

# BMJ Open Protocol: A grounded theory of 'recovery' – perspectives of adolescent users of mental health services

Lucianne Palmquist,<sup>1</sup> Sue Patterson,<sup>2</sup> Analise O'Donovan,<sup>1</sup> Graham Bradley<sup>3</sup>

**To cite:** Palmquist L, Patterson S, O'Donovan A, *et al*. Protocol: A grounded theory of 'recovery'—perspectives of adolescent users of mental health services. *BMJ Open* 2017;7:e015161. doi:10.1136/bmjopen-2016-015161

► Prepublication history for this paper is available online. To view these files please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2016-015161>).

Received 12 November 2016  
Revised 11 April 2017  
Accepted 18 May 2017



CrossMark

<sup>1</sup>School of Applied Psychology and Menzies Health Institute Queensland, Griffith University Mt Gravatt Campus, Mt Gravatt, Queensland, Australia

<sup>2</sup>Metro North Hospital and Health Services and School of Applied Psychology, Griffith University, Brisbane, Queensland, Australia

<sup>3</sup>School of Applied Psychology and Menzies Health Institute Queensland, Griffith University Gold Coast Campus, Gold Coast, Queensland, Australia

## Correspondence to

Lucianne Palmquist; Lucianne.palmquist@griffithuni.edu.au

## ABSTRACT

**Introduction** Policies internationally endorse the recovery paradigm as the appropriate foundation for youth mental health services. However, given that this paradigm is grounded in the views of adults with severe mental illness, applicability to youth services and relevance to young people is uncertain, particularly as little is known about young people's views. A comprehensive understanding of the experiences and expectations of young people is critical to developing youth mental health services that are acceptable, accessible, effective and relevant.

**Aim** To inform development of policy and youth services, the study described in this protocol aims to develop a comprehensive account of the experiences and expectations of 12–17 year olds as they encounter mental disorders and transition through specialist mental health services. Data will be analysed to model recovery from the adolescents' perspective.

**Method and analysis** This grounded theory study will use quantitative and qualitative data collected in interviews with 12–17 year olds engaged with specialist Child/Youth Mental Health Service in Queensland, Australia. Interviews will explore adolescents' expectations and experiences of mental disorder, and of services, as they transition through specialist mental health services, including the meaning of their experiences and ideas of 'recovery' and how their experiences and expectations are shaped. Data collection and analysis will use grounded theory methods.

**Ethics and dissemination** Adolescents' experiences will be presented as a mid-range theory. The research will provide tangible recommendations for youth-focused mental health policy and practice. Findings will be disseminated within academic literature and beyond to participants, health professionals, mental health advocacy groups and policy and decision makers via publications, research summaries, conferences and workshops targeting different audiences. Ethical and research governance approvals have been obtained from relevant Human Research Ethics committees and all sites involved.

## INTRODUCTION

Adolescence is a period of multiple transitions integral to identity formation and finding a place in the world.<sup>1 2</sup> These often tumultuous times are negotiated successfully by most adolescents.<sup>3</sup> A substantial minority, however, experience cognitive, affective and behavioural disturbances, some meeting

## Strengths and limitations of this study

- This protocol outlines a grounded theory study of adolescent service users' experiences and expectations as they encounter mental disorders and transition through mental health services.
- The study will support conceptualisation and a theoretical explanation of adolescents' journeys through their experiences of mental disorder and service encounters.
- The theory developed in the study will be generated on the basis of select experiences of a particular sample, within a particular sociopolitical context, and it is acknowledged that others may have differing experiences. However, this is balanced by acknowledgement that the theory is partial and grounded in the data documenting adolescents' own perspectives relating to recovery and care needs.
- The study will contribute to currently limited literature, giving adolescents a voice in discussion of experiences and perspectives on recovery, and will contribute to a much needed conversation which could inform recommendations for service development.

diagnostic criteria for a 'mental disorder'. While prevalence rates vary, mental disorders among young people are acknowledged as a global phenomenon, affecting up to 25% of adolescents in Australia and the UK.<sup>4 5</sup> Disruptive to personal and social development and associated with risk taking behaviour, mental disorders in adolescence frequently continue into or recur in adulthood impacting educational and occupational opportunities, with potential long-term consequences for health, economic and social outcomes,<sup>6</sup> and quality of life.<sup>7 8</sup>

With mental disorders contributing more than 60% of the total burden of health-related disability for 15–34 year olds,<sup>4</sup> promoting mental health and ensuring timely treatment is a priority in Western countries. While evidence supports the effectiveness of various pharmacological and psychosocial interventions in improving outcomes,<sup>5</sup> young people

experiencing mental disorders often do not access professional help or specialist services.<sup>9–11</sup> When they do, engagement is often tenuous, and early disengagement rates are high.<sup>12</sup>

Improving services is recognised as an economic, moral and social imperative. Across the ‘wealthy West’, reform of mental health services for both adults and young people is predicated on the ‘recovery’ paradigm.<sup>13–16</sup> This paradigm is grounded in the view that people experiencing mental disorders are capable of living “full, satisfying, hopeful and contributing lives...” even if “the illness is not ‘cured’”.<sup>17(p15)</sup> Conceptualised not as an event or endpoint but as a ‘journey’,<sup>18</sup> personal recovery is differentiated from clinical recovery defined as symptom remission or functional restoration. Recovery is conceptualised as a process of restoring connectedness, hope, identity, meaning and empowerment.<sup>19</sup> Services adopting a recovery paradigm recognise the person receiving treatment as an expert in relation to themselves and their care needs and are capable of setting personal and health-related goals. Such services promote shared decision making and self-determination while encouraging development of an identity as a person living with, but not defined by, mental health experiences.<sup>20</sup> While intuitively attractive, applicability to young people of the recovery model, developed by adults for adults, is uncertain.

With only around one third of adolescents experiencing mental disorder accessing formal services,<sup>9</sup> research to date has focused on factors influencing access and engagement. Studies are consistent internationally in locating barriers to access in mental health literacy, stigma, discomfort with professional help or help settings and limited resources with which to access services.<sup>9 12 21 22</sup> Little is known, however, about adolescents’ expectations or experience of services. Their views about ‘recovery’ remain uncertain but the limited evidence available suggests that they may be inconsistent with the prevailing recovery paradigm. A seminal study by Simonds and colleagues<sup>23</sup> in regard to adolescents’ recovery processes identifies that their expectations largely align with notions of ‘clinical’ recovery, grounded in the elimination of symptoms to restore a ‘normal life’; however, that may be defined. Furthermore, indicating limited acknowledgement of autonomous personal effort, adolescents attribute symptom remission to time, maturation or alternatively medical and psychiatric intervention. This contrasts substantially with the adult recovery paradigm’s emphasis on self-determination.

If mental health services for adolescents are to be acceptable and effective, it is critical that service development be grounded in detailed understanding of service users’ experiences and expectations. Knowing how adolescents define and experience recovery is essential to implementation of recovery-oriented practice in developmentally and contextually appropriate ways. Further research is required to understand adolescents’ experience of onset and progression of mental disorders over time, how they make sense of and negotiate concerns, what supports they

seek (if any) and the events, actions and conditions that shape their trajectories.

### Aims and objectives

This study aims to develop a comprehensive contextualised explanation of adolescents’ experiences as they encounter onset and progression of mental disorder and transition into and through mental health services (hereafter their ‘journey’).

The objectives are as follows: (1) qualitatively map participants’ journeys; (2) identify critical moments (eg, turning points, decisions, actions) within these journeys; (3) describe relationships among networks of critical moments; (4) identify contextual and personal influences shaping the journeys; and (5) conceptually model the journey and ‘recovery’ including the core process and critical moments involved in the journey.

## METHODS AND ANALYSIS

### Paradigm and methodology

This study employs a grounded theory (GT) methodology. Developed by sociologists Glaser and Strauss,<sup>24</sup> GT is widely used in health and social sciences to generate theoretical accounts of social phenomena. Described as the ‘the most comprehensive qualitative research methodology available’,<sup>25(p1)</sup> GT is appropriate when research aims to explain a process where the concerns of those involved are central to its understanding and cannot be predetermined.<sup>24 26</sup>

GT methodology is distinguished by its core strategies: recursive study design, theoretical sampling and constant comparative system of analysis.<sup>27</sup> Data collection and analysis occur iteratively, results of one cycle informing the next. Throughout this process, data sets are constantly compared with each other and against developing conceptualisations to generate successively more abstract concepts. Sampling proceeds on theoretical grounds whereby hypotheses generated from data guide further data sampling for theory refinement. Theoretical sampling continues to ‘saturation’, the point at which further data collection provides no new information for theory development.<sup>24</sup> Theories thus ‘grounded’ in data are ‘mid-range’, lying between hypothetical statements about narrowly defined phenomena and highly abstract, all-encompassing ‘grand’ theories.<sup>28</sup>

GT methodology has ‘evolved’ since its initial description. There are now several variants.<sup>29</sup> While core features are retained, different versions reflect their proponents’ world views and adopt differing positions related to timing in the use of literature, the researchers’ role and specific analytical techniques. This study employs Corbin and Strauss’s<sup>29</sup> approach, within a pragmatic paradigm developed by Rorty.<sup>30</sup> Consistent with the tenet of pragmatic epistemology, that there are no fixed points from which reality can be observed, researchers and participants are understood as interactively constructing knowledge during the research process.<sup>29 31</sup> Resultant theory acknowledges

'temporal, cultural and structural context'<sup>31(p524)</sup> and conditions that give rise to the phenomenon. The theory is understood as provisional, its value dependent on its relevance to real-world problems and capacity to support change.

### Study team

The study team comprises an early career researcher (Author 1) and three clinician-researchers with complementary expertise in the topic, recovery and methodology. The study is coordinated by author 1 ('researcher'), a PhD candidate and registered psychologist with 14 years' experience working clinically within specialist youth mental health services. Authors 3 and 4 are experienced academics with backgrounds in clinical and educational/developmental psychology. Author 2, also trained as a psychologist, is a health services researcher with substantial experience in qualitative research including GT.

### Study setting

This study is being conducted in Queensland, Australia, with participants recruited from specialised Child and Youth Mental Health Services (CYMHS) funded by the Queensland Government. Delivered by medical, nursing and allied health professionals in multidisciplinary teams, CYMHS provide specialist assessment and treatment for young people (<18 years old) experiencing substantial distress and disruption in daily functioning, typically meeting diagnostic criteria for severe or complex mental disorders. Consistent with national and state 'recovery-oriented' policy, CYMHS operate on the premise that young people can and do recover from mental disorders.<sup>32</sup>

### Participants and recruitment

Participants are adolescents attending CYMHS in four study sites selected to represent geographic (regional/rural/inner-city), socioeconomic and cultural variation. Eligibility criteria (box 1) are intentionally broad to promote recruitment of a sample with varied experiences.

While sample size in GT is determined on the basis of credibility in context of the purpose of inquiry,<sup>33</sup> practicalities and time require an estimation. Based on team members' experiences and Cresswell's<sup>28</sup>

recommendations for achievement of saturation, we aim to recruit 30 participants. Recruitment commenced July 2015 continuing through January 2017. At the time of writing, 19 participants have been recruited and data collection is continuing.

Recruitment follows procedures outlined in figure 1.

### Data collection

GT is a flexible methodology<sup>29</sup> that does not delimit the types of data acquired, techniques of collection or the way they are used. Indeed use of different kinds of data is recommended, providing alternate vantage points on the phenomenon.<sup>24</sup> In this study, primary data are participants' first-person accounts, supplemented by two self-report quantitative measures of mental health. Data are collected in semi-structured interviews conducted at two timepoints, first at recruitment then 3–6 months later, depending on participants' availability and engagement with CYMHS. Interviews are conducted by the researcher in private rooms at CYMHS, or other suitable facilities. The researcher uses a conversational approach following leads in participants' accounts and participants' language to encourage articulation of experiences and views.

Data collection is supported by flexible use of a topic guide (box 2). The topic guide was informed by a review of literature related to young people's experiences of 'recovery',<sup>23 34</sup> interviewing young people,<sup>35 36</sup> interviewing for GT<sup>26 37</sup> and the study team's clinical and research experiences with young people. Two visual aids, employed at the participant's discretion, are used to support description and critical reflection on experiences. First, early in both interviews, participants are invited to complete a timeline<sup>38</sup> of their 'journey' from awareness of difficulties to first interview, then from initial interview to the second. As timelines are constructed, participants are prompted to identify and explore personally significant events and feelings associated with these events. Second, a set of cards called 'Ups and Downs'<sup>39</sup> is available to support expression of feelings and description of experiences. Depicting a figure experiencing diverse emotions while floating at sea, the cards are used in conjunction with the timeline or separately.

The topic guide and use of timelines were piloted with two adolescents (known to study team members) who had experienced difficulties related to their mental health. When debriefed and invited to critique the interview, they reported finding the interview enjoyable and an opportunity to learn about themselves. No changes to the topic guide or interview process were recommended.

To supplement personal accounts of change in mental health (if any), at each interview, participants are also invited to complete two self-report measures: the Strengths and Difficulties Questionnaire (SDQ)<sup>40</sup> and Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS).<sup>41</sup> The SDQ, selected because it is routinely used within CYMHS, measures psychological, behavioural and social difficulties, prosocial function and impact. Completion involves rating the extent to which 25 attributes are

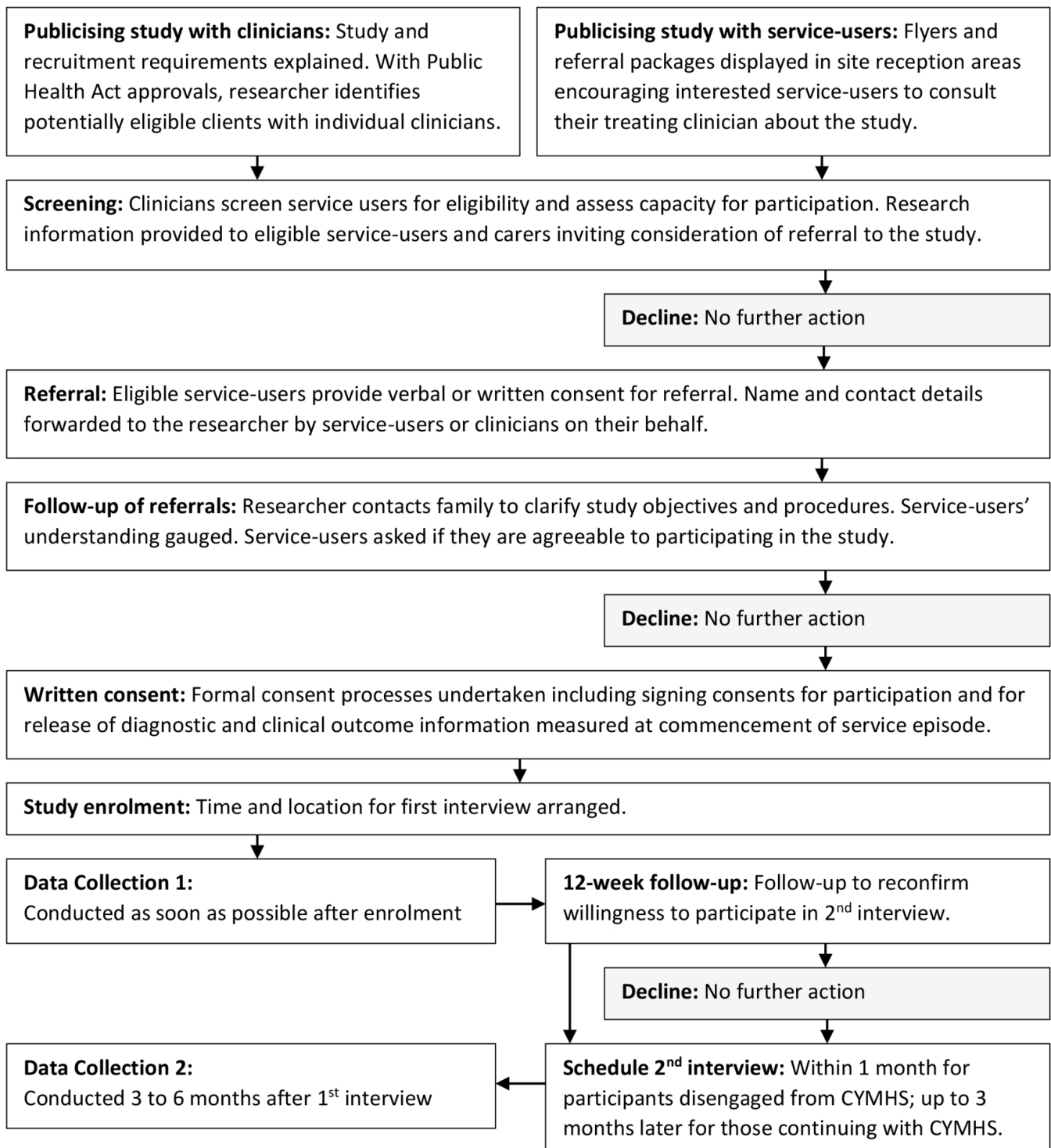
#### Box 1 Eligibility criteria for study participation

##### Inclusion criteria

- ▶ aged 12–17 years, inclusive
- ▶ engaged with CYMHS for up to 3 months in current service episode
- ▶ with a diagnosable mental disorder representative of those typically treated at CYMHS
- ▶ Children's Global Assessment Scale score of 70 or less
- ▶ clinically assessed as having adequate psychiatric and cognitive capacity for study participation
- ▶ sufficiently conversant in the English language to complete interview

##### Exclusion criteria

- ▶ consumers with primary neurodevelopmental or organic diagnoses or impairments



**Figure 1** Study recruitment process

‘true’ for the participant on a three-point scale (‘not’, ‘somewhat’ or ‘certainly’). Designed for 4–16-year olds but validated for use to age 19 years, the SDQ has a reported Cronbach’s  $\alpha$  of 0.82 for a score of total difficulties, demonstrating satisfactory internal reliability. With consent, participants’ SDQ scores collected by clinicians at treatment commencement are obtained from CYMHS to measure changes from treatment commencement

to timepoint 1. Selected because it is commonly used within services to evaluate change to quality of life, the BMSLSS<sup>41</sup> generates a single ‘satisfaction’ score on a continuous scale from 1 to 5 within each of five dimensions (family, friendship, school/work, self and living environment). Scores are summed to calculate overall life satisfaction. The BMSLSS demonstrates satisfactory psychometric qualities with Cronbach’s  $\alpha=0.76$ –0.85 in



## Box 2 Initial interview topic guide domains

### Recognising and experiencing onset of mental disorders

- ▶ When, how, what difficulties came to awareness (commence timeline)
- ▶ Understandings of causes, meanings attributed
- ▶ How the problems impacted them at home, school, community, relationships and vice versa

### Initial actions, disclosures or noticing

- ▶ Others' noticing (when, how, their actions/responses and what this meant to participant)
- ▶ Participant's actions, disclosures (how, when, responses by others, what this meant)
- ▶ What happened next? (continue timeline)

### Timing/decisions regarding accessing support

- ▶ When, how, by whom decisions were made about getting professional help
- ▶ What led to the decisions being made and what other alternatives were considered
- ▶ Initial feelings about these decisions (concerns, expectations associated with seeking support)

### Engagement with services

- ▶ Experience of accessing/engaging with services, where, when, why those
- ▶ Experience of initial processes (helpful/unhelpful processes or experiences)
- ▶ Suggestions for improvement

### Expectations

- ▶ Expectations and hopes regarding the difficulties, what might help
- ▶ Perception of others' expectations, personal reactions/responses to these
- ▶ Expectations of the future

### Change

- ▶ Perceived changes to date (if any) (how, when, under what conditions, in what contexts (home, school, neighbourhood, relationships))
- ▶ Perceived cause of changes (if any)
- ▶ Personal actions contributing to changes (if any)
- ▶ Effect of changes on self and relationships across home, school, neighbourhood settings

### Other pertinent issues

- ▶ Invitation to add other important ideas, experiences

normative samples<sup>42</sup> and  $\alpha=0.77$  for a clinical sample of 11–17 year olds.<sup>43</sup>

Audio recorded with permission, interviews last around 90 minutes. Following each interview, participants are offered a AU\$25 gift voucher to acknowledge their contribution.

## Data management and analysis

Dependent on type, data are managed and analysed using SPSS V.22 or NVivo V.10.

Following each interview, quantitative data are entered into SPSS.<sup>44</sup> Scores are calculated according to instrument guidelines. Within-case scores between treatment commencement and each interview timepoint are compared to identify clinical and reliable change. Results are described (eg. 'no change in social function', 'change from abnormal to normative range in emotional symptoms') then appended as a notated piece of data to the

participant's interview transcript relating to the relevant timepoint.

Interviews are transcribed verbatim. Along with timelines and notations about which picture cards are used, transcripts are uploaded to NVivo V.10<sup>45</sup> for storage and management. Prior to formal coding, each transcript is carefully read to identify chronology of events and important aspects related to them. A chronological summary of each case is made to track each participant's journey during the analytic process.

Combined data are then coded and analysed. As described by Corbin and Strauss,<sup>29</sup> analysis involves deconstructing, conceptualising and creatively reconstructing data in new ways, enabling development of new theories. Analysis in this study involves six iterative stages: (1) within-case analyses at timepoint 1; (2) cross case comparisons at timepoint 1; (3) within-case analyses at timepoint 2; (4) cross case comparisons at timepoint 2; (5) within-case analyses across timepoints incorporating chronology; (6) cross case comparisons across timepoints. Analysis at each stage involves systematic coding and constant comparative methods. Each transcript is segmented into units of meaning which are labelled descriptively. Concepts thus formed are examined in relation to each other, with similar concepts categorised according to more abstract themes and labelled to reflect their similarity. Subsequent interviews are coded using existing and newly generated codes as applicable. Comparisons between concepts and categories are made within and between cases, codes either added to existing categories or new categories developed. As interviews progress, dimensions and properties of each category are established to form distinct, richly described 'saturated' categories. Theory building then commences, moving from inductive interpretation of data to reasoned analysis of how the categories relate.

## Theory development

Strauss and Corbin's storyline approach will be used to construct and convey 'a descriptive narrative about the central phenomenon'.<sup>46(p116)</sup> The first step in theory building involves linking progressively developing categories chronologically and conceptually to form a storyline. Supporting theory formation, propositional statements are made regarding how categories relate, within which contexts, under what conditions and with what results (in context C, process A occurs resulting in experience B). Saturated categories are further examined to develop an understanding of the most salient issues and to identify a 'core' category or central storyline to which all other categories relate. Finally, the theory is situated contextually and boundaries are established. Theory development is regarded as complete when the conceptual framework forms a systematic theory that reasonably represents, in a manner appropriate to use, the phenomenon of interest.

## Rigour in analysis

Because qualitative research is inherently subjective,<sup>47</sup> the researchers' wise judgement and diligence are central to

the integrity of the product.<sup>48</sup> Credibility relies on presentation of analysis such that readers are persuaded of ‘the plausibility of interpretations’.<sup>49(p204)</sup> Rigour in GT involves ensuring adequacy and trustworthiness of the theory. In this study, rigour will be promoted in three interlinked ways: audit trail, critical dialogue among authors and checking understanding with participants as the theory develops. First, to enable others to follow the process of analysis, procedural and analytical decisions are documented, including theoretical sampling decisions and progression, and challenges to and resolution of hypothetical formulations.<sup>50</sup> Second, the analytical process is supported by dialogue between co-researchers who meet monthly during data collection and analysis phases of the research. Co-researchers act as critical friends, challenging the researcher to justify coding and analysis with reference to data, and test alternative explanations.<sup>50</sup> Corbin and Strauss<sup>51</sup> suggest that ‘opening up’ analyses for peer scrutiny helps guard against bias by promoting reflexivity. Third, to ensure that the theory remains grounded in data, the topic guide is refined to support exploration of developing categories, and tentative understanding of processes are checked with participants. Disconfirming data and exceptions are sought. Finally, ‘reflexivity’, self-awareness and metacognition regarding the researcher’s influence on the research process and its outcomes<sup>52</sup> are promoted by keeping a record of the researcher’s thoughts, reactions and feelings during data collection and analysis. This self-reflection assists in identifying assumptions and biases, and it provides opportunities to revise research questions and maintain openness to other possible interpretations of the data.

### Quality of the theory

There is consensus among proponents of GT that quality of the theory is first and foremost dependent on it being grounded in the data.<sup>24 26 37</sup> Dependent on approach and purpose, various other properties have been recommended as characterising a good theory. In this study, quality of the theory will be assessed on the basis of its fit, relevance, workability and usefulness.<sup>24 26</sup> ‘Fit’ is evidenced when categories and concepts relate to the data. Assessment of fit will be enabled by presenting data excerpts to illustrate concepts. Relevance relates to resonance of the theory<sup>26</sup> - the extent to which it ‘rings true’ to participants or others sharing their circumstances, eliciting an emotional response.<sup>53</sup> A workable theory explains and interprets what is happening in the process under investigation, accounting for any variation.<sup>24</sup> To enable assessment of workability, the storyline will be presented in diagrammatic and narrative form. Explanation of the storyline will include description of contexts and conditions within which events, actions or interactions occur. It will also describe the manner in which they vary, under which circumstances and with what consequences. Pragmatically, the ‘usefulness’ of the theory should be assessed in relation to its applicability, its suitability as a basis for making recommendations within everyday settings and

for generating discussion and further research.<sup>26</sup> Assessment of the theory’s usefulness will be aided by outlining study limitations and recommendations for future research. Recommendations for policy and practice will also be made.

## ETHICS AND DISSEMINATION

### Ethical considerations associated with this research

Researchers are obliged to balance participants’ rights against risks in research participation. Children and adolescents have the right to express their views on matters of relevance to them.<sup>54</sup> One way of doing this is through research participation. To promote their right to consider participation in this study, (1) young people have direct access to age-appropriate research information via displays in service reception areas, (2) the researcher engages proactively with clinicians to identify potential participants and (3) clinicians are encouraged to consider rights to research participation, thus not making decisions for the young person, for example, regarding their interest in the study.

Established protocols describe means of minimising risks in research participation for children and people experiencing mental disorders.<sup>55</sup> To maintain rights to privacy, potential participants are first approached by clinicians involved with their care. While clinicians are encouraged to invite all eligible service users to consider meeting the researcher, to minimise risk, clinicians consider possible impacts of research involvement and assess potential participants’ emotional capacity for participation before formally referring. On referral, research purposes and procedures are explained in age-appropriate language. The voluntary nature of the study and participants’ right to withdraw without consequence are emphasised. Confidentiality and its limitations are discussed with particular focus on duty of care and management of privacy (secure storage of information) and participants’ anonymity in presentation of results. Before inviting participation, potential participants are asked to describe in their own words what they are being asked to do and for what purpose. Participants provide consent in their own right, and co-consent is sought from parents/carers or another responsible adult familiar with the young person. During data collection, various strategies are employed to minimise power differentials. The researcher maintains focus on participants as experts in themselves and uses developmentally appropriate techniques during interviews, including use of participants’ expressions relating to their experiences. Participants may, at their discretion, invite a support person to accompany them during interview, on the understanding that the researcher will not ask questions of the support person.

It is possible that participants experience emotional discomfort while sharing personal stories. Should participants appear distressed, they are encouraged to take breaks or terminate the interview. If participants disclose risk of harm to self or others, duty of care in the

best interest of the young person takes precedence in line with the relevant professional code of ethics,<sup>56</sup> and issues of risk are referred, in consultation with the young person, to their clinician or carer. Participants expressing concerns about their mental well-being are referred to their treating team. A document detailing local, online and telephone mental health support options is also provided.

### Dissemination of results

The research will be reported as a PhD thesis and in various other formats, disseminated online through the University library, via workshops, conference presentations and published articles, summary reports to participating research sites and within clinical peer/student supervision forums. Participants will be offered a summary of research findings or links to publications. Research and Consumer/Carer Advocacy groups within participating districts will be offered a copy of relevant publications.

When reporting study processes and findings, the 32-item consolidated criteria for reporting qualitative research<sup>57</sup> checklist will be used to address three domains relating to research team and reflexivity, study design, and data analysis and reporting.

### DISCUSSION

To our knowledge, this is the first study using sequential interviews and GT methodology to deliver a theoretical explanation of adolescent recovery. The theory developed in this study will be based on the select experiences of a particular sample, within a particular sociopolitical context, and it is acknowledged that others may have differing experiences. However, this is balanced by acknowledgement that the theory is partial and grounded in data documenting adolescents' perspectives regarding recovery and care needs. The theory will contribute to a much needed conversation, and in line with a pragmatic foundation, could inform recommendations for health, educational and research organisations regarding (1) planning and delivery of care for adolescents in ways that are right for them, (2) development of age-appropriate recovery measures and (3) future research with adolescents experiencing mental disorders. The authors aim to improve care providers' capacity of to recognise and respond to young people's needs in a timely and effective manner.

**Acknowledgements** The authors would like to acknowledge the contributions of the young people who kindly provided feedback on data collection methods, content and materials prior to commencement of the study. The study team would also like to acknowledge the contributions of ethics, governance and data custodian administrators for providing guidance around required processes and procedures for the conduct of research within Queensland Health. The contributions of clinical staff for their involvement in recruitment to date are acknowledged. The contributions to research by the young people who have participated in the study to date are greatly appreciated.

**Contributors** All authors were responsible for the development and refinement of the protocol. LP wrote the draft and final manuscripts. SP provided substantial

intellectual input into informing methodology and provided overall review of structure. GB and AO contributed to critical review, editing and final approval of the version to be published.

**Funding** Funding has been provided via the Griffith University School of Applied Psychology PhD fund. No other grant has been received from public, commercial or not-for-profit sectors. Queensland Health has provided in-kind support to the study.

**Competing interests** None declared.

**Ethics approval** This study has been reviewed and approved by the National Health and Medical Research Council authorised Human Research Ethics Committees of Mater Health Services (Ref. HREC/14/MHS/208) and Griffith University Research (Ref. PSY/26/15/HREC). Governance approvals have been obtained from each site.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Open Access** This is an Open Access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>

© Article author(s) (or their employer(s) unless otherwise stated in the text of the article) 2017. All rights reserved. No commercial use is permitted unless otherwise expressly granted.

### REFERENCES

- Erikson EH. *Identity and the life cycle*. New York: Norton, 1980.
- Hoffnung M, Hoffnung RJ, Seifert KL, et al. *Lifespan development: a chronological approach*. 2nd edn. Milton, Qld: John Wiley & Sons Australia, 2013.
- Bradshaw CP, Brown JS, Hamilton SF. Bridging positive youth development and mental health services for youth with serious behavior problems. *Child Youth Care Forum* 2008;37:209–.
- Hickie IB. Youth mental health: we know where we are and we can now say where we need to go next. *Early Interv Psychiatry* 2011;5(Suppl 1):63–9.
- Patel V, Flisher AJ, Hetrick S, et al. Mental health of young people: a global public-health challenge. *Lancet* 2007;369:1302–13.
- Royal Australian & New Zealand College of Psychiatrists. *Position statement 63: the prevention and early intervention of mental illness in infants, children and adolescents*: The Royal Australian & New Zealand College of Psychiatrists, 2010.
- Markowitz FE. Modeling processes in recovery from mental illness: relationships between symptoms, life satisfaction, and self-concept. *J Health Soc Behav* 2001;42:64–79.
- Hansson L. Determinants of quality of life in people with severe mental illness. *Acta Psychiatr Scand* 2006;113(s429):46–50.
- Gulliver A, Griffiths KM, Christensen H. Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC Psychiatry* 2010;10:113.
- Rickwood DJ. Promoting youth mental health: priorities for policy from an Australian perspective. *Early Interv Psychiatry* 2011;5:40–5.
- Lawrence DL, Johnson S, Hafekost J, et al. *The Mental Health of Children and Adolescents: report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing*. Canberra, 2015.
- Kim H, Munson MR, McKay MM. Engagement in mental health treatment among adolescents and young adults: a systematic review. *Child Adolesc Social Work J* 2012;29:241–66.
- Australian Government. *National Standards for Mental Health Services*. Canberra: Commonwealth of Australia, 2010.
- Ministers AH. *National Mental Health Plan 2003–2008*. Canberra: Australian Government, 2003.
- Council of Australian Governments. *The Roadmap for National Mental Health Reform 2012–2022*. Canberra: Australian Government, 2012.
- Australian Health Ministers' Advisory Council. *National Framework for Recovery Oriented Mental Health Services: policy and theory*. Canberra: Commonwealth Government, 2013.
- Anthony WA. Recovery from mental illness: the guiding vision of the mental health service system in the 1990s. *Psychiatr Rehab J* 1993;16:11–23.
- Deegan PE. The importance of personal medicine: a qualitative study of resilience in people with psychiatric disabilities. *Scand J Public Health Suppl* 2005;66:29–35.



19. Leamy M, Bird V, Le Boutillier C, *et al.* Conceptual framework for personal recovery in mental health: systematic review and narrative synthesis. *Br J Psychiatry* 2011;199:445–52.
20. Australian Health Ministers' Advisory Council. *A National Framework for Recovery Oriented Mental Health Services: guide for Practitioners and Providers*. Canberra: Commonwealth of Australia, 2013.
21. Mitchell AJ, Selmes T. Why don't patients attend their appointments? maintaining engagement with psychiatric services. *Adv Psychiatr Treat* 2007;13:423–34.
22. King R, Bambling M, Lloyd C, *et al.* Online counselling: the motives and experiences of young people who choose the internet instead of face to face or telephone counselling. *Counselling and Psychotherapy Res* 2006;6:169–74.
23. Simonds LM, Pons RA, Stone NJ, *et al.* Adolescents with anxiety and depression: is social recovery relevant? *Clin Psychol Psychother* 2014;21:289–98.
24. Glaser BG, Strauss AL. *The Discovery of Grounded Theory*. Chicago: Aldine, 1967.
25. Haig BD. Grounded theory as scientific method, 1995. <http://www.ssnpstudents.com/wp/wp-content/uploads/2015/02/Haig-Grounded-Theory-as-Scientific-Method.pdf>. (accessed 16 Nov 2014).
26. Charmaz K. *Constructing Grounded Theory: a practical guide through qualitative analysis*. London: Sage Publications, 2006.
27. Lingard L, Albert M, Levinson W. Grounded theory, mixed methods, and action research. *BMJ* 2008;337:a567.
28. Creswell J. *Qualitative Inquiry and Research Design: choosing among five traditions*. Thousand Oaks, CA: Sage Publications, 1998.
29. Corbin JM, Strauss A. *Basics of qualitative research*. 3rd edn. Thousand Oaks, CA: Sage, 2008.
30. Richard R. *Philosophy and the Mirror of Nature*. Princeton, New Jersey: Princeton University Press, 1979.
31. Charmaz K. Grounded theory: objectivist and constructivist methods. In: Denzin N, Lincoln Y, eds. *Handbook of qualitative research*. 2 ed. Thousand Oaks, CA: Sage, 2000:509–35.
32. Queensland Mental Health Commission. *Improving Mental Health and Wellbeing: the Queensland Mental Health, Drug and Alcohol Strategic Plan 2014-2019*. Brisbane: Queensland Government, 2014.
33. Patton MQ. *Qualitative evaluation and research methods*. 2nd edn. Thousand Oaks, CA: Sage, 1990:532.
34. Leavey JE. Youth experiences of living with mental health problems: emergence, loss, adaptation and recovery (ELAR). *Can J Commun Ment Health* 2005;24:109–26.
35. Kvale S, Brinkmann S. *InterViews: learning the craft of qualitative research interviewing*. 2 ed. Thousand Oaks, CA : Sage, 2009.
36. Eder D, Fingerson L. Interviewing children and adolescents. In: Gubrium JF, Holstein JA, eds. *Handbook of Interview Research*. Thousand Oaks, CA: Sage, 2001:181–202.
37. Strauss A, Corbin C. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 2 ed. Thousand Oaks, CA: Sage, 1998.
38. Marland G, McNay L, Fleming M, *et al.* Using timelines as part of recovery-focused practice in psychosis. *J Psychiatr Ment Health Nurs* 2011;18:869–77.
39. Deal R. Ups and Downs: sailing on Life's Billowing Ocean: Innovative Resources. 2009. <http://innovativeresources.org/?s=ups+and+downs>. (accessed 05 Oct 2016).
40. Goodman R. The strengths and difficulties questionnaire: a research note. *J Child Psychol Psychiatry* 1997;38:581–6.
41. Seligson JL, Huebner ES, Valois RF. Preliminary validation of the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS). *Soc Indic Res* 2003;61:121–45.
42. Huebner ES, Seligson JL, Valois RF, *et al.* A review of the brief multidimensional students' life satisfaction scale. *Soc Indic Res* 2006;79:477–84.
43. Athay MM, Kelley SD, Dew-Reeves SE. Brief Multidimensional Students' Life Satisfaction Scale-PTPB Version (BMSLSS-PTPB): psychometric properties and relationship with mental health symptom severity over time. *Adm Policy Ment Health* 2012;39(1-2):30–40.
44. *IBM SPSS Statistics for Windows [program]. 22.0 version*. Armonk, NY: IBM Corp, 2013.
45. *NVivo Qualitative Data Analysis Software [program]. 10 version*. 2014.
46. Strauss AL, Corbin JM. *Basics of Qualitative research: grounded theory procedures and techniques*. Newbury Park, CA: Sage, 1990.
47. Hoepfl MC. Choosing qualitative research: a primer for technology education researchers. *Journal of Technology Education* 1997;9.
48. Polkinghorne DE. An agenda for the second generation of qualitative studies. *Int J Qual Stud Health Well-being* 2006;1:68–77.
49. Foster JJ, Parker I. *Carrying out investigations in psychology: methods and statistics*. Leicester: British Psychological Society, 1995.
50. Lincoln YS, Guba EG. *Naturalistic Inquiry*. Newbury Park, CA: Sage, 1985.
51. Corbin JM, Strauss A. Grounded theory research: procedures, canons, and evaluative criteria. *Qual Sociol* 1990;13:3–21.
52. Hall WA, Callery P. Enhancing the rigor of grounded theory: incorporating reflexivity and relationality. *Qual Health Res* 2001;11:257–72.
53. Corbin J, Strauss A. *Basics of qualitative research: techniques and procedures for developing grounded theory*. 4 ed. London: Sage, 2015.
54. Schenk K, Williamson J. *Ethical approaches to gathering information from children and adolescents in international settings: guidelines and resources*. Washington, DC: The Population Council, 2005.
55. National Health and Medical Research Council. National Statement on Ethical Conduct in Human Research 2007 (updated May 2015). <https://www.nhmrc.gov.au/book/section-4-ethical-considerations-specific-participants>. (accessed Oct 2016).
56. Society AP. *Code of ethics*. Melbourne, Vic: Australian Psychological Society, 2007.
57. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007;19:349–57.