




BMJ Open Understanding resilience among transition-age youth with serious mental illness: protocol for a scoping review

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ABSTRACT

Introduction Transition-age youth (16–29 years old) are disproportionately affected by the onset, impact and burden of serious mental illness (SMI; for example, depression, bipolar disorder, schizophrenia spectrum disorders). Emerging evidence has increasingly highlighted the concept of resilience in mental health promotion and treatment approaches for this population. A comprehensive synthesis of existing evidence is needed to enhance conceptual clarity in this area, identify knowledge gaps, and inform future research and practice. As such, the present scoping review is guided by the following questions: How has resilience been conceptualised and operationalised in the transition-age youth mental health literature? What factors influence resilience among transition-age youth with SMI, and what outcomes have been studied within the context of transition-age youth's mental health recovery?

Methods and analysis The present protocol will follow six key stages, in accordance with Arksey and O'Malley's (2005) established scoping review methodology and recent iterations of this framework, and has been registered with Open Science Framework (<https://osf.io/rzfc5>). The protocol and review process will be carried out by a multidisciplinary team in consultation with community stakeholders. A comprehensive search strategy will be conducted across multiple electronic databases to identify relevant empirical literature. Included sources will address the population of transition-age youth (16–29 years) diagnosed with SMI, the concept of resilience (in any context) and will report original research written in English. Data screening and extraction will be completed by at least two independent reviewers. Following meta-narrative review and qualitative content analyses, findings will be synthesised as a descriptive overview with tabular and graphical summaries.

Ethics and dissemination University of Toronto Health Sciences Research Ethics Board approval was obtained to complete the community stakeholder consultation stage of this review. Results will be disseminated through conference presentations, publications, and user-friendly reports and graphics.

INTRODUCTION

Transition-age youth (16–29 years old) are the highest risk age group for onset of serious mental illness (SMI; mental illnesses that cause

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This scoping review study will follow recent recommendations and guidance documents to promote methodological rigour and has been registered to enhance transparency.
- ⇒ Variability in how the population (transition-age youth) and concept (resilience) have been defined, as well as restrictions to the search strategy based on language, date and publication type, may limit the breadth of the search.
- ⇒ An assessment of the methodological quality of included studies will not be conducted, which limits the types of conclusions and implications that can be drawn from the review.
- ⇒ We will apply an iterative and team-based approach, in consultation with community stakeholders (transition-age youth with serious mental illness, clinicians, researchers), to improve the applicability and dissemination of results.

substantial functional impairment, eg, depression, bipolar disorder, schizophrenia spectrum disorders), the single most disabling group of disorders worldwide.^{1 2} The experience of mental illness for young people is unique, in that it arises during a critical period of psychosocial development, identity formation and many complex life transitions.^{3 4} Access to supportive treatment and relationships, social marginalisation, and stigma continue to influence the course and severity of mental illness for transition-age youth.⁵ Indeed, SMI can negatively impact one's overall physical health, quality of life, and engagement in meaningful life roles and activities, including academics, employment, and social relationships.^{1 4 6 7} Further, the experience of chronic and persistent symptoms of mental illness can contribute to suicide risk, which is the second leading cause of death among individuals 15–29 years old globally.^{8 9} Despite the increased risk and burden of SMI among transition-age youth, this age group faces many barriers in accessing service and supports, as



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they transition out-of-youth services and into the adult mental health and addiction services sector.^{10 11} As such, the identification of factors that contribute to transition-age youth's mental health recovery and early intervention are now recognised as priority areas within national and global mental health strategies and guidelines.^{11–14}

Of particular interest, researchers and clinicians have emphasised the importance of promoting *resilience* in transition-age youth's mental health recovery. Most definitions of resilience refer to positive adaptation in the face of significant adversity as a central or defining feature. However, there are many different ways of conceptualising resilience (eg, as a trait, outcome or dynamic process),^{15 16} which has led to some ambiguity in how resilience is defined and understood across different research disciplines and perspectives.^{17 18} For example, many authors have conceptualised and discussed resilience as an outcome resulting from changes made at the individual level, or in relation to positive personal attributes (eg, hope, self-efficacy, coping).^{19 20} This aligns with early definitions of resilience as an exceptional personal quality or trait, that an individual either has or does not have, which will determine their capacity to both endure incredibly stressful life events and continue on a path towards full functional and emotional recovery.^{15 21 22} Conceptualisations of resilience as a personal trait or outcome have been criticised in recent research as this does not recognise the critical role of one's environment and available resources.^{17 23}

In more contemporary and holistic conceptions, 'resilience has come to be seen less in terms of static characteristics within the individual and more as a dynamic and multi-faceted family of processes that evolve over time' (p. 234).²⁴ To illustrate, resilience has been conceptualised as a dynamic process, involving one's personal characteristics, environment and support networks that influence how an individual 'bounces back' from challenging circumstances (eg, onset of mental illness).^{16–18 25} This also acknowledges the integral role of not only the individual, but the social and ecological systems that influence resilience.^{26 27} For example, Wathen and colleagues²⁸ offer the following definition further contextualised to the field of trauma and mental health: 'Resilience is a dynamic process in which psychological, social, environmental and biological factors interact to enable an individual at any stage of life to develop, maintain, or regain their mental health despite exposure to adversity' (p. 10).²⁸ Through this lens, resilience is seen as fluid (rather than a fixed or predetermined trait), arising through multiple pathways that lead to positive indices of flourishing and functioning.²⁹ Taken together, processes of resilience are shaped by the complex interplay between individual experiences of stress/adversity, multimodal 'resilience factors' (eg, risks, internal and external protective factors, self-regulatory strategies), as well as one's adaptation and other resilience-related outcomes.^{25 30}

This process-oriented perspective of resilience has gained increased attention in mental health and

rehabilitation sciences research over the past two decades,^{19 29} and has aligned with the paradigm shift towards recovery models of mental health and the growing popularity and application of positive psychology principles in psychiatry.³¹ Indeed, resilience research and recovery models of mental health share an orientation towards understanding the processes that underlie individual experiences (embedded within one's sociocultural context/environment) and emphasise the importance of hope, meaning, engagement, and life satisfaction in one's recovery.^{32–34} Recent conceptual models³⁵ and interventions^{36 37} focused on youth-specific and integrated mental health services also highlight resilience as an important aspect to the recovery process. Additionally, adopting a resilience perspective aligns with more strengths-based and transdiagnostic approaches which aim to better understand processes of recovery relevant to a broader range of adolescent and young adult mental health service users.³⁸ Researchers have begun to uncover resilience factors across and beyond specific diagnoses, which can be targeted in interventions to promote positive development, functioning and well-being.^{26 29 30 39} As such, the study of resilience among transition-age youth with SMI can inform developments in recovery-oriented approaches to service delivery and warrants further exploration.

In sum, emerging evidence and frameworks of resilience provide a unique lens to understanding mental health among transition-age youth, with the capacity to recognise individuals' strengths, and move beyond the common focus on illness, deficits and problems in rehabilitation sciences.³⁵ However, researchers have not yet developed a theoretical framework or model of resilience tailored to the unique experiences of transition-age youth who are diagnosed with SMI to guide research and practice.¹⁹ In addition, conceptualisations of resilience vary across the scientific literature, which directly impacts how the concept of resilience is understood, operationalised and applied within this context. This is important to address as discrepancies across definitions of resilience may limit measurement, study comparisons, and current understandings of resiliency-informed care approaches in research and clinical practice.²³ A comprehensive synthesis of existing evidence will enhance conceptual clarity in this area, identify factors and outcomes that are relevant to transition-age youth's resilience, and inform future work.

Objectives

The overarching purpose of the present scoping review is to synthesise and describe the breadth of scientific literature on resilience among transition-age youth diagnosed with SMI, identify current knowledge gaps and recommend key areas for future resilience research among this population. Specifically, this scoping review will explore how the concept of resilience has been conceptualised and operationalised in the transition-age youth mental health literature, and identify resilience factors and

outcomes that have been studied within the context of transition-age youth's mental health recovery (eg, adversity, risks, internal and external protective factors, self-regulatory strategies, adaptation and resilience-related outcomes). The focus of this review will be on conceptualisations of resilience from a process-oriented perspective (rather than as a personal trait or outcome).

METHODS AND ANALYSIS

A scoping review design was selected based on the exploratory nature of the proposed research question and the current focus on clarifying the concept of resilience. Particularly, a scoping review design allows for a comprehensive summary of knowledge, inclusive of more broad study objectives and methodologies, and is thus recommended for gaining conceptual clarity and identifying key knowledge gaps.^{40 41}

The scoping review protocol will follow the methodological stages outlined by Arksey and O'Malley,⁴² and extended by Levac and colleagues,⁴³ including: (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data, (5) collating, summarising and reporting the results, and (6) stakeholder consultation.^{42 43} Throughout the review process, an iterative and reflexive approach will be used in order to refine the initial protocol as needed in consultation with a community stakeholder group (involving researchers, clinicians and transition-age youth with SMI).^{42 43} Recent guidance documents⁴⁴ and best practices for conducting and reporting scoping reviews (Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) extension for scoping reviews (PRISMA-ScR))⁴⁵ will also be applied to promote methodological rigour and transparency. The Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols checklist⁴⁶ can be found in online supplemental appendix A. The current protocol has been registered through Open Science Framework (<https://osf.io/rzfc5>), and will be conducted over a 1-year time frame (December 2021–November 2022).

Stage 1: identifying the research question

This scoping review aims to explore the extent and breadth of the current scientific literature on resilience among transition-age youth diagnosed with SMI. Specifically, the review will address two research questions: (1) How has resilience been conceptualised and operationalised (ie, defined and measured) in the transition-age youth mental health literature?; (2) What factors influence resilience among transition-age youth with SMI, and what outcomes have been studied within the context of transition-age youth's mental health recovery? The research questions have been broadly framed using the PCC mnemonic to address the *population* of transition-age youth diagnosed with SMI and the *concept* of resilience within any *context* of one's mental health recovery.⁴¹ Each

component is further clarified below, in accordance with the Joanna Briggs Institute scoping review manual.⁴⁴

Population

For the present review, the population is defined as 'transition-age youth', including adolescents and young adults between the ages of 16 and 29 years old, who are entering adulthood and have been diagnosed with SMI. It is important to note that definitions of 'youth', 'adolescents' and 'young adults' differ across various cultures and settings, and are thus highly mixed within the scholarly literature. In order to be inclusive of the most common European/United Nations/WHO definitions of this age group and reflective of current mental health service models, the present review will include studies with participants spanning middle adolescence (age 15 years) to the 'upper limit' of young adulthood (age 36 years) if the target population is clearly defined as 'transition-age youth'.^{3 14 47–50} Additionally, SMI is defined as 'a mental, behavioural or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities', such as one's interpersonal relationships, self-care, employment or recreation.^{51 52} Definitions of SMI exclude dementias, developmental disorders and substance use disorders, as well as mental disorders due to a general medical condition.⁵² Examples of mental health conditions that may meet criteria for SMI include: major depressive disorders, bipolar disorders, borderline personality disorder, anxiety disorders, eating disorders and schizophrenia spectrum disorders.^{51 52} Among youth and adolescents (under age 18 years), the same definition and examples are applied but also occasionally termed 'serious emotional disturbance', rather than SMI.^{52 53} Studies with participants experiencing comorbid disorders which are not the primary focus will also be included in this scoping review.

Concept

While definitions of resilience vary across different research disciplines, most definitions refer to positive adaptation in the face of significant challenge, risk or adversity as central or defining features, and acknowledge the importance of sociocultural factors in shaping experiences and understandings of resilience.¹⁹ For the purpose of this scoping review, resilience is defined as a dynamic process that unfolds over time, involving multiple resilience factors that interact to enable individuals to negotiate or recover from stressful life events/adversity (eg, one's personal characteristics, environment and support networks). Studies that adopt this process-oriented perspective will be included, and the following core elements of resilience and resilience factors will be explored: adversity, risks, internal and external protective factors, self-regulatory strategies, adaptation and resilience-related outcomes.^{25 30} Studies that focus solely on a trait perspective of resilience, similar constructs (eg, ego-resilience, psychological capital) or biological/genetic/neurophysiological factors will be omitted.

Lastly, given our focus on psychological resilience at the person or individual level, studies evaluating family-level or community-level resilience will not be included.

Context

While ‘clinical recovery’ is often defined as a reduction in SMI symptoms or impairment (typically in clinical/healthcare settings), ‘personal recovery’ refers to the processes that contribute to transition-age youth’s hope, development and engagement in meaningful activities (even while facing SMI) and emphasises the importance of multiple contexts where this occurs (eg, spanning personal, familial, social and institutional environments).³⁵ The present review considers mental health recovery primarily through a personal recovery lens, and will thus explore transition-age youth’s resilience in any context of their mental health recovery, which may include individual, community and health-oriented settings (among others).

Stage 2: identifying relevant literature

Information source

To comprehensively review the existing evidence and knowledge base related to resilience in the field of transition-age youth mental health, empirical sources will be considered, including original research/primary studies. Specifically, six electronic databases of value to the fields of psychology, health and rehabilitation sciences will be searched to identify relevant empirical studies: MEDLINE (Ovid), EMBASE (Ovid), PsycINFO, AMED, CINAHL and Scopus. To enhance the comprehensiveness of the search, relevant journals and the reference list of included sources and similar reviews will be manually searched.

Search strategy

The search terms and search strategy will be developed by the multidisciplinary review team, in consultation with a health sciences librarian at the University of Toronto. Importantly, keywords have been carefully selected to best capture the complex and evolving terminology used to describe the population and concept reflected in our research question. As mentioned, terms to describe the age group of transition-age youth are highly variable and inconsistent within the literature (eg, subject headings/keywords may be inclusive of youth/teenagers/adolescents/emerging adults/adults, etc). Clinical and lay language to describe SMI diagnoses have also evolved over time, with ‘severe and persistent mental illness’ and ‘chronic mental illness’ often cited.⁵² Further, as reflected in the research aims, there is currently no consensus on the definition of resilience and conceptualisations differ based on the context or academic discipline applied.¹⁹ To overcome these challenges in the development and execution of our search, we will use the following techniques: (1) a multistep search process to ensure relevant sources are not missed (an initial limited search strategy favouring sensitivity over precision will be conducted first and inform potential revisions making the search strategy

more precise); (2) use of Yale Medical Subject Headings analyser for piloting and (3) ongoing expert consultation. Additionally, the search strategy will undergo peer review to enhance its feasibility and rigour (eg, CADTH Peer Review Checklist for Search Strategies).⁵⁴

The preliminary search strategy and list of keywords have been developed using MEDLINE (Ovid) and adapted to each database (see online supplemental appendix B). The search strategy will explore specified search terms within subject headings, titles, abstracts and keywords. Search terms will be combined using appropriate Boolean logic and operators (eg, ‘and’, ‘or’, ‘not’).

Stage 3: study selection

Study selection will follow a collaborative and iterative screening process among the review team using Covidence systematic review software⁵⁵ and predetermined eligibility criteria.^{42 43} All search results will be exported to Covidence for data management and to remove duplicates. At least two independent reviewers (authors AEN and MLdJ) will complete screening in two stages for (1) title/abstract and (2) full-text review. The reviewers will complete a calibration exercise using a sample of 10 references to pilot inclusion/exclusion criteria and compare decisions (eg, include/exclude/uncertain). Formal title/abstract screening will commence when 80% agreement is achieved and will involve regular meetings among reviewers to discuss any challenges or uncertainties. Upon completion of stage 1, full-text references will be obtained and independently screened by the same two reviewers. The same strategy will be applied to stage 2 full-text screening, including piloting (calibration exercise for 10 references) and regular discussion. At each stage, reviewer (inter-rater) agreement will be reported. Disagreements will be resolved by consensus or by the decision of a third reviewer (senior authors EJN and CMS).

Included sources will address the population of transition-age youth diagnosed with SMI, the concept of resilience (in any context) and will contain original peer-reviewed research written in English. Specific language restrictions were made for feasibility purposes. Additionally, the publishing date was limited to the years 2000–2022 as this is the time period where a significant rise in resilience research emerged within mental health and rehabilitation sciences.^{19 29 56} The prioritisation, implementation and evaluation of mental health services specifically tailored to transition-age youth (eg, early intervention programmes) also mainly took root after the year 2000.^{13 47 57} Further inclusion/exclusion criteria for the two-stage screening are detailed below.

Eligibility for stage 1 title/abstract review

Inclusion criteria

(a) Population: refers to transition-age youth diagnosed or living with SMI (as defined previously); (b) concept: resilience/resiliency is identified as a key focus within the purpose/objectives/research question, outcome

measure, and/or findings; (c) context: is set in any individual, community or health-oriented context of mental health recovery; (d) type of source: peer-reviewed original research (quantitative, qualitative, mixed method); (e) publication language/date: written in English and published between 2000 and 2022.

Exclusion criteria

(a) Population: refers to non-clinical population, general population, children/youth (age 0–14 years) or childhood developmental disorder; (b) concept: resilience/resiliency is not an explicit focus; (c) type of source: peer-reviewed articles with the primary aim of developing, reporting or validating the psychometric properties of survey measures/instruments, study protocols, review articles (eg, systematic/scoping reviews, meta-analyses), books/book chapters and grey literature (eg, editorials, commentaries/reports, clinical guidelines, conference proceedings and theses/dissertations); (d) publication language/date: written in another language than English and published before 1 January 2000.

Eligibility for stage 2 full-text review

Inclusion criteria

(a) Population: clearly defined clinical population in accordance with either: participant self-reported history of SMI, clinician-confirmed diagnosis of SMI or Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-V) / International Classification of Diseases 10th Revision (ICD-10) system diagnostic criteria; (b) concept: must explicitly define/operationalise the concept of resilience from a process-oriented perspective and focus on individual-level resilience.

Exclusion criteria

(a) Population: mixed samples whereby transition-age youth with SMI are encompassed within broader age groups or the general population (without the stratification of results/reporting); (b) concept: trait resilience, other psychological constructs that are similar or connected to resilience/resiliency (eg, psychological capital, hardiness, grit, general indices of subjective well-being), family-level or community-level resilience, or biological/genetic/neurophysiological factors are identified as the sole/primary focus or outcome.

While criteria were developed to maintain a broad scope of selected studies, our hope is that stringent inclusion/exclusion criteria will eliminate sources that only include the concept of resilience as an opinion, recommendation, vague interpretation or buzzword—as this will not aid in enhancing conceptual clarity in this research area. As such, these broad eligibility criteria may undergo further refinement to ensure that selected sources capture the full breadth of knowledge available related to resilience among young people with SMI.

Stage 4: data extraction

Following recommended data charting methods,^{42 43} a standardised and systematic charting form (table 1) will

Table 1 Draft charting form

General document details	
APA citation	Full author, date and journal details.
Country and location	Country of publication (and location if provided).
Study characteristics	
Study purpose	Purpose, research question(s), aim(s), and/or objective(s) of the study.
Study population and sample size	Age range, SMI (clinical diagnosis/self-reported; stage of illness), relevant demographic characteristics. Number of participants.
Study design and methods	Quantitative, qualitative or mixed methods. Main experimental, observational or qualitative methods used.
	Intervention (if applicable): description of key characteristics (eg, intervention purpose/target, type, main components, duration).
	Youth engagement (if applicable): extent to which youth with SMI were engaged through aspects of the research process.
	Intersectional approaches (if applicable): description of recruitment procedures, theoretical frameworks, and analyses addressing diversity and intersecting social identities of participants.
Context	The setting of the research if provided (eg, community, health-oriented, specific treatment/programme).
Conceptualisation and operationalisation of resilience	
Conceptualisation	How was resilience described from a process-oriented perspective?
Definition of resilience	Definition or operationalisation of resilience.
Theoretical framework/model	Theory, conceptual model(s) or framework(s) applied.
Seminal papers referenced	Overarching paradigm and seminal conceptual papers that have informed the research (if applicable).
Instruments used to measure resilience	Specific measures/surveys employed (if applicable).
Academic discipline	Broad field of research or practice.
Resilience factors and outcomes	
Adversity/risks	Personal or environmental risk factors identified (if applicable).
Internal/external protective factors	Personal or environmental protective factors identified (if applicable).
Self-regulatory strategies	Strategies identified to self-manage mood, emotions, thoughts, and/or behaviours (if applicable).
Study outcomes	Any outcomes that were measured or described. Description of positive change, resilience-related outcomes or adaptation (if applicable).
Important results	Description of main findings and implications.
SMI, serious mental illness.	

be used to organise and interpret relevant details from the selected sources in line with our research question and objectives. The following information will be charted in Excel: (1) general document details, (2) key characteristics of empirical studies (eg, research design, methods,

intervention details, youth engagement, intersectional approaches, study population, context), (3) how resilience was conceptualised and operationalised (eg, definition, theoretical framework/model, academic discipline, measures), and (4) resilience factors and outcomes identified.

The preliminary chart form was also developed in accordance with Greenhalgh and colleagues⁵⁸ meta-narrative approach.⁵⁸ Specifically, this meta-narrative approach was originally created to detail how a field of study or key concept has evolved over time and to explore potential tensions that exist across research traditions (or 'paradigms') within knowledge syntheses.⁵⁸ A meta-narrative approach is recommended when examining complex, heterogeneous bodies of literature where a key concept of interest has been conceptualised and investigated through different research traditions, and conceptual clarity is needed.⁵⁸ According to Greenhalgh and colleagues,⁵⁸ a *research tradition* refers to a paradigm of inquiry, undertaken by researchers, that shares four key inter-related dimensions (conceptual, theoretical, methodological, instrumental), and thus shows distinct disciplinary roots, scope and key concepts.⁵⁸ Research traditions are often characterised and influenced by seminal conceptual papers that inform the direction and focus of future work.⁵⁸ Alternatively, an *academic discipline* is defined as a broader field of study or branch of knowledge (eg, sociology, psychology, medicine).⁵⁸

Data extraction will be a collaborative and iterative process among the review team to ensure that key characteristics, definitions, themes and strengths/limitations are captured. A calibration exercise using a sample of five studies will be completed by two reviewers to pilot the chart form. When agreement of at least 80% is achieved, the two independent reviewers (authors AEN and MLdJ) will complete the remaining formal data charting procedures for all references. The charting form will be revised as needed based on stakeholder feedback. Consensus will be reached through discussion or final decision by a third reviewer (senior authors EJM and CMS) if necessary. Any challenges in the organisation/categorisation of data at this stage will be brought to the four content experts on this protocol (CMS, SPB, NK, EJM), each of whom has over 10 years of research and/or clinical experience in young adult mental health and resiliency.

Stage 5: collating, summarising and reporting the results

The PRISMA-ScR checklist will guide the presentation of results in the final report.⁴⁵ This will include a flow diagram to explicitly detail review decision-making processes.⁴⁵ Data from eligible full-texts will be analysed and collated using meta-narrative and qualitative content analyses as well as descriptive statistics (eg, frequencies/counts). Results of this scoping review will be summarised narratively in a descriptive overview.^{42 43}

Qualitative content analysis will be used to identify, analyse and report patterns across the included empirical sources to understand how resilience has been

conceptualised and operationalised among transition-age youth with SMI. Particularly, definitions, measures, resilience factors and outcomes will be open-coded, and then grouped to generate distinct categories. Aspects of the study population and context of mental health recovery may also be analysed. The inductive and reflexive coding process will be completed by two reviewers (authors AEN and MLdJ) using NVivo software. Categories will then be reviewed and discussed with all members of the multidisciplinary review team (CMS, SPB, NK, EJM) for further refinement. As guided by Greenhalgh and colleagues⁵⁸ for meta-narrative review, findings will be organised and synthesised to map conceptualisations of resilience over time and across different research traditions.⁵⁸ Research traditions will be identified through a process of grouping articles that reflect similar theoretical, methodological and/or instrumental approaches (eg, seminal papers cited, how the authors frame the concept of resilience within the study outcomes or implications). This will allow for easier interpretation of the extent and breadth of the current literature on resilience among transition-age youth diagnosed with SMI. Particularly, comparisons and tensions across definitions of resilience may be highlighted according to each paradigm.

Reflexivity will support methodological rigour and transparency by explicitly acknowledging how the researchers' positionality may influence the motivations and methodological choices that ultimately shape the review process, interpretations and results.⁵⁹⁻⁶¹ Ongoing reflexive practice will be used to address and challenge researcher biases, assumptions, and pre-understandings that may influence study decisions and analyses, and to critically analyse positions of privilege and power in research activities. Detailed notes of our decision-making processes and justifications will be documented throughout all stages of the scoping review.

For the purpose of the present scoping review, we will use a combination of narrative, tabular and graphical summaries to present key findings.^{42 43} A traditional summary chart will describe key characteristics of each included source (eg, author and year of publication, research tradition, academic discipline, study design, study population, definitions of resilience, measures, main findings). Resilience factors and outcomes will be summarised in a table or figure. A creative graphical/visual depiction of identified research traditions and time frame will also be used to 'map' key findings of the review.⁵⁸ In sum, the analytical approach has been developed to facilitate conceptual/theoretical advancements in resilience research, identify key knowledge gaps, and highlight potential future directions in the study of transition-age youth resilience and mental health. The presentation and reporting of results (through summaries, tables and visuals) will be discussed among the multidisciplinary review team and community stakeholder group. Consistent input from the perspective of researchers, clinicians and transition-age youth with SMI will enhance the relevance and utility of the review findings.

Stage 6: stakeholder consultation

The overarching goal of the current scoping review is to systematically explore the current extent and breadth of peer-reviewed research on resilience among transition-age youth diagnosed with SMI. Particularly, efforts have been made within the scoping review methodology to provide a holistic and coherent overview of evidence that can inform future research, education and practice.^{41–43} In order to achieve these goals, the multidisciplinary review team has been formed to include knowledgeable stakeholders (researchers, clinicians, knowledge users) with backgrounds in psychiatry/early intervention services (NK), occupational therapy/resiliency in rehabilitation sciences (AEN, SPB, EJN) and kinesiology/young adult mental health programming (MLdJ, CMS).

Following Levac and colleagues' recommendations, this scoping review will also consult with community stakeholders to gain the perspectives of transition-age youth with lived experience of SMI, clinicians and other mental health/resiliency researchers.⁴³ To achieve stage 6 of this review, qualitative focus groups will be conducted virtually (using online teleconferencing). Community stakeholders will be invited through the review team's current research/practice networks and established partnerships with youth-focused mental health services in Canada. Recruitment materials (emails, e-posters) will share details regarding eligibility, focus group participation and the letter of informed consent form. Interested participants will provide written informed consent by digitally signing a secure online consent form on the University of Toronto's Research Electronic Data Capture platform.

Consultative meetings will be held at two time points to inform: (1) the research methods (topic consultation and input meeting), and (2) interpretation, reporting and knowledge translation strategies (reaction meeting). Following current recommendations for stakeholder consultation^{43 62 63} and focus group studies,^{64 65} up to three focus groups (n=6–10 participants each) will be conducted at each time point. For the topic consultation and input meeting, community stakeholders will be asked about their perspectives of the review objectives and methods, key areas of focus for data extraction and analysis (eg, important aspects of transition-age youth resilience to capture within the charting form), and what they would most like to learn from the results of the scoping review. At the time of the reaction meeting, community stakeholders will be asked about their impression of key review findings (eg, how resilience has been defined), whether this resonates with them/their experiences, where gaps/tensions exist that require further investigation and how this knowledge can be applied to support mental health recovery. This will shape how results are presented and interpreted in the final scoping review paper and guide decision-making on knowledge dissemination strategies. We will aim for equal representation among the researchers, clinicians and young people involved in each focus group. The consent form and group norms will be reviewed with participants at the start of each focus

group discussion. Focus groups will be co-facilitated by two members of the review team (AEN, MLdJ) virtually using a semistructured interview guide. Audio recordings will be transcribed verbatim to complete directed content analysis.⁶⁶ Complete methods and results will be detailed in the final report (including stakeholder group characteristics, sample size, data collection tools, analysis and findings).⁴³ Several recommendations to enhance the trustworthiness of qualitative content analysis will be employed,^{67 68} including: (1) member checking, (2) clear description of the context and participant characteristics, (3) transparent reporting of the coding process and agreement, and (4) use of illustrative quotes, as well as frequencies/counts where appropriate, to summarise results.

Guided by scoping review practices, stakeholder engagement will promote a more collaborative approach, emphasise the voices of young people and knowledge users, and ultimately maximise the potential contribution of the research.⁴³ Particularly, involving transition-age youth with SMI as part of the review process will facilitate feedback on the relevance and usefulness of the review findings. This is considered essential for not only advancing research and practice in youth mental health, but also addressing recent concerns of the 'weaponisation' of resiliency in rehabilitation (eg, adding stress, pressure or individual onus to 'become resilient' at times of increased vulnerability) by drawing on the values and perspectives of young people.^{69–71}

Patient and public involvement

Patients and members of the public have not been involved in the design of this scoping review and the protocol development. However, the perspectives of transition-age youth who have experienced SMI will be gathered during the review process. Their feedback will inform our methods, interpretation of results and knowledge dissemination plan.

Ethics and dissemination

This scoping review study received approval from the University of Toronto Health Sciences Research Ethics Board to conduct the community stakeholder input and reaction meetings (stage 6), which involve collection and analysis of primary data. Results of the review will be disseminated through traditional approaches, including open-access peer-reviewed publication(s), presentations at one to two national/international conferences and a plain-language summary report. Additional knowledge translation strategies may be used dependent on community stakeholder feedback to share findings, key messages and future directions (eg, infographics, social media).

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REFERENCES

- McGorry P. Transition to adulthood: the critical period for pre-emptive, disease-modifying care for schizophrenia and related disorders. *Schizophr Bull* 2011;37:524–30.
- Pearson C, Janz T, Ali J. Mental and substance use disorders in Canada. In: *Health at a glance. statistics Canada. Catalogue No. 82-624-X*, 2013.
- Arnett JJ, Žukauskienė R, Sugimura K. The new life stage of emerging adulthood at ages 18–29 years: implications for mental health. *Lancet Psychiatry* 2014;1:569–76.
- Yung AR, Cotter J, McGorry PD. *youth mental health: approaches to emerging mental ill-health in young people* Routledge, 2020.
- Rehm J, Shield KD. Global burden of disease and the impact of mental and addictive disorders. *Curr Psychiatry Rep* 2019;21:10.
- Fusar-Poli P. Integrated mental health services for the developmental period (0 to 25 years): a critical review of the evidence. *Front Psychiatry* 2019;10.
- Vander Stoep A, Beresford SA, Weiss NS, et al. Community-Based study of the transition to adulthood for adolescents with psychiatric disorder. *Am J Epidemiol* 2000;152:352–62.
- Lozano R, Naghavi M, Foreman K, et al. Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the global burden of disease study 2010. *Lancet* 2012;380:2095–128.
- World Health Organization. Mental health and substance use: Suicide data [Internet], 2019. Available: <https://www.who.int/teams/mental-health-and-substance-use/data-research/suicide-data>
- Burgess PM, Pirkis JE, Slade TN, et al. Service use for mental health problems: findings from the 2007 national survey of mental health and wellbeing. *Aust N Z J Psychiatry* 2009;43:615–23.
- Mental Health Commission of Canada. *Changing directions, changing lives: the mental health strategy for Canada*, 2021.
- Ministry of Health and Long-Term Care. *Respect, recovery, resilience: Recommendations for Ontario's mental health & addictions strategy*, 2011.
- World Health Organization. Mental health action plan 2013–2020 [Internet], 2013. Available: <https://apps.who.int/iris/handle/10665/89966>
- World Health Organization. Guidelines on mental health promotive and preventive interventions for adolescents: helping adolescents thrive, 2020
- Fine SB. Resilience and human adaptability: who rises above adversity? *Am J Occup Ther* 1991;45:493–503.
- Masten AS. Ordinary magic. resilience processes in development. *Am Psychol* 2001;56:227–38.
- Luthar SS, Cicchetti D, Becker B. The construct of resilience: a critical evaluation and guidelines for future work. *Child Dev* 2000;71:543–62.
- Ungar M. *The social ecology of resilience: a Handbook of theory and practice* 2011.
- Fletcher D, Sarkar M. Psychological resilience: a review and critique of definitions, concepts, and theory. *Eur Psychol* 2013;18:12–23.
- Gillespie BM, Chaboyer W, Wallis M. Development of a theoretically derived model of resilience through concept analysis. *Contemp Nurse* 2007;25:124–35.
- Rutten BPF, Hammels C, Geschwind N, et al. Resilience in mental health: linking psychological and neurobiological perspectives. *Acta Psychiatr Scand* 2013;128:3–20.
- Rutter M. Resilience in the face of adversity. protective factors and resistance to psychiatric disorder. *Br J Psychiatry* 1985;147:598–611.
- Schwarz S. Resilience in psychology: a critical analysis of the concept. *Theory Psychol* 2018;28:528–41.
- Van Vliet KJ. Shame and resilience in adulthood: a grounded theory study. *J Couns Psychol* 2008;55:233–45.
- Nalder E, Hartman L, Hunt A, et al. Traumatic brain injury resiliency model: a conceptual model to guide rehabilitation research and practice. *Disabil Rehabil* 2019;41:2708–17.
- Masten AS, Lucke CM, Nelson KM, et al. Resilience in development and psychopathology: multisystem perspectives. *Annu Rev Clin Psychol* 2021;17:521–49.
- Ungar M, Theron L. Resilience and mental health: how multisystemic processes contribute to positive outcomes. *Lancet Psychiatry* 2020;7:441–8.
- Wathen CN, MacGregor JCD, Hammerton J, et al. Priorities for research in child maltreatment, intimate partner violence and resilience to violence exposures: results of an international Delphi consensus development process. *BMC Public Health* 2012;12:684.
- Stainton A, Chisholm K, Kaiser N, et al. Resilience as a multimodal dynamic process. *Early Interv Psychiatry* 2019;13:725–32.
- Davydov DM, Stewart R, Ritchie K, et al. Resilience and mental health. *Clin Psychol Rev* 2010;30:479–95.
- Schrank B, Brownell T, Tylee A, et al. Positive psychology: an approach to supporting recovery in mental illness. *East Asian Arch Psychiatry* 2014;24:95–103.
- Echezarraga A, Las Hayas C, López de Arroyabe E. Resilience and recovery in the context of psychological disorders. *J Humanist Psychol*. 2019;002216781985162.
- Friesen BJ. Recovery and resilience in children's mental health: views from the field. *Psychiatr Rehabil J* 2007;31:38–48.
- Jacob KS. Recovery model of mental illness: a complementary approach to psychiatric care. *Indian J Psychol Med* 2015;37:117–9.
- Rayner S, Thielking M, Lough R. A new paradigm of youth recovery: implications for youth mental health service provision. *Aust J Psychol* 2018;70:330–40.
- Meyer PS, Gottlieb JD, Penn D, et al. Individual Resiliency training: an early intervention approach to enhance well-being in people with First-Episode psychosis. *Psychiatr Ann* 2015;45:554–60.
- Oliver KG, Collin P, Burns J, et al. Building resilience in young people through meaningful participation. *Australian e-Journal for the Advancement of Mental Health* 2006;5:34–40.
- Fusar-Poli P, Solmi M, Brondino N, et al. Transdiagnostic psychiatry: a systematic review. *World Psychiatry* 2019;18:192–207.
- Fritz J, de Graaff AM, Caisley H, et al. A systematic review of amenable resilience factors that moderate and/or mediate the

- relationship between childhood adversity and mental health in young people. *Front Psychiatry* 2018;9:230.
- 40 Colquhoun HL, Levac D, O'Brien KK, *et al.* Scoping reviews: time for clarity in definition, methods, and reporting. *J Clin Epidemiol* 2014;67:1291–4.
 - 41 Munn Z, Peters MDJ, Stern C, *et al.* Systematic review or scoping review? guidance for authors when choosing between a systematic or scoping review approach. *BMC Med Res Methodol* 2018;18:143.
 - 42 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;8:19–32.
 - 43 Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci* 2010;5:69.
 - 44 Peters MDJ, Marnie C, Tricco AC, *et al.* Updated methodological guidance for the conduct of scoping reviews. *JBIM Evid Synth* 2020;18:2119–26.
 - 45 Tricco AC, Lillie E, Zarin W, *et al.* PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med* 2018;169:467–73.
 - 46 Moher D, Shamseer L, Clarke M, *et al.* Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Syst Rev* 2015;4:1.
 - 47 McGorry P, Bates T, Birchwood M. Designing youth mental health services for the 21st century: examples from Australia, Ireland and the UK. *Br J Psychiatry Suppl* 2013;54:s30–5.
 - 48 Mueser KT, Penn DL, Addington J, *et al.* The navigate program for first-episode psychosis: rationale, overview, and description of psychosocial components. *Psychiatr Serv* 2015;66:680–90.
 - 49 Perovic B. *Defining youth in contemporary national legal and policy framework across Europe. partnership between the European Commission and the Council of Europe in the field of youth*, 2016.
 - 50 United Nations. Definition of youth, 2013. Available: <http://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>.
 - 51 National Institute of Mental Health. Mental illness, 2021. Available: [https://www.nimh.nih.gov/health/statistics/mental-illness.shtml#:~:text=Serious mental illness \(SMI\) is,or more major life activities](https://www.nimh.nih.gov/health/statistics/mental-illness.shtml#:~:text=Serious mental illness (SMI) is,or more major life activities)
 - 52 Substance Abuse and Mental Health Services Administration. Behind the term: serious mental illness. development services group, Inc, 2016. Available: <https://www.hsd.org/?abstract&did=801613>
 - 53 Substance Abuse and Mental Health Services Administration. *Adults with SMI and children/youth with SED U.S. department of health and human services*, 2020.
 - 54 McGowan J, Sampson M, Salzwedel DM, *et al.* PRESS Peer Review of Electronic Search Strategies: 2015 Guideline Statement. *J Clin Epidemiol* 2016;75:40–6.
 - 55 Innovance VH. Covidence systematic review software [Internet], 2021. Available: www.covidence.org
 - 56 Raanaas RK, Bjøntegaard H. Ø., Shaw L. A scoping review of participatory action research to promote mental health and resilience in youth and adolescents. *Adolesc Res Rev* 2020;5:137–52.
 - 57 McGorry PD, Mei C. Early intervention in youth mental health: progress and future directions. *Evid Based Ment Health* 2018;21:182–4.
 - 58 Greenhalgh T, Robert G, Macfarlane F, *et al.* Storylines of research in diffusion of innovation: a meta-narrative approach to systematic review. *Soc Sci Med* 2005;61:417–30.
 - 59 Barry CA, Britten N, Barber N, *et al.* Using reflexivity to optimize teamwork in qualitative research. *Qual Health Res* 1999;9:26–44.
 - 60 Finlay L. Negotiating the swamp: the opportunity and challenge of reflexivity in research practice. *Qualitative Research* 2002;2:209–30.
 - 61 Jacobson D, Mustafa N. Social identity map: a reflexivity tool for practicing explicit positionality in critical qualitative research. *Int J Qual Methods* 2019;18:160940691987007.
 - 62 Keown K, Van Eerd D, Irvin E. Stakeholder engagement opportunities in systematic reviews: knowledge transfer for policy and practice. *J Contin Educ Health Prof* 2008;28:67–72.
 - 63 Sabiston CM, Vani M, DeJonge M. Scoping reviews and rapid reviews. *Int Rev Sport Exerc Psychol* 2022.
 - 64 Hennink MM, Kaiser BN, Weber MB. What influences saturation? estimating sample sizes in focus group research. *Qual Health Res* 2019;29:1483–96.
 - 65 O'Brien K, Wilkins A, Zack E, *et al.* Scoping the field: identifying key research priorities in HIV and rehabilitation. *AIDS Behav* 2010;14:448–58.
 - 66 Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res* 2005;15:1277–88.
 - 67 Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 2004;24:105–12.
 - 68 Elo S, Kääriäinen M, Kanste O. Qualitative content analysis: a focus on trustworthiness. *SAGE Open* 2014;4:215824401452263.
 - 69 Hutcheon E, Lashewicz B. Theorizing resilience: critiquing and unbounding a marginalizing concept. *Disabil Soc* 2014;29:1383–97.
 - 70 McCrae N. The weaponizing of mental health. *J Adv Nurs* 2019;75:709–10.
 - 71 Shalanski L, Ewashen C. An interpretive phenomenological study of recovering from mental illness: teenage girls' portrayals of resilience. *Int J Ment Health Nurs* 2019;28:492–500.