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Title: Priorities and directions for future research on student mental health within Scottish Higher Education Institutions: A scoping review protocol

Abstract

Background: While research on student mental health has flourished in recent years, studies within the Scottish context remain limited. It is important that we seek to understand what is currently known about student mental health in Higher Educational Institutions (HEIs) in Scotland given its unique educational and socio-political context and health and social care system to guide and advance future research. To date, a scoping review which maps the available literature has yet to be conducted. Here, we outline the protocol for a scoping review on student mental health in HEIs in Scotland.

Methods: This protocol outlines the process of conducting a scoping review of primary research concerning student mental health in HEIs in Scotland. The Joanna Briggs Institute guidance on best practice for conducting a scoping review will be utilised throughout. A systematic search of appropriate databases will be conducted which will allow for a two-step screening process and data charting. Inclusion criteria for this review dictates that eligible studies will: (1) include a population aged 16 years plus, (2) include the term 'mental health', (3) include data collected within Scotland, (4) be primary research, (4) be published post-2003 and (5) be published in English.

Discussion: The findings of the scoping review outlined in this protocol will be used to inform any immediate actions that can be taken to support better student mental health in Scotland as well as guide future research in the area. This review will help build guidance on how to strengthen the evidence base on student mental health in Scotland for students, educational providers, academics and mental health practitioners with the aim of raising awareness and improving research, policy and practice.

Introduction

The number of students in Higher Education Institutions (HEIs) with serious mental health problems has risen significantly over the last decade (Andersen et al, 2021; Bekkouche et al, 2022; Lewis et al, 2021; ONS, 2022) and worsened due to stressors associated with the COVID-19 pandemic (Grubic et al, 2020; Salimi et al, 2023). Student counselling and wellbeing services have reportedly seen an increasing number of students with more severe mental health problems (Hill et al., 2020; Johnson & Lester, 2022; Mahon et al., 2022). Moreover, there has been evidence of an increase in student suicides (Batchelor et al, 2021; Brown, 2018; Ma et al, 2021; Sivertsen et al, 2022; Surdey et al, 2022). In addition, government policies aimed at widening access to HEIs to under-represented groups, such as those with no family history of higher education, mature students and those with vocational rather than academic qualifications, has meant greater demands being placed on support services, with no corresponding increase in resources (Llopart & Esteban-Guitart, 2018). Furthermore, growing evidence suggests that a relatively small proportion of students who experience mental health problems are likely to seek help (Eisenberg et al. 2007; Lipson et al, 2022; Oswalt et al, 2020), with lower help-seeking behaviours particularly evident in the international student population (Alharbi et al, 2021; Cheng, et al, 2018; Cogan et al, 2022). Amongst the general student population this appears to be largely due to the stigma surrounding mental health problems and challenges in accessing services (Fekih-Romdhane et al, 2022; Maeshima et al, 2022).

Why focus on the Scottish context?

The Scottish education system differs in important ways from that of other UK national systems (England; Wales; Northern Ireland), including the length of degrees and number of transition points. While the total length of time students spend in primary, secondary and higher education is the same compared to their English peers, Scottish students spend one year less in secondary school and one year more at university thus typically entering the university environment one year younger. In addition to spending 4 years on an Honours degree, Scottish students may also have a broader and more flexible learning experience as they study a wider range of subjects during the first two years, before specialising in third year. However, this broad curriculum can also be a source of distress, as transition to Honours may entail a grade requirement or entry examination. Furthermore, there is a contextual disparity in the student academic experience given the geopolitical environment and student background. Scotland has been highly successful in including students from underrepresented groups and backgrounds through the establishment of a Commission on

Widening Access and resultant *Widening Participation* (WP) strategies in each institution, as well as attracting international students (The Scottish Government, 2018; 2022). While these trends are enriching the diversity at Scottish HEIs and strengthening the workforce, evidence from other countries suggests that these groups may experience more negative emotions and lower levels of wellbeing and sense of belonging during their time within HEIs (Compton and Shim 2015; Macaskill, 2013; Wong et al., 2014).

Despite the wide and extensive international research focused on student mental health, the literature on student mental health within the Scottish context is limited. Extant research highlights how financial stressors are a predictor of both physical and mental health problems (Cutherbertson et al, 2004) and difficulties with disclosure and the stigma of mental health help-seeking (Quinn et al, 2009). Further work has emphasised the importance of close relationships in moderating the effect of depressive symptoms on declining mental health, reduced physical activity and suicidal ideation over the course of a degree course (Evans et al, 2021; Murray et al, 2016). Such research has, however, tended to be specific to one HEI and/or student population and thus further, targeted work is needed to understand the broader mental health issues and research priorities facing diverse student populations throughout Scotland (Cogan et al, 2022).

The largest study to be conducted, to date, on student mental health in Scotland used both survey data (n = 15,000) and qualitative interviews (n = 35 with professional stakeholders). This study identified key gaps in wellbeing support provision, the need for a trauma informed approach and for increased support for those with long term and enduring mental health problems. The problematic interface between university support systems and the NHS was also highlighted (Maguire & Cameron, 2021). While research on student mental health has begun to recognise the importance of including the voices of those with lived experience in the research process, few to none of the studies on student mental health in Scotland use participatory community-based approaches or student-led methodologies (Nieweglowski et al., 2018).

A scoping review can help advance our knowledge of student mental health in Scottish HEI context with a key aim of mapping the available literature on the topic (Khalil et al, 2016).. The scoping review will tackle multiple questions to ensure that a broad understanding of current knowledge on student mental health within the Scottish context is elaborated. The review will help identify how mental health is commonly conceptualised and measured in Scottish HEIs and will identify which study designs are used; an important step in designing future research studies which could meaningfully contribute to the body of knowledge.

The scoping review aims to map the available evidence on this topic and, importantly, determine areas which require further research. The proposed review will aim to include a broad range of articles from cross- and inter-disciplinary sources and will define 'student' as aged 16 + years, to ensure that all relevant literature can be included. Best practice guidelines to ensure rigor, transparency and trustworthiness will be adhered to (Peters et al., 2015; Peters et al., 2022). Furthermore, the scoping review will facilitate an understanding of gaps in the literature and evidence which represent areas for future research.

Overall, this review will deepen understandings of student mental health and help to build a stronger evidence base within the Scottish context.

Scoping Review Questions

Primary question

(1) What evidence exists of mental health problems among students within the Scottish context?

Secondary questions

- (2) What is unique about student mental health issues faced by students in Scotland?
- (3) How is student mental health conceptualised in the literature?
- (4) Do studies assess the prevalence of mental health problems among students, and if so, how is it measured?
- (5) What are the characteristics of participants included in the sources of evidence identified?
- (6) What are the research designs that underpin the literature on student mental health?
- (7) What are the risk factors for and the impact of mental health problems on students?
- (8) Which interventions are effective in helping to reduce or prevent mental health problems among student populations?
- (9) What gaps are there in the literature surrounding student mental health?

Method

The purpose of the scoping review method is to map a body of literature with the intention to illuminate key characteristics, terms, methods, findings, interventions and relevant gaps to inform future research (Munn et al, 2018). The Joanna Briggs Institute (JBI) guidance on how to conduct a scoping review will be adhered to throughout (Khalil, et al, 2021). In terms

of reporting style, the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews checklist (PRISMA-ScR) will be used (Tricco et al, 2018).

Inclusion Criteria

Population

Aged 16 years onwards enrolled in HEIs in Scotland. No limitations on maximum age will be included in order to provide the best representation of the Scottish HEI student population. Further, students could be from any country of origin provided they were enrolled in a Scottish HEI.

Concept

Must include specific mention of HEI 'student' relating to mental illness/health/disorder/problem and/or other mental health diagnostic criteria (e.g. depression, anxiety). In studies where accounts of students' own understandings and/or experiences of mental health are included, their own use of terminology (e.g. mental distress, madness) will be acknowledged and included.

Context

The context is to explore, in the first instance, research within Scottish HEIs, including comparative studies between students studying in Scotland and other countries.

Date of publication

From 2003-current (20 year time span).

Types of evidence source

Primary research, qualitative, quantitative or mixed methods. Reviews, case studies and opinion texts will also be sourced.

Languages

English only (based on this being the primary language spoken within the context being researched).

Search Strategy

The search strategy for this scoping review will be as comprehensive as is possible and appropriate within the parameters of this protocol. The search strategy will be developed with the help of an expert health librarian and will be peer-reviewed using the Peer Review of Electronic Search Strategies (PRESS) guideline statement (McGowan et al, 2016). Any

limitations in terms of the comprehensive nature of this review will be justified in detail within the final scoping review.

In accordance with the JBI guidelines for conducting a scoping review, a three-step search strategy process will be implemented. The first step will involve performing an initial search of two databases; namely APA PsycInfo and MEDLINE (Ovid). Text words used in the title and abstracts of relevant papers identified within this search will be extracted and analysed alongside the index terms describing articles. These words/terms will then be used in step two where a second search will be conducted across all relevant databases (Cochrane library, MEDLINE (Ovid), Child and Adolescent Development Studies, Web of Science (Core Collection), APA PsycInfo) and Scopus. Lastly, step three will include examining reference lists of articles which have been included in the review from their full-text to identify further relevant sources. Grey literature will not be explored unless it is identified during the three-step search strategy. All search strategies will be submitted with the scoping review as supplementary material (Munn et al, 2023).

Sources of evidence

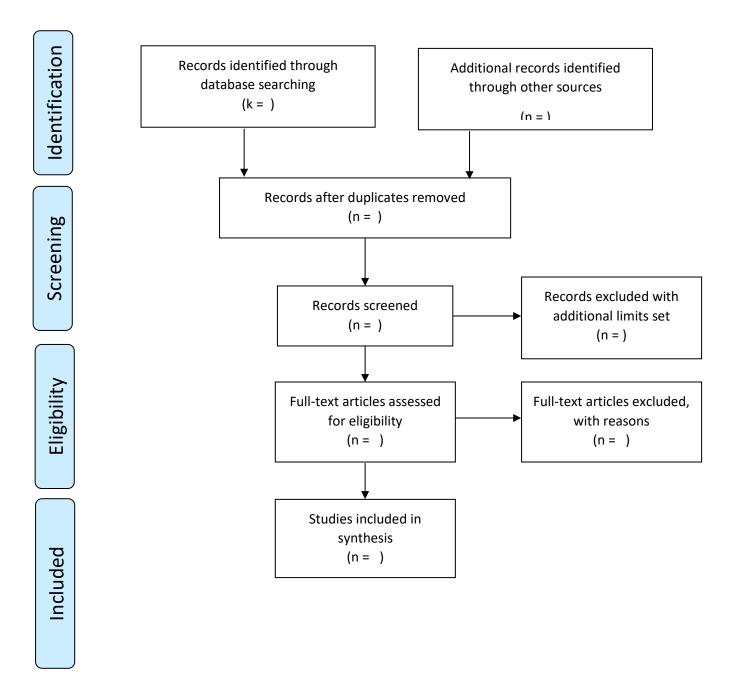
Prior to commencing the screening process, a calibration exercise will be conducted to ensure reliability in correctly selecting articles for inclusion by reviewers (Kastner et al, 2012). Two levels of screening will be used to identify sources of evidence for inclusion in the scoping review: (1) study selection - review title and abstract, (2) study screening - review the full text. Study selection will be conducted by two independent reviewers, with the first reviewer screening all studies and a second reviewer screening 10% of studies. Data screening, charting and literature quality assessments will be managed using Covidence software to sift, categorise, and sort findings according to key issues and themes. Any articles identified as relevant based on the title and abstract by one or both researchers will be reviewed at full-text level. The screening process involves both reviewers evaluating the full texts of selected articles in relation to the pre-determined inclusion criteria. Where disagreement occurs between reviewers, full texts will be screened again and discussion will take place until a consensus is met. If necessary, validation by a third reviewer will be sought. A PRISMA flowchart will be used to report the final number of the study selection process (See Figure 1).

Data Extraction

Data from articles included from full-text will be charted using a data extraction table, based on a model recommended by the JBI (Khali et al, 2021). Data being charted relates to citation, context, participant characteristics, study aim, methodology, results, interventions, limitations, key results relating to the review questions and future areas for research. This

process of data charting from the full texts will be conducted by the first reviewer and then 10% will be verified by a reviewer. Any discrepancies will be discussed until a consensus has been met, or a third reviewer will be sought.

Figure 1. PRISMA Flow Diagram



Results

In the scoping review, the researchers will extract results from included texts and map these descriptively. This method of reporting will be used to identify what is known about the key topics concerning student mental health in relation to the research questions and to highlight

any gaps in knowledge. Frequency counts for populations, concepts and characteristics will also be included. A descriptive content analysis of available literature may be conducted, if appropriate, based on the charted data (Cooper et al, 2021). These methods have been chosen in accordance with the aims of the scoping review. Results will be presented in relation to the research questions developed for the scoping review. Accompanying these discussions, a tabular presentation of the data for aspects such as participant characteristics, study methodology, measures and prevalence of student mental health problems in Scotland will be reported. Once data are analysed, a meeting to present findings to the whole team and a student advisory group within a research network for student mental health in Scotland (ScotSMART) will be held to solicit feedback on the final content before broader dissemination of findings to decision-makers, academics and policy makers.

Discussion

This protocol outlines the rationale and proposed questions and methods to be used for conducting a scoping review on student mental health in HEIs in Scotland. The scoping review will produce important new information on student mental health in Scotland, conceptual understandings of mental health, measurement, characteristics of participants, study design and methodology, the impact of living with mental health issues, effective interventions and identify any factors that are unique to student mental health within Scotland. It will also highlight challenges and gaps in the existing evidence base with recommendations for key areas for future research. The findings will be disseminated through universities, professional and NHS bodies, third sector organisations, conferences and research papers. This review will help inform the development of impactful resources and build an evidence base on student mental health in Scotland for students, educational providers, academics and mental health practitioners, with the aim of raising awareness and improving research in this area. Lastly, the review will be targeted across a broad scope of disciplines concerning student mental health, which will provide the opportunity to elicit more generalisable findings that can directly inform practice and policy decisions within these disciplines.

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