



Strengths, Weaknesses and Knowledge-Gaps in the Application of the Recovery Model to Adolescent Mental Health: A Scoping Review

Raffaella Di Schiena¹ · Etienne Joiret² · Justine Marneffe¹ · Bruno Piccinin²

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Abstract

There is today a broad consensus about the conceptualisation of recovery in adults facing mental health challenges: a personal journey grounded in societal connectedness, hope, constructing a life with meaning and purpose, empowerment, and autonomous management of symptoms based on their acceptance. However, recent findings show that this conception cannot be automatically transposed to adolescents. Based on a scoping review methodology, this paper examines the application of the recovery model to adolescents mental health through the identification of strengths, weaknesses and knowledge gaps. Studies that investigated the adaptation of the recovery model to adolescents (age-range: 12–18) were selected and mapped, using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR). A deductive thematic analysis was conducted to see which components apply to adolescents (*strengths*) and which do not or hardly apply (*weaknesses*). An inductive thematic analysis was conducted to identify *knowledge gaps*. 13 studies identified as relevant were mapped and analysed. Main strengths identified were importance given to connections, to hope and to empowerment. Main weaknesses were the idea of a personal journey, importance given to autonomous management of symptoms, to identity and to building a life project with meaning and purpose. Knowledge gaps were how to adapt to developmental challenges, how to integrate multiple actors in the decision-making process, how to increase adolescents' participation and how to foster resilience. When applying the recovery model to adolescents, it is essential to account for their specific needs. Recovery should be re-conceptualized rather than grounded in adult-centric theoretical frameworks. Integrating resilience as a core component can further support adolescents in the process of recovery from mental illness, while navigating through developmental challenges.

Keywords Recovery model · Adolescence · Youth mental-health · Scoping review

Introduction

There is a large and consensual body of evidence showing that most mental disorders emerge during adolescence, a critical period for psychological, physiological, and social development (Kessler et al., 2007). Therefore, early prevention and treatment during this phase are essential to reduce the risk of chronicity and negative outcomes in adulthood (McGorry & Goldstone, 2011). Despite this, much of the

research and clinical practice in the field of mental health still begins with adult populations and is often extended to adolescents, as though this extension could occur automatically, overlooking the distinct characteristics of this age group (*ibidem*). However, in youth, contextual factors such as peer-group integration, family dynamics, and the involvement of multiple stakeholders in the clinical decision-making process play a pivotal role (Prinstein & Giletta, 2016; Steinberg & Morris, 2001). Moreover, developmental characteristics such as identity and goal instability and physiological changes should be considered, as they are known to play a role in the development of mental health issues (Rapee et al., 2019).

One of the most widely recognized and applied models in mental health today is the recovery model, which focuses on patient empowerment, respect for individual goals, and support in the journey toward well-being and autonomy,

✉ Raffaella Di Schiena
Raffaella.dischiena@uliege.be

¹ Clinical Psychology of Child and Adolescents, University of Liège, Quartier Agora, Place Des Orateurs, 2, (B33), 4000 Liège, Belgium

² Centre Hospitalier Jean Titeca, Brussels, Belgium

despite the presence and persistence of symptoms (Anthony, 1993; Slade, 2009). This model, primarily developed for an adult population with chronic mental health conditions, has shown considerable effectiveness in improving patients' quality of life (Slade et al., 2017).

In recent years, there has been growing interest in adapting this model to youth mental health (Ward, 2014), and several studies have been conducted in an attempt to conceptualize recovery in this age group. However, to our knowledge, no study has yet clearly identified the strengths, weaknesses, and knowledge gaps in the application of the recovery model to the specific characteristics of the adolescent population.

The purpose of this study is to summarize the literature produced so far in this field and to draw conceptual patterns that can inform the future of psychiatric rehabilitation for adolescents.

The Recovery Revolution in Adults

The concept of recovery, since its first formulations in the 1980s by the psychiatric users' movement in the United States, has seen impressive diffusion in psychiatric culture, enthusiastic reception by many policymakers and practitioners, and has definitively revolutionized approaches in adult psychiatry. The most cited definition, provided by Bill Anthony (1993), describes recovery as "a personal and unique process towards a satisfying, hopeful, and fulfilling life, despite the limitations caused by the illness (mental); it involves developing new meanings and purposes, despite the catastrophic effects of the illness" (p. 527). This definition implies that mental health is distinct from the absence of illness: one can exist without the other, and the very idea of a cure is replaced by the more realistic concept of recovering a meaningful life.

Achieving this ideal requires a new way of conceptualizing intervention, which is no longer exclusively medical in nature (i.e., centered on the reduction or disappearance of symptoms) but focuses on implementing a concrete and fulfilling life project. The approach shifts from a paternalistic and medical model to a multidisciplinary one, valuing the contributions of various stakeholders and, especially, of the "patient" himself, who is considered the greatest expert on their situation.

Today, there is substantial evidence showing that recovery-oriented practices often lead to an improved quality of life, better symptom management, and greater personal satisfaction (Davidson et al., 2009). Consequently, the recovery concept has been rapidly adopted into mental health policies and reforms in various countries, such as the United Kingdom, New Zealand, Australia, and Canada (Slade, 2009). In Europe, countries like France and the Netherlands

have also integrated elements of recovery into their mental health systems. These nations have developed policies and clinical practices aimed at supporting patient recovery, with initiatives such as peer support programs and personalized recovery plans (Shepherd et al., 2008).

The Main Components of Adults' Recovery

Since the first definition of recovery, multiple authors have attempted to operationalize the concept to make it more accessible for research and clinical practice (Davidson et al., 2005; Noordsy et al., 2002). Building on these earlier conceptualizations, Leamy et al. (2011) proposed a five-element framework, often referred to as the CHIME model. This model organizes recovery around five core themes: Connectedness (the importance of relationships and social support), Hope (a positive outlook and belief in the possibility of recovery), Identity (developing a positive sense of self), Meaning (finding purpose in life beyond illness), and Empowerment (gaining control over one's life). These frameworks demonstrate the consensus that exists today about how recovery can be understood and measured.

To guide our mapping of the studies conducted on youth recovery, we first identified a list of basic concepts that appear to be consensual among the authors:

- **Personal Journey:** In the recovery model, this refers to the individualized, non-linear path each person takes toward recovery. It acknowledges that recovery is unique for everyone, shaped by personal experiences, values, and goals. The concept emphasizes the subjective nature of recovery, where individuals set their own pace and define their milestones within their specific life context (Slade, 2009).
- **Hope and Optimism:** Central to recovery, this dimension involves the belief that recovery is possible. It includes a future-oriented mindset, fostering motivation with an emphasis on positive thinking and goal setting (Anthony, 1993; Davidson et al., 2005; Deegan, 1988; Leamy et al., 2011; Noordsy et al., 2002).
- **Identity:** Rebuilding and reclaiming a positive sense of self is critical. This dimension highlights moving beyond the label of mental illness, overcoming stigma, and rediscovering personal strengths (Deegan, 1988; Leamy et al., 2011; Slade, 2009).
- **Meaning and Purpose:** Finding a sense of meaning in life is essential for personal recovery. It includes drawing meaning from one's experiences, setting meaningful goals, and engaging in fulfilling activities such as work, relationships, or personal projects (Leamy et al., 2011; Slade, 2009).

- **Connectedness:** Social relationships and community involvement play a key role in recovery. Forming supportive connections with peers, family, and community fosters a sense of belonging and counters isolation (Anthony, 1993; Leamy et al., 2011).
- **Empowerment and Responsibility:** This dimension emphasizes the individual's control over their own recovery process. It involves self-determination, making informed choices, and taking responsibility for one's health and well-being, focusing on strengths rather than deficits (Anthony, 1993; Leamy et al., 2011; Noordsy et al., 2002).
- **Overcoming and Management of Symptoms:** This refers to individuals' ability to minimize the impact of mental health symptoms on their daily lives. Rather than eliminating symptoms entirely, this process focuses on developing coping mechanisms, based on a preliminary acceptance of one's condition (Davidson et al., 2005).

Based on this list of components, this review explores the alignments and discrepancies in mental health recovery as applied to young people, by conducting a scoping review of studies that have examined the application of the recovery model to adolescents, using various methodologies. In this way, components identified in those studies as important for youth have been considered *strengths* of the recovery model. Conversely, components that do not fit well or present difficulties in the context of youth mental health recovery have been considered *weaknesses* of the recovery model when applied to adolescents. Finally, *knowledge gaps* identified throughout this literature have also been summarised.

Methodology

The present study utilized a scoping review design in accordance with the guidelines provided by the Joanna Briggs Institute (JBI), e.g. the Preferred Reporting Items for Systematic Reviews and Meta-Analyses, considering the extension for Scoping Reviews (PRISMA-ScR) (Peters et al., 2020). These guidelines ensure a systematic and transparent approach to evidence mapping on a given topic, guiding the development of the search strategy, selection criteria, and data presentation (Munn et al., 2020; Tricco et al., 2018).

Qualitative and quantitative empirical studies, conceptual and discussion papers, as well as systematic and scoping reviews published in peer-reviewed journals on the application of the recovery model to adolescent mental health were considered for inclusion. As recommended by the JBI, we followed the PCC framework (Population, Concept, and Context) to define the selection criteria (Pollock et al., 2023). Therefore, studies included in our review concerned

adolescents aged 12 to 18 (where the age range was specified); they addressed the concept of the recovery model applied to young users or recovery-oriented practices; and were conducted in the context of mental health services and psychiatric care.

Study Search

Following the PRISMA-ScR guidelines, we conducted a two-step search strategy. The *first step* consisted of an extensive search of academic databases to identify all relevant peer-reviewed journal articles in English. PubMed, Web of Science, Scopus, Medline, and PsycINFO were consulted using the following keywords: "recovery model", "recovery oriented", "adolescent", "psychiatry", "teen", "youth", "young", and "mental health". The exact syntax used was: ("*recovery model*" OR "*recovery oriented*") AND (*adolescent** OR *teen** OR *youth* OR *young**) AND (*psychiatr** OR "*mental health*").*ab*. We deliberately restricted our search to the abstract field, rather than including titles, keywords, or subject headings, to improve conceptual specificity. This choice was made to reduce the retrieval of irrelevant results caused by the high polysemy of terms such as *recovery*, *mental health*, and *youth*, and to enhance the likelihood that all key concepts co-occurred in a meaningful and thematically relevant context. The *second step* expanded the scope by incorporating manual searches and reference mining from key articles identified in the first step.

Thematic Analysis

We conducted a thematic content analysis following the JBI's recommended procedures for qualitative synthesis (Pollock et al., 2023).

To identify the strengths and weaknesses in the application of the recovery model to youth mental health, we adopted a deductive approach. A coding framework was developed to encompass the main conceptual components of the model: Personal Journey, Connectedness, Hope, Identity, Meaning and Purpose, Empowerment, and Overcoming and Management of Symptoms. Two independent reviewers systematically analyzed each study, coding for the presence or absence of predefined themes.

To explore knowledge gaps, the results and discussion sections were analyzed inductively by the same reviewers. The reviewers coded and named themes identified by the study authors that were not included in the framework, as well as themes explicitly marked as lacking empirical investigation. Following the initial independent analysis, the two reviewers discussed their findings for both the deductive and inductive analyses to reach consensus.

Analysis and Results

Study Selection

In the *first step* a total of 578 papers were identified. Among these, 20 articles were judged as potentially relevant based on title and abstract screening, and were read in full. Of these, 13 were excluded because they were not conceptually relevant.

Two additional studies (Naughton et al., 2018; Reid et al., 2024), though initially deemed relevant, were excluded from the final synthesis. Both had a declared focus on *child and adolescent* mental health, but included a substantial number of studies centered primarily on children. Although each review did include some relevant studies focused on adolescents - namely Kaplan & Racussen (2013), Simonds et al. (2014), John et al. (2015), and Ward (2014) in Naughton et al. (2018); Kelly & Coughlan (2019), Khoury (2020), and Naughton et al. (2018) in Reid et al. (2024) - these individual sources were already included in our review as primary studies. Therefore, the inclusion of the two reviews would have created redundancy and potentially introduced conceptual noise, without providing additional adolescent-specific insight. Three studies including slightly older participants were retained (Dallinger et al., 2023; Law et al., 2020; Rayner et al., 2018), as their samples consisted mainly of adolescents and their objectives clearly

aligned with developmental issues relevant to this age group. This process resulted in 5 relevant papers retained from the database search.

In the second step, 9 additional papers were selected. Two papers were protocols and were consequently excluded. One additional article from the French-language literature was also included, as it met all eligibility criteria, thus resulting in 8 relevant papers in total from this second step.

The final set of included articles consisted then of 13 studies. A PRISMA flow chart (Rethlefsen & Page, 2022) describing this process is visible on Fig. 1.

Study Description

Selected papers are summarized in Table 1. This table reports authors, objective of the article, methodology, population, and country.

Concerning objective and methodology, Table 1 shows the predominance of qualitative studies (8) and discussion papers (3). Only two quantitative studies have been identified (John et al., 2015; Naughton et al., 2020), which are clearly exploratory in nature, given the very small sample size and the goal of the studies: to develop a recovery measure for youth (John et al., 2015) and to reach consensus around youth recovery dimensions solely from the practitioners' perspective (Naughton et al., 2020). When looking at populations, two studies focused exclusively

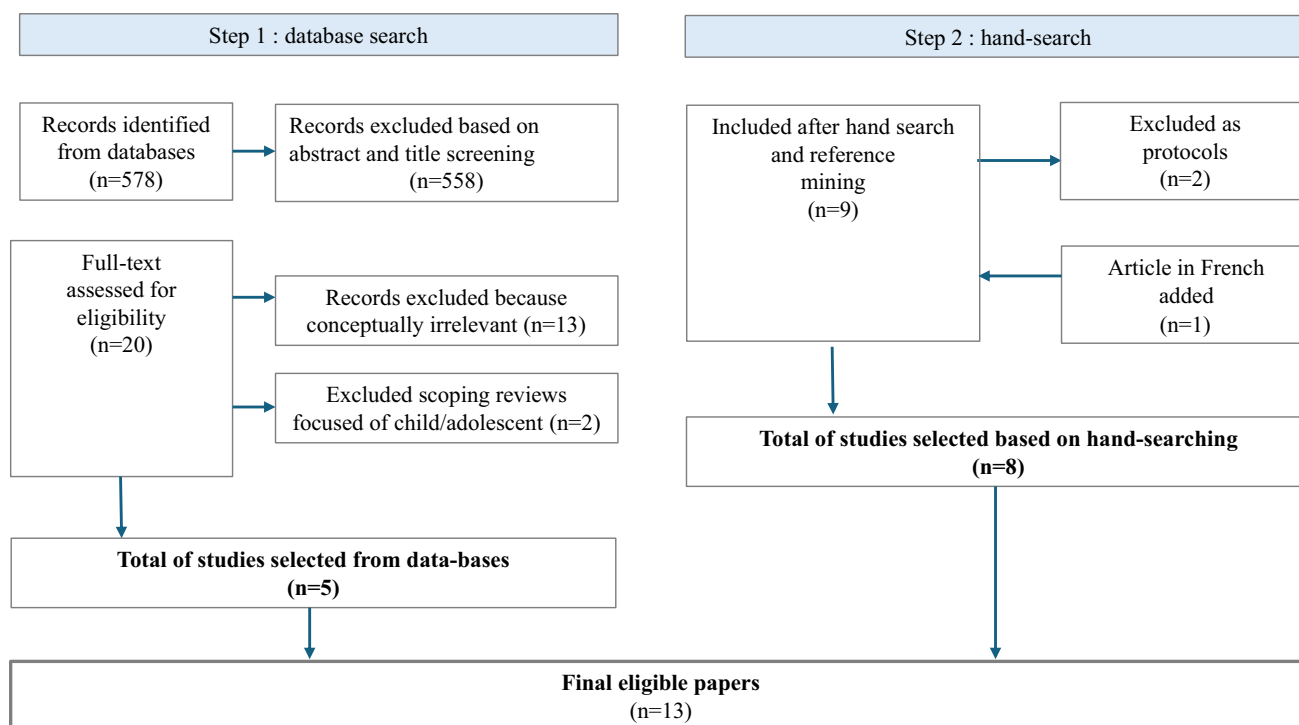


Fig. 1 Adapted PRISMA flow chart

Table 1 Summary of reviewed articles

Authors, year	Objective	Methodology	Population	Country
Agarwal & Sinha, 2016	To take stock of the situation in India	Discussion paper	//	Written in India
Dallinger et al., 2023	To build-up a conceptual model of recovery in the youth's perspective	Focus group discussions with professionals Interviews with caregivers and youth	22 professionals 9 caregivers 16 young users (15–21)	Australia
Di Schiena et al., 2022	To describe limits in the application of the recovery model to an adolescents' mental health service	Single institution-case analysis	//	Belgium
John et al., 2015	To develop recovery measures for young people and parents/carers	Administration of questionnaires for young users and caregivers	47 dyads young users (10–18)/ caregivers	UK
Kaplan & Racussen, 2013	To propose a recovery-oriented intervention in adolescents with mental health crisis	Single institution-case analysis	//	UK
Kelly & Coughlan, 2019	To develop a theory of youth mental health recovery from the parents' perspective	Interviews	14 parents of hospitalized young users (8 to 18)	Ireland
Khoury, 2020	To identify limits of the application of the recovery model to youth	Discussion paper	//	Written in Canada
Law et al., 2020	To explore the view of recovery in the perspective of young users	Interviews	23 adolescents and young users (14–25)	UK
Naughton et al., 2020	To reach consensus around youth recovery dimensions	3 rounds survey	Practitioners of youth mental health services 1st round: 35 2nd round: 32 3rd round: 27	Australia
Reid & Alford, 2023	To investigate the representation of youth in text policy	Critical discourse analysis on the Australian policy for recovery oriented mental health services	//	Australia
Rayner et al., 2018	To build-up a conceptual model of youth recovery	Interviews	15 young users with chronic psychiatric condition (16–25)	Australia
Simonds et al., 2014	To explore the process of recovery in adolescents with non-severe mental illness	Interviews	9 young users with anxiety and depression (14–16) and 12 mothers	UK
Ward, 2014	To discuss communalities and differences in the recovery process between adults and adolescents	Discussion paper	//	Written in Australia

on young service users (Law et al., 2020; Rayner et al., 2018), while others adopted a multi-informant approach, including caregivers and/or professionals: Dallinger et al. (2023) and John et al. (2015) incorporated views from young users, caregivers, and professionals. Simonds et al. (2014) and Kelly & Coughlan (2019) focused primarily on mothers and parents, respectively. Naughton et al. (2020) investigated the views of practitioners, while Di Schiena et al. (2022) and Kaplan & Racussen (2013) conducted single-institution case studies.

Most of the included studies were conducted in high-income, English-speaking countries, predominantly in the UK (4), Australia (4), and to a lesser extent in Canada, Ireland, Belgium, and India.

Thematic Analysis

Results of thematic analysis are summarized in Table 2 and report the recovery components that were identified as relevant for youth (*strengths*) and non-relevant or hardly applicable (*weaknesses*), in the second and third columns. In the last column, open ended questions or dimensions non covered by the adults' recovery model are indicated (*knowledge gaps*). Themes and recurrences observed are reported below.

Strengths

Connectedness This dimension is highlighted as essential in 11 out of 13 studies. It is considered a cornerstone of recovery, emphasizing the role of supportive relationships

Table 2 Summary of themes

Authors, year	Strengths	Weaknesses	Knowledge gaps
Agarwal & Sinha, 2016	<ul style="list-style-type: none"> • Connectedness • Hope • Empowerment 		<ul style="list-style-type: none"> • How to integrate and promote resilience • It should integrate schools as partner
Dallinger et al., 2023	<ul style="list-style-type: none"> • Connectedness • Hope • Identity • Meaning and purpose • Empowerment 		<ul style="list-style-type: none"> • Resilience processes
Di Schiena et al., 2022	<ul style="list-style-type: none"> • Connectedness • Empowerment 	<ul style="list-style-type: none"> • Hope • Overcoming and management of symptoms (difficulties in symptoms awareness and acceptance) 	<ul style="list-style-type: none"> • A developmentally responsive model • The necessary cultural shift • Resource constraints • Peer-support • Culture sensitive measures • Larger samples to identify underlying dimensions
John et al., 2015	<ul style="list-style-type: none"> • Connectedness • Identity • Meaning and purpose • Empowerment • Overcoming and management of symptoms 		<ul style="list-style-type: none"> • Working with family and the receiving community is accelerated and more intensive in crisis • How to integrate and promote resilience • Powerlessness and lack of comprehension by young people and parents • Lack of youth's voice • Early interventions • Youth friendly language • Link to global health • More subjective narratives should be integrated into reflection
Kaplan & Racussen, 2013	<ul style="list-style-type: none"> • Hope-optimism 	<ul style="list-style-type: none"> • Personal journey (the receiving community is important, especially to reduce length of hospitalizations) 	<ul style="list-style-type: none"> • Working with family and the receiving community is accelerated and more intensive in crisis • How to integrate and promote resilience • Powerlessness and lack of comprehension by young people and parents • Lack of youth's voice • Early interventions • Youth friendly language • Link to global health • More subjective narratives should be integrated into reflection
Kelly & Coughlan, 2019	<ul style="list-style-type: none"> • Personal journey • Connectedness 		<ul style="list-style-type: none"> • How to integrate and promote resilience • Powerlessness and lack of comprehension by young people and parents • Lack of youth's voice • Early interventions • Youth friendly language • Link to global health • More subjective narratives should be integrated into reflection
Khoury, 2020	<ul style="list-style-type: none"> • Hope • Connectedness 	<ul style="list-style-type: none"> • Personal journey 	<ul style="list-style-type: none"> • Lack of youth's voice • Early interventions • Youth friendly language • Link to global health • More subjective narratives should be integrated into reflection
Law et al., 2020	<ul style="list-style-type: none"> • Connectedness • Hope 	<ul style="list-style-type: none"> • Over-coming and management of symptoms (difficulties in symptoms acceptance) • Personal journey (recovery is about being good and stable) • Identity (youngsters do not have a stable sense of self to which return, nor stable values) 	<ul style="list-style-type: none"> • Fluctuation in life goals • Early onset of symptoms • How to integrate recovery with unstable self-identity • How to help young people to construct their identity • Different representations of recovery in professionals and parents • Resilience • Recovery as transformative experience • Importance of a developmentally responsive model • Importance of recovery advocacy (from professionals) • Adaptation of language • The neo-liberal ideological goal of increasing youth responsibility and family implication
Naughton et al., 2020	<ul style="list-style-type: none"> • Connectedness • Hope • Identity • Meaning and purpose • Empowerment • Overcoming and management of symptoms 	<ul style="list-style-type: none"> • Personal Journey • Empowerment and responsibility (should be adapted to age) • Meaning and Purpose 	<ul style="list-style-type: none"> • Recovery as transformative experience • Importance of a developmentally responsive model • Importance of recovery advocacy (from professionals) • Adaptation of language • The neo-liberal ideological goal of increasing youth responsibility and family implication
Reid & Alford, 2023	<ul style="list-style-type: none"> • Connectedness • Overcoming and management of symptoms 	<ul style="list-style-type: none"> • Empowerment 	<ul style="list-style-type: none"> • The neo-liberal ideological goal of increasing youth responsibility and family implication
Rayner et al., 2018	<ul style="list-style-type: none"> • Connectedness • Hope • Identity 	<ul style="list-style-type: none"> • Overcoming and management of symptoms (difficulties in symptoms awareness) • Personal journey • Meaning and purpose • Empowerment 	<ul style="list-style-type: none"> • Importance of the ecological context • Resilience • Recovery as a transformative process • Importance of a developmentally responsive model
Simonds et al., 2014		<ul style="list-style-type: none"> • Meaning and purpose (difficulties in future projections) • Identity 	<ul style="list-style-type: none"> • Renegotiation of self-identity (loss of self) • How to handle with difficulties in symptoms acceptance

Table 2 (continued)

Authors, year	Strengths	Weaknesses	Knowledge gaps
Ward, 2014	<ul style="list-style-type: none"> • Connectedness • Hope • Identity • Meaning and purpose • Empowerment 	<ul style="list-style-type: none"> • Personal journey (peer and family are in the same journey) • Identity • Meaning and purpose (difficult because of the instability of identity and goals) 	<ul style="list-style-type: none"> • Empowerment and self-determination should apply to families and caregivers • How to incorporate physiological changes in the process

with family, peers, and professionals. For instance, Kaplan & Racussen (2013) and Rayner et al. (2018) stress the importance of family and community involvement in accelerating recovery, reducing hospital stays, and promoting emotional stability. Agarwal & Sinha (2016) also emphasize the importance of integrating schools as active partners in the recovery process for young people.

Hope and Optimism The promotion of hope is cited in 8 studies as critical for motivating adolescents and reducing feelings of helplessness. However, this finding is counterbalanced by Di Schiena et al. (2022), who found that hope was difficult to foster in the single institution they analyzed.

Identity Building identity appears to be an important part of recovery in adolescents, as highlighted in 4 studies. These studies consider the construction of a new sense of self—one that integrates mental health challenges into a broader personal narrative—as a key asset in the youth recovery process.

Meaning and Purpose This dimension is considered as part of the recovery process in adolescents in 4 studies. These studies emphasize the importance of supporting adolescents in constructing a meaningful sense of self and future, which is often challenged during the course of mental health difficulties.

Empowerment Empowerment and responsibility for one's choices are seen as vital elements for fostering autonomy in adolescents. These were identified as strengths in 6 studies. Agarwal & Sinha (2016) describe empowerment as a mechanism for building adolescents' confidence and sense of control over their recovery journey.

Overcoming and Management of Symptoms The symptoms dimension is mentioned as a strength in 3 studies, that

consider the possibility of autonomously manage symptoms as an important part of youth recovery.

CHIME The global CHIME framework (Connectedness, Hope, Identity, Meaning, Empowerment) from Leamy et al. (2011) is found to be applicable to adolescents in 3 studies.

Weaknesses

Personal Journey The notion of a personal journey was found to be hardly applicable in 6 out of 13 studies. Conversely, no study identified this aspect as a strength.

Empowerment In 3 studies it is noted that expecting adolescents to take on significant responsibility may be unrealistic or harmful. In these studies, some limiting conditions are pointed out, such as age (Naughton et al., 2020) or the presence of a severe chronic condition (Rayner et al., 2018). However, these studies contrast with others that consider this aspect a strength of the recovery model for adolescents.

Identity Adolescents often lack a stable sense of self that should be the basis of their life project. This limitation is highlighted in 3 studies: Law et al. (2020) and Ward (2014) point to the fluid and evolving nature of adolescent identity as a key challenge. Simonds et al. (2014) observed the loss of self, brought by mental illness, and the necessity of negotiating a new self and revising future projections. Again, this is in contrast with the 4 studies considering this dimension as a strength.

Meaning and Purpose This dimension is also identified as a weakness in 4 studies because making sense of mental illness and finding a purpose requires complex reasoning and a stable identity, which are not yet acquired during an early developmental stage such as adolescence. Moreover, this implies symptoms' acceptance, which is not easy when the illness is at its onset. Also in this case, a contrast

emerges with the 4 studies considering Meaning and Purpose as a strength.

Overcoming and Management of Symptoms This category has been recognized as a weakness in 3 studies, that emphasize difficulties in symptoms' acceptance. These studies contrast with those considering this dimension as a strength.

Knowledge Gaps

While the available data does not allow for a comprehensive quantification of all gaps, the following themes emerge across multiple studies:

Integration of Developmental Processes The need for a developmentally responsive recovery model is highlighted in 4 studies. Adolescents' fluctuating life goals (Di Schiena et al., 2022; Law et al., 2020; Naughton et al., 2020), unstable self-identity (Law et al., 2020), as well as physiological changes and developmental transitions (Ward, 2014), represent unique challenges that are typical of this developmental stage.

Family Involvement 2 studies emphasize that concrete strategies for shared decision-making and fostering active parental involvement are lacking, especially in critical situations where families experience powerlessness and lack of comprehension (Kaplan & Racussen, 2013).

Lack of Voices from Adolescents The importance of considering narratives and youth-specific insights is mentioned in 2 studies. This gap highlights the need for greater participation of adolescents in conceptualizing and shaping recovery practices.

Resilience Promotion 5 studies mentioned resilience, conceived as the ability to adapt positively and recover from adversity, stress, or trauma (Masten, 2001), as an important target in young people recovery.

Authors target the lack of clear strategies for fostering it within the existing recovery-oriented frameworks.

Cultural and Contextual Variability The adaptation of recovery practices to diverse cultural and systemic contexts is noted in 1 study. It underlies the importance of multi-systemic approaches and the lack of concrete models for implementing culturally sensitive recovery interventions (Khoury, 2020).

Recovery as a Transformative Experience 2 studies suggest that recovery in youth should be better conceptualized as

a transformation (Naughton et al., 2018, 2020; Rayner et al., 2018). For these authors, adolescents might not yet perceive where the recovery process should lead, as they are still developing their identity, understanding themselves, becoming familiar with mental illness, and adapting to developmental changes. On this basis, the idea of a transformative experience better suits youth recovery.

General Discussion

This scoping review sheds light on the adaptation of the recovery model to adolescents' mental health, a critical yet underexplored area. The number of studies, as well as their exploratory nature, shows a great interest in the topic but also highlights the early stage of research in this area.

However, based on our review, some general patterns and recurrences can already be drawn.

Overall, while some core principles of the recovery model appear to align well with the needs of adolescents, others require significant rethinking to fit the developmental realities of this population.

Moreover, our literature map also showed that some recovery components are seen simultaneously as strengths or weaknesses, depending on the study and which aspects the authors emphasize.

One of the most consensual finding is the centrality of connectedness, which appears to be a strength also in the adolescent recovery process. This highlights the importance of fostering strong relationships with peers, family, and professionals to support adolescents' mental health recovery. Such emphasis on social bonds resonates with adolescent developmental psychology, which places significant weight on peer influence and family support during this critical life stage (Steinberg & Morris, 2001). It is also consistent with the tendency observed, among studies, to triangulate different perspectives (Dallinger et al., 2023; John et al., 2015; Kelly & Coughlan, 2019; Naughton et al., 2020; Simonds et al., 2014;), by adopting a multi-informant strategy. In addition, it aligns with other models of care that emphasize shared responsibility and collaborative decision-making, such as the System of Care (SoC) model, that promotes the coordination of services around youth and their families, including education, social services, and healthcare (Stroul & Blau, 2008). All these considerations suggest that adolescent recovery can hardly be defined as a purely personal journey. This is also consistent with what we observed: no study identified the idea of a personal journey as a strength, while several studies qualified it as a weakness of the adult recovery model when applied to youth. In this perspective, the recovery journey of an adolescent rather appears to be a collective process, involving the broader community. It is

important to note, however, that recent critiques have also questioned the individualistic nature of the recovery model more generally, emphasizing that social connectedness and interpersonal bonds are essential components of recovery for individuals of all ages facing mental health challenges (Price-Robertson et al., 2016).

Hope and optimism also emerged consistently as key facilitators of recovery, providing a counterbalance to the sense of helplessness often experienced by adolescents with mental health challenge, thus confirming previous evidence showing that hope is a protective factor for youngsters going through psychological difficulties (Griggs, 2017).

Instead, less clear patterns emerged about other categories. Having a strong sense of identity and a life project with meaning and purpose are considered important for adolescents' recovery by some authors, but developmental characteristics such as fluctuating self-concept and shifting life goals made other authors underline the complexity of these aspects in adolescence. This also raises a broader theoretical question: should the focus shift from reclaiming identity to supporting its construction? This distinction is critical for tailoring recovery practices to adolescents and may necessitate reconceptualizing identity as a fluid and evolving process rather than a fixed attribute.

Empowerment also proved to be a complex aspect of recovery in youth. On the one hand, it is regarded as a crucial element for fostering autonomy in adolescents and enabling them to gain control over their recovery journey. On the other hand, assigning responsibility for decision-making to young people may be unrealistic or even disadvantageous, given their developmental instability and difficulties in achieving autonomy and independence from their families and social groups. This finding is consistent with the broader literature on promoting agency and self-determination during adolescence (Dickey & Deatrck, 2000; Field et al., 1997), which recognizes these as important developmental assets but also as potentially harmful processes. For some adolescents, making decisions autonomously may in fact mean being left alone to face their difficulties. As Dickey & Deatrck (2000) further pointed out, healthcare providers often struggle to balance giving adolescents independence while also keeping them safe. This requires building trust and paying close attention to legal and ethical rules. These tensions underscore the importance of a developmentally attuned approach to empowerment in adolescent mental health recovery.

The last contrast observed is about the autonomous management of symptoms. Similarly to what happens for adults, some authors see this asset as a marker of positive recovery also for adolescents, as it also implies acceptance of one's own condition. However, again, other authors underline how this responsibility can be experienced as burdensome and destabilizing for adolescents. After-all, difficulties in

self-regulation among adolescents are well-known (Steinberg, 2005), as well as their heightened need to protect self-esteem during a developmental phase where peer acceptance and identity construction are central (Sebastian et al., 2008).

Concerning knowledge gaps, these remain substantial and all point to the need for building a recovery model that is developmentally responsive. This entails addressing instability, fluctuating life goals, and specific developmental needs such as peer acceptance, puberty, and positive self-construction, which pose unique and unmet challenges. Key questions remain: how can the perspective of young service users be heard and integrated alongside that of their families, without one outweighing the other in the decision-making process? How can difficulties in acknowledging and understanding symptoms be addressed in this age group, which is simultaneously engaged in identity formation and striving for social integration? Furthermore, how can greater attention be given to fostering resilience as a primary recovery goal for adolescents, and how can the recovery process be redefined as a transformative experience that incorporates identity reconstruction and adjustment? The breadth of themes identified as knowledge gaps underscores that research in this area is still at an early stage, and that relying on adult-based recovery conceptualizations is far from sufficient for capturing the specificities of adolescence.

Avenues for Future Research

The present research opens up few promising avenues for further investigation.

First, many of the selected studies rely on qualitative or theoretical designs, which, while valuable for exploratory purposes, limit the generalizability of findings and the ability to establish causal relationships. Future research should advance this topic by adopting large-scale studies based on quantitative data and structured surveys. For example, generic tools designed to assess recovery, such as the Recovery Assessment Scale (RAS; Hancock et al., 2015), the Questionnaire about the Process of Recovery (QPR; Neil et al., 2009), or the Canadian - Personal Recovery Outcome Measure (C-PROM; Barbic et al., 2024) can be introduced in the current youth psychiatric practices. However, these measures are once again build up on adult populations. Therefore, complementary measures focusing on specific developmental dimensions of recovery could be incorporated, such as Hemingway Measure of Adolescent Connectedness (HMAC; Karcher & Sass, 2010), the Child and Youth Resilience Measure (CYRM; Ungar & Liebenberg, 2011), or the Self-Perception Profile for Adolescents (SPPA; Harter, 2012). The integration of such tools would allow future studies to move beyond exploratory findings.

Second, there is a cultural and contextual bias in this review. The majority of studies were conducted in high-income countries, which limits the applicability of findings to diverse sociocultural and economic contexts. Recovery practices developed in well-resourced settings may not translate effectively to low- and middle-income countries, where systemic barriers to care, such as resource constraints and cultural attitudes, significantly influence recovery processes. As such, future research would benefit from studies conducted in low- and middle-income countries and non-Western settings, to ensure that youth recovery models are inclusive and culturally responsive.

Third, the development of a new theoretical conceptualization of recovery for youth appears necessary. Although some attempts have already been made in this direction by researchers advocating for a more collective and relational approach to recovery, such as in the System of Care model (Stroul & Blau, 2008), other developmental challenges highlighted in this review — such as physiological changes during puberty, identity construction, self-esteem protection, and difficulties in symptoms management — remain significantly overlooked.

Lastly, it becomes clear that applying adult-derived categories to adolescents' recovery risks overlooking the central role of personal life histories. For adults, recovery constructs often emerge from a trajectory that includes stabilization, acceptance of the condition, and vocational reintegration. By contrast, adolescents' representations of recovery are shaped by life stories where early adverse experiences, ongoing developmental transitions, and immediate relational contexts remain highly influential. This suggests that a recovery conceptualization for adolescents might benefit from life story-based approaches that ground recovery in the subjective perspective of young people, rather than in predefined conceptual categories.

General Conclusions

This review highlights the promise of the recovery model for improving youth mental health care, while also revealing critical gaps in both the evidence base and the practical implementation of recovery-oriented practices for adolescents. The findings suggest that certain principles, such as connectedness and hope, align well with adolescent needs, whereas others, including identity reconstruction and personal responsibility, require substantial adaptation.

To advance the field, future research should prioritize large-scale, multi-site, and longitudinal studies that capture recovery processes over time. Efforts should also aim to integrate diverse cultural perspectives, strengthen the inclusion of adolescent voices, and develop resilience-based, developmentally

informed recovery frameworks. Moving forward, progress will not only depend on adapting adult recovery principles, but also on developing alternative frameworks that reflect adolescents' unique developmental challenges and subjective perspectives. Such frameworks may benefit from a life story-based approach, recognizing that young people's recovery trajectories are profoundly shaped by their personal histories and evolving developmental contexts.

By addressing these gaps, the field can move toward a more inclusive, effective, and transformative approach to youth mental health recovery, that fully honors the distinct challenges of adolescence.

Declarations

Research Involving Humans and Animals Statement This study did not involve human participants or animals and is therefore in full compliance with ethical standards for research.

Conflict of interest The authors declare no conflict of interest regarding this research.

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