deprivation or early signs of schizophrenia, potential onset of schizophrenia or bipolar disorder, anxiety disorder and depression, paranoid personality disorder and anxiety, high anxiety, paranoia, and low mood nearing depression, poor mental health with possible clinical issues, anxiety with psychotic features possibly escalating to an acute psychotic episode, need for checking ADHD and autism, and finally, hallucination and panic attacks.	psychosis, schizophrenia, schizophrenic disorder, paranoid schizophrenia, delusion, delusional disorder, paranoia, trauma, psychosis with paranoia, self-neglect, dissociation, delusion, paranoid personality disorder, depression, loneliness, mental instability, autism, hallucinations, pain, urgent need for psychiatric care.

ARMS, At-Risk Mental States

Research question 2 – best form of help, medicines and treatment

Best forms of help

GPs were rated as the most helpful resource for depression (77%), followed by psychiatrists (70.5%) and psychologists (68.9%). For the ARMS vignette, both GPs and psychologists were seen as equally helpful (68.9%), along with close family members (66.2%). For the psychosis vignette, psychiatrists were considered the most beneficial (79.7%), followed by GPs (76.3%) and psychologists (66.1%). Participants also acknowledged the potential harm of dealing with mental health issues alone, with percentages ranging from 21.3%–25.4% (see Table 5).

Table 5

Proportion of respondents who answered "helpful" (%; 95% CI) to seek help from any of following people.

Type of help	Depression N=62	ARMS N=74	Psychosis N=59
A typical family GP or doctor	77.0 (65.0-85.9)	68.9 (57.6-78.3)	76.3 (63.9-85.4)
A typical chemist (pharmacist)	39.3 (28.1-51.9)	29.7 (20.5-41.0)	28.8 (18.8-41.5)
A counsellor	65.6 (53.0-76.3)	62.2 (50.8-72.4)	55.9 (43.3-67.9)
A social worker	32.8 (22.3-45.3)	33.8 (24.0-45.2)	50.8 (38.4-63.2)
Telephone counselling service, e.g., Samaritans	61.7 (49.0-72.9)	60.8 (49.4-71.1)	39.0 (27.6-51.8)
A psychiatrist	70.5 (58.0-80.5)	59.0 (48.1-69.9)	79.7 (67.6-88.1)
A psychologist	68.9 (56.4-79.1)	68.9 (57.6-78.3)	66.1 (53.3-76.9)
Help from his/her close family	63.9 (51.4-74.9)	66.2 (54.8-76.0)	55.9 (43.3-67.9)
Help from some close friends	52.5 (40.2-64.5)	60.8 (49.4-71.1)	52.5 (40.0-64.7)
A naturopath or a herbalist	42.6 (31.0-55.1)	32.4 (22.8-43.8)	39.0 (27.6-51.8)
The clergy, a minister or a priest	42.6 (31.5-5.1)	29.7 (20.5-41.0)	33.9 (23.1-46.7)
John/Beth/Jenny tries to deal with his/her problems on his/her own (13)	21.3 (12.8-33.3)	24.3 (15.9-35.3)	25.4 (16.0-37.9)

Best form of medicines

More traditional psychiatric medications like antidepressants and antipsychotics received lower helpfulness ratings across all three conditions compared to vitamins, sedatives and tranquilisers (see Table 6). 'Vitamins/Minerals/Tonics/Herbal Medicines' had the highest frequency of helpful ratings in both depression and ARMS, with tranquilisers rated as second for depression. Highest helpfulness ratings were given to antibiotics (27.6%) and analgesics (20.7%), despite being for physical health issues.

Table 6

Proportion of respondents who answered "helpful" (%; 95% CI) to use any of following medicines.

Medicine Type	Depression N=62	ARMS N=74	Psychosis N=59
Vitamins/Minerals/ Tonics/Herbal Medicines	54.1 (41.7 - 66.0)	95.3 (81.5 - 99.5)	17.0 (0.0 - 99.9)
Analgesics	27.9 (18.1 - 40.2)	24.3 (15.9 - 35.3)	20.7 (12.1 - 32.9)
Antidepressants	*8.2 (3.2 - 18.2)	*13.5 (7.3 - 23.3)	11.9 (5.6 - 22.8)
Antibiotics	14.8 (7.7 - 26.0)	17.6 (10.4 - 27.9)	27.6 (16.0 - 45.6)
Sedatives/Hypnotics	37.7 (26.6 - 50.3)	28.4 (15.9 - 39.6)	16.9 (9.3 - 28.7)
Antipsychotics	32.8 (23.2 - 43.5)	11.9 (5.6 - 22.8)	*8.5 (3.3 - 18.8)
Tranquilisers (e.g., valium)	42.6 (31.0 - 55.1)	24.3 (15.9 - 35.3)	13.6 (6.8 - 24.8)

*NICE recommended.

Best form of treatments

For depression and ARMS, “self-help” and lifestyle changes were popular choices for respondents, such as consulting a website, book or expert online, reading about others with similar problems, cutting out alcohol and becoming more active physically. ARMS received higher helpfulness ratings (73.0%) for relaxation and stress management courses compared to depression. Formal therapies like psychotherapy (52.5%-63.9%) and CBT (59.3%-70.5%) were next, with the lowest for psychosis and highest for depression.

Admission to a psychiatric ward had the highest harmfulness rating for depression and ARMS but highest helpfulness rating for psychosis. ECT had the highest harmfulness rating (37.7%-43.2%) across vignettes, though some rated it as helpful for depression (29.5%) and psychosis (22.0%), reflecting its controversial nature.

Alcohol-related responses were contradictory: nearly half rated cutting it out as helpful (40.5%-49.2%), while an occasional drink was rated as both the third most harmful (27.9%-37.3%) and simultaneously helpful by about two-thirds. This likely reflects cultural contradictions about alcohol use.

Table 7

Proportion (%; 95% CI) of respondents who rated treatments as "helpful" and "harmful"

	Depression N=62		ARMS N=74		Psychosis N=59	
Treatment type	Helpful	Harmful	Helpful	Harmful	Helpful	Harmful
Becoming more physically active	73.3 (60.9-83.0)	0.0 (0.0-7.2)	77.0 (66.2-85.2)	4.1 (0.9-11.7)	59.3 (46.6-70.9)	3.4 (0.3-12.2)
Reading about people with similar problems and how they have dealt with them	80.3 (68.5-88.5)	3.3 (0.3-11.9)	63.5 (52.1-73.6)	6.8 (2.6-15.2)	44.8 (32.8-57.6)	10.3 (4.5-21.1)
Getting out and about more	68.9 (56.4-79.1)	6.6 (2.1-16.1)	67.6 (56.2-77.2)	9.5 (4.4-18.5)	45.8 (33.7-58.3)	8.5 (3.3-18.8)
Courses on relaxation, stress management, meditation, or yoga	*63.9 (51.4-74.9)	6.6 (2.1-16.1)	73.0 (61.8-81.8)	10.8 (5.3-20.2)	47.5 (35.3-60.0)	10.2 (4.4-20.8)
Cutting out alcohol altogether	49.2 (37.1-61.4)	8.2 (3.2-18.2)	40.5 (30.1-51.9)	10.8 (5.3-20.2)	45.8 (33.7-58.3)	6.8 (2.2-16.6)
Psychotherapy	*63.9 (51.4-74.9)	4.9 (1.1-14.0)	55.4 (44.1-66.2)	8.1 (3.5-16.9)	52.5 (40.0-64.7)	8.5 (3.3-18.8)
Cognitive behaviour therapy	*70.5 (58.1-80.5)	8.2 (3.2-18.2)	*61.6 (50.2-72.0)	6.9 (2.6-15.4)	*59.3 (46.6-70.9)	3.4 (0.3-12.2)
Hypnosis	39.3 (28.1-51.9)	8.2 (3.2-18.2)	37.8 (27.6-49.2)	1.4 (0.0-8.0)	33.9 (23.1-46.7)	8.5 (3.3-18.8)
Admission to a psychiatric ward of a hospital	*35.0 (24.1-47.7)	26.7 (17.1-39.1)	35.1 (25.2-46.5)	37.8 (27.6-49.2)	*54.2 (41.7-66.3)	15.3 (8.0-26.8)
Electroconvulsive therapy (ECT)	*29.5 (19.5-42.0)	37.7 (26.6-50.3)	13.5 (7.3-23.3)	43.2 (32.6-54.6)	*22.0 (13.2-34.3)	40.7 (29.1-53.4)
Having an occasional alcoholic drink to relax	34.4 (23.7-47.0)	27.9 (18.1-40.2)	23.0 (14.8-33.8)	32.4 (22.8-43.8)	23.7 (14.6-36.1)	37.3 (26.1-50.1)
A special diet or avoiding certain foods	41.0 (29.5-53.5)	6.6 (2.1-16.1)	23.0 (14.8-33.8)	10.8 (5.3-20.2)	33.9 (23.1-46.7)	11.9 (5.6-22.8)
Consulting a website that gives information about his problem	60.7 (48.1-72.0)	8.2 (3.2-18.2)	58.1 (46.7-68.7)	12.2 (6.3-21.7)	37.3 (26.1-50.1)	10.2 (4.4-20.8)
Consulting an expert using email or the web about his problem	67.2 (54.7-77.7)	8.2 (3.2-18.2)	57.5 (46.1-68.2)	8.2 (3.5-17.1)	47.5 (35.3-60.0)	8.5 (3.3-18.8)
Consulting a book that gives information about his health problem	*63.9 (51.4-74.9)	6.6 (2.1-16.1)	55.4 (44.1-66.2)	10.8 (5.3-20.2)	*54.2 (41.7-66.3)	8.5 (3.3-18.8)
Receiving information about his problem from a health educator	*70.5 (58.1-80.5)	6.6 (2.1-16.1)	*64.9 (53.5-74.8)	12.2 (6.3-21.7)	*54.2 (41.7-66.3)	10.2 (4.4-20.8)

*NICE recommended.

Research question 3 – Factors associated with a correct problem recognition

Chi-square tests were used to explore possible associations between participant characteristics and their ability to correctly recognise the three mental health conditions. While there was no significant association between sector type (mental health vs. other) and correct recognition of depression (χ^2=0.82, df=1, p=0.48), there was a statistically significant association for ARMS (χ^2=6.37, df=1, p=0.04) and psychosis (χ^2=4.87, df=1, p=0.04). This indicates mental health VSOs were likelier to identify psychosis correctly compared to non-specialist VSOs (see Table 8). This was also the case for ARMS, however the sample size was small and required a Fisher's Exact test.

Exposure to people with similar problems showed a trend toward an association however it did not reach statistical significance (χ^2=3.33, df=1, p=0.097). No statistically significant associations were found between problem recognition and sociodemographic or organisational characteristics (see Table 9 and Table 10). Due to a small sample size only descriptive data is reported for ARMS in Table 11.

Table 8

Association between sector type and correct and incorrect groups in all vignettes

Sociodemographic characteristics	Depression n=62		ARMS N=74		Psychosis N=59	
Sector type	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
Mental health-related	8	2	3	8	7	3
Non-mental health	34	18	3	60	16	33
Test statistics	0.82		6.37		4.87	
df	1		1		1	
p	0.48[a]		0.04[a]		0.04[a]	

[a]Fisher's exact test

Table 9

Comparison in sociodemographic and organisational variables between correct and incorrect participant groups for the depression vignette

	Depression (N=62)		Statistics		
	Correct	Incorrect	chi-square	df	P-value
Sociodemographic characteristics					
Age			4.58	3	0.21[a]
18-34	20	13			
35-44	11	5			
45-54	7	0			
55+	2	2			
Education level			0.19	2	0.91[a]
School	14	15			
Undergraduate	33	16			
Postgraduate	14	4			
Ethnicity	42	20			
Any White	29	15			
Any Mixed	8	5			
Any Black	1	0			
Any Asian	2	0			
Other	2	0			
Ethnicity 2			0.23	1	0.77[b]
Any White	29	15			
Any Other	13	5			
Region			4.74	4	0.32[a]
East of England	11	5			
Greater London	7	3			
Midlands	0	2			
North of England	10	3			
South of England	14	7			
Organisational characteristics					
Exposure to similar presentation			3.33	1	0.097[b]
No	6	7			
Yes	35	13			
Received training			0.17	1	0.45[b]
No	9	8			
Yes	32	12			
Policies, guidance or programmes					
No	10	6	0.17	1	0.76[b]
Yes	30	14			

Any discrepancies in group sizes are due to missing data.
[a]chi-square test
[b]Fisher's exact test
Exact significance (two-tailed)

Table 10

Comparison in sociodemographic variables between correct and incorrect participant groups for the psychosis vignette

	Psychosis (N=59)		Statistics		
	Correct	Incorrect	chi-square	df	P-value
Sociodemographic characteristics					
Age			4.03	3	0.26[a]
18-34	10	23			
35-44	7	7			
45-54	2	4			
55+	3	1			
Education level			0.515	2	0.78[a]
School	6	8			
Undergraduate	11	20			
Postgraduate	6	7			
Ethnicity combined			0.14	1	0.78[b]
Any White	17	25			
Any Other	6	11			
Ethnicity					
Any White	17	25			
Any Mixed	4	10			
Any Black	0	0			
Any Asian	1	1			
Other	1	0			
Region			8.10	4	0.09[a]
East of England	11	7			
Greater London	3	4			
Midlands	0	2			
North of England	5	7			
South of England	4	16			
Organisational characteristics					
Exposure to similar presentation			0.34	1	0.72[b]
No	15	19			
Yes	8	17			
Received training			1.06	1	0.25[b]
No	15	17			
Yes	8	19			
Policies, guidance or programmes					
No	12	15	1.06	1	0.46[b]
Yes	10	21			

Any discrepancies in group sizes are due to missing data.
[a]chi-square test
[b]Fisher's exact test
Exact significance (two-tailed)

Table 11

Comparison in sociodemographic variables between correct and incorrect participant groups for the ARMS vignette

	Depression (N=62)	
	Correct	Incorrect
Sociodemographic characteristics		
Age		
18-34	20	13
35-44	11	5
45-54	7	0
55+	2	2
Education level		
School	14	15
Undergraduate	33	16
Postgraduate	14	4
Ethnicity	42	20
Any White	29	15
Any Mixed	8	5
Any Black	1	0
Any Asian	2	0
Other	2	0
Ethnicity 2		
Any White	29	15
Any Other	13	5
Region		
East of England	11	5
Greater London	7	3
Midlands	0	2
North of England	10	3
South of England	14	7
Organisational characteristics		
Exposure to similar presentation		
No	6	7
Yes	35	13
Received training		
No	9	8
Yes	32	12
Policies, guidance or programmes		
No	10	6
Yes	30	14

Any discrepancies in group sizes are due to missing data.

Research question 4 – training, policies, and support

Participants reported high exposure to individuals similar to those in the depression (77.4%) and ARMS (74.3%) vignettes, despite low recognition of ARMS. Psychosis had the lowest exposure rate. Most participants had training for depression (70.9%) and ARMS (68.9%), with fewer for psychosis (45.8%). The higher ratings for ARMS are very likely due to participants identifying other problems with the ARMS vignette. A similar trend was observed in policies and procedures guiding work with these conditions (see Table 12).

Content analysis of open-ended responses identified four key training areas: mental health awareness and skills, risk and crisis management, and safeguarding. When asked how VSO staff would advise or support the person in the vignette, the most common response was seeking professional help and signposting (49.1%), including contacting the person's GP (15.2%). Many responses also included supporting the individual access help, listening and providing emotional support, supporting them access the community and engage in activities.

Table 12

Proportion (n, %) of respondents with exposure, training and policies in each vignette

	Depression N = 61	ARMS N = 74 Total, n (%)	Psychosis N = 59
Exposure to Similar Presentation			
Yes	48 (77.4%)	55 (74.3%)	25 (42.4%)
No	13 (20.9%)	19 (25.7%)	34 (57.6%)
Received Training			
Yes	44 (70.9%)	51 (68.9%)	27 (45.8%)
No	17 (27.4%)	23 (31.1%)	32 (54.2%)
Policies, Guidance, or Programmes			
Yes	44 (70.9%)	44 (59.5%)	31 (52.5%)
No	16 (25.8%)	30 (40.5%)	27 (45.8%)

Discussion

Main findings

We sought to investigate Mental Health Literacy (MHL) of depression, psychosis and ARMS (At-risk Mental States) in the voluntary sector (VSO) using an online survey. The main findings are that there was highest recognition of depression (67.7%), then psychosis (39.0%), and lowest recognition was ARMS (8.1%). There were no statistically significant associations in the ability to recognise depression, ARMS or psychosis based on age, education level, ethnicity, region, training or exposure. However, there was an association between working in a mental health charity and correctly recognising ARMS and psychosis.

Lifestyle changes, self-help strategies, seeking help from a GP, psychiatrist and psychologist were rated as the best forms of help across all conditions. Psychiatrist was rated as the most helpful for the psychosis vignette. Psychiatric medications received lower helpfulness ratings than ‘Vitamins/Minerals/Tonics/Herbal Medicines’ across all three conditions. For treatments, around a quarter rated ECT as helpful across all conditions, which was highest for psychosis. ECT was rated as being as or more helpful than talking therapies, like Cognitive-behavioural Therapy (CBT).

Most VSO staff reported receiving training about depression (70.9%) but fewer reported having received training about psychosis (45.8%). A content analysis identified key areas: mental health training, risk and crisis management, safeguarding training. In response to the open-ended question on providing support to the person in the vignette, seeking professional help (49.1%), particularly contacting the person’s GP (15.2%) was the most common response.

Interpretation of findings

Problem recognition

Depression was more commonly recognised than psychosis and ARMS, a finding that aligns with previous research conducted among other populations (Jorm et al., 1997; Reavley et al., 2012, 2014; Reavley & Jorm, 2011a; Wright et al., 2005; Zorrilla et al., 2019).

Despite low ARMS recognition, most participants identified the vignette as reflecting a mental health issue and reported working with similar cases, indicating ARMS presence in VSOs. This is in keeping with another study on ARMS recognition in Australia, where lay people had a similar recognition rate to voluntary sector staff in this study, 12.0% vs. 8.2%, respectively (Greenhalgh & Shanley, 2017). Correct ARMS identification rose to 47.6% when lay participants viewed a video vignette instead of a written one, which is promising though causality is hard to determine. Participants were given multiple-choice which included ‘psychotic or schizophrenia spectrum disorder’ to improve the coding accuracy, whereas in this study questions were open-ended, and psychosis was included as a separate vignette which yielded higher correct recognition similar to Greenhalgh and Shanley (2017).

Best forms of help

Across all vignettes respondents selected ‘a typical family GP or doctor’ as one of the topmost rated helpful items (depression, 77.0%; ARMs, 68.9%; psychosis, 76.3%). For depression and psychosis vignettes, psychologist and psychiatrist were most rated as helpful. For ARMS, help from close family was the highest rated. Responses are in accordance with recommendations given by UK National Institute for Health and Care Clinical Excellence guidelines (NICE, 2014, 2022).

Lifestyle changes such as diet and exercise were viewed as the most helpful. However, solely self-management was rated as harmful. There is a notable interest in non-pharmacological

and alternative treatments, which can be seen in the high ratings for 'Vitamins/Minerals/Tonics/Herbal Medicines' and preferences for psychologists and GPs over medication, similar to findings by a systematic review on public attitudes to psychiatry (Angermeyer et al., 2017). This suggests VSO staff may favour less invasive treatment, and in keeping with recent trends moving away from biomedical models of health toward holistic approaches i.e. the biopsychosocial model, and the emerging role of epigenetics (Cecil, 2020; Roache, 2020). However, recommending non-evidence-based interventions may carry risks.

Electroconvulsive Therapy (ECT) is a controversial psychiatric treatment used to induce a seizurs, which appears to provide relief from psychiatric symptoms (Ferrier & Waite, 2019; Michael et al., 2003). This controversy was reflected in the findings across all vignettes, where ECT was rated as the most harmful treatment (range 27.9% - 37.3%), and also rated as helpful for depression (29.5%) and psychosis (22.0%). ECT continues to remain available and NICE Guidelines recommend its use for more severe and treatment-resistant depression, prolonged mania and schizophrenia (NICE, 2009). This mixed perception of ECT underscores the complexity and nuance in psychiatric care (Read et al., 2019). While the public and professionals tend to perceive ECT as harmful (Alexander et al., 2020; Cheung et al., 2022), patients report more favourable attitudes (C. Griffiths & O'Neill-Kerr, 2019; Rose, 2003). These findings suggest a need for greater public awareness of ECT's specific benefits and risks (Ferrier & Waite, 2019; Michael et al., 2003; Read et al., 2019).

Sociodemographic and organisational factors

The only statistically significant association with a correct psychosis and ARMS recognition was working in a mental health charity, which is in keeping with the existing wider MHL literature (Greenhalgh & Shanley, 2017; Reavley et al., 2014). Further supporting that exposure and study of mental health disorders is associated with recognition of these conditions (Reavley et al., 2014).

Clinical Implications

A key finding was the lower recognition of psychosis and ARMS, highlighting a possible need for educational resources aimed at increasing public and VSO awareness. These resources could include the specificity of ARMS in differentiation to other common co-morbidities, the associated risks, and the urgency in seeking due heightened risk of transition to first-episode psychosis or more enduring psychotic symptoms. Resources could also address the risks of over-pathologising and the need for a sensitive approach to ARMS and psychosis.

VSO staff correctly identified best sources of help aligning with existing national guidelines, which is promising i.e., GPs, psychologists, psychiatrists and close family. However, mixed results around treatment options, such as the popularity of vitamins and ECT, reveal a gap in awareness of recommended treatments, highlighting potential risks in signposting non-evidence-based interventions, which could prolong DUP.

The gap in ARMS recognition in VSOs may reflect broader public awareness issues. Whilst ARMS is not yet widely included in diagnostic manuals, it is a strong indicator of psychosis risk, which increases with delayed treatment (Salazar De Pablo et al., 2021). Early access to appropriate help has been shown to improve outcomes (Correll et al., 2018; Fusar-Poli et al., 2017). The results of this study underscore the potential need for increased awareness and understanding of psychosis, and in particular ARMS, and effective treatment strategies within the voluntary sector and changing integrated care context.

Strengths and limitations

Relevance and quality of the study was enhanced through co-production of methodology with VSO staff, and a clinical psychologist who confirmed the vignettes' diagnostic accuracy. Findings are significant because there is little peer-reviewed empirical data on VSO activities

and their impact (Foster et al., 2020; McCulloch et al., 2014). By surveying a new population, this research also addresses a gap in the MHL research landscape.

Despite best efforts to minimise spam entries, not all may have been identified, interpretation of findings should take this into account. Nonetheless, this study helps to further understanding of the online application of this survey, given the limited evidence-base.

The methodology relied on written vignettes of mental health difficulties, which may differ from real-life scenarios. Additionally, confounding factors such as the names and ages of those in the case study were not controlled for, potentially introducing response bias. The MHL survey has good validity, particularly given the higher recognition of disorders from healthcare professionals (Reavley et al., 2014). Also, case study vignettes are widely used in teaching, demonstrating their relevance to the study of mental health conditions. While the coding of problem recognition responses followed official guidelines (American Psychiatric Association, 2013) and relevant peer-reviewed papers (Jorm et al., 1997; Yung & McGorry, 1996), the inclusion of a second coder was not possible due to resource constraints.

Only a small number of charities (14.6%) that were directly contacted became involved. Despite both email and social media recruitment, there was an over-representation of VSO staff who were White, aged 18-34, associated with a non-mental health charity, based in Southeast England with a degree. Findings should be interpreted appropriately given the limited generalisability and representation this presents.

Only six respondents correctly identified ARMS, however fifty respondents reported having exposure to a similar problem, it was therefore unclear what their perception of the main problem was. Greenhalgh & Shanley (2017) argue that offering multiple choice better detects perception of the primary problem than open-ended questions. However, this does not account for the process of elimination, particularly if other choices have high specificity. In a

naturalistic setting, people will need to generate their own ideas of the salient problem, and open-ended questions can capture this type of free recall. However, this approach overlooks instances where a correct recognition may be accompanied by other conditions, such as anxiety alongside psychosis. Future surveys could ask more targeted questions to differentiate between primary and secondary issues identified by respondents.

Future research

The findings provide a summary of the current state of MHL among workers in VSOs in England, focusing on their recognition of psychosis, ARMS and depression. Given their significant role in providing specialist support, addressing gaps in statutory services and inclusion in healthcare provision long-term plans (Newbigging et al., 2020; NHS England, 2019) future research can both describe and quantify the role and impact of VSOs on recognition, skill levels through to referrals and mental health outcomes. Service evaluations of existing VSOs can drive recommendations and development of training and clear pathways to care. Future research should develop training for VSOs and evaluate whether this can improve problem recognition. This would aid the awareness and detection of ARMS and psychosis, and thus improving outcomes for those affected.

Conclusions

Overall, VSO MHL yielded similar recognition rates of depression, ARMS and psychosis recognition rates with previous research. Higher recognition of ARMS and psychosis was linked to mental health VSOs, suggesting that exposure aids problem recognition. Lower recognition of psychosis and ARMS indicates a possible knowledge gap in VSOs, even though they are working with likely cases. This may be concerning as low detection of cases impacts DUP. Future efforts could identify VSOs best placed for psychosis and ARMS detection and create educational tools to improve awareness, training, and protocols.

Acknowledgements

We extend our sincerest gratitude to the following co-producers for their time and knowledge in the inception and development of this study's methodology: Kadra Abdinasir, Centre for Mental Health; Dr. Dan Robotham, The McPin Foundation; Tara Behnam, Iranian and Kurdish Women's Right Organisation (IKWRO); Dr. Dave Heavens, Principal Clinical Psychologist and East of England EIP Clinical Advisor for NHS England and NHS Improvement. We also thank Phillip Roberts from UEA Student Support Services who advised on statistical analysis.

Author contributions

NA and JH contributed to the study conceptualisation and design. The data collection was carried out by NA. NA analysed the data and drafted the manuscript with guidance and supervision from JH. NA, JH and SO contributed to the interpretation and presentation of data. All authors commented on previous versions of the manuscript and approved the final manuscript.

Declaration of interest

None.

References

Adams, C., Gringart, E., & Strobel, N. (2022). Explaining adults' mental health help-seeking through the lens of the theory of planned behavior: A scoping review. *Systematic Reviews*, *11*(1), 160. https://doi.org/10.1186/s13643-022-02034-y

Aguirre Velasco, A., Cruz, I. S. S., Billings, J., Jimenez, M., & Rowe, S. (2020). What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A systematic review. *BMC Psychiatry*, *20*(1), 293. https://doi.org/10.1186/s12888-020-02659-0

Aisbett, D., Boyd, C., Francis, K., Newnham, K., & newnham, K. (2007). Understanding barriers to mental health service utilization for adolescents in rural Australia. *Rural and Remote Health*. https://doi.org/10.22605/RRH624

Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior [1]. *Journal of Applied Social Psychology*, *32*(4), 665–683. https://doi.org/10.1111/j.1559-1816.2002.tb00236.x

Alexander, L., Malone, K., Counihan, E., Kennedy, J., Roddy, D., & Delaney, L. (2020). Assessing Public Attitudes to Electroconvulsive Therapy: Validation of the Modified ECT Attitudes Questionnaire Using a Systematic Analysis. *The Journal of ECT*, *36*(1), 47–53. https://doi.org/10.1097/YCT.0000000000000612

Allan, S. M., Hodgekins, J., Beazley, P., & Oduola, S. (2021). Pathways to care in AT-RISK mental states: A systematic review. *Early Intervention in Psychiatry*, *15*(5), 1092–1103. https://doi.org/10.1111/eip.13053

American Psychiatric Association. (2013). *DSM-5® Handbook of Differential Diagnosis*. American Psychiatric Publishing. https://doi.org/10.1176/appi.books.9781585629992

Andersen, R. M. (1995). Revisiting the Behavioral Model and Access to Medical Care: Does it Matter? *Journal of Health and Social Behavior*, *36*(1), 1. https://doi.org/10.2307/2137284

Angermeyer, M. C., van der Auwera, S., Carta, M. G., & Schomerus, G. (2017). Public attitudes towards psychiatry and psychiatric treatment at the beginning of the 21st century: A systematic review and meta-analysis of population surveys. *World Psychiatry*, *16*(1), 50–61. https://doi.org/10.1002/wps.20383

Australian Institute of Health and Welfare. (2024, April 30). *Rural and remote health*. Australian Institute of Health and Welfare. https://www.aihw.gov.au/reports/rural-remote-australians/rural-and-remote-health

Baker, S. J., Jackson, M., Jongsma, H., & Saville, C. W. N. (2021). The ethnic density effect in psychosis: A systematic review and multilevel meta-analysis. *The British Journal of Psychiatry*, *219*(6), 632–643. https://doi.org/10.1192/bjp.2021.96

Bakolis, I., Murray, E. T., Hardy, R., Hatch, S., & Richards, M. (2023). Area disadvantage and mental health over the life course: A 69-year prospective birth cohort study. *Social Psychiatry and Psychiatric Epidemiology*, *58.*

Barican, J. L., Yung, D., Schwartz, C., Zheng, Y., Georgiades, K., & Waddell, C. (2022). Prevalence of childhood mental disorders in high-income countries: A systematic review and meta-analysis to inform policymaking. *Evidence Based Mental Health*, *25*(1), 36–44. https://doi.org/10.1136/ebmental-2021-300277

Barnaby, N., Alison, Y., Connie, M., & Mandie, N. (2014). *The CAARMS: assessing young people at ultra high risk of psychosis.* Orygen Youth Health Research Centre. https://www.orygen.org.au/Training/Resources/Psychosis/Manuals/Manual-PDF-files/orygen-the-caarms-pdf.aspx

Barry, R., Rehm, J., De Oliveira, C., Gozdyra, P., & Kurdyak, P. (2020). Rurality and Risk of Suicide Attempts and Death by Suicide among People Living in Four English-speaking High-income Countries: A Systematic Review and Meta-analysis. *The Canadian Journal of Psychiatry*, *65*(7), 441–447. https://doi.org/10.1177/0706743720902655

Bentall, R. P. (Ed.). (1992). *Reconstructing schizophrenia*. Routledge.

Bhui, K., Ullrich, S., & Coid, J. W. (2014). Which pathways to psychiatric care lead to earlier treatment and a shorter duration of first-episode psychosis? *BMC Psychiatry*, *14*(1), 72. https://doi.org/10.1186/1471-244X-14-72

Biddle, L., Gunnell, D., Sharp, D., & Donovan, J. L. (2004). Factors influencing help seeking in mentally distressed young adults: A cross-sectional survey. *British Journal of General Practice*, *54(501)*, 248–253.

Boerma, M., Beel, N., Jeffries, C., & Krishnamoorthy, G. (2023). 'It's all about rapport': Australian therapists' recommendations for engaging adolescent males in counselling and psychotherapy. *Counselling and Psychotherapy Research*, capr.12716. https://doi.org/10.1002/capr.12716

Boyd, C., Francis, K., Aisbett, D., Newnham, K., Sewell, J., Dawes, G., & Nurse, S. (2007). Australian rural adolescents' experiences of accessing psychological help for a mental health problem. *The Australian Journal of Rural Health*, *15*(3), 196–200. https://doi.org/10.1111/j.1440-1584.2007.00884.x

Boyd, C., Hayes, L., Nurse, S., Aisbett, D. L., Francis, K., Newnham, K., & Sewell, J. (2011). Preferences and intention of rural adolescents toward seeking help for mental health problems. *Rural and Remote Health*, *11*(1), 1582.

Boydell, K. M., Pong, R., Volpe, T., Tilleczek, K., Wilson, E., & Lemieux, S. (2006). Family perspectives on pathways to mental health care for children and youth in rural communities. *The Journal of Rural Health: Official Journal of the American Rural Health Association and the National Rural Health Care Association*, *22*(2), 182–188. https://doi.org/10.1111/j.1748-0361.2006.00029.x

Bradley, K. L., McGrath, P. J., Brannen, C. L., & Bagnell, A. L. (2010). Adolescents' attitudes and opinions about depression treatment. *Community Mental Health Journal*, *46*(3), 242–251. https://doi.org/10.1007/s10597-009-9224-5

Broglia, E., Nisbet, K., Bone, C., Simmonds-Buckley, M., Knowles, L., Hardy, G., Gibbon, L., & Barkham, M. (2023). What factors facilitate partnerships between higher education and local mental health services for students? A case study collective. *BMJ Open*, *13*(12), e077040. https://doi.org/10.1136/bmjopen-2023-077040

Bronfenbrenner, U. (1974). Developmental Research, Public Policy, and the Ecology of Childhood. *Child Development*, *45*(1), 1. https://doi.org/10.2307/1127743

Calloway, S. J., Kelly, P., & Ward-Smith, P. (2012). Stressors and barriers to help seeking for psychological distress among students attending a rural university. *Journal of Rural Mental Health*, *36*(1), 3–10. https://doi.org/10.1037/h0094774

Campbell, F., Blank, L., Cantrell, A., Baxter, S., Blackmore, C., Dixon, J., & Goyder, E. (2022). Factors that influence mental health of university and college students in the UK: A systematic review. *BMC Public Health*, *22*(1), Article 1. https://doi.org/10.1186/s12889-022-13943-x

Care Quality Commission. (2012). *CQC launch "State of Care" report 2012*. https://www.cqc.org.uk/news/releases/cqc-launch-state-care-report-2012

Cecil, C. A. M. (2020). Biopsychosocial pathways to mental health and disease across the lifespan: The emerging role of epigenetics. In J. Savulescu, R. Roache, & W. Davies (Eds.), *Psychiatry reborn: Biopsychosocial psychiatry in modern medicine* (pp. 190–206). Oxford university press.

Chapman, T., & Wistow, J. (2023). *Local health and social wellbeing: The contribution of the voluntary sector, community and social enterprise sector in Buckinghamshire, Oxfordshire and Berkshire West*. Durham University. https://www.stchads.ac.uk/wp-content/uploads/2023/06/FULL-REPORT-The-contribution-of-the-VCSE-sector-to-local-health-and-social-wellbeing-in-Buckinghamshire-Oxfordshire-and-Berkshire-West-June-2023.pdf

Cheung, O., Baker, M., & Tabraham, P. (2022). Improving attitudes toward electroconvulsive therapy. *BJPsych Bulletin*, *46*(1), 4–10. https://doi.org/10.1192/bjb.2021.5

Church, M., Ellenbogen, S., & Hudson, A. (2020). Perceived barriers to accessing mental health services for rural and small city Cape Breton youth. *Social Work in Mental Health*, *18*(5), 554–570. https://doi.org/10.1080/15332985.2020.1801553

Correll, C. U., Galling, B., Pawar, A., Krivko, A., Bonetto, C., Ruggeri, M., Craig, T. J., Nordentoft, M., Srihari, V. H., Guloksuz, S., Hui, C. L. M., Chen, E. Y. H., Valencia, M., Juarez, F., Robinson, D. G., Schooler, N. R., Brunette, M. F., Mueser, K. T., Rosenheck, R. A., … Kane, J. M. (2018). Comparison of Early Intervention Services vs Treatment as Usual for Early-Phase Psychosis: A Systematic Review, Meta-analysis, and Meta-regression. *JAMA Psychiatry*, *75*(6), 555–565. https://doi.org/10.1001/jamapsychiatry.2018.0623

Craig, T. K. J., Garety, P., Power, P., Rahaman, N., Colbert, S., Fornells-Ambrojo, M., & Dunn, G. (2004). The Lambeth Early Onset (LEO) Team: Randomised controlled trial of the

effectiveness of specialised care for early psychosis. *BMJ*, *329*(7474), 1067. https://doi.org/10.1136/bmj.38246.594873.7C

Crumb, L., Mingo, T. M., & Crowe, A. (2019). “Get over it and move on”: The impact of mental illness stigma in rural, low-income United States populations. *Mental Health & Prevention*, *13*, 143–148. https://doi.org/10.1016/j.mhp.2019.01.010

Das-Munshi, J., Becares, L., Dewey, M. E., Stansfeld, S. A., & Prince, M. J. (2010). Understanding the effect of ethnic density on mental health: Multi-level investigation of survey data from England. *BMJ*, *341*(oct21 1), c5367–c5367. https://doi.org/10.1136/bmj.c5367

Das-Munshi, J., Leavey, G., Stansfeld, S. A., & Prince, M. J. (2012). Migration, social mobility and common mental disorders: Critical review of the literature and meta-analysis. *Ethnicity & Health*, *17*(1–2), 17–53. https://doi.org/10.1080/13557858.2011.632816

Das-Munshi, J., Schofield, P., Bhavsar, V., Chang, C.-K., Dewey, M. E., Morgan, C., Stewart, R., Thornicroft, G., & Prince, M. J. (2019). Ethnic density and other neighbourhood associations for mortality in severe mental illness: A retrospective cohort study with multi-level analysis from an urbanised and ethnically diverse location in the UK. *The Lancet Psychiatry*, *6*(6), 506–517. https://doi.org/10.1016/S2215-0366(19)30126-9

Department for Environment, Food & Rural Affairs. (2023). *Statistical Digest of Rural England: 5 – Connectivity and Accessibility*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1142327/5__Connectivity_and_Accessibility.pdf

Drake, R. J., Haley, C. J., Akhtar, S., & Lewis, S. W. (2000). Causes and consequences of duration of untreated psychosis in schizophrenia. *British Journal of Psychiatry*, *177*(6), 511–515. https://doi.org/10.1192/bjp.177.6.511

Dykxhoorn, J., Osborn, D., Walters, K., Kirkbride, J. B., Gnani, S., & Lazzarino, A. I. (2023). Temporal patterns in the recorded annual incidence of common mental disorders over two decades in the United Kingdom: A primary care cohort study. *Psychological Medicine*, 1–12. https://doi.org/10.1017/S0033291723002349

Ferrier, I. N., & Waite, J. (Eds.). (2019). *The ECT Handbook* (4th ed.). Cambridge University Press. https://doi.org/10.1017/9781911623175

Foster, A., O'Cathain, A., & Harris, J. (2020). How do third sector organisations or charities providing health and well-being services in England implement patient-reported outcome measures (PROMs)? A qualitative interview study. *BMJ Open*, *10*(10), e039116. https://doi.org/10.1136/bmjopen-2020-039116

Fusar-Poli, P. (2012). Predicting Psychosis: Meta-analysis of Transition Outcomes in Individuals at High Clinical Risk. *Archives of General Psychiatry*, *69*(3), 220. https://doi.org/10.1001/archgenpsychiatry.2011.1472

Fusar-Poli, P., Correll, C. U., Arango, C., Berk, M., Patel, V., & Ioannidis, J. P. A. (2021). Preventive psychiatry: A blueprint for improving the mental health of young people. *World Psychiatry*, *20*(2), 200–221. https://doi.org/10.1002/wps.20869

Fusar-Poli, P., McGorry, P. D., & Kane, J. M. (2017). Improving outcomes of first-episode psychosis: An overview. *World Psychiatry*, *16*(3), 251–265. https://doi.org/10.1002/wps.20446

Garety, P. A., Kuipers, E., Fowler, D., Freeman, D., & Bebbington, P. E. (2001). A cognitive model of the positive symptoms of psychosis. *Psychological Medicine*, *31*(2), 189–195. https://doi.org/10.1017/S0033291701003312

Garrido, S., Millington, C., Cheers, D., Boydell, K., Schubert, E., Meade, T., & Nguyen, Q. V. (2019). What Works and What Doesn't Work? A Systematic Review of Digital Mental Health Interventions for Depression and Anxiety in Young People. *Frontiers in Psychiatry*, *10*, 759. https://doi.org/10.3389/fpsyt.2019.00759

Ghiara, V. (2020). Disambiguating the Role of Paradigms in Mixed Methods Research. *Journal of Mixed Methods Research*, *14*(1), 11–25. https://doi.org/10.1177/1558689818819928

Global Burden of Disease Collaborative Network. (2021). *Global Burden of Disease Study 2019 (GBD 2019) Reference Life Table* [Dataset]. Institute for Health Metrics and Evaluation (IHME). https://doi.org/10.6069/1D4Y-YQ37

Gough, B., & Novikova, I. (2020). *Mental health, men and culture: How do sociocultural constructions of masculinities relate to men's mental health help-seeking behaviour in the WHO European region?* WHO Regional Office for Europe.

Greenhalgh, K. T., & Shanley, D. C. (2017). Recognising an at Risk Mental State for Psychosis: Australian Lay People and Clinicians' Ability to Identify a Problem and Recommend Help Across Vignette Types. *Australian Psychologist*, *52*(6), 524–532. https://doi.org/10.1111/ap.12238

Griffiths, C., & O'Neill-Kerr, A. (2019). Patients', Carers', and the Public's Perspectives on Electroconvulsive Therapy. *Frontiers in Psychiatry*, *10*, 304. https://doi.org/10.3389/fpsyt.2019.00304

Griffiths, K. M., Christensen, H., & Jorm, A. F. (2009). Mental health literacy as a function of remoteness of residence: An Australian national study. *BMC Public Health*, *9*(1), 92. https://doi.org/10.1186/1471-2458-9-92

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry*, *10*(1), 113. https://doi.org/10.1186/1471-244X-10-113

Gunnell, D., & Martin, R. M. (2004). Patterns of General Practitioner consultation for mental illness by young people in rural areas. A cross-sectional study. *Health Statistics Quarterly*, *21*, 30–33.

Harwood, T. G., & Garry, T. (2003). An Overview of Content Analysis. *The Marketing Review*, *3*(4), 479–498. https://doi.org/10.1362/146934703771910080

Henderson, C., & Gronholm, P. C. (2018). Mental Health Related Stigma as a 'Wicked Problem': The Need to Address Stigma and Consider the Consequences. *International Journal of Environmental Research and Public Health*, *15*(6), Article 6. https://doi.org/10.3390/ijerph15061158

Henderson, C., & Thornicroft, G. (2009). Stigma and discrimination in mental illness: Time to Change. *The Lancet*, *373*(9679), 1928–1930. https://doi.org/10.1016/S0140-6736(09)61046-1

Hernan, A., Philpot, B., Edmonds, A., & Reddy, P. (2010). Healthy minds for country youth: Help-seeking for depression among rural adolescents. *Australian Journal of Rural Health*, *18*(3), 118–124. https://doi.org/10.1111/j.1440-1584.2010.01136.x

Hodgekins, J., French, P., Birchwood, M., Mugford, M., Christopher, R., Marshall, M., Everard, L., Lester, H., Jones, P., Amos, T., Singh, S., Sharma, V., Morrison, A. P., & Fowler, D. (2015). Comparing time use in individuals at different stages of psychosis and a non-clinical comparison group. *Schizophrenia Research*, *161*(2–3), 188–193. https://doi.org/10.1016/j.schres.2014.12.011

Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.-C., Vedel, I., & Pluye, P. (2018). The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. *Education for Information*, *34*(4), 285–291. https://doi.org/10.3233/EFI-180221

Hoyt, D. R., Conger, R. D., Valde, J. G., & Weihs, K. (1997). Psychological Distress and Help Seeking in Rural America. *American Journal of Community Psychology*, *25*(4), 449–470. https://doi.org/10.1023/A:1024655521619

Jorm, A. F., Kitchener, B. A., & Reavley, N. J. (2019). Mental Health First Aid training: Lessons learned from the global spread of a community education program. *World Psychiatry*, *18*(2), 142–143. https://doi.org/10.1002/wps.20621

Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). "Mental health literacy": A survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, *166*(4), 182–186. https://doi.org/10.5694/j.1326-5377.1997.tb140071.x

Karnilowicz, W., Ali, L., & Phillimore, J. (2014). Community research within a social constructionist epistemology: Implications for "Scientific Rigor". *Community Development*, *45*(4), 353–367. https://doi.org/10.1080/15575330.2014.936479

Keller, E. M. (2022). Understanding Help-Seeking in Rural Counties: A Serial Mediation Model of Self-Reliance, Stigma, and Attitudes toward Psychologists. *Unpublished Doctoral Thesis*. https://trace.tennessee.edu/utk_graddiss/6924

Kelly, C., Hulme, C., Farragher, T., & Clarke, G. (2016). Are differences in travel time or distance to healthcare for adults in global north countries associated with an impact on health outcomes? A systematic review. *BMJ Open*, *6*(11), e013059. https://doi.org/10.1136/bmjopen-2016-013059

Kerr, G., Greenfield, G., Hayhoe, B., Gaughran, F., Halvorsrud, K., Pinto da Costa, M., Rehill, N., Raine, R., Majeed, A., Costelloe, C., Neves, A. L., & Beaney, T. (2023). Attendance at remote versus in-person outpatient appointments in an NHS Trust. *Journal of Telemedicine and Telecare*, 1357633X231216501. https://doi.org/10.1177/1357633X231216501

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*(6), 593. https://doi.org/10.1001/archpsyc.62.6.593

Kickbusch, I. (2013). *Health Literacy, the solid facts*. World Health Organization.

Knapp, M., King, D., Healey, A., & Thomas, C. (2011). Economic outcomes in adulthood and their associations with antisocial conduct, attention deficit and anxiety problems in childhood. *The Journal of Mental Health Policy and Economics*, *14*(3), 137–147.

Kvig, E. I., Brinchmann, B., Moe, C., Nilssen, S., Larsen, T. K., & Sørgaard, K. (2017). Geographical accessibility and duration of untreated psychosis: Distance as a determinant of treatment delay. *BMC Psychiatry*, *17*(1), 176. https://doi.org/10.1186/s12888-017-1345-8

Lehtimaki, S., Martic, J., Wahl, B., Foster, K. T., & Schwalbe, N. (2021). Evidence on Digital Mental Health Interventions for Adolescents and Young People: Systematic Overview. *JMIR Mental Health*, *8*(4), e25847. https://doi.org/10.2196/25847

Luck, G. W., Black, R., & Race, D. (2010). Demographic Change in Rural Australia: Future Opportunities and Challenges. In G. W. Luck, R. Black, & D. Race (Eds.), *Demographic Change in Australia's Rural Landscapes: Implications for Society and the Environment* (pp. 375–384). Springer Netherlands. https://doi.org/10.1007/978-90-481-9654-8_16

Lynch, L., Moorhead, A., Long, M., & Hawthorne-Steele, I. (2021). What Type of Helping Relationship Do Young People Need? Engaging and Maintaining Young People in Mental Health Care—A Narrative Review. *Youth & Society*, *53*(8), 1376–1399. https://doi.org/10.1177/0044118X20902786

Ma, K. K. Y., Anderson, J. K., & Burn, A. (2022). Review: School-based interventions to improve mental health literacy and reduce mental health stigma – a systematic review. *Child and Adolescent Mental Health*, camh.12543. https://doi.org/10.1111/camh.12543

Mahase, E. (2020). Coronavirus: Covid-19 has killed more people than SARS and MERS combined, despite lower case fatality rate. *BMJ*, m641. https://doi.org/10.1136/bmj.m641

March, D., Hatch, S. L., Morgan, C., Kirkbride, J. B., Bresnahan, M., Fearon, P., & Susser, E. (2008). Psychosis and Place. *Epidemiologic Reviews*, *30*(1), 84–100. https://doi.org/10.1093/epirev/mxn006

Marino, D., & Tebala, D. (2022). Rural Areas and Well-Being in EU Countries + UK: A Taxonomy and a Cluster Analysis. *Sustainability*, *14*(22), Article 22. https://doi.org/10.3390/su142215213

McCann, T. V., Savic, M., Ferguson, N., Cheetham, A., Witt, K., Emond, K., Bosley, E., Smith, K., Roberts, L., & Lubman, D. I. (2018). Recognition of, and attitudes towards, people with depression and psychosis with/without alcohol and other drug problems: Results from a national survey of Australian paramedics. *BMJ Open*, *8*(12), e023860. https://doi.org/10.1136/bmjopen-2018-023860

McChesney, K., & Aldridge, J. (2019). Weaving an interpretivist stance throughout mixed methods research. *International Journal of Research & Method in Education*, *42*(3), 225–238. https://doi.org/10.1080/1743727X.2019.1590811

McCulloch, A., Goldie, I., & Bridger, S. (2014). Early Intervention in Mental Health Problems: The Role of the Voluntary Sector. In P. Byrne & A. Rosen (Eds.), *Early Intervention in Psychiatry* (1st ed., pp. 134–146). Wiley. https://doi.org/10.1002/9781118557174.ch12

Mcgorry, P. D., Killackey, E., & Yung, A. (2008). Early intervention in psychosis: Concepts, evidence and future directions. *World Psychiatry*, *7*(3), 148–156. https://doi.org/10.1002/j.2051-5545.2008.tb00182.x

McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, *22*(3), 276–282.

Michael, N., Erfurth, A., Ohrmann, P., Arolt, V., Heindel, W., & Pfleiderer, B. (2003). Neurotrophic Effects of Electroconvulsive Therapy: A Proton Magnetic Resonance Study of the Left Amygdalar Region in Patients with Treatment-Resistant Depression. *Neuropsychopharmacology*, *28*(4), 720–725. https://doi.org/10.1038/sj.npp.1300085

Middleton, N., Gunnell, D., Frankel, S., Whitley, E., & Dorling, D. (2003). Urban–rural differences in suicide trends in young adults: England and Wales, 1981–1998. *Social Science & Medicine*, *57*(7), 1183–1194. https://doi.org/10.1016/S0277-9536(02)00496-3

Mind. (2011). *An independent inquiry into acute and crisis mental healthcare*. https://www.mind.org.uk/media-a/4377/listening_to_experience_web.pdf

Morgan, A. J., Reavley, N. J., Ross, A., Too, L. S., & Jorm, A. F. (2018). Interventions to reduce stigma towards people with severe mental illness: Systematic review and meta-analysis. *Journal of Psychiatric Research*, *103*, 120–133. https://doi.org/10.1016/j.jpsychires.2018.05.017

Morgan, C., Burns, T., Fitzpatrick, R., Pinfold, V., & Priebe, S. (2007). Social exclusion and mental health: Conceptual and methodological review. *British Journal of Psychiatry*, *191*(6), 477–483. https://doi.org/10.1192/bjp.bp.106.034942

Morgan, C., Charalambides, M., Hutchinson, G., & Murray, R. M. (2010). Migration, Ethnicity, and Psychosis: Toward a Sociodevelopmental Model. *Schizophrenia Bulletin*, *36*(4), 655–664. https://doi.org/10.1093/schbul/sbq051

Morgan, C., Knowles, G., & Hutchinson, G. (2019). Migration, ethnicity and psychoses: Evidence, models and future directions. *World Psychiatry*, *18*(3), 247–258. https://doi.org/10.1002/wps.20655

National Institute for Health and Care Excellence. (2009). *Guidance on the use of electroconvulsive therapy*. National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/ta59

National Institute for Health and Care Excellence. (2014). *Psychosis and schizophrenia in adults: Prevention and management*. National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/cg178

National Institute for Health and Care Excellence. (2022). *Depression in adults: Recognition and management (NICE Guideline No. 222)*. National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/ng222

Nelson, B., Alison, Y., Connie, M., & Mandie, N. (2014). *The CAARMS: assessing young people at ultra high risk of psychosis.*

Newbigging, K., Rees, J., Ince, R., Mohan, J., Joseph, D., Ashman, M., Norden, B., Dare, C., Bourke, S., & Costello, B. (2020). The contribution of the voluntary sector to mental health

crisis care: A mixed-methods study. *Health Services and Delivery Research*, *8*(29), Article 29.

Newbury, J. B., Arseneault, L., Caspi, A., Moffitt, T. E., Odgers, C. L., Belsky, D. W., Sugden, K., Williams, B., Ambler, A. P., Matthews, T., & Fisher, H. L. (2022). Association between genetic and socioenvironmental risk for schizophrenia during upbringing in a UK longitudinal cohort. *Psychological Medicine*, *52*(8), 1527–1537. https://doi.org/10.1017/S0033291720003347

NHS Digital. (2022). *Psychological Therapies, Annual report on the use of IAPT services, 2021-22* [Dataset].

NHS England. (2014). *FIVE YEAR FORWARD VIEW*. https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf.

NHS England. (2019). *The NHS Long Term Plan*. https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf

NHS England. (2021). *Annual Report and Accounts 2019/20*. https://www.england.nhs.uk/wp-content/uploads/2021/01/nhs-england-annual-report-2019-20-full.pdf

NHS England. (2023). *Implementing the early intervention in psychosis access and waiting time standard*. https://www.england.nhs.uk/wp-content/uploads/2023/03/B1954-implementing-the-early-intervention-in-psychosis-access-and-waiting-time-standard.pdf

O'Brien, D., & Creswell, C. (2019). *Children with anxiety disorders in primary care: The views of general practitioners II (CADPC II)* [Dataset]. University of Reading. https://doi.org/10.17864/1947.192

Oduola, S., Coombes, E., Hodgekins, J., & Jones, A. (2024). *Perspectives of young people, family carers and voluntary sector staff on help-seeking for mental health difficulties in a rural region of the United Kingdom—A qualitative study* (p. 2024.01.04.24300825). medRxiv. https://doi.org/10.1101/2024.01.04.24300825

Oduola, S., Craig, T. K. J., Das-Munshi, J., Bourque, F., Gayer-Anderson, C., & Morgan, C. (2019). Compulsory admission at first presentation to services for psychosis: Does ethnicity still matter? Findings from two population-based studies of first episode psychosis. *Social Psychiatry and Psychiatric Epidemiology*, *54*(7), 871–881. https://doi.org/10.1007/s00127-019-01685-y

Ofcom. (2022). *Connected nations 2022: UK report*.

Office for Health Improvement & Disparities. (2023). *Premature mortality in adults with severe mental illness (SMI)*.

Office for National Statistics (ONS). (2022). *Suicides in England and Wales: 2022 registrations* [Statistical bulletin]. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2022registrations#suicides-in-england-and-wales

Oliver, D., Davies, C., Crossland, G., Lim, S., Gifford, G., McGuire, P., & Fusar-Poli, P. (2018). Can We Reduce the Duration of Untreated Psychosis? A Systematic Review and Meta-Analysis of Controlled Interventional Studies. *Schizophrenia Bulletin*, *44*(6), 1362–1372. https://doi.org/10.1093/schbul/sbx166

Orlowski, S., Lawn, S., Antezana, G., Venning, A., Winsall, M., Bidargaddi, N., & Matthews, B. (2016). A Rural Youth Consumer Perspective of Technology to Enhance Face-to-Face Mental Health Services. *Journal of Child and Family Studies*, *25*(10), 3066–3075. https://doi.org/10.1007/s10826-016-0472-z

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., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, n71. https://doi.org/10.1136/bmj.n71

Perez, J., Jin, H., Russo, D. A., Stochl, J., Painter, M., Shelley, G., Jackson, E., Crane, C., Graffy, J. P., Croudace, T. J., Byford, S., & Jones, P. B. (2015). Clinical effectiveness and cost-effectiveness of tailored intensive liaison between primary and secondary care to identify individuals at risk of a first psychotic illness (the LEGs study): A cluster-randomised controlled trial. *The Lancet Psychiatry*, *2*(11), 984–993. https://doi.org/10.1016/S2215-0366(15)00157-1

Piers, R., Williams, J. M., & Sharpe, H. (2023). Review: Can digital mental health interventions bridge the ‘digital divide’ for socioeconomically and digitally marginalised youth? A systematic review. *Child and Adolescent Mental Health*, *28*(1), 90–104. https://doi.org/10.1111/camh.12620

Pisani, A. R., Schmeelk-Cone, K., Gunzler, D., Petrova, M., Goldston, D. B., Tu, X., & Wyman, P. A. (2012). Associations between suicidal high school students’ help-seeking and their attitudes and perceptions of social environment. *Journal of Youth and Adolescence*, *41*(10), 1312–1324. https://doi.org/10.1007/s10964-012-9766-7

Plana-Ripoll, O., Di Prinzio, P., McGrath, J. J., Mortensen, P. B., & Morgan, V. A. (2021). Factors that contribute to urban–rural gradients in risk of schizophrenia: Comparing Danish and Western Australian registers. *Australian & New Zealand Journal of Psychiatry*, *55*(12), 1157–1165. https://doi.org/10.1177/00048674211009615

Powell, K., Huxley, E., & Townsend, M. L. (2021). Mental health help seeking in young people and carers in out of home care: A systematic review. *Children and Youth Services Review*, *127*, 106088. https://doi.org/10.1016/j.childyouth.2021.106088

Power, P., Iacoponi, E., Reynolds, N., Fisher, H., Russell, M., Garety, P. A., McGuire, P. K., & Craig, T. (2007). The Lambeth Early Onset Crisis Assessment Team Study: General practitioner education and access to an early detection team in first-episode psychosis. *British Journal of Psychiatry*, *191*(S51), s133–s139. https://doi.org/10.1192/bjp.191.51.s133

Pretorius, C., Chambers, D., & Coyle, D. (2019). Young People's Online Help-Seeking and Mental Health Difficulties: Systematic Narrative Review. *Journal of Medical Internet Research*, *21*(11), e13873. https://doi.org/10.2196/13873

Public Health England. (2017). *Health and wellbeing in rural areas*. https://www.local.gov.uk/sites/default/files/documents/1.39_Health%20in%20rural%20areas_WEB.pdf

Public Health England. (2018). *Severe mental illness (SMI) and physical health inequalities: Briefing*.

Public Health England. (2019). *An evidence summary of health inequalities in older populations in coastal and rural areas: Executive summary and main messages*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/824717/Health_Inequalities_in_Ageing_in_Rural_and_Coastal_Areas-Messages_and_summary.pdf

Public Health England. (2023). *Rural Mental Health: Fourth Report of Session 2022–23*.

Radez, J., Reardon, T., Creswell, C., Lawrence, P. J., Evdoka-Burton, G., & Waite, P. (2021). Why do children and adolescents (not) seek and access professional help for their mental

health problems? A systematic review of quantitative and qualitative studies. *European Child & Adolescent Psychiatry*, *30*(2), 183–211. https://doi.org/10.1007/s00787-019-01469-4

Read, J., Cunliffe, S., Jauhar, S., & McLoughlin, D. M. (2019). Should we stop using electroconvulsive therapy? *BMJ*, k5233. https://doi.org/10.1136/bmj.k5233

Reavley, N. J., & Jorm, A. F. (2011a). Recognition of Mental Disorders and Beliefs about Treatment and Outcome: Findings from an Australian National Survey of Mental Health Literacy and Stigma. *Australian & New Zealand Journal of Psychiatry*, *45*(11), 947–956. https://doi.org/10.3109/00048674.2011.621060

Reavley, N. J., & Jorm, A. F. (2011b). Stigmatizing Attitudes towards People with Mental Disorders: Findings from an Australian National Survey of Mental Health Literacy and Stigma. *Australian & New Zealand Journal of Psychiatry*, *45*(12), 1086–1093. https://doi.org/10.3109/00048674.2011.621061

Reavley, N. J., McCann, T. V., & Jorm, A. F. (2012). Mental health literacy in higher education students. *Early Intervention in Psychiatry*, *6*(1), 45–52. https://doi.org/10.1111/j.1751-7893.2011.00314.x

Reavley, N. J., Morgan, A. J., & Jorm, A. F. (2014). Development of scales to assess mental health literacy relating to recognition of and interventions for depression, anxiety disorders and schizophrenia/psychosis. *Australian & New Zealand Journal of Psychiatry*, *48*(1), 61–69. https://doi.org/10.1177/0004867413491157

Reeb, B. T., & Conger, K. J. (2011). Mental Health Service Utilization in a Community Sample of Rural Adolescents: The Role of Father-Offspring Relations. *Journal of Pediatric Psychology*, *36*(6), 661–668. https://doi.org/10.1093/jpepsy/jsr016

Reinhard, M. A., Dewald-Kaufmann, J., Wüstenberg, T., Musil, R., Barton, B. B., Jobst, A., & Padberg, F. (2020). The vicious circle of social exclusion and psychopathology: A systematic review of experimental ostracism research in psychiatric disorders. *European Archives of Psychiatry and Clinical Neuroscience*, *270*(5), 521–532. https://doi.org/10.1007/s00406-019-01074-1

Reupert, A. E., Cuff, R., Drost, L., Foster, K., Van Doesum, K. T. M., & Van Santvoort, F. (2013). Intervention programs for children whose parents have a mental illness: A review. *Medical Journal of Australia*, *199*(S3). https://doi.org/10.5694/mja11.11145

Richardson, L., Hameed, Y., Perez, J., Jones, P. B., & Kirkbride, J. B. (2018). Association of Environment With the Risk of Developing Psychotic Disorders in Rural Populations: Findings from the Social Epidemiology of Psychoses in East Anglia Study. *JAMA Psychiatry*, *75*(1), 75–83. https://doi.org/10.1001/jamapsychiatry.2017.3582

Rickwood, D., & Thomas, K. (2012). Conceptual measurement framework for help-seeking for mental health problems. *Psychology Research and Behavior Management*, *5*, 173–183. https://doi.org/10.2147/PRBM.S38707

Roache, R. (2020). The biopsychosocial model in psychiatry: Engel and beyond. In J. Savulescu, R. Roache, & W. Davies (Eds.), *Psychiatry reborn: Biopsychosocial psychiatry in modern medicine* (pp. 6–22). Oxford university press.

Robards, F., Kang, M., Usherwood, T., & Sanci, L. (2018). How Marginalized Young People Access, Engage With, and Navigate Health-Care Systems in the Digital Age: Systematic Review. *Journal of Adolescent Health*, *62*(4), 365–381. https://doi.org/10.1016/j.jadohealth.2017.10.018

Rogler, L. H., & Cortes, D. E. (1993). Help-seeking pathways: A unifying concept in mental health care. *American Journal of Psychiatry*, *150*(4), 554–561. https://doi.org/10.1176/ajp.150.4.554

Ronis, S., & Slaunwhite, A. (2019). Gender and geographic predictors of cyberbullying victimization, perpetration, and coping modalities among youth. *Canadian Journal of School Psychology*, *34*(1), 3–21. https://doi.org/10.1177/0829573517734029

Rose, D. (2003). Patients' perspectives on electroconvulsive therapy: Systematic review. *BMJ*, *326*(7403), 1363–0. https://doi.org/10.1136/bmj.326.7403.1363

Russell, V., Gaffney, P., Collins, K., Bergin, A., & Bedford, D. (2004). Problems experienced by young men and attitudes to help-seeking in a rural Irish community. *Irish Journal of Psychological Medicine*, *21*(1), 6–10. https://doi.org/10.1017/S0790966700008065

Salazar De Pablo, G., Radua, J., Pereira, J., Bonoldi, I., Arienti, V., Besana, F., Soardo, L., Cabras, A., Fortea, L., Catalan, A., Vaquerizo-Serrano, J., Coronelli, F., Kaur, S., Da Silva, J., Shin, J. I., Solmi, M., Brondino, N., Politi, P., McGuire, P., & Fusar-Poli, P. (2021). Probability of Transition to Psychosis in Individuals at Clinical High Risk: An Updated Meta-analysis. *JAMA Psychiatry*, *78*(9), 970. https://doi.org/10.1001/jamapsychiatry.2021.0830

Sampogna, G., Bakolis, I., Evans-Lacko, S., Robinson, E., Thornicroft, G., & Henderson, C. (2017). The Impact of Social Marketing Campaigns on Reducing Mental Health Stigma: Results From the 2009–2014 Time to Change Programme. *European Psychiatry*, *40*, 116–122. https://doi.org/10.1016/j.eurpsy.2016.08.008

Sayer, A. (1997). Essentialism, Social Constructionism, and beyond. *The Sociological Review*, *45*(3), 453–487. https://doi.org/10.1111/1467-954X.00073

Schneiders, J. (2003). Neighbourhood socioeconomic disadvantage and behavioural problems from late childhood into early adolescence. *Journal of Epidemiology & Community Health*, *57*(9), 699–703. https://doi.org/10.1136/jech.57.9.699

Schofield, P., Thygesen, M., Das-Munshi, J., Becares, L., Cantor-Graae, E., Pedersen, C., & Agerbo, E. (2017). Ethnic density, urbanicity and psychosis risk for migrant groups – A population cohort study. *Schizophrenia Research*, *190*, 82–87. https://doi.org/10.1016/j.schres.2017.03.032

Sears, H. A. (2004). Adolescents in rural communities seeking help: Who reports problems and who sees professionals? *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, *45*(2), 396–404. https://doi.org/10.1111/j.1469-7610.2004.00230.x

Seidler, Z. E., Rice, S. M., Dhillon, H. M., Cotton, S. M., Telford, N. R., McEachran, J., & Rickwood, D. J. (2020a). Patterns of Youth Mental Health Service Use and Discontinuation: Population Data from Australia's Headspace Model of Care. *Psychiatric Services*, *71*(11), 1104–1113. https://doi.org/10.1176/APPI.PS.201900491

Seidler, Z. E., Rice, S. M., Dhillon, H. M., Cotton, S. M., Telford, N. R., McEachran, J., & Rickwood, D. J. (2020b). Patterns of youth mental health service use and discontinuation: Population data from Australia's headspace model of care. *Psychiatric Services*, *71*(11), 1104–1113. https://doi.org/10.1176/appi.ps.201900491

Sibley, C. G., & Barlow, F. K. (Eds.). (2016). *The Cambridge Handbook of the Psychology of Prejudice* (1st ed.). Cambridge University Press. https://doi.org/10.1017/CBO9781316161579

Solmi, M., Durbaba, S., Ashworth, M., & Fusar-Poli, P. (2020). Proportion of young people in the general population consulting general practitioners: Potential for mental health

screening and prevention. *Early Intervention in Psychiatry*, *14*(5), 631–635. https://doi.org/10.1111/eip.12908

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, *8*(1), 45. https://doi.org/10.1186/1471-2288-8-45

Tomczyk, S., Schomerus, G., Stolzenburg, S., Muehlan, H., & Schmidt, S. (2020). Ready, Willing and Able? An Investigation of the Theory of Planned Behaviour in Help-Seeking for a Community Sample with Current Untreated Depressive Symptoms. *Prevention Science*, *21*(6), 749–760. https://doi.org/10.1007/s11121-020-01099-2

VCSE Health and Wellbeing Alliance. (2024). *Keep it Local for Better Health: How Integrated Care Systems can unlock the power of community*. https://locality.org.uk/assets/images/Keep-it-Local-for-Better-Health.pdf

Waldmann, T., Staiger, T., Oexle, N., & Rüsch, N. (2020). Mental health literacy and help-seeking among unemployed people with mental health problems. *Journal of Mental Health*, *29*(3), 270–276. https://doi.org/10.1080/09638237.2019.1581342

Walker, T. (2022). *Digital Poverty Transformation: Accessing Digital Services in Rural North West Communities—Regional Policy Briefing*. Work Foundation, Lancaster University.

Waqas, A., Malik, S., Fida, A., Abbas, N., Mian, N., Miryala, S., Amray, A. N., Shah, Z., & Naveed, S. (2020). Interventions to Reduce Stigma Related to Mental Illnesses in Educational Institutes: A Systematic Review. *Psychiatric Quarterly*, *91*(3), 887–903. https://doi.org/10.1007/s11126-020-09751-4

Wesselmann, E. D., & Parris, L. (2021). Exploring the Links Between Social Exclusion and Substance Use, Misuse, and Addiction. *Frontiers in Psychology*, *12*, 674743. https://doi.org/10.3389/fpsyg.2021.674743

Wilson, R. L., Cruickshank, M., & Lea, J. (2012). Experiences of families who help young rural men with emergent mental health problems in a rural community in New South Wales, Australia. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, *42*(2), 167–177. https://doi.org/10.5172/conu.2012.42.2.167

World Bank. (2022). *High income—World Bank Data 2021/2022*. https://data.worldbank.org/country/XD

World Health Organization. (2020). *World Drug Report 2020: Drug use and health consequences*. https://wdr.unodc.org/wdr2020/field/WDR20_Booklet_2.pdf

Wright, A., Harris, M. G., Jorm, A. F., Cotton, S. M., Harrigan, S. M., McGorry, P. D., Wiggers, J. H., & Hurworth, R. E. (2005). Recognition of depression and psychosis by young Australians and their beliefs about treatment. *Medical Journal of Australia*, *183*(1), 18–23. https://doi.org/10.5694/j.1326-5377.2005.tb06881.x

Wykes, T., Huddy, V., Cellard, C., McGurk, S. R., & Czobor, P. (2011). A Meta-Analysis of Cognitive Remediation for Schizophrenia: Methodology and Effect Sizes. *American Journal of Psychiatry*, *168*(5), 472–485. https://doi.org/10.1176/appi.ajp.2010.10060855

Yung, A. R., & McGorry, P. D. (1996). The Initial Prodrome in Psychosis: Descriptive and Qualitative Aspects. *Australian & New Zealand Journal of Psychiatry*, *30*(5), 587–599. https://doi.org/10.3109/00048679609062654

Zorrilla, M. M., Modeste, N., Gleason, P. C., Sealy, D.-A., Banta, J. E., & Sang Leng Trieu. (2019). Assessing Depression-Related Mental Health Literacy among Young Adults.

Californian Journal of Health Promotion, *17*(1), 71–83.

https://doi.org/10.32398/cjhp.v17i1.2225

CHAPTER THREE

Discussion and Critical Evaluation

Word count: 4,462

Chapter Three – Discussion and Critical Evaluation

The findings of the systematic review and empirical study will be considered within the wider context of help-seeking for rural youth and the role voluntary sector organisations may have in the early detection of psychosis in a UK context. Strengths and limitations of each paper will be discussed, and clinical, research and theoretical implications will be considered. Given the researcher's experience of working in the voluntary sector, with vulnerable young people and in early intervention in psychosis services, reflections on how these experiences have informed the research process will be presented.

Overview of the research

Summary of Systematic Review

The systematic review provides comprehensive insights into the distinct barriers and facilitators influencing help-seeking behaviours among rural youth facing mental health challenges, highlighting significant disparities compared to their urban counterparts at the individual, relationship, community and systemic and organisational levels (Bronfenbrenner, 1974). By adopting a mixed-methodology approach, the review addresses a crucial gap in the literature, offering an understanding of the help-seeking issues surrounding mental health support for young people in rural communities.

One of the key findings of the review is the dual role played by the close-knit nature of rural communities. While these communities offer social support and facilitate help-seeking, the interconnectedness presents challenges related to increased social visibility and maintaining confidentiality. For rural youth, seeking help often means navigating complex social dynamics and balancing the need for privacy with the desire for support from their community networks.

There was also a lower likelihood of rural male youth consulting general practitioners (GPs) or utilising mental health services compared to their urban counterparts. Instead, they tend to rely more heavily on informal sources of support, such as friends and family. Disengagement from services is particularly pronounced among rural and ethnically minoritised male youth, highlighting the need for targeted interventions to address this disparity. These findings highlight a broader issue of male mental health and the societal stigmas associated with seeking help (Gough & Novikova, 2020; NHS Digital, 2022; Seidler et al., 2020b). The review aligns with existing evidence, including the higher suicide rates among males in both rural and urban settings, pointing to a critical need for targeted interventions, particularly in the UK (Barry et al., 2020; Office for National Statistics (ONS), 2022).

Cultural barriers, including a strong emphasis on self-reliance and stigma surrounding mental health, further complicate help-seeking behaviours among rural youth. The perception of seeking help as a sign of weakness, coupled with fears of social exclusion, contributes to feelings of isolation, and exacerbates existing mental health challenges. These cultural norms underscore the importance of tailoring interventions to address the unique socio-cultural context of rural communities (Boerma et al., 2023; Keller, 2022).

Geographical distance and transportation emerge as significant barriers to accessing mental health services in rural areas (Public Health England, 2023). While proximity to services is a challenge, financial constraints, and reliance on family members for transportation further compound the issue. Additionally, the preference for in-person support over telephone or online services underscores the importance of considering the digital divide and limited internet connectivity in rural regions (Ofcom, 2022).

Despite these challenges, the review highlights the crucial role of informal facilitators, like family, as well as formal facilitators of support, such as school counsellors and GPs, in the help-seeking process.

Summary of Empirical Paper

Mental Health Literacy (MHL) concerning depression, psychosis, and At-risk Mental States (ARMS) among workers in the voluntary sector organisations (VSO) was investigated through the use of case study vignettes. The primary research question was as follows: 1. What proportion of voluntary sector staff can correctly identify psychosis, ARMS and depression in a vignette-based survey? Secondary research questions were as follows: 2. What proportion of voluntary sector staff can correctly identify best forms of help for psychosis, ARMS and depression? 3. What factors are associated with a correct identification of psychosis, ARMS and depression? 4. What training, policies and procedures (e.g. interventions and referral processes) are VSO staff guided by when working with people similar to those in the vignettes? The methodology and materials of this study were co-produced with staff from VSOs from London and the East of England, and a senior clinical psychologist that helped to confirm the diagnostic accuracy of the case study vignettes.

The primary finding was that there was highest recognition of depression at 67.7%, then psychosis at 39.0%, and lowest recognition of ARMS at 8.1%. Correct problem recognition showed no statistically significant association with sociodemographic and organisational variables such as age, education, ethnicity, or prior exposure to mental health training. However, there was an association between correct problem recognition for psychosis and working in a mental health charity. This was also the case for ARMS, however the sample size was small indicative of less statistical power, though this may not discredit the finding, a conservative approach to extrapolation is more appropriate.

When asked about helpful treatments and medicines, VSO staff responses indicated that they deemed lifestyle changes as helpful approaches compared to other treatments. In response to best people to seek help from for each condition, generally, General Practitioners (GPs), psychiatrists and psychologists were selected as helpful, which reflects UK NICE guidance (National Institute for Health and Care Excellence, 2014, 2022). Conversely, NICE recommended psychiatric and antidepressant medication received fewer helpfulness ratings compared to vitamins or herbal medicines (National Institute for Health and Care Excellence, 2014, 2022). Despite the attached controversy, a notable proportion of respondents rated electroconvulsive therapy (ECT) as helpful for depression (29.5%) and psychosis (22.0%), while also considering it the most harmful treatment (27.9% - 37.3%) across all vignettes. Whilst helpfulness ratings for the best people for help were in line with national clinical guidelines for each condition, there are mixed results for treatments suggesting a gap in possible public and VSO awareness.

Theoretical implications

The exploration of young people's help-seeking for mental health difficulties in a rural context as part of this thesis portfolio highlights two key areas for theoretical consideration: stigma and help-seeking. Considering both these areas can help contextualise and position the role VSOs may play in addressing the identified barriers and facilitators to help-seeking.

In the systematic review, distance to services, and time required for travel were commonly reported barriers to accessing support. However, it was the lack of self-efficacy and independence due to a lack of treatment options in local services, reliance on family for travel and lack of funds i.e., for petrol, that contributed to young people's reluctance to seek support. Similarly, young people reported that they would disengage if services were not able to meet their needs, had limited treatment options or did not align with their values i.e.,

regarding information sharing between services, distress from retelling of personal stories, or a lack of commitment to confidentiality. Another finding was that young people wanted to avoid stigma out of a “fear of exclusion” or past experiences of exclusion due to mental health stigma which can be understood within an ingroup “favouritism” and outgroup “discrimination” dichotomy, with adherence to social norms placing them within the favourable in-group (Sibley & Barlow, 2016, p. 92). A possible interpretation of the observed disengagement, fear of stigma and lack of help-seeking behaviour among young people, particularly in the context of mental health within rural settings, can be framed within the Theory of Planned Behaviour (TPB) model (Ajzen, 2002). This theoretical framework suggests that to bridge the intention-behaviour gap, the help-seeking behaviour needs to be perceived as the norm for their social context (subjective norm), that it is perceived to be beneficial (attitude) and that the person believes they have self-efficacy and control over the intended behaviour. For example, if a young person is reliant on family for travel when all their friends have cars, and they do not have control over when and how they can make the journey to a community health centre to seek support, they are likely to have low perceived self-efficacy and possible control over the behaviour, thus more unlikely to bridge the intention to behaviour gap. Attitudes to help-seeking and self-efficacy have been shown to be key predictors of help-seeking behaviours (Tomczyk et al., 2020). Future initiatives to improving mental health literacy could address the attitudinal barriers laid out by the TPB model. By assessing the current landscape of help-seeking behaviour in rural settings, these initiatives can help to pinpoint areas needing improvement and explore the reasons behind young people's decisions to either engage with or withdraw from mental health services. This approach will not only bridge the gap between intention and action, as outlined by the TPB model, but also facilitate targeted interventions to encourage more positive engagement with mental health support.

Clinical implications

The thesis portfolio is centred on exploring gaps in the pathways to care for psychosis and ARMS and considered the unique barriers young people from rural areas face when seeking help for mental health problems, particularly given they are at increased risk of experiencing ARMS and first-episode psychosis (FEP). Given the lower recognition of psychosis and ARMS in the voluntary sector, it is important to consider improving mental health literacy of the wider community and address the specific barriers to help-seeking for young people in rural areas. While it is difficult to conclude whether being able to recognise psychosis and ARMS would have a direct impact in a VSO context, increasing mental health literacy is likely to promote early detection and timely access to mental health services, and in the case of ARMS and psychosis, it may contribute to reducing the duration of untreated psychosis (DUP): a continued priority for services.

Whilst the urbanicity effect indicates elevated risk of psychosis for those residing in urban areas compared to rural populations (March et al., 2008), this alone is unlikely to be a causal factor of psychosis, and more indicative of factors more prevalent in urban living, such as more widespread problems such as social deprivation also present in rural populations (Newbury et al., 2022; Plana-Ripoll et al., 2021). While there is ongoing research on the specific determinants of psychosis (Das-Munshi et al., 2019), it is unclear how young people from rural areas, who are less likely to seek help and have poorer access to health services compared to their urban counterparts, navigate seeking help for ARMS or psychosis. In this context, VSOs have an important role to play in bridging the gap between the need for mental health support and its availability in rural areas. Given the risk factors for psychosis, such as social deprivation, isolation and poverty, which VSOs target with community initiatives, they are well placed to address specific needs of rural communities (Chapman & Wistow, 2023; VCSE Health and Wellbeing Alliance, 2024).

A common finding between the systematic review and empirical study was that awareness of mental health was a key factor in help-seeking and mental health problem recognition. Educational resources and specialist training are effective at addressing these health inequalities (Henderson & Gronholm, 2018; Jorm et al., 2019; Kickbusch, 2013). If we are to improve help-seeking in young people from rural populations, and at the point of contact with community-based VSOs, mental health literacy is crucial for reducing mental health stigma, early detection and timely access. The nature of VSO integrated working means that not only can they distribute the training within the organisations, but they can also take a proactive role in developing and delivering tailored educational resources to local statutory services and community figures. Other than increasing mental health literacy, the benefits of this are twofold: it creates mental health visibility within communities thus addressing stigma and is also empowering for both VSO staff and community members encouraging self-advocacy and help-seeking behaviours. This would be of particular importance to improving help-seeking behaviours of male youth from rural settings.

Outside of family and friends, GPs were identified as key facilitators of help-seeking and access to formal support by both VSOs and young people in rural settings. GPs are a clear source of support and referrals at the individual and organisation level. Integration of mental health services into primary care can be a key step forward for rural populations more generally given barriers to healthcare access due to geographical proximity of specialist services which are often based in city-centres. In the case of ARMS, while its identification in a mental health setting still holds some controversy, it is made up of a specific set of symptoms which without early detection has a high risk to develop into FEP and more enduring symptoms. Through increasing awareness and education, and utilising existing infrastructure and the close-knit nature of rural communities, GPs and VSOs may be able to address many of the barriers to help-seeking identified in the systematic review.

Critical appraisal of the research

The thesis portfolio findings provide a significant contribution to the field of mental health literacy (MHL), help-seeking, young people in rural populations, the voluntary sector and how these fit in within the wider context of duration of untreated psychosis (DUP). The portfolio has many strengths. The methodology across both pieces of research included qualitative and quantitative approaches. For the empirical paper, this was informed by co-producers in the voluntary sector and NHS, which helped focus the research and maintain its relevance to the current VSO provision and clinical landscape. The portfolio provides synthesis of international data from high-income contexts, as well as the analysis of data from a national high-income setting, to help build a wider perspective on the individual components of areas of interest. However, both pieces of research were primarily interpreted for a UK context, therefore cross-cultural generalisations should be made with caution. Due to resource constraints, the co-production work was primarily around developing the methodology with professionals in VSO and NHS, and missing the voices of those with lived experience, i.e., people with ARMS, psychosis or young people from rural populations.

The principal researcher interpreted findings through a social constructionism lens which postulates that individuals perceive their reality based on social, historical and cultural contexts (Sayer, 1997). This perspective suggests that experiences are relative, existing not in isolation but as part of a broader socio-cultural fabric, thereby challenging the notion of a "singular truth". A significant criticism of this approach, however, is its potential to diminish the tangible impact of events in its endeavour to deconstruct phenomena into constituent parts. Such a viewpoint might suggest that environmental variables are more within our control than they might truly be, and therefore oversimplifying the complexity of real-world interactions. In the context of the thesis portfolio, it was important to consider the findings with realistic and attainable clinical implications in mind, given the interplay between

individual agency and structural constraints such as funding, human resources and government policy.

Social constructionism traditionally aligns with qualitative methodology, however progressively this rigid assumption is being challenged in academia and within mixed methods design (Ghiara, 2020; Karnilowicz et al., 2014; McChesney & Aldridge, 2019). Social constructionism allows for nuance and in-depth understanding of the 'how' and 'why' in the identified barriers and facilitators to help-seeking for young people exist in rural contexts, this position guided the thematic analysis. The quantitative data provided an insight into patterns of phenomena that colour the social context, for example, stigma was an influential phenomenon that impacted young people's behaviours and experiences, across multiple rural contexts. Within a social constructionism paradigm, the quantitative data provided an anchor from which meaning could be derived, and interpretation followed the logic that quantitative data, while seemingly objective, is influenced by social processes, cultural norms and power dynamics, all of which remains relevant to the research question. To provide structure to this nuanced approach and to provide more concrete clinical and practical recommendations, findings were then mapped onto the ecological model (Bronfenbrenner, 1974) to help target resources at the different levels of the social, relational, institutional and systemic levels, and to further emphasise the impacting factors of help-seeking at each level in line with social constructionism paradigm (Karnilowicz et al., 2014).

In terms of methodological strengths, the systematic review was developed by experts in the field of social sciences, along with the support of a specialist librarian. Medical Subject Headings (MeSH) terms were used for the research database PubMed, which is an indexing system that helped to expand the search and identify relevant papers using related but different terminology. This, in combination with searches across multiple databases, and following the screening process by two researchers, gave a high number of full-text papers

that were retrieved and screened. To further control for researcher bias, a second-rater quality assessed two of the included papers (13%) with 'almost perfect' interrater reliability. There were many full-text papers that were excluded as it was not possible to stratify data by rural populations or by age (16-25), however due to resource constraints, it was not feasible to contact authors of these papers to request stratified data for synthesis. Similarly, a grey literature search was not conducted, which may have been able to provide a wider and more nuanced perspective on help-seeking for young people in rural populations.

Both pieces of research were conducted and interpreted for a UK context, therefore cross-cultural generalisations should be made with caution.

Future research

There is a clear need for both national and local research and data on young people's help-seeking journeys and health service utilisation in rural settings, particularly in the UK and in other western contexts outside of Australia and USA. One way to address this is a national effort to evaluate the impact and efforts of existing mental health services and their remote provisions, particularly with EIP services, working with young people in rural settings. From the research, primary care is a key setting for both young people and referrals from VSO staff and volunteers as identified from the systematic review and empirical study. There needs to be a better understanding of digital interventions and poor connectivity in rural areas, young people's help-seeking and accessing services.

Considering the critical role VSOs occupy in providing specialised support, it is vital to address the current gaps in mental health literacy within these organisations. This not only involves a deeper understanding of these conditions but also necessitates the development of robust referral systems and effective intervention strategies. It is also about ensuring that those experiencing ARMS and psychosis have timely access to the support and treatment they need. Equipping VSO workers with the necessary knowledge and skills may be another route to improve the early detection of these conditions.

Future research must endeavour to map out the precise role and impact of VSOs in the mental health landscape. This involves a detailed examination of how these organisations contribute to the early detection of mental health conditions and the subsequent care pathways available to those affected. By conducting comprehensive service evaluations of existing VSOs, we can gain insights into their effectiveness and areas that require improvement. For example, there is little understanding of current levels of training and skill levels within organisations. Such evaluations would be instrumental in formulating recommendations for the advancement of

training programs and the establishment of clear, accessible routes to mental health care that VSOs can situate themselves into.

Researcher Reflections

Systematic review

I have previously worked with vulnerable young people, primarily in an inner-city context. My initial encounter with the challenges faced by rural young people in accessing mental health services came during my training as a clinical psychologist within an early intervention in psychosis program. Throughout this experience, it became evident how critical various factors were in shaping the service experience for these individuals. Factors included their geographical location, the proximity and accessibility of their social networks, access to recreational activities, grocery shopping, and, fundamentally, their access to mental health services.

Many of these young people came from low socioeconomic backgrounds, with financial difficulties often exacerbated by their rural settings and limited access to amenities. Some lived in supported accommodation, away from their families, which limited their visits to perhaps once a month, further contributing to their isolation. Conversely, a few were fortunate to live close enough to their friends, allowing for frequent social interactions. Remarkably, despite these challenges, many demonstrated excellent communication skills and quickly formed relationships within the community mental health team—a reflection, perhaps, of their socially interconnected rural upbringing.

Their motivation to engage with mental health services, despite facing significant barriers, was particularly striking. Our community mental health team's ability to adapt to the individual needs of these young people allowed for a flexible approach, combining both in-

person and online support. This adaptability was crucial in facilitating their access to and engagement with support.

Inspired by my supervisor's interest in the mental health and service accessibility of rural young people and driven by my firsthand experiences supporting young people from rural communities, I became keenly interested in taking on this project. Witnessing their resilience and the obstacles they navigated in seeking help highlighted the importance of understanding and addressing the unique challenges faced by rural young people in accessing mental health services. For the systematic review it felt important to consider whether possible barriers and facilitators to help-seeking were specific to rural youth or whether they were part of the bigger picture of young people’s help-seeking both in urban and more rural areas. This involved scouring the included literature for possible comparisons, to help inform our understanding of rural youth. I was galvanised to answer this question as I dived deeper into the political landscape informing rural health provision. For example, the UK government’s recent response to not follow through with the Environment, Food and Rural Affairs Committee recommendations to ensure all schools and colleges in rural areas have Mental Health Support Teams (MHST) by 2026/7 was concerning given the state of rural mental health but also the higher risk of rural youth being affected by crisis events such as flooding, as existing provisions are insufficient. Conversely, as a researcher it was imperative I remained reflective and mindful of my professional insight into young people’s experiences to remain impartial and scientifically objective to data synthesis process. While synthesising quantitative data was easier to manage in this regard, given the mixed methodology data, other aspects involved the synthesis and coding of qualitative data which made it more difficult. I am therefore grateful to my supervisor for her insightful questions to help me reflect on how I could ensure my work was scientifically replicable. While I had previous experience of conducting a systematic review and meta-analysis I had never synthesised both

quantitative and qualitative data in a systematic review. This experience has helped me recognise the richness and in-depth understanding qualitative data can provide to a systematic review.

Empirical study

After completing my undergraduate degree in psychology, I started volunteering and working across various voluntary sector organisations, from helplines and support work to conducting research aimed at raising awareness of harmful traditional practices in schools. My motivation for working in these settings came from a desire to make a positive impact on marginalised peoples in an inner-city context. Much of the work I was involved in focused on ensuring the safety and mental wellbeing of children and young people accessing the services. Yet, I often felt limited by the lack of training and funding, despite seeing the tangible benefits of our efforts on some of society's most vulnerable individuals. This piqued my interest in clinical research to better understand how to support those in need, particularly young people facing serious mental health challenges. My supervisor recognised my experiences and desire for positive change during the planning of the empirical study, and we were able to consider my passions as well as the technical knowledge required to plan, design, and implement this project. This journey taught me that research often stems from a strong desire to question norms, making me appreciate the pioneers in my field and the process of allowing space for nurturing ideas to improve health provision. Initially, I was excited to explore various research ideas with my supervisor, but I soon realised that while this creativity was valuable, it didn't make me the most efficient researcher. Stepping into the role of lead researcher was daunting and revealed gaps in my skillset but, with my supervisor's support, helped me better understand balancing idealism with pragmatism.

My experience highlighted the critical role of the voluntary sector in providing continuous support to those in need, contrasting with the more prescribed packages of treatment statutory

services offer. Co-production with my VSO colleagues underlined the challenges in prioritising upskilling within VSOs compared to statutory services, despite their key role in areas like crisis care. This journey made me reflect on the focus needed in research, the management of expectations with co-producers, and the importance of reflecting on the impact of our work to develop creative solutions collectively.

Thesis Portfolio Conclusion

The findings of this thesis portfolio underscore the imperative need to address the barriers and enhance the facilitators of help-seeking for rural youth seeking mental health support. The systematic review revealed disparities in the help-seeking behaviours of young people in rural settings, and thus emphasising the importance of understanding their individual, relational, community and systemic factors influencing mental health support and access. Notably, the review highlighted the help-seeking behaviours of rural male youth, and the key challenges in the close-knit nature of rural communities, the role that stigma plays, and key facilitators of help-seeking. The empirical paper focused on Mental Health Literacy among voluntary sector staff and shed light on levels of awareness of depression, ARMS and psychosis. The main finding that recognition of ARMS and early symptoms of psychosis was low, highlighted a significant gap in awareness. The study also helped to underscore the role of GPs as key sources for accessing formal support for mental health issues, whilst also highlighting that VSO participants demonstrated a poorer understanding of treatment options in line with national guidance and evidence-base, which may have negative consequences on the DUP if support and referrals are not made to reach appropriate treatment. Moving forward, future initiatives and research should prioritise enhancing mental health awareness as a public health priority at the population and professional level in rural areas to address identified barriers. Research into developing educational resources for VSOs, specialist training and tailored interventions for rural youth can play a pivotal role in reducing stigma,

promoting early detection, and empowering individuals to seek help. This is of a particular priority for rural male youth. VSOs are also uniquely positioned to deliver and support such initiatives alongside existing infrastructure such as primary care provision within rural communities, allowing for better mental health visibility and self-advocacy.

In essence, by addressing these findings and implications through collaborative efforts between VSOs, healthcare providers, and communities, there is a tangible opportunity to bridge gaps in mental health support and DUP for rural youth.

References – Discussion and Critical Evaluation

Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior [1]. *Journal of Applied Social Psychology*, *32*(4), 665–683. https://doi.org/10.1111/j.1559-1816.2002.tb00236.x

Barry, R., Rehm, J., De Oliveira, C., Gozdyra, P., & Kurdyak, P. (2020). Rurality and Risk of Suicide Attempts and Death by Suicide among People Living in Four English-speaking High-income Countries: A Systematic Review and Meta-analysis. *The Canadian Journal of Psychiatry*, *65*(7), 441–447. https://doi.org/10.1177/0706743720902655

Boerma, M., Beel, N., Jeffries, C., & Krishnamoorthy, G. (2023). 'It's all about rapport': Australian therapists' recommendations for engaging adolescent males in counselling and psychotherapy. *Counselling and Psychotherapy Research*, capr.12716. https://doi.org/10.1002/capr.12716

Bronfenbrenner, U. (1974). Developmental Research, Public Policy, and the Ecology of Childhood. *Child Development*, *45*(1), 1. https://doi.org/10.2307/1127743

Chapman, T., & Wistow, J. (2023). *Local health and social wellbeing: The contribution of the voluntary sector, community and social enterprise sector in Buckinghamshire, Oxfordshire and Berkshire West*. Durham University. https://www.stchads.ac.uk/wp-content/uploads/2023/06/FULL-REPORT-The-contribution-of-the-VCSE-sector-to-local-health-and-social-wellbeing-in-Buckinghamshire-Oxfordshire-and-Berkshire-West-June-2023.pdf

Das-Munshi, J., Schofield, P., Bhavsar, V., Chang, C.-K., Dewey, M. E., Morgan, C., Stewart, R., Thornicroft, G., & Prince, M. J. (2019). Ethnic density and other neighbourhood associations for mortality in severe mental illness: A retrospective cohort study with multi-

level analysis from an urbanised and ethnically diverse location in the UK. *The Lancet Psychiatry*, *6*(6), 506–517. https://doi.org/10.1016/S2215-0366(19)30126-9

Gough, B., & Novikova, I. (2020). *Mental health, men and culture: How do sociocultural constructions of masculinities relate to men's mental health help-seeking behaviour in the WHO European region?* WHO Regional Office for Europe.

Henderson, C., & Gronholm, P. C. (2018). Mental Health Related Stigma as a 'Wicked Problem': The Need to Address Stigma and Consider the Consequences. *International Journal of Environmental Research and Public Health*, *15*(6), Article 6. https://doi.org/10.3390/ijerph15061158

Jorm, A. F., Kitchener, B. A., & Reavley, N. J. (2019). Mental Health First Aid training: Lessons learned from the global spread of a community education program. *World Psychiatry*, *18*(2), 142–143. https://doi.org/10.1002/wps.20621

Keller, E. M. (2022). Understanding Help-Seeking in Rural Counties: A Serial Mediation Model of Self-Reliance, Stigma, and Attitudes toward Psychologists. *Unpublished Doctoral Thesis*. https://trace.tennessee.edu/utk_graddiss/6924

Kickbusch, I. (2013). *Health Literacy, the solid facts*. World Health Organization.

March, D., Hatch, S. L., Morgan, C., Kirkbride, J. B., Bresnahan, M., Fearon, P., & Susser, E. (2008). Psychosis and Place. *Epidemiologic Reviews*, *30*(1), 84–100. https://doi.org/10.1093/epirev/mxn006

National Institute for Health and Care Excellence. (2014). *Psychosis and schizophrenia in adults: Prevention and management*. National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/cg178

National Institute for Health and Care Excellence. (2022). *Depression in adults: Recognition and management (NICE Guideline No. 222)*. National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/ng222

Newbury, J. B., Arseneault, L., Caspi, A., Moffitt, T. E., Odgers, C. L., Belsky, D. W., Sugden, K., Williams, B., Ambler, A. P., Matthews, T., & Fisher, H. L. (2022). Association between genetic and socioenvironmental risk for schizophrenia during upbringing in a UK longitudinal cohort. *Psychological Medicine*, *52*(8), 1527–1537. https://doi.org/10.1017/S0033291720003347

NHS Digital. (2022). *Psychological Therapies, Annual report on the use of IAPT services, 2021-22* [dataset].

Ofcom. (2022). *Connected nations 2022: UK report*.

Office for National Statistics (ONS). (2022). *Suicides in England and Wales: 2022 registrations* [Statistical bulletin]. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2022registrations#suicides-in-england-and-wales

Plana-Ripoll, O., Di Prinzio, P., McGrath, J. J., Mortensen, P. B., & Morgan, V. A. (2021). Factors that contribute to urban–rural gradients in risk of schizophrenia: Comparing Danish and Western Australian registers. *Australian & New Zealand Journal of Psychiatry*, *55*(12), 1157–1165. https://doi.org/10.1177/00048674211009615

Sayer, A. (1997). Essentialism, Social Constructionism, and beyond. *The Sociological Review*, *45*(3), 453–487. https://doi.org/10.1111/1467-954X.00073

Seidler, Z. E., Rice, S. M., Dhillon, H. M., Cotton, S. M., Telford, N. R., McEachran, J., & Rickwood, D. J. (2020). Patterns of youth mental health service use and discontinuation:

Population data from Australia's headspace model of care. *Psychiatric Services*, *71*(11), 1104–1113. https://doi.org/10.1176/appi.ps.201900491

Sibley, C. G., & Barlow, F. K. (Eds.). (2016). *The Cambridge Handbook of the Psychology of Prejudice* (1st ed.). Cambridge University Press. https://doi.org/10.1017/CBO9781316161579

Tomczyk, S., Schomerus, G., Stolzenburg, S., Muehlan, H., & Schmidt, S. (2020). Ready, Willing and Able? An Investigation of the Theory of Planned Behaviour in Help-Seeking for a Community Sample with Current Untreated Depressive Symptoms. *Prevention Science*, *21*(6), 749–760. https://doi.org/10.1007/s11121-020-01099-2

VCSE Health and Wellbeing Alliance. (2024). *Keep it Local for Better Health: How Integrated Care Systems can unlock the power of community*. https://locality.org.uk/assets/images/Keep-it-Local-for-Better-Health.pdf

APPENDICES

A. Author guidelines for Health Promotion International

B. Author guidelines for Schizophrenia Research

C. Systematic Review Supplementary Materials 1 to 4

D. UEA FMH Approval letter

E. Participant Information Sheet

F. Debrief information

G. Informed Consent Form

H. Recruitment poster

I. Empirical study survey

APPENDIX A – Health Promotions International Author Guidelines

Scope

Health Promotion International is a peer reviewed journal that contains refereed original articles, perspectives, opinion pieces, policy pieces, and editorials relating to contemporary themes and innovations in the health promotion field. We seek papers related to the social, environmental, commercial and political determinants of health. Studies focusing on planetary health (and the climate crisis), health literacy, youth, First Nations Health, harmful industries, public messaging/social marketing, the infodemic (health misinformation/disinformation), health policy, and health advocacy are particularly encouraged.
Contributors who are new to the journal may like to read the following editorial from Professor Samantha Thomas (Editor in Chief) and Emeritus Professor Mike Daube (Chair of the Editorial Board).

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Once a submitted manuscript passes initial assessment by the Journal's Editor-in-Chief, it will then be passed to a handling editor to undergo peer review before recommending a final decision. The Editor-in-Chief makes the final decision on the submitted manuscript.
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You may suggest potential reviewers at submission. However, there is no guarantee the suggested reviewers will be selected by the Journal.
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or

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Journal Sections

We publish six types of manuscripts (Table One). With the exception of Editorials and papers submitted for the Mike Daube Early Career Advocacy Series, all manuscripts go through a single-anonymised process of peer review as described in the Peer Review Process section of these guidelines.

Please ensure when submitting that your main manuscript file includes the below information:

The title of the paper

The authors and institutional affiliations. We would encourage authors to use First Peoples placenames where appropriate (for example Naarm, Melbourne or Tāmaki Makaurau, Auckland).

An authorship statement about the contribution of each author in relation to the ICJME guidelines. Any author who does not meet ICJME criteria should be recognised in the Acknowledgements.

A breakdown of the word count for each section (ensuring that these meet the word count for each article).

Details of funding for the study *see section Funding below.

A statement about the institutional ethical approval for the study (your ethics approval should also be included in the manuscript file)

Acknowledgements

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For the funding statement the following rules should be followed:

The sentence should begin: 'This work was supported by …'

The full official funding agency name should be given, i.e. 'the National Cancer Institute at the National Institutes of Health' or simply 'National Institutes of Health' not 'NCI' (one of the 27 subinstitutions) or 'NCI at NIH' (full RIN-approved list of UK funding agencies) Grant numbers should be complete and accurate and provided in brackets as follows: '[grant number ABX CDXXXXXX]'

Multiple grant numbers should be separated by a comma as follows: '[grant numbers ABX CDXXXXXX, EFX GHXXXXXX]'

Agencies should be separated by a semi-colon (plus 'and' before the last funding agency)

Where individuals need to be specified for certain sources of funding the following text should be added after the relevant agency or grant number 'to [author initials]'. An example is given here: 'This work was supported by the National Institutes of Health [AA123456 to C.S., BB765432 to M.H.]; and the Alcohol & Education Research Council [P50 CA098252 and CA118790 to R.B.S.R.].'

Table One: Types of manuscripts published by Health Promotion International

Type of Article	Description	Word Length
Original Articles	These papers present empirical research (including reviews) covering the broad field of health promotion. We welcome a range of cutting edge qualitative, quantitative and mixed methods manuscripts. Original research papers should be structured according to the following headings: *Background, Methods, Results, Discussion, Conclusion, Acknowledgements, Declaration of Interest, Author Contributions, and References.* *Notes:* Please include an Author Contributions section in your manuscript file. In the methods section there should be a clear statement of the ethical approval. If other papers have been published from this study they should be noted at the start of the methods section. Please see note below for reporting guidelines for Indigenous research.	Up to 7000 words including: Unstructured abstract (250 words) Contribution to Health Promotion statement (100 words) No more than 4 tables, figures and diagrams (worth 500 words each) Manuscript word counts exclude: Referencing Supplementary files may be used to provide

		additional information
Reviews	Reviews address recent advances in public health and health promotion. *Systematic reviews are particularly welcomed* but may not be appropriate for every topic. Other types of reviews include narrative reviews, scoping reviews, realist reviews, and State-of-the-Art reviews. If authors are submitting a review article that is not a systematic review, then the review methods should be described in a way that is as clear and as replicable as possible. The manuscript will generally follow through sections: Unstructured abstract (no more than 250 words), Introduction, Methods, Results, Discussion, Conclusion, References. Tables and Figures should not be placed within the text, rather provided in separate file/s. Checklists have been developed for a number of study designs, including randomized controlled trials (CONSORT), systematic reviews (PRISMA), observational studies (STROBE), diagnostic accuracy studies (STARD) and qualitative studies (COREQ, RATS). We recommend	Up to 7000 words including: Unstructured abstract (250 words) Contribution to Health Promotion statement (100 words) Manuscript word counts exclude: No more than 4 tables, figures, or diagrams (worth 500 words each) References

	authors refer to the EQUATOR Network website for further information on the available reporting guidelines for health research, and the MIBBI Portal for prescriptive checklists for reporting biological and biomedical research where applicable. Authors are requested to make use of these when drafting their manuscript and peer reviewers will also be asked to refer to these checklists when evaluating these studies. Please click here to view examples of different reviews.	
Perspectives	These articles aim to advance innovation in health promotion research and scholarship through conceptual or theoretical argument, and/or methodological reflection. In doing so they provide a systematic and evidence based commentary on a contemporary public health or health promotion issue.	Up to 7000 words including: Unstructured abstract (250 words) Contribution to Health Promotion statement (100 words) Tables, figures and diagrams (worth 500 words each)

		Manuscript word counts exclude: References Supplementary files may be used to provide additional information
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		additional information
Editorials	These articles are by invitation only.	Up to 1500 words in length No abstract or lay summary is required No figures or diagrams permitted Manuscript word count excludes: References - no more than 20 references for Editorials
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promotion statement (100 words)
Up to 3 tables, figures, or diagrams
References
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Manuscripts must be clearly and concisely written in an appropriate standard of English. You can find further help and information about English language support here.

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Three to five bullet points

No more than 100 words in total (approximately 20 words per bullet point)

Written in lay language that is understandable to a general audience

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Please include a minimum of 5-7 keywords to aid literature searching. Keyword listings may determine (a) the editors' choice of peer reviewers, and (b) retrievability by your colleagues.

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The section of the journal for which the submission is intended

Acknowledgements

Ethics information

Funding information

A declaration of interest statement for the authors

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Word length is detailed in the table above. Please state clearly in the ScholarOne system the breakdown of the total word count. Over-length articles will not be considered in any circumstances.

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Authors may not submit manuscripts that are under consideration for publication elsewhere. Compliance with this criterion should be clearly stated in the cover letter.

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Health Promotion International is committed to ethical publishing in 'Indigenous' contexts. We recommend that such papers follow the reporting guidelines developed by Maddox and colleagues (2022) as outlined below and in this accessible and fillable PDF, particularly in relation to how Indigenous peoples were engaged in each stage of the research process.

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In addition to the text abstract, authors are encouraged to submit a graphical abstract or short video abstract (no more than 2 minutes in length) as part of the article if they wish to do so. The graphical/video abstract should clearly summarize the focus and findings of the article, and will be published as part of the article online and in PDF. The graphical/video abstract should be submitted for peer review as a separate file, selecting the appropriate file-type designation in the journal's online submission system. The file should be clearly named, e.g. graphical_abstract.tiff, video_abstract.mp4.

See this page for guidance on appropriate file format and resolution for graphics and videos. Please ensure graphical abstracts are in landscape format.

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Authors should check all references carefully, and in particular ensure that all references in the Reference section are cited in the text.

The list of references should be in alphabetical order of surnames.

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Examples:
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Journals article (e-pub ahead of print): Salmon, J., Ball, K., Crawford, D., Booth, M., Telford, A., Hume, C., Jolley, D. and Worsley, A. (2005) Reducing sedentary behaviour and increasing physical activity among 10-year-old children: overview and process evaluation of the 'Switch-Play' intervention. *Health Promotion International*, January 24, 2005: 10.1093/heapro/dah502.
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APPENDIX B – Schizophrenia Research Author Guidelines

Types of papers:
(1) Full-length papers: 4000 words (excluding tables, figures and references). (2) Review articles: up to 5000 words. (3) Invited comments or hypotheses (no abstract; less than 1000 words). (4) Editorials. (5) Schizophrenia meeting reviews: solicited and/or submitted. (6) Book reviews (less than 1000 words). (7) Letters to the Editor: written in response to recent content in Schizophrenia Research, as well as letters with independent content (1000 words, unstructured (no side headings) and with no abstract. Up to 10 references will be allowed. Additional tables or figures may be included as supplementary material).

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• All tables (including titles, description, footnotes)
• Ensure all figure and table citations in the text match the files provided
• Indicate clearly if color should be used for any figures in print
Graphical Abstracts / Highlights files (where applicable)
Supplemental files (where applicable)

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APPENDIX C – Systematic Review Supplementary Materials

Supplementary material 1 – Example search strategy for PubMed

("mental health"[Mesh] OR "mental health" OR "mental illness" OR "mental state" OR "anxiety" OR "depression" OR "low mood" OR "prodrom*" OR "psycho*" OR "psychiatr*") AND ("pathway*" OR "help seeking") AND ("rural health"[Mesh] OR "rural" OR "remote") AND ("adolescen*" OR "teen*" OR "young people" OR "young person*" OR "young adult*")

Supplementary material 2 - MMAT ratings and rationale by raters

Study ID		**QUALITATIVE STUDIES**					**Rating**
		1.1. Is the qualitative approach appropriate to answer the research question?	1.2. Are the qualitative data collection methods adequate to address the research question?	1.3. Are the findings adequately derived from the data?	1.4. Is the interpretation of results sufficiently substantiated by data?	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?	
Orlowski 2016	MM	Yes	No	Yes	Yes	Yes	4 = Moderate-High
		Comment: This was a qualitative study using semi-structured interviews and inductive thematic analysis. The analysis used a systematic approach (Braun & Clarke, 2006). The analysis used codes and quotes to support outcome and discussion for each theme. Authors did acknowledge that recruitment possibly bias due to majority of the sample residing in the inner rural regions and were treatment seeking participants which may impact the generalisability of the findings in relation to the research question. Overall, there is a clear link between analysis and conclusions.					
	NA	Yes	Can't tell	Yes	Yes	Yes	4 = Moderate-High
		Comment: Semi-structured interviews were used however a clear theoretical rationale is not given. An inductive thematic analysis was conducted. The results were reported adequately and include quotes to justify the two themes, for which quotes was provided. There are clear links between data sources, collection, analysis and interpretation.					
		QUANTITATIVE DESCRIPTIVE STUDIES					

Pisani 2012		4.1. Is the sampling strategy relevant to address the research question?	4.2. Is the sample representative of the target population?	4.3. Are the measurements appropriate?	4.4. Is the risk of nonresponse bias low?	4.5. Is the statistical analysis appropriate to answer the research question?	
	MM	Yes	Yes	Yes	Yes	Yes	5 = High
		Comment: This was a cross-sectional study using quantitative measures. The study offered clear rationale in the use of measures in relation to the research question. The measures used have been shown to have test-retest reliability. The analysis did not consider race as a covariate but did report quantitative data on non-respondents stating that this did not have a statistical impact on gender, grade or age. There is a clear link between data sources, collection, analysis and interpretation.					
	NA	Yes	Yes	Yes	Yes	Yes	5 = High
		Comment: The sampling strategy was relevant to the target population which is specified. They report on validity and reliability. Non-response bias is likely to be low as they found no differences reported in age, gender and grade. The statistical analyses reported is appropriate for the research questions (chi-sq., MANCOVA/ANCOVA group effects and gen linear mixed model to test associations between predictor variables).					

Supplementary material 3 – MMAT ratings

Study ID	**MMAT Score**	**Comments**	1.1. Is the qualitative approach appropriate to answer the research question?	1.2. Are the qualitative data collection methods adequate to address the research question?	1.3. Are the findings adequately derived from the data?	1.4. Is the interpretation of results sufficiently substantiated by data?	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?
QUALITATIVE STUDIES							
Aisbett 2007	5	Semi-structured interviews were used. A phenomenological approach was used and rationale for which was adequately described. Sample was purposive sampling, which was appropriate for the approach used. Quotes are provided to justify the themes. There are clear links between data sources, collection, analysis and interpretation.	Yes	Yes	Yes	Yes	Yes
Boyd 2007	5	A qualitative content comparative method using semi-structured interviews was adopted. The approach was briefly mentioned in the study, however clear rationale and a theoretical framework was not presented. The results were reported adequately and include quotes to justify themes. There are clear links between data sources, collection, analysis and interpretation.	Yes	Yes	Yes	Yes	Yes
Calloway 2012	5	Focus groups were used with a clear rationale. Content analysis was performed, the author's approach is explained step by step. The results were reported adequately and include	Yes	Yes	Yes	Yes	Yes

		quotes to justify themes. There are clear links between data sources, collection, analysis and interpretation.					
Orlowski 2016	4	Semi-structured interviews were used however a clear theoretical rationale is not given. An inductive thematic analysis was conducted. The results were reported adequately and include quotes to justify the two themes, for which quotes was provided. There are clear links between data sources, collection, analysis and interpretation.	Yes	Can't tell	Yes	Yes	Yes
Wilson 2012	5	Multiple in-depth interviews conducted. Interpretive phenomenological research design is used.	Yes	Yes	Yes	Yes	Yes
Study code	**MMAT Score**	**Comments**	**4.1. Is the sampling strategy relevant to address the research question?**	**4.2. Is the sample representative of the target population?**	**4.3. Are the measurements appropriate?**	**4.4. Is the risk of nonresponse bias low?**	**4.5. Is the statistical analysis appropriate to answer the research question?**
MIXED METHODS STUDY							
Boyd 2011	2	A strong rationale for mixed methodology given to verify qualitative findings with quantitative methods and larger sample through the content-analysis of open-ended questions. Quantitative findings presented and further explained by qualitative findings showing some integration, however no inconsistencies, comparisons or divergences were reported between the two types of data collected. MMAT quality ratings for qualitative	No	No	Yes	No	Yes

		(2/5) and quantitative (2/5) data was individually used to appraise these separately. Probability sampling was not used and only 8/42 approached schools took part; therefore, not a normative sample which authors also report in limitations.					
QUANTITATIVE DESCRIPTIVE STUDIES							
Bradley 2010	1	Convenience sampling, not a probability sampling, all students that were registered on an English course during winter semester (introducing further bias), findings not generalisable e.g. All Caucasian, mostly married parents etc. Measures (CES-D) appropriate, reason for use justified briefly ("shown to be an acceptable tool" however validity and reliability testing not reported. Other measures are not standardised, nor any pre-testing reported but designed for this study using findings and questions used from previous research, no reporting of whether these are pre-tested. 44.6% completion rate;	No	No	Can't tell	Can't tell	Yes
Church 2020	3	The way the sample was selected was adequate. Target population is stated and there were some differences between census data and study data. There is no explanation of the non-response rate and whether there were any differences in characteristics. The questionnaire was created by the authors and internal validity reported however small sample size plus meaning behind respondents'	Yes	Yes	Can't tell	No	Yes

		selection unclear e.g., "neutral"/no "dont know" response. Data analysis was appropriate for the research questions.					
Gunnell 2004	5	YP seeking help from GP; cross sectional study - sampling is very good, yes, does represent population as GP data, yes widely recorded data, expected to be highly accurate, yes very low risk of non-response bias, looking at existing data records however only complete data was looked at so people who don't have stable residence, from ethnic minority backgrounds or marginalised status won't be well represented hmm.	Yes	Yes	Yes	Yes	Yes
Pisani 2012	5	The sampling strategy was relevant to the target population which is specified. They report on validity and reliability. Non-response bias is likely to be low as they found no differences reported in age, gender and grade. The statistical analyses reported is appropriate for the research questions (chi-sq., MANCOVA/ANCOVA group effects and gen linear mixed model to test associations between predictor variables).	Yes	Yes	Yes	Yes	Yes
Reeb 2011	3	No randomisation or stratification of sample however large sample included and relevant to research question; recruited two-parent families from seventh-grade classes in 34 public and private schools across 8 rural counties in central Iowa. Data European-American and data collected in 1980s. More diverse and recent samples, including single	No	No	Yes	Yes	Yes

		parent, same sex, urban, and minority families is needed. Measures overall are adequate however not robust. Main dependent variable measure of mental health service use was based on self-report and a 4-point scale, medical records more accurate; used in previous research however validity/reliability testing not reported. Depression scale reported as having good validity/reliability and comparisons provided. Paternal warmth based on observer ratings, more valid measure would be multiple observations in different settings or self-report from both fathers and adolescents.					
Ronis 2019	4	Convenience (non-probability) sampling through social media, advertisement posters. Sample unlikely to be representative of general population. Internal consistency calculated for questions measuring dependent variables. Missing values accounted for, rationale explained for data analysis plan.	Yes	No	Yes	Yes	Yes
Russell 2004	4	Convenience sampling was used and the sample was viewed as not large enough to represent the whole population although was originally proposed to as there was a random selection of a representative sample. The measurements were appropriate being a questionnaire that was piloted for reliability and validity. The study included the non-response rate and had an overall response rate of 85%. Chi square testing was used.	No	Yes	Yes	Yes	Yes

Sears 2004	2	Convenience sample, no probability sampling e.g. cluster sampling, nor is it normative and sample is only from one source of target population in schools i.e. would have missed school leavers. Source of adapted measures listed however how it is adapted, validity/reliability testing not reported. Some standardised measures used along with appropriate information reported. Overall measures and variable well defined. Response rate is high at 89% however no comparison of non-responders.	No	No	Yes	Can't tell	Yes
Seidler 2020	5	Retrospective study. Included sample is well defined and no probability sampling required, sample is all young people from service in question. Variables well defined. Study would not account for help-seeking nature of young people not known to services.	Yes	Yes	Yes	Yes	Yes

All papers met criteria for screening questions 1. Are there clear research questions? 2. Do the collected data allow to address the research questions?
Quality assessment rating met: 1, 20%; 2, 40%; 3, 60%; 4, 80%; 5, 100%

Supplementary material 4 - Stages of review and synthesis

Research question

What are the barriers and facilitators of help-seeking for young people aged 16-25 from rural populations in high-income countries?

Qualitative data

1. Extract and enter data verbatim into NVivo.
2. Thematic synthesis guided by Thomas and Harden (2004) framework for ‘coding text and developing descriptive themes.
   a. Line-by-line coding.
   b. Review and combine codes.
   c. Emergence of themes mapped onto socioecological framework (Bronfenbrenner, 1974) i.e., individual, community and systemic.
3. Barriers and facilitators as descriptive themes finalised.

Quantitative data

1. Extract relevant data guided by excel headings.
2. Applied Popay et al. (2006) ‘narrative synthesis’ techniques to guide comparing and contrasting findings.
   a. Vote counting matrix i.e., n, number of studies report barrier A, B, and C
   b. Grouping studies by i.e., study type, participant, data source, quality rating etc. to help identifying similarities and differences.
3. Listed main findings to answer research question.

Synthesis of qualitative and quantitative data

1. Barriers and facilitators found in quantitative and qualitative data were brought together and organised under each layer of the socioecological framework.
2. Qualitative data was utilised to ascertain whether young people’s perspectives corroborated or refuted the of young individuals as reported in the quantitative data (Thomas and Harden, 2004).

Findings were used to develop recommendations and identify gaps in the evidence base for future research.

Supplementary material 5 - Coding framework example

Excerpts as example		Refined Themes	Description
Calloway 2012 “I went to several sessions where the counselors weren’t listening to me. Because I was so jaded from my experience as a five-year-old that it was like. . .You’re not going to listen to a thing I want to say so I’m not going to go again.” “In my junior year I was working 4 ½ jobs and taking 18 credits and my average day would consist of going to class, coming home, doing my homework, going to work and staying up until 4:00 in the morning. And to keep myself going I was on a regimen of Mountain Dew and caffeine pills.”	• Past negative experiences • Stressors and high demands as barrier • Valuing self-reliance - accessing mental health services is weak	Individual factors and characteristics	This theme explores how individual past experiences and personal characteristics act as barriers and facilitators to help-seeking.
Wilson 2012 t has always been a very emotional thing for me … I’ve reached the end of my string (tears and sobs). This sounds horrible, but, I wish he’d just go away … it is pulling our family apart … we all tippy toe around his issues. His brother is spending so much time anywhere BUT home. I have got to the stage where I think ‘if you won’t take any notice, just go off and do your own thing’ … I cry … I don’t know! I don’t know who to go to … Another mother said: I don’t think there is a lot of support in the rural areas. I know … it should be better.	• Emotional burden on family • Family • Family facilitated • Family help-seeking strategies • Parents as help-seeking facilitators	The role of family	This theme looks at family support and the emotional impact on family members as barriers and facilitators of help-seeking.
Aisbett 2017 *It's harder to get around if you don't have a car at all and you live*	• Travel • Travel time • Transportation	Geographical limitations and access	This theme addresses the challenges

out of town yeah, transportation is yeah, a big problem here *That would be hard, say if I lived, even just lived [just out of town] that would be hard if I had to go to an appointment every week cos mum works and everything it would be a lot harder without transportation.* Calloway 2012 *Even if a student had a car on campus, the nearest city was over 60 miles away. The cost of fuel and the driving time restricted this activity,* *"We're on a small campus which makes it [difficult] . . . you can't get away it just becomes more and more you just want to get away from the people and you can't and then it just explodes after a while."* Aisbett 2017 *It was better when it was up at the hospital, yeah because you could just be going into the hospital to see someone, like yeah, because where it was, it was sorta like you walk in the door - psych services was that way and dentist was that way so you could be going to the dentist when really you were going to psych services.*	• Location • Social visibility		posed by geographical location and access to services.
Boyd 2007 'you couldn't go anywhere without people knowing who you were' the whole area that I lived in everyone basically sort of had an idea of who everyone else was and their business' Calloway 2012 "The only counselor on campus happens to be related to someone I previously dated. So that made it very awkward when I visited with her . . . it didn't feel necessarily	• Rural gossip networks • Rural isolation • Stigma community • Stigma professionals • Stigma sexuality • Stigma • Surveillance	Community interconnectedness	This theme explores the close-knit nature of rural communities and how stigma, gossip and privacy impacts help-seeking.

appropriate and she was the only option.” Orlowski 2016 Like gossip is a currency.			
Orlowski 2016 It’s, honestly, no wonder that people don’t want to go there for help anywhere, because if – you know, the way it is – like, and I’m telling you these rooms are one of the things that will make a person want to leave and not come back….the environment is, indeed, the most important thing (participant 2). unable to as the internet dropped out 5 min after beginning the chat session	• Not youth friendly • Poor internet access	Organisational and systemic factors	This theme explores the structural and organisational barriers to accessing services.

APPENDIX D - UEA FMH Approval Letter

University of East Anglia
Norwich Research Park
Norwich. NR4 7TJ

Email: ethicsmonitor@uea.ac.uk
Web: www.uea.ac.uk

Study title: Knowledge and recognition of psychosis in the voluntary sector: a vignette-based national survey

Application ID: ETH2122-0161

Dear Nazire,

Your application was considered on 25th March 2022 by the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee).

The decision is: **approved**.

You are therefore able to start your project subject to any other necessary approvals being given.

If your study involves NHS staff and facilities, you will require Health Research Authority (HRA) governance approval before you can start this project (even though you did not require NHS-REC ethics approval). Please consult the HRA webpage about the application required, which is submitted through the IRAS system.

This approval will expire on **1st October 2023**.

Please note that your project is granted ethics approval only for the length of time identified above. Any extension to a project must obtain ethics approval by the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee) before continuing.

It is a requirement of this ethics approval that you should report any adverse events which occur during your project to the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee) as soon as possible. An adverse event is one which was not anticipated in the research design, and which could potentially cause risk or harm to the participants or the researcher, or which reveals potential risks in the treatment under evaluation. For research involving animals, it may be the unintended death of an animal after trapping or carrying out a procedure.

Any amendments to your submitted project in terms of design, sample, data collection, focus etc. should be notified to the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee) in advance to ensure ethical compliance. If the amendments are substantial a new application may be required.

Approval by the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee) should not be taken as evidence that your study is compliant with the UK General Data Protection Regulation (UK GDPR) and the Data Protection Act 2018. If you need guidance on how to make your study UK GDPR compliant, please contact the UEA Data Protection Officer (dataprotection@uea.ac.uk).

Please can you send your report once your project is completed to the FMH S-REC (fmh.ethics@uea.ac.uk).

I would like to wish you every success with your project.

On behalf of the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee)

Yours sincerely,

Paul Linsley

APPENDIX E – Participant Information Sheet v1.1

Participant Information Sheet - ETH2122-1697 12/04/2022 Version 1.1

Research study: ***Understanding wellbeing support provided by the voluntary sector organisations (VSO) – a national survey***

Would you like to take part in this research study? Before you decide, it is important for you to understand why the research is being done and what it would involve. Please take time to read the following information carefully. Please ask us if there is anything that is not clear or if you would like more information (please see our contact details at the end of this document). Please take time to decide whether or not you wish to take part.

Brief Summary

This is a project being undertaken by Nazire Akarsu on the Doctorate in Clinical Psychology, Department of Clinical Psychology and Psychological Therapies at University of East Anglia. The project will look into understanding the support provided by voluntary sector staff and volunteers. The project will specifically focus on organisations directly advising and supporting people in the community. All eligible staff and volunteers will be given an online link to a survey to complete by a designated member of your organisation. The research is being supervised by Dr Joanne Hodgekins and Dr Sheri Oduola.

Why have I been chosen?

You have been chosen because you work or volunteer for a voluntary sector organisation that supports people in one of the following areas: employment, community development, education, health, human and civil rights, child, youth and family, poverty, housing, drug and alcohol.

Do I have to take part?

It is up to you whether or not you wish to take part. If you do decide to take part in the research, you will be asked to complete an online consent form and your responses will remain anonymous meaning we will not ask you for personal information and you cannot be identified

If you do decide to take part, you are free to exit the survey at any time however your anonymous responses will still be submitted. If after completing the survey you wish to withdraw and delete your responses, you will be given the option to do so at the end of the survey.

What would taking part involve?

You will be asked to anonymously complete a survey which will take approximately 20-minutes to complete, this includes a consent process. The survey will include three vignettes with follow-up questions asking you about your knowledge of mental health and wellbeing services I relation to the vignette.

As part of the survey, you will be asked to provide your age, gender, ethnicity and county you work in and the first part of the post code. **We will not ask you to give your name or contact details.** This means that you will remain anonymous unless you choose to contact us. The survey also includes questions about work-based supervision, if this is something you receive within your role. In total, the survey should take about 20-minutes to complete.

What will happen to me if I take part?

You will be asked to complete an online survey which we estimate will take you 20-minutes. You may also wish to provide your email address to be entered into a prize draw to win one of fifteen £20 Amazon gift vouchers and/or be contacted with the results of the study after its completion. You can provide your email address using the weblink at the end of the survey. Your email address will be stored separately from your survey responses in a secure electronic location.

What do I have to do?

Please answer the questions in the online survey.

Will I be paid to take part?

There is no payment for taking part in the survey however there is an optional prize draw

where you could win one of fifteen Amazon gift vouchers. To enter the prize draw, you can use the weblink at the end of the questionnaire to enter your email address. This is so we can securely store your email address separately to your survey responses and protect your anonymity.

What are the benefits of taking part?

While there are no immediate benefits for those taking part in the project, it is hoped that this work will have a beneficial impact on the development and provision of both statutory mental health and wellbeing services and voluntary sector organisations.

Will there be any risks or other implications of taking part in this study?

We are not aware of any risks or health implications to you by taking part in this research however contact information for support services will be provided at the beginning and end of the survey. All information we obtain as part of this study will be anonymised and kept confidential.

What will happen to information about me that is collected during the study?

Everything you tell us will be kept confidential. This means that no one else but us will know what you have told us. We will not be asking for your name or other personal details. We will, however, ask for you to provide an email address should you wish to be entered into an optional prize draw. We will use this to contact you if you win the prize draw. Your email address will be stored separately to your questionnaire responses, and it will not be possible to match your email address to your survey responses. Your personal data and information will only be used as outlined in this Participant Information Sheet, unless you consent otherwise. Data Protection Act 2018 (DPA 2018) and UK General Data Protection Regulation (UK GDPR), and the University of East Anglia's Research Data Management Policy.

The information you provide will be stored securely and your identity will be kept strictly confidential, except as required by law. Study findings may be published, but you will not be identified in these publications if you decide to participate in this study. Study data may also be deposited with a repository to allow it to be made available for scholarly and educational purposes. The data will be kept for at least 10 years beyond the last date the data were accessed. The deposited data will not include your name or any identifiable information about

you.

What if I would like further information about the study?

In addition to the information provided here, should you have any further enquiries please contact me using the following: n.akarsu@uea.ac.uk

What if I would like to find out the results of the study?

You have a right to receive feedback about the overall findings of this study. If you would like to learn more about the findings of the study, please tick the appropriate box at the bottom of the consent form and please provide your email address at the end of the survey. Email addresses will be stored securely and separately to the survey responses. Overall results will be provided in the form of a one-page lay summary which you will receive after the study is finished.

Who has reviewed the research?

Ethical approval for this study has been sought from University of East Anglia (UEA) Faculty of Medicine and Health (FMH) Ethics Committee.

If you are unhappy with any part of your research participation, or would like to make a complaint, please contact the Head of the Department, Professor Niall Broomfield:

Email: n.broomfield@uea.ac.uk

Address: Norwich Medical School, Norwich Research Park, University of East Anglia, Norwich, Norfolk, NR4 7TJ.

Who to contact in crisis or if you are feeling unwell

- **First Response Service**: For a mental health crisis, call 111 and select option 2. Calls will be answered 24/7 by trained mental health practitioners.
- If you want support via text, contact **SHOUT** by texting 85258, https://giveusashout.org/
- **Saneline**: 0300 304 7000 between 4.30pm and 10.30pm each evening
- **Samaritans**: Call free any time, from any phone, on **116 123** for confidential, non-judgmental emotional support.
- **Lifeline**: 0808 808 2121 Between 7pm-11pm 365 days a year
- **MIND** Infoline provides an information and signposting service. Open 9am to 6pm, Monday to Friday (except for bank holidays). Infoline: 0300 123 3393, Email: info@mind.org.uk
- **A&E:** If you are not able to obtain the support you need through the methods above, you can call 999 or go to your nearest A&E department.

Thank you for reading this information sheet.

APPENDIX F – Debrief form

Debrief form

<u>Voluntary Sector Organisations and Knowledge of Mental Health and Wellbeing Services in the Community</u>

Debrief:

We are interested in whether voluntary sector staff can recognise commonly known mental health difficulties, like depression, like in the case of John, and psychosis, like in the case of Jenny. However, we are also interested in whether voluntary sector staff can recognise someone who is at risk of developing psychosis and are beginning to show early tell-tale signs, like in the case of Beth who has begun to socially isolate herself and sometimes has unusual sensory experiences, like hearing whispers at night and suspects people are watching or laughing at her, even though she can convince herself this isn't true. Some of the main risk factors for developing a first episode of psychosis often starts due to social circumstances, like experiencing a type of adversity e.g. stress, unemployment, abuse, housing issues, drugs/alcohol, poverty, to name a few. The evidence base shows that early intervention and recognition of early signs and symptoms of psychosis is often key to preventing a person from developing a first episode of psychosis. This recognition and support can be from anywhere, and often as first points of contact, the voluntary sector can be key in the journey to getting the professional help most young people and adults need.

More info:

Psychosis is when “you perceive or interpret reality in a very different way from people around you.”, and typically characterised by hallucinations, delusions and disorganised thinking and speech (MIND, 2020). It is one of the leading causes of disability in the world, with limited options for recovery and treatment (Fusar-Poli et al., 2017; Global Burden of Disease Study Collaborators, 2015). Addressing the risk factors associated with the onset of psychosis is key, e.g., homelessness, drug and alcohol use, unemployment and vulnerability to various types of abuse (Morgan et al., 2010). However, an era of austerity compounded by the Covid-19 pandemic (Mahase, 2020) has meant that the NHS is under strain now more than ever (Newbigging et al., 2017). Voluntary-sector organisations (VSOs) help fill gaps in NHS mental health services and typically provide more targeted work with disadvantaged communities, some of which are at higher risk of psychosis (CQC, 2012; Mind, 2011; Morgan et al., 2019; NHS Five Year Forward View, 2014; NHS England, 2019; Oduola et al., 2019). However, it is unknown to what extent VSO staff can recognise mental health difficulties when working with these vulnerable populations, and how they might support them.

Vignettes with a psychosis presentation used in cross-sectional surveys have been shown to be effective in identifying levels of mental health literacy in various populations including the public (Reavley and Jorm, 2011), young people (Wright et al., 2005) unemployed people (Waldmann et al., 2020) and health professionals (McCann et al., 2018; Reavley et al., 2014) in various countries. Therefore, this research study is investigating the extent to which UK-based VSO staff can recognise mental health difficulties, like psychosis, through a vignette-based survey,

which is modelled primarily on the Mental Health Literacy scales developed by Neavley and colleagues (2011).

We are not aware of any risks or health implications to you by taking part in this research however contact information for support services will be provided at the beginning and end of the survey. All information we obtain as part of this study will be anonymised and kept confidential.

You can find more information on this topic on the following websites:

- What is psychosis? https://www.mind.org.uk/information-support/types-of-mental-health-problems/psychosis/about-psychosis/
- Psychosis factsheet: https://www.rethink.org/advice-and-information/about-mental-illness/learn-more-about-conditions/psychosis/?gclid=Cj0KCQiA15yNBhDTARIsAGnwe0V4kZ_h14Xwtjq5eCYQjs2Jo0niwrCEeff1TV_QRI4gFYaDa5zkQRwaAohBEALw_wcB
- Information booklet for family and friends: https://likemind.nhs.uk/files/resources/Family-and-Friends-Booklet.pdf
- Psychosis and NHS: https://www.nhs.uk/mental-health/conditions/psychosis/treatment/

We appreciate some of the case scenarios may trigger difficult emotions or memories for some people.

Please take care of yourself, you may wish to do something relaxing following the completion of this survey.

Here are some contact details if you or someone you know is in crisis or if you or someone you know are feeling unwell:

- **First Response Service**: For a mental health crisis, call 111 and select option 2. Calls will be answered 24/7 by trained mental health practitioners.
- If you want support via text, contact **SHOUT** by texting 85258, https://giveusashout.org/
- **Saneline**: 0300 304 7000 between 4.30pm and 10.30pm each evening
- **Samaritans**: 08457 909090 24hrs a day 365 days of the year, (free call) for confidential, non-judgmental emotional support.
- **Lifeline**: 0808 808 2121 Between 7pm-11pm 365 days a year
- **MIND** Infoline provides an information and signposting service. Open 9am to 6pm, Monday to Friday (except for bank holidays). Infoline: 0300 123 3393, Email: info@mind.org.uk
- **A&E:** If you are not able to obtain the support you need through the methods above, you can call 999 or go to your nearest A&E department.

APPENDIX G – Recruitment Poster

Participants required for 20-min anonymous survey

Do you work or volunteer for a community-based charity providing advice or support to people?

We are looking for participants from community-based charity organisations to anonymously take part in a survey exploring knowledge and understanding of mental health conditions and services in the UK.

To take part you must be:

- working in a community-based charity and advising or supporting people directly as part of your job role (voluntary or paid)
- you work in one or more of the following areas: housing, health, employment, education, learning disabilities, youth work, refugees and asylum seekers, social care, any form of violence or abuse, modern slavery, drugs and alcohol
- working in United Kingdom (UK)
- able to understand and read English

If you meet the above criteria and would like to take part, then please follow the link below. You can choose to provide your email address if you wish to be entered into a prize draw to win one of 15 x £20 Amazon gift vouchers.

To take part in the survey please follow this link:
https://ueapsych.eu.qualtrics.com/jfe/form/SV_1TTdi7CLo0NqPvo

Alternative short URL link to the survey: https://shorturl.at/pHIYZ

If you have any questions please contact:

Naz Akarsu
Postgraduate Student Researcher
Doctorate in Clinical Psychology
Email: n.akarsu@uea.ac.uk

APPENDIX H – Informed Consent Form

Informed Consent Form (ETH2122-1697 25/03/2022 Version 1)

Please read carefully and tick as appropriate before continuing with the survey.

☐ 1. I have read the information provided at the start of this survey on the current project (dated 25/03/2022, version 1) (1)

☐ 2. I understand that I will not benefit financially (2)

☐ 3. I know how to contact the research team if I need to (3)

☐ 4. I am satisfied that my welfare and interests have been properly safeguarded (4)

☐ 5. I understand that I can change my mind and refuse to take part at any time during the research process. I can do this by exiting the screen by clicking the top right "x" button. (5)

APPENDIX I – Empirical Study Survey

Q86 **--**

Study findings & £20 Amazon Voucher PRIZE DRAW Please provide your email address if you wish to be contacted about the findings of the study and/or to be entered into the £20 Amazon voucher prize draw using the weblink at the end of the survey. This is so we can keep your survey responses separate to your email address to protect your anonymity.

End of Block: PIS - ICF - Email link

Start of Block: Demographics

Q1 What is your age:

▼ 18 - 24 (1) ... 85 or older (8)

Rural help-seeking and voluntary sector

Q2 What is your highest level of educational qualification?

- ○ Before Primary School (4-11) (1)
- ○ Primary School (11+) (2)
- ○ Secondary School / High School (3)
- ○ Trade School (4)
- ○ College or Sixth Form (5)
- ○ Bachelor's Degree (6)
- ○ Master's Degree (7)
- ○ Ph.D. or higher (8)
- ○ Prefer not to say (9)

Q3 What is your ethnicity?

- English, Welsh, Scottish, Northern Irish (1)
- Irish (2)
- Gypsy or Irish Traveller (3)
- Any other White background (4)
- White and Black Caribbean (5)
- White and Black African (6)
- White and Asian (7)
- Any other Mixed or Multiple ethnic background (8)
- Indian (9)
- Pakistani (10)
- Bangladeshi (11)
- Chinese (12)
- Any other Asian background (13)
- African (14)
- Caribbean (15)
- Any other Black, African or Caribbean background (16)

○ Arab (17)

○ Any other ethnic group (18)

○ Prefer not to say (19)

Q6 What is the first half of your organisation's post code
e.g. WCV1, CB7, BN34

____

Q7 What county is your voluntary sector organisation based in?

▼ Bath and North East Somerset (1) ... Worcestershire (51)

Q8 What area of work does your voluntary sector organisation specialise in?

▼ Abuse (1) ... Other (35)

Q9 If you selected 'other', please specify organisation's specialised area:

____

Page Break

Q11 **You will now be presented with a description of a person.**

Please read the description carefully and answer the following questions. There will be three rounds of this after which the survey will end.

Click 'Next' to begin.

End of Block: Demographics

Start of Block: Person A

Person A
John is 30 years old. He has been feeling unusually sad and miserable for the last few weeks. Even though he is tired all the time, he has trouble sleeping nearly every night. John doesn't feel like eating and has lost weight. He can't keep his mind on his work and puts off making any decisions. Even day-to-day tasks seem too much for him. This has come to the attention of John's boss who is concerned about his lowered productivity. John feels he will never be happy again and believes his family would be better off without him. John has been so desperate, he has been thinking of ways to end his life.

Q13 Q1. What, if anything, would you say is wrong with John?

____

Q14 Q2. If John were to seek help from any of the following people, is it likely to be helpful, harmful or neither for him? (Select one response for each line)

	Helpful (1)	Neither (2)	Harmful (3)	Depends (4)	Don't know (5)
a. A typical family GP or doctor (2)	○	○	○	○	○
b. A typical chemist (pharmacist) (3)	○	○	○	○	○
c. A counsellor (4)	○	○	○	○	○
d. A social worker (5)	○	○	○	○	○
e. Telephone counselling service, e.g. Samaritans (6)	○	○	○	○	○
f. A psychiatrist (7)	○	○	○	○	○
g. A psychologist (8)	○	○	○	○	○
h. Help from his close family (9)	○	○	○	○	○
i. Help from some close friends (10)	○	○	○	○	○
j. A naturopath or a herbalist (11)	○	○	○	○	○
k. The clergy, a minister or a priest (12)	○	○	○	○	○

l. John tries to deal with his problems on his own (13)	○	○	○	○	○

Q15 Q3. If John were to take one of the following medicines, is it likely to be helpful, harmful or neither for him? (Select one response for each line)

	Helpful (1)	Neither (2)	Harmful (3)	Depends (4)	Don't know (5)
a. Vitamins and minerals, tonics or herbal medicines (1)	○	○	○	○	○
b. Analgesics (2)	○	○	○	○	○
c. Antidepressants (3)	○	○	○	○	○
d. Antibiotics (4)	○	○	○	○	○
e. Sedatives / hypnotics (5)	○	○	○	○	○
f. Antipsychotics (6)	○	○	○	○	○
g. Tranquilisers such as valium (diazepam) (7)	○	○	○	○	○

Q17 Q4. If John were to undertake any of the following, is it likely to be helpful, harmful or neither for him?
(Select one response for <u>each</u> line)

	Helpful (1)	Neither (2)	Harmful (3)	Depends (4)	Don't know (5)
a. Becoming more physically active (1)	○	○	○	○	○
b. Reading about people with similar problems and how they have dealt with them (2)	○	○	○	○	○
c. Getting out and about more (3)	○	○	○	○	○
d. Courses on relaxation, stress management, meditation or yoga (4)	○	○	○	○	○
e. Cutting out alcohol altogether (5)	○	○	○	○	○
f. Psychotherapy (6)	○	○	○	○	○
g. Cognitive behaviour therapy (7)	○	○	○	○	○
h. Hypnosis (8)	○	○	○	○	○
i. Admission to a psychiatric ward of a hospital (9)	○	○	○	○	○
j. Electroconvulsive therapy (ECT) (10)	○	○	○	○	○
k. Having an occasional alcoholic drink to relax (11)	○	○	○	○	○

l. A special diet or avoiding certain foods (12)	○	○	○	○	○
m. Consulting a website that gives information about his problem (13)	○	○	○	○	○
n. Consulting an expert using email or the web about his problem (14)	○	○	○	○	○
o. Consulting a book that gives information about his health problem (15)	○	○	○	○	○
p. Receiving information about his problem from a health educator (16)	○	○	○	○	○

Q19 Working with someone like John in your organisation:

Q18 1. Have you worked with someone who was like John before?

○ No (1)

○ Yes (2)

Q20 2. If you were advising or supporting someone like John in your organisation, what would you do?

____

Q21 3. Have you received training to support or advise someone like John in your organisation?

- No (1)
- Yes (2)

Q22 4. Do you have policies, guidance or programmes specifically for supporting or advising someone like John?

- No (1)
- Yes (2)

Q23 4.1. If yes, can you please provide more information:

____

Q24 6. How frequently do you work with someone like John in your organisation?

- Never (1)
- Rarely (2)
- Occasionally (3)
- Frequently (4)
- Always (5)

Q25 7. What training, if any, have you received to help you work with people like John in your organisation?

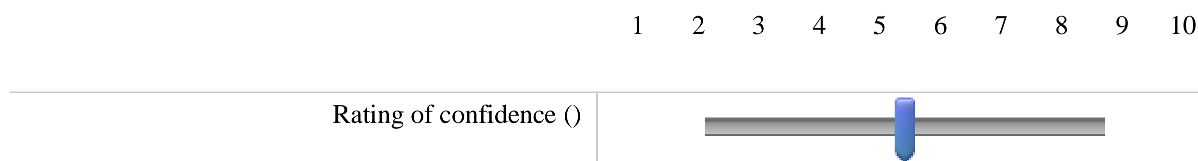
____

Q26 8. Please rate how confident you feel working with someone like John in your organisation.

Rating scale from 1 to 10, where 1=not confident, 10=very confident

1 2 3 4 5 6 7 8 9 10

Rating of confidence ()



Q27 Please click 'NEXT' to continue to read about the next person's difficulties.

The survey has THREE cases for you to read about and it will take you approximately 20-minutes to complete. We are very grateful for your time.

However, if you would like to end the survey here, please tick the box below.

▢ Tick here to end the survey and go to the debrief page, or click 'Next' to continue with the survey (4)

Skip To: End of Survey If Please click 'NEXT' to continue to read about the next person's difficulties. The survey has THRE... = Tick here to end the survey and go to the debrief page, or click 'Next' to continue with the survey

End of Block: Person A

Start of Block: Person B

Q36 **Beth is a 20-year-old history student at university. She has been very stressed at university, has been feeling anxious and like she cannot cope with the pressure of doing a thesis and coursework. On most days, she feels as though people are looking at her and laughing at her when she is in lectures and walking around on-campus, however when she calms herself down she realises this is not true, though it continues to happen the next day. Beth has stopped going to lectures and has begun handing in her coursework late or sometimes not at all. She has also been refusing invitations from friends to go out as she is worried that she will become overwhelmed. Also during this time, Beth hears her name being called and sometimes**

hears whispering noises for a few seconds, and mostly at night. She realises it is her mind playing tricks on her and attributes it to stress.

Q37 Q1. What, if anything, would you say is wrong with Beth?

____

Q38 Q2 If Beth were to seek help from any of the following people, is it likely to be helpful, harmful or neither for her? (Select one response for each line)

	Helpful (1)	Neither (2)	Harmful (3)	Depends (4)	Don't know (5)
a. A typical family GP or doctor (1)	○	○	○	○	○
b. A typical chemist (pharmacist) (2)	○	○	○	○	○
c. A counsellor (3)	○	○	○	○	○
d. A social worker (4)	○	○	○	○	○
e. Telephone counselling service, e.g. Lifeline (5)	○	○	○	○	○
f. A psychiatrist (6)	○	○	○	○	○
g. A psychologist (7)	○	○	○	○	○
h. Help from her close family (8)	○	○	○	○	○
i. Help from some close friends (9)	○	○	○	○	○
j. A naturopath or a herbalist (10)	○	○	○	○	○

k. The clergy, a minister or a priest (11)	○	○	○	○	○
l. Beth tries to deal with her problems on her own (12)	○	○	○	○	○

Q39 Q3 If Beth were to take one of the following medicines, is it likely to be helpful, harmful or neither for her? (Select one response for each line)

	Helpful (1)	Neither (2)	Harmful (3)	Depends (4)	Don't know (5)
a. Vitamins and minerals, tonics or herbal medicines (1)	○	○	○	○	○
b. Analgesics (2)	○	○	○	○	○
c. Antidepressants (3)	○	○	○	○	○
d. Antibiotics (4)	○	○	○	○	○
e. Sedatives / hypnotics (5)	○	○	○	○	○
f. Antipsychotics (6)	○	○	○	○	○
g. Tranquilisers such as valium (diazepam) (7)	○	○	○	○	○

Q40 Q4 If Beth were to undertake any of the following, is it likely to be helpful, harmful or neither for her?
(Select one response for each line)

	Helpful (1)	Neither (2)	Harmful (3)	Depends (4)	Don't know (5)
a. Becoming more physically active (1)	○	○	○	○	○
b. Reading about people with similar problems and how they have dealt with them (2)	○	○	○	○	○
c. Getting out and about more (3)	○	○	○	○	○
d. Courses on relaxation, stress management, meditation or yoga (4)	○	○	○	○	○
e. Cutting out alcohol altogether (5)	○	○	○	○	○
f. Psychotherapy (6)	○	○	○	○	○
g. Cognitive behaviour therapy (7)	○	○	○	○	○
h. Hypnosis (8)	○	○	○	○	○
i. Admission to a psychiatric ward of a hospital (9)	○	○	○	○	○
j. Electroconvulsive therapy (ECT) (10)	○	○	○	○	○

k. Having an occasional alcoholic drink to relax (11)	○	○	○	○	○
l. A special diet or avoiding certain foods (12)	○	○	○	○	○
m. Consulting a website that gives information about her problem (13)	○	○	○	○	○
n. Consulting an expert using email or the web about her problem (14)	○	○	○	○	○
o. Consulting a book that gives information about her health problem (15)	○	○	○	○	○
p. Receiving information about her problem from a health educator (16)	○	○	○	○	○

Q41 Working with someone like Beth in your organisation:

Q42 1. Have you worked with someone who was like Beth before?

○ No (1)

○ Yes (2)

Q43 2. If you were advising or supporting someone like Beth in your organisation, what would you do?

____

Q44 3. Have you received training to support or advise someone like Beth in your organisation?

○ No (1)

○ Yes (2)

Q45 4. Do you have policies, guidance or programmes specifically for supporting or advising someone like Beth?

○ No (1)

○ Yes (2)

Q46 4.1. If yes, can you please provide more information:

____

Q47 6. How frequently have you worked with someone like Beth in your organisation?

- ◯ Never (1)
- ◯ Rarely (2)
- ◯ Occasionally (3)
- ◯ Frequently (4)
- ◯ Always (5)

Q48 7. What training, if any, have you received to help you work with people like Beth in your organisation?

____

Q49 8. Please rate how confident you feel working with someone like Beth in your organisation.

Rating scale from 1 to 10, where 1=not confident, 10=very confident

1 2 3 4 5 6 7 8 9 10

Q50 Please click 'NEXT' to continue to read about the next person's difficulties.

The survey has THREE cases for you to read about and it will take you approximately 20-minutes to complete. We are very grateful for your time.

However, if you would like to end the survey here, please tick the box below.

☐ Tick here to end the survey and go to the debrief page or click 'Next' to continue with the survey (1)

Skip To: End of Survey If Please click 'NEXT' to continue to read about the next person's difficulties. The survey has THRE... = Tick here to end the survey and go to the debrief page or click 'Next' to continue with the survey

End of Block: Person B

Start of Block: Person C

Q68 **Jenny is 44 years old. She is living in a boarding house in an industrial area. She has not worked for years. She wears the same clothes in all weathers and has left her hair to grow long and untidy. She is always on her own and is often seen sitting in the park talking to herself. At times she stands and moves her hands as if to communicate to someone in nearby trees. She rarely drinks alcohol. She speaks carefully using uncommon and sometimes made-up words. She is polite but avoids talking with other people. At times she accuses shopkeepers of giving information about her to other people. She has asked her landlord to put extra locks on her door and to remove the television set from her room. She says spies are trying to keep her under observation because she has secret information about international computer systems which control people through television transmitters. Her landlord complains that she will not let him clean the room which is increasingly dirty and filled with glass objects. Jenny says she is using these "to receive messages from space".**

Q69 Q1. What, if anything, would you say is wrong with Jenny?

____

Q70 Q2 If Jenny were to seek help from any of the following people, is it likely to be helpful, harmful or neither for her? (Select one response for each line)

	Helpful (1)	Neither (2)	Harmful (3)	Depends (4)	Don't know (5)
a. A typical family GP or doctor (1)	○	○	○	○	○
b. A typical chemist (pharmacist) (2)	○	○	○	○	○
c. A counsellor (3)	○	○	○	○	○
d. A social worker (4)	○	○	○	○	○
e. Telephone counselling service, e.g. Lifeline (5)	○	○	○	○	○
f. A psychiatrist (6)	○	○	○	○	○
g. A psychologist (7)	○	○	○	○	○
h. Help from her close family (8)	○	○	○	○	○
i. Help from some close friends (9)	○	○	○	○	○
j. A naturopath or a herbalist (10)	○	○	○	○	○

k. The clergy, a minister or a priest (11)	○	○	○	○	○
l. Jenny tries to deal with her problems on her own (12)	○	○	○	○	○

Q71 Q3 If Jenny were to take one of the following medicines, is it likely to be helpful, harmful or neither for her? (Select one response for each line)

	Helpful (1)	Neither (2)	Harmful (3)	Depends (4)	Don't know (5)
a. Vitamins and minerals, tonics or herbal medicines (1)	◯	◯	◯	◯	◯
b. Analgesics (2)	◯	◯	◯	◯	◯
c. Antidepressants (3)	◯	◯	◯	◯	◯
d. Antibiotics (4)	◯	◯	◯	◯	◯
e. Sedatives / hypnotics (5)	◯	◯	◯	◯	◯
f. Antipsychotics (6)	◯	◯	◯	◯	◯
g. Tranquilisers such as valium (diazepam) (7)	◯	◯	◯	◯	◯

Q72 Q4 If Jenny were to undertake any of the following, is it likely to be helpful, harmful or neither for her? (Select one response for each line)

	Helpful (1)	Neither (2)	Harmful (3)	Depends (4)	Don't know (5)
a. Becoming more physically active (1)	○	○	○	○	○
b. Reading about people with similar problems and how they have dealt with them (2)	○	○	○	○	○
c. Getting out and about more (3)	○	○	○	○	○
d. Courses on relaxation, stress management, meditation or yoga (4)	○	○	○	○	○
e. Cutting out alcohol altogether (5)	○	○	○	○	○
f. Psychotherapy (6)	○	○	○	○	○
g. Cognitive behaviour therapy (7)	○	○	○	○	○
h. Hypnosis (8)	○	○	○	○	○
i. Admission to a psychiatric ward of a hospital (9)	○	○	○	○	○
j. Electroconvulsive therapy (ECT) (10)	○	○	○	○	○

k. Having an occasional alcoholic drink to relax (11)	○	○	○	○	○
l. A special diet or avoiding certain foods (12)	○	○	○	○	○
m. Consulting a website that gives information about her problem (13)	○	○	○	○	○
n. Consulting an expert using email or the web about her problem (14)	○	○	○	○	○
o. Consulting a book that gives information about her health problem (15)	○	○	○	○	○
p. Receiving information about her problem from a health educator (16)	○	○	○	○	○

Q73 Working with someone like Jenny in your organisation:

Q74 1. Have you worked with someone who was like Jenny before?

- ○ No (1)
- ○ Yes (2)

Q75 2. If you were advising or supporting someone like Jenny in your organisation, what would you do?

____

Q76 3. Have you received training to support or advise someone like Jenny in your organisation?

○ No (1)

○ Yes (2)

Q77 4. Do you have policies, guidance or programmes specifically for supporting or advising someone like Jenny?

○ No (1)

○ Yes (2)

Q78 4.1. If yes, can you please provide more information:

____

Q79 6. How frequently have you worked with someone like Jenny in your organisation?

- Never (1)
- Rarely (2)
- Occasionally (3)
- Frequently (4)
- Always (5)

Q80 7. What training, if any, have you received to help you work with people like Jenny in your organisation?

____

Q81 8. Please rate how confident you feel working with someone like Jenny in your organisation.

Rating scale from 1 to 10, where 1=not confident, 10=very confident

	1	2	3	4	5	6	7	8	9	10
Rating of confidence ()										

Q82 Please click 'NEXT' to continue to read about the next person's difficulties.

The survey has THREE cases for you to read about and it will take you approximately 20-minutes to complete. We are very grateful for your time.

However, if you would like to end the survey here, please tick the box below.

☐ Tick here to end the survey and go to the debrief page or click 'Next' to continue with the survey (1)

Skip To: End of Survey If Please click 'NEXT' to continue to read about the next person's difficulties. The survey has THRE... = Tick here to end the survey and go to the debrief page or click 'Next' to continue with the survey

End of Block: Person C

Start of Block: Debrief

Study debrief Voluntary Sector Organisations and Knowledge of Mental Health and Wellbeing Services in the Community - debrief

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Q30 **Study debrief:**
We are interested in whether voluntary sector staff can recognise commonly known mental health difficulties, like depression, like in the case of John, and psychosis, like in the case of Jenny. However, we are also interested in whether voluntary sector staff can recognise someone who is at risk of developing psychosis and are beginning to show early tell-tale signs, like in the case of Beth who has begun to socially isolate herself and sometimes has unusual sensory experiences, like hearing whispers at night and suspects people are watching or laughing at her, even though she can convince herself this isn't true. Some of the main risk factors for developing a first episode of psychosis often starts due to social circumstances, like experiencing a type of adversity e.g. stress, unemployment, abuse, housing issues, drugs/alcohol, poverty, to name a few. The evidence base shows that early intervention and recognition of early signs and symptoms of psychosis is often key to preventing a person from developing a first episode of psychosis. This recognition and support can be from anywhere, and often as first points of contact, the voluntary sector can be key in the journey to getting the professional help most young people and adults need.

More information:

Psychosis is when "you perceive or interpret reality in a very different way from people around you.", and typically characterised by hallucinations, delusions and disorganised thinking and speech (MIND, 2020). It is one of the leading causes of disability in the world, with limited options for recovery and treatment (Fusar-Poli et al., 2017; Global Burden of Disease Study Collaborators, 2015). Addressing the risk factors associated with the onset of psychosis is key, e.g., homelessness, drug and alcohol use, unemployment and vulnerability to various types of abuse (Morgan et al., 2010). However, an era of austerity compounded by the Covid-19 pandemic (Mahase, 2020) has meant that the NHS is under strain now more than ever (Newbigging et al., 2017). Voluntary-sector organisations (VSOs) help fill gaps in NHS mental health services and typically provide more targeted work with disadvantaged communities, some of which are at higher risk of psychosis (CQC, 2012; Mind, 2011; Morgan et al., 2019; NHS Five Year Forward View, 2014; NHS England, 2019; Oduola et al., 2019). However, it is unknown to what extent VSO staff can recognise mental health difficulties when working with these vulnerable populations, and how they might support them. Vignettes with a psychosis presentation used in cross-sectional surveys have been shown to be effective in identifying levels of mental health literacy in various populations including the public (Reavley and Jorm, 2011), young people (Wright et al., 2005) unemployed people (Waldmann et al., 2020) and health professionals (McCann et al., 2018; Reavley et al., 2014) in various countries. Therefore, this research study is investigating the extent to which UK-based VSO staff can recognise mental health difficulties, like psychosis, through a vignette-based survey, which is modelled primarily on the Mental Health Literacy scales developed by Neavley and colleagues (2011).

Q33 **We are not aware of any risks or health implications to you by taking part in this research however contact information for support services will be provided at the beginning and end of the survey. All**

information we obtain as part of this study will be anonymised and kept confidential.

You can find more information on this topic on the following websites:

What is psychosis?

https://www.mind.org.uk/information-support/types-of-mental-health-problems/psychosis/about-psychosis/

Psychosis factsheet: https://www.rethink.org/advice-and-information/about-mental-illness/learn-more-about-conditions/psychosis/?gclid=Cj0KCQiA15yNBhDTARIsAGnwe0V4kZ_h14Xwtjq5eCYQjs2Jo0niwrCEeff1TV_QRl4gFYaDa5zkQRwaAohBEALw_wcB

Information booklet for family and friends: https://likemind.nhs.uk/files/resources/Family-and-Friends-Booklet.pdf

Psychosis and NHS: https://www.nhs.uk/mental-health/conditions/psychosis/treatment/

Q32 **We appreciate some of the case scenarios may trigger difficult emotions or memories for some people.**

Please take care of yourself, you may wish to do something relaxing following the completion of this survey.

Here are some contact details if you or someone you know is in crisis or if you or someone you know are feeling unwell:
First Response Service: For a mental health crisis, call 111 and select option 2. Calls will be answered 24/7 by trained mental health practitioners. If you want support via text, contact

SHOUT by texting 85258, https://giveusashout.org/

Saneline: 0300 304 7000 between 4.30pm and 10.30pm each evening

Samaritans: 08457 909090 24hrs a day 365 days of the year, (free call) for confidential, non-judgmental emotional support.

Lifeline: 0808 808 2121 Between 7pm-11pm 365 days a year

MIND Infoline provides an information and signposting service. Open 9am to 6pm, Monday to Friday (except for bank holidays). Infoline: 0300 123 3393, Email: info@mind.org.uk

A&E: If you are not able to obtain the support you need through the methods above, you can call 999 or go to your nearest A&E department.

Q29 **Right to withdraw and delete responses**
You have the right to withdraw at any point during the research process however your completed responses will have already been submitted.

☐ If you wish to withdraw and have your responses deleted, please tick this box. (1)

Q92 Please go to the next page to enter your email address.

- END OF SURVEY-