

Learning From the Field: Reflections on the Use of Theory, Mixed Methods and Case Study Design to Explore Implementation and Experience in Mental Health Crisis Services for Children and Young People

Journal of Mixed Methods Research

2026, Vol. 0(0) 1–18

© The Author(s) 2026



Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/15586898261494286

journals.sagepub.com/home/mmr

Ben Hannigan¹ , Clare Bennett^{1,2,3}, Leanne Sawle¹ , Claire Fraser⁴,
Jessy Williams^{1,5}, Aled Jones⁶, Steven Prymachuk⁴, Mair B. Elliott⁷,
Martin Elliott⁸, Nicola Bennett¹, Euan Hails⁹, Iain McMillan¹⁰, and
Rachael Vaughan⁸

Abstract

This article arises from a theory-informed, sequential, mixed methods project which combined a survey and multiple nested case studies to examine implementation and experience in the context of mental health crisis services for children and young people in England and Wales. Its primary contribution to mixed methods research is to show how theory, mixed methods and case studies can be practicably brought together to improve understanding of complex interventions introduced into complex systems. It makes a further contribution through a reflective exploration of the implementation of mixed methods research in sensitive fields involving vulnerable groups, by specifically exploring: participation and engagement; and fieldwork flexibility, power and control.

¹School of Healthcare Sciences, Cardiff University, Cardiff, UK

²Health Innovation West Midlands, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK

³Richard Wells Research Centre & College of Nursing Midwifery & Healthcare, University of West London, London, UK

⁴School of Health Sciences, The University of Manchester and Manchester Academic Health Science Centre (MAHSC), Manchester, UK

⁵School of Geography, Earth and Environmental Sciences, University of Plymouth, Plymouth, UK

⁶School of Nursing and Midwifery, University of Plymouth, Plymouth, UK

⁷Independent Consultant, Wales, UK

⁸CASCADE, School of Social Sciences, Cardiff University, Cardiff, UK

⁹Aneurin Bevan University Health Board, Newport, UK

¹⁰Vale of Glamorgan Council, Barry, UK

Corresponding Author:

Nicola Bennett, School of Healthcare Sciences, College of Biomedical and Life Sciences, Cardiff University, Ty'r Garth, Heath Park West, St Agnes Road, Cardiff, CF14 4DN, UK.

Email: bennettng@cardiff.ac.uk

Keywords

children and young people's mental health crisis care, complex systems, implementation, survey and case study, theory-informed sequential mixed methods design

Introduction

Methodological advances in recent years have included examinations of how mixed methods and case studies can be brought together (Guetterman & Fetters, 2018; Plano Clark et al., 2018). In this article, our primary contribution is to extend this field of scholarship by showing how theory can be added to this combination, in workable fashion, as a key component within studies seeking to improve understanding of implementation and experience. Through a series of methodological, ethical and practical reflections, we make a further contribution by addressing the two areas of participation and engagement, and fieldwork flexibility, power and control as these particularly arise in the context of research in sensitive fields involving vulnerable groups of participants. These reflections are derived from our experiences conducting a theory-informed, sequential, mixed methods project which combined a survey and multiple nested case studies in the area of young people's mental health crisis care. We close by drawing lessons for researchers concerned, as we have been in this exemplar project, with the mixed methods investigation of complex interventions organised and provided through complex systems.

As part of the wider methodological background to this article is the general observation that study designs have, over the years, become increasingly diverse as researchers have blended methodologies and methods in response to the specific demands posed by their questions (Poth et al., 2023). More than one philosophical foundation for this eclecticism can be found (Creswell & Plano Clark, 2018), although both 'strong' and 'weak' versions of pragmatism have found particular favour over the years (Biesta, 2010). Whilst definitions of 'mixed methods research' vary and have evolved, common to most are the collection and analysis of quantitative and qualitative data within a design which supports their integration (Creswell & Plano Clark, 2018). In the health and care setting, this being the field from where we draw our reflections, compelling practical arguments have been proposed for research of this type as a way of producing evidence of sufficient depth needed for the improvement of services and practice (Doyle et al., 2009; Tariq & Woodman, 2013; Wasti et al., 2022).

Choreographing Theory, Design and Methods to Improve Understanding of Implementation and Experience in Complex Systems

Our primary methodological contribution, introduced in this opening section, is to show how a priori theoretical commitments, when added to mixed methods and case study design in practicable ways, are able to support improved understanding of implementation and experience in complex systems.

Introducing CAMH-Crisis2: A Sequential Design Combining a Survey and Multiple Case Studies

Mixed methods approaches are increasingly used in the mental health field (Demkowicz et al., 2025), and in this article we develop our analysis with reference to an illustrative mental health implementation research project known as CAMH-Crisis2. This received funding from the UK's National Institute for Health and Care Research for a period of 30 months from the start of

November 2022 to the end of April 2025 (National Institute for Health and Care Research, 2022). With its focus on mental health crisis care for children and young people it is in a substantively important field (Schnittker, 2025) with youth health and wellbeing now a matter of global concern (Clark et al., 2020). Evidence of increasing distress in this population (Analytical Services Population Health Clinical Audit & Specialist Care Team, 2023) helps explain the urgency with which governments around the world are issuing policy and guidance in this area (Evans et al., 2023), with our argument for project funding pointing to the paucity of UK evidence to support the development of services.

The detail of our funded, overall, project plan has previously been published (Bennett et al., 2023), but in essence CAMH-Crisis2 combined three discrete units of research activity, or ‘work packages’ (WPs), each designed to meet a single objective. Reproduced in full, these three objectives were as follows:

- (1) To describe and map National Health Service (NHS), local authority, education and third sector approaches to the implementation and organisation of crisis care for children and young people across England and Wales.
- (2) To identify eight contrasting case studies in which to evaluate how crisis services have developed and are currently organised, sustained, experienced and integrated within the context of their local systems of services.
- (3) To compare and contrast these services in the context of the available international evidence, drawing out and disseminating clear implications for the design and delivery of future crisis responses for children and young people and their families.

To meet these objectives, informed by the non-partisan, pragmatic, view that it is possible to overstate the paradigmatic differences between qualitative and quantitative research styles (Bryman, 1988), we elected for the logical use of a theory-informed sequential mixed methods design combining a survey followed by multiple nested case studies. Not all research problems are best solved using mixed methods (Creswell & Plano Clark, 2018), but features of CAMH-Crisis2 made it a good fit for a combinatory approach of this type. Our prior knowledge that very limited evidence exists relating to the shape and characteristics of crisis care for children and young people in the UK (Evans et al., 2023) informed the first objective, and to meet this in WP1 a database of services was created and a survey developed with questions reflecting both the project’s theoretical foundations and its substantive concern to examine how crisis care is organised. Following an analysis of survey returns and the creation of a typology of approaches to provision, in WP2, to meet the second objective, eight contrasting crisis services were sampled from WP1 responses. Each was treated as a separate case study, with the larger part of fieldwork in each involving the generation of detailed interview data with staff, family members and with children and young people. The analysis of how crisis care was implemented, and experienced by those using crisis services, proceeded on a within-case basis in WP2 ahead of a cross-case synthesis of findings in WP3 helping inform the creation of a series of principles designed to influence the future commissioning and provision of care.

The sequential relationship between these three WPs, and the junctures where underpinning theory was integrated within the project’s design and methods, are summarised in Figure 1. As this shows, theory informed all three WPs, with the strategies through which this was accomplished examined further below. Mixed methods data integration occurred in WP2, with interview and documentary data (where available) being combined with survey data collected in WP1 to inform analyses of each case study’s approach to provision, the work being done to implement this and the service’s sustainability, and experiences of care. Integration was also at the heart of WP3, where data from all parts of the project were brought together with information

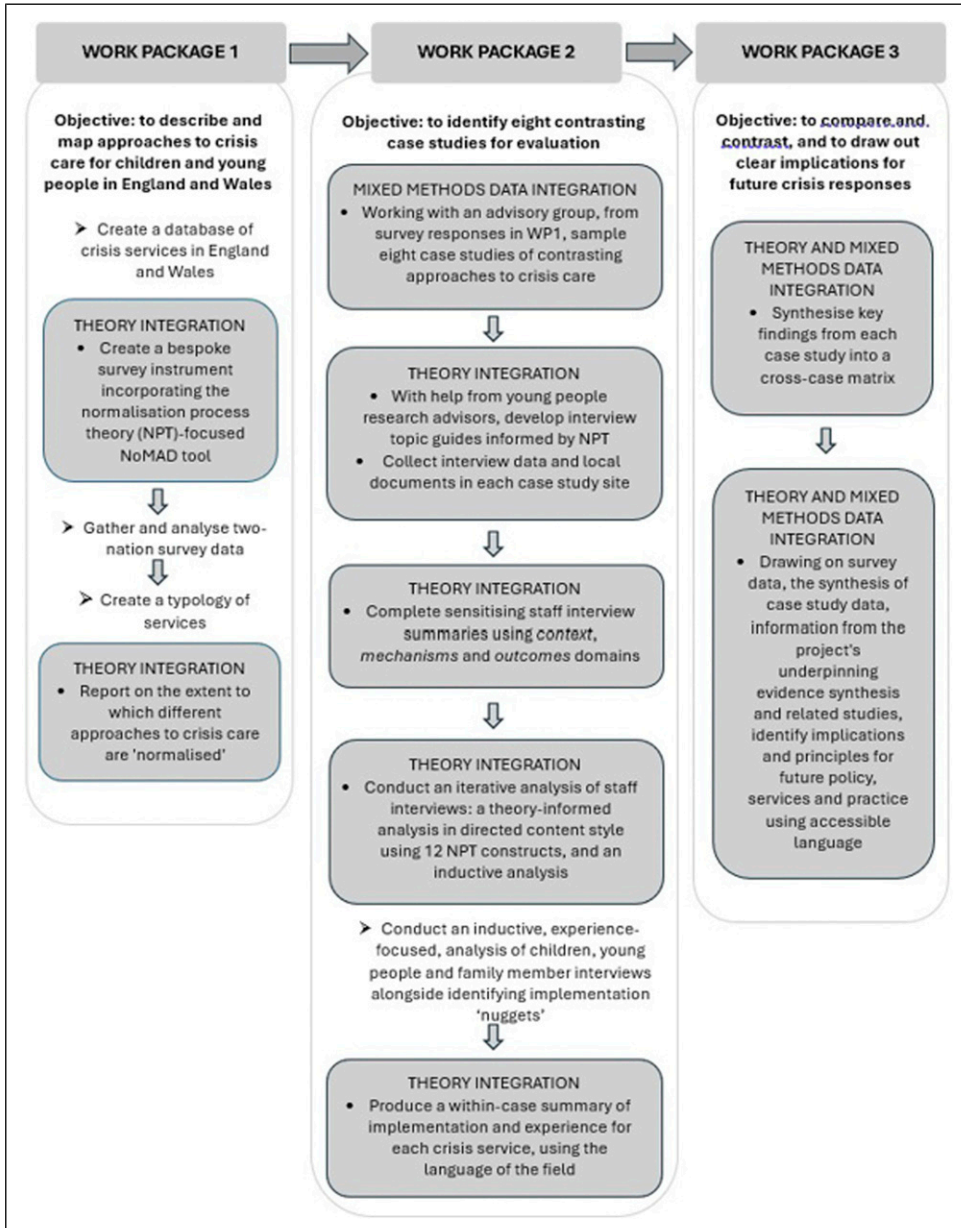


Figure 1. CAMH-Crisis2: a theory-informed, sequential, mixed methods project examining complex interventions in complex systems

from the project's underpinning evidence synthesis to inform implications and principles for policy, services and practice in the field.

We report in full on our substantive findings in companion articles (Bennett et al., 2025, 2026), and thus confine ourselves in this paper to only including sufficient detail of what we found to meaningfully illustrate the methodological and related reflections we advance. Data collection in WP1 and WP2 sequentially ran from January 2023 through to January 2025. In WP1, by the close

of this part of the project (February 2024) usable survey responses had been received from staff in 124 distinct services across all parts of England and Wales. In WP2, for which permission to commence data collection was given in May 2023 and for which fieldwork concluded in January 2025, a total of 137 interviews were conducted across all eight case studies. Of these, 25 were with children and young people, 25 were with parents or carers, and the remainder were with staff occupying a variety of roles in their local systems of care.

Making a Methodological Contribution: Adding Theory to the Mix in CAMH-Crisis2

Theories are useful, with what Merton (1968) refers to as theories of the middle range being particularly helpful in connecting abstraction with empirical investigation in discrete spheres of inquiry. In CAMH-Crisis2, a constellation of ideas underpinned our project from its inception, with important implications for research design and for the approaches taken to the generation and analysis of data as summarised in Figure 1 and explored in detail below. A foundational proposition was that organised responses to mental health crisis in children and young people are (as we put it in our protocol) ‘examples of complex interventions introduced into complex systems’ (Bennett et al., 2023). Urry (2005) refers to a generalised and cross-disciplinary ‘complexity turn’, and our formulation of ‘complexity’ reflects significant advancements in the conceptualisation of ‘complex interventions’ since the publication, almost two decades ago, of the UK Medical Research Council (MRC)’s widely cited guidance in this area (Craig et al., 2008). As an influential example of theory development, writing particularly about upstream initiatives intended to prevent poor health, Hawe et al. (2009) invoke the idea of interventions as critical occurrences in interrelating, networked, ecologies. Moore et al. (2019) extend this thinking by referring to interventions as events in complex social systems, and, in so doing, make links to a wider body of theorising which embraces ideas such as emergence, non-linearity, interconnectedness and unpredictability. With their multiple moving parts, health and care environments are now frequently referred to as exemplars of system complexity (Braithwaite et al., 2017). It is therefore significant in this context how a recent framework updating the MRC’s earlier guidance reflects this wider turn towards a more expansive view of ‘complexity’, placing added weight in the development and evaluation of complex interventions on the features of the system within which innovations are introduced (Skivington et al., 2021).

Scholars of research methodology have explored how mixed methods can congruently be used to investigate complex systems and the processes of change which take place within these (Kallemeyn et al., 2020). In CAMH-Crisis2, reflecting our key, whole-project, concern to understand how crisis responses are introduced, sustained and experienced, we built on our conceptualisation of crisis services for children and young people as examples of complex interventions introduced into complex systems by turning to the emerging field of implementation science to help further frame both our ideas and our methods. Implementation science centres on the study of how evidence is adopted for the improvement of quality and effectiveness in health and care services (Eccles & Mittman, 2006), and is an area of scholarship notable for its receptivity to the development and deployment of theory (Wang et al., 2023). It is also a methodologically diverse field, in which studies have demonstrated the use of experimental, quasi-experimental, observational, hybrid effectiveness-implementation, simulation modelling, configurational comparative methods, and more (Hwang et al., 2020). In mental health implementation research, this being the field within which our exemplar project is situated, a particular case has been made for the use of qualitative methods (Hamilton & Finley, 2019).

Normalisation process theory (NPT), as a discrete set of concepts and tools within the implementation science domain, serves as an aid to understanding how new ideas and ways of working take hold and become sustained (or indeed, fall away) as part of everyday practices (May

et al., 2020). In recent years in the UK, teams and services with responsibilities to meet urgent and emergency mental health need in children and young people have grown in number (Royal College of Psychiatrists, 2025), with national guidance on their form and function lagging (NHS England, 2024). This rapid addition of organised crisis responses to the health and care system made NPT, with its focus on the work which is done to introduce, embed and maintain interventions, a logical choice as a theoretical framework to integrate with our design and methods in CAMH-Crisis2. As used by project team members in earlier studies (Jones et al., 2022), NPT initially arose from observations surrounding the introduction of telemedicine before evolving into a developed, mid-range, social scientific theory focused on individual and collective action (May & Finch, 2009). Over time, NPT as a set of ideas and tools has, itself, become ‘normalised’ in having been used to frame the study of how new interventions are implemented in a wide variety of health and other settings, using a range of research approaches (May et al., 2018, 2025; McEvoy et al., 2014).

Normalisation process theory continues to evolve. Earlier iterations faced critique for their tendency to focus the attention of researchers solely on the individual and collective activities of local actors engaged in implementation processes at the expense of adequately accommodating the shaping effects of the wider policy and organisational environment (Clarke et al., 2013). In CAMH-Crisis2, our conceptualisation of crisis responses as complex interventions introduced into complex systems sensitised us to the importance of understanding these larger, surrounding, features. Here, we were helped by a recent theoretical refinement to NPT explicitly supporting explorations of the *implementation contexts* for interventions, and of *implementation outcomes*, alongside the foundational *implementation mechanisms* through which individuals and groups introduce and sustain new practices (May et al., 2022). As currently articulated, and as deployed in our study, NPT now comprises three larger domains each of which contains four constructs, as is summarised in Table 1.

Making a Methodological Contribution: Connecting Theory, Design and Methods in Practicable Ways

For researchers interested in theory, decisions need to be made over the relationships and the choreography between methods, data, and the concepts which are deployed and/or developed (MacFarlane & O'Reilly-de Brún, 2012). In order that theory is able to function as a useful tool, decisions also need to be made relating to what May et al. (2020) refer to as the workable integration of theory with the acts of creating, analysing and presenting data. For example, in the case of the normalisation of new practices, in their everyday talk and action people tasked with implementation will not routinely use the language of NPT. This makes the translation of concepts into understandable, usable, words a necessary part of the process of generating theory-informed data and, later on in the life of a study, an important consideration when presenting findings in language which resonates with that used in the field of inquiry.

In WP1, our survey development and our building of a database of services to which our final survey could be sent were helped by team members' prior experiences in a closely related project (Prymachuk et al., 2024), the insights of an externally chaired advisory group comprising academics, practitioners and managers with interests and expertise in young people's mental health care, and our underpinning evidence review (Evans et al., 2023). We included questions relating to the characteristics of crisis services, their organisation, and the features of service user populations. Critically, to practicably cement our specific theoretical interest in the implementation of crisis care, we also included the Normalisation Measure Development (NoMAD) tool in our survey (Finch et al., 2018; Rapley et al., 2018). This is a free-to-use, NPT-informed, validated 23-item questionnaire which seeks to improve understanding of how complex

Table 1. An overview of normalisation process theory (May et al., 2022), as also reproduced in Bennett et al. (2026)

Implementation contexts (how interventions are shaped by their environment)		Implementation mechanisms (the collaborative work of enacting interventions)			Implementation outcomes (the impact of implementation)	
Strategic intentions	How contexts shape the formulation and planning of interventions	Coherence building	How people work together to understand and plan activities to put the intervention into practice	Intervention performance	Practices that have changed as a result of the intervention	
Adaptive execution	How contexts affect how users can find and enact workarounds to make intervention workable	Cognitive participation	How people work together to create networks or communities of practice	Relational restructuring	How the intervention has changed the way people are organised and relate to each other	
Negotiating capacity	Extent to which the intervention can fit or be integrated into existing ways of working	Collective action	How people work together to enact the intervention	Normative restructuring	Impact of intervention on norms, rules and resources that govern action	
Re-framing organisational logics	How existing social structural and cognitive resources shape the implementation environment	Reflexive monitoring	How people work together to appraise interventions	Sustainment (normalisation)	How interventions become incorporated into practice	

interventions are integrated in health care contexts from the perspective of those who are involved in their implementation. Individual items in NoMAD reflect the four implementation mechanism constructs found in NPT (summarised in [Table 1](#)) along with their sub-constructs, and are scored using a five-point Likert scale. In CAMH-Crisis2, following guidance on the tool's use, items were customised to reflect the context for the study ([May et al., 2015](#)). To illustrate this process with an example, respondents were invited to indicate their relative agreement or disagreement with these two 'coherence' construct items: 'I can see how crisis care for children and young people differs from usual ways of working', and 'staff in this service have a shared understanding of the purpose of crisis care for children and young people'.

Substantive findings from this first phase of our project, which include the observation that crisis services are remarkably heterogeneous in both their form and the interventions they offer, can be found in [Bennett et al. \(2025\)](#). In addition to meeting objective 1 in our project and producing findings of value in themselves, our selection of a survey method in this first phase of work logically reflected the sequential design ([Creswell & Plano Clark, 2018](#)) summarised in [Figure 1](#), and the plan to use survey responses to inform the careful selection of contrasting cases for our subsequent, second, package of work. Informed by primers supporting both novice and experienced investigators ([Stake, 1995](#); [Yin, 2018](#)) the detailed study of cases is well-established in the social sciences, but in health and care research the examination of cases, with or without the use of mixed methods of data generation and/or analysis, was initially slower to arrive ([Crowe et al., 2011](#)). Recent methodological scholarship has advanced appreciation of the ways in which mixed methods and case study approaches might be brought together in projects like CAMH-Crisis2, where the research challenge is to explore multifaceted and complex social phenomena ([Plano Clark et al., 2018](#)). Our design nested our multiple case studies within the project overall, making it an example of what [Guetterman and Fetters \(2018\)](#) call a 'mixed methods-case study' as opposed to a 'case study-mixed methods' (where the parent case study includes a nested mixed methods element).

In the second work package of our project, case study selections were informed by discussions with our project's advisory groups and involved inevitable trade-offs given that not all services taking part in our WP1 survey could participate in a subsequent in-depth exploration. Our aim was to sample for variation, beginning with a recognition of the importance of sampling across a range of crisis responses as summarised in our typology created from our survey returns. Selection was also informed by the need to include cases in geographically distinct locales in both England and Wales, and in settings where differences could be found in the populations served. Following an approach used in earlier studies involving members of the current team ([Coffey et al., 2019](#); [Simpson et al., 2016](#)), in the context of health and social care policy devolution ([Hannigan, 2022](#)), CAMH-Crisis2 therefore afforded an opportunity to establish the points of similarity and difference in the wider, structural, environment for young people's mental health care across the two nations. We selected cases in tranches, and by the close of fieldwork had collected data in geographically distinct services offering a non-residential safe haven, community in-person rapid responses, emergency mobile support, combined in-person community and hospital responses, remote provision, and residential services.

In each case we sought documentary data (such as service specifications) and conducted in-depth interviews with key actors in the local system. Additional methods of data generation, including ethnographic observations, were beyond the scope of the project particularly given the resource implications of attempting these in dispersed settings. Interviewees included commissioners, service managers and crisis care practitioners and had a clear focus on implementation. Reflecting [May et al. \(2020\)](#)'s observations on the importance of combining theory with methods in workable ways, our practical strategy for incorporating an NPT-informed focus in our interviews was to craft topic guides which reflected the language used by staff whilst

simultaneously incorporating our concern with understanding implementation processes. Our interviews, then, wore theory lightly. For example, to understand what NPT refers to as the ‘coherence’ of new ways of working, participants were invited to consider how well they felt the aims of crisis care were understood across services, and to understand ‘cognitive participation’ they were asked to talk about team ‘buy-in’ in terms of achieving the aims of a crisis response.

We also conducted interviews with children, young people and family members with the aim of using these data to better understand individuals’ experiences of crisis care. This focus on experiences per se was an essential part of our project overall, connected but also distinct from our parallel concern to understand what staff did to implement crisis care in their areas, and our formal presentation of findings in our companion articles is giving appropriate prominence to what people using crisis services said. During data generation, topic guides used with children, young people and family members focused on accessing and using crisis services.

Our analyses of case study data, in the first instance, stayed close to the particularities of each case (Ayres et al., 2003). This was to support the production of detailed accounts of implementation and experience in each with reference to overarching national contexts, but not with reference to each other. As with our approach to data generation, our strategy for data analysis in WP2 was theory-informed. Our analysis plan included using case-specific documents and reports as sources of useful contextual information. For interviews conducted with members of staff, initial sensitising reflections were recorded using the broad domains of ‘context’, ‘mechanism’ and ‘outcomes’. With the help of the qualitative data analysis software package NVivo (Lumivero, 2017) we closed the gap between theory and data by using the 12 NPT constructs summarised in Table 1 as codes applied to staff interview transcripts in a directed content, or framework, analytic style (Hsieh & Shannon, 2005; May et al., 2022). We also created codes in reflexive inductive style (Braun & Clarke, 2022) to capture phenomena of interest which were not adequately captured using the NPT framework. This inductive analytic approach was also used with the transcripts of interviews conducted with children, young people and family members given our clear focus on understanding their experiences of crisis care. Where these interview data additionally yielded what we referred to as ‘nuggets of information’ about how crisis care was being implemented we included these in our implementation-focused analyses. Our final step in WP2 involved summarising and synthesising findings within each case. Working in an iterative abductive style (Alvesson & Sköldbberg, 2018), we generated NPT-informed themes grounded in our synthesis of staff data and the ‘nuggets’ identified from our analysis of interviews conducted with children, young people and family members. We produced thematic summaries of our inductive analyses of experience data, and summarised key overall findings for each case in a matrix (Miles et al., 2020) using a theory-informed ‘context’, ‘mechanism’ and ‘outcomes’ framework (May et al., 2022).

Finally, cross-case synthesis and the identification and dissemination of whole-project implications for future policy, services and practice was the focus of our project’s third and final package of work. Here, we first created a matrix summarising ‘context’, ‘mechanism’ and ‘outcomes’ across all cases. We used this, plus findings from our earlier evidence synthesis (Evans et al., 2023) and information from other NPT-informed mental health studies, to inform the creation of a set of principles intended to guide future commissioning, services and practice in the context of crisis care for children and young people. Our tailored summaries produced for each site, our short whole-project briefing and an animation, were produced in accessible language for use by people working in, and using, crisis services.

Findings from our second and third work packages are reported in [Bennett et al. \(2026\)](#). Employing a theory-informed sequential design combining a large-scale survey and subsequent case studies allowed us to develop nuanced understandings of how mental health crisis care for children and young people is implemented and experienced, and to advance principles for future services. Summarised, these relate to accessibility; support in navigating complex systems; clarity on the crisis care offer; expertise and interpersonal skills; targeted services; continuity; flexibility balanced with stability; and service integration. Over the lifetime of our project, our fieldwork experiences also brought opportunities for reflection and learning as these relate to the work of generating and using data in a complex, sensitive, field with vulnerable groups of participants. In the second part of this paper which follows, we turn to some of the ethical and practical challenges faced along with our responses.

Conducting Mixed Methods Research in Sensitive Fields Involving Vulnerable Groups of Participants

Here we reflect on our fieldwork experiences in two broad areas as they relate to mixed methods research in complex systems involving vulnerable groups: participation and engagement; and fieldwork flexibility, power and control.

Participation and Engagement: Involving Young People as Research Collaborators

Within mixed methods scholarship significant attention is being paid to the transformational potential of research which is done *with*, rather than *to*, populations which are vulnerable and seldom heard ([Gómez, 2014](#); [Poth & Mertens, 2023](#)). As part of a wider trend towards partnerships and collaboration, for health and care researchers in the UK values-driven standards are available to guide public involvement and engagement ([National Institute for Health and Care Research et al., 2019](#)). From our earliest planning onwards in CAMH-Crisis2 we recognised the importance of working with young people and family members to shape the development of our project. Building on the team assembled for our underpinning evidence synthesis, which had included members with lived experience ([Evans et al., 2023](#)), the funded CAMH-Crisis2 team included a young person with experience of mental health service use and of activism, a carer with family experience of services, and the engagement manager for children, young people, parents and carers at the Children's Social Care Research and Development Centre (CASCADE) at Cardiff University, UK. Young people's involvement in this centre is organised through a research advisory group, CASCADE Voices, run in collaboration with Voices From Care Cymru ([CASCADE: Children's Social Care Research and Development Centre, nd](#)) and in CAMH-Crisis2 funding included resources to pay members of CASCADE Voices for the work they did to support the project.

Young people's engagement in mental health research takes many forms ([McCabe et al., 2023](#)), and in our preparations ahead of applying for research ethics committee approval for our case study component we involved project members and young people as members of CASCADE Voices in a number of ways. These included: in the design of interview topic guides and the development of fieldwork strategies appropriate to the involvement of young people as participants; in the creation of age-appropriate participant information sheets; and in the production of related young people-facing materials including videos outlining our project and what participation involved. As we show below, to overcome challenges associated with the engagement of children, young people and family members as interview participants we returned to these same CASCADE Voices research advisors over the lifetime of our study to inform important project adjustments.

Fieldwork Flexibility, Power and Control: Ethics and Practice in Mixed Methods Research Involving Children, Young People and Families

During our preparations for, and our conduct of, fieldwork in the case study component of CAMH-Crisis2 we recognised how our project raised a number of important ethical and relational issues. In studies with children and young people power typically rests with adult researchers, who determine the questions to be asked, control the data which are generated, and manage the ways in which findings are produced and communicated (Davidson, 2017). We were also alert to the existence of multiple barriers to participation in mental health studies, including stigma and perceived threats to identity (Sheridan et al., 2020), and understood that not all people who have been in crisis, or who have cared for others during periods of great distress, will necessarily be inclined to talk to strangers about their experiences of service use. Indeed, during fieldwork a reluctance on the part of young people to take part in our study was reported to us by some of the practitioners we worked with in our case study services.

Participatory approaches may help address some of these power imbalances (Holland et al., 2010), and simultaneously promote research engagement (Grant, 2017). As part of our preparations members of the team with data generation responsibilities in WP2 engaged in creative methods training (Kara, 2020). This was with a view to expanding the range of qualitative approaches and techniques for interviewers involved in fieldwork with children and young people. For example, for one child taking part in CAMH-Crisis2 a creative approach involved mapping our topic guide to a template derived from an already-familiar ‘colour monsters’ activity and using pencils and stickers (Llenas, 2018). The use of an activity adapted from materials known to the young person through their engagement with services was also helpful, in this instance, given the sensitivity of the topic being discussed.

Reflecting trends promoting accessibility and collaborative relationships in mixed methods research (Gómez, 2014), participant-facing materials for CAMH-Crisis2 were created in age-appropriate language with the help of our research advisors. In our three case studies in Wales information was produced in both English and Welsh, whilst initial preparations for data generation in all cases included identifying a portion of our project award to enable shopping vouchers to be offered to young people and family members for their time spent as interview participants. Choice of interview setting for children, young people and family members was another strand in our initial approach to encouraging participation, allowing in-person interviews in familiar environments or interviews which took place entirely online. Although ultimately not needed during fieldwork, arrangements were also made for interviews to be conducted with community language interpreters.

A feature of much mixed methods research is its ‘messiness’, of a type which is often omitted from published accounts which tend to report research processes in superficial, linear, fashion (Walton et al., 2020). Messiness can arise from the divergence between quantitative and qualitative findings, and/or the tensions and unpredictability associated with conducting complex studies in the real world (Sanscartier, 2020). In CAMH-Crisis2, experience over the fieldwork phase of our second work package, characterised initially by low numbers of young people and family members coming forward to take part in the study, prompted us to make a series of flexible adjustments to our strategies for recruitment and participation. A reflexive stance in mixed methods research requires transparency, or the demonstration of a ‘craft attitude’, in acknowledging how and why modifications of this type are needed (Sakata, 2023; Sanscartier, 2020). In our data collection we were careful not to ask children and young people to revisit their personal mental health histories, but we were also aware that our project invited a return to periods of distress. At the suggestion of staff in one case site, we asked for (and received) permission to use closed social media channels to promote our study amongst the young people

using the case study team's services. Following consultation with young people advising the project, we also secured permission to expand the ways in which the consent process (and the additional assent process for participants aged under 16), and participation in interviews, could proceed. This was a critical juncture in the life of the project, greatly improving the accessibility of our study to young potential participants. With research ethics committee approval, by making use of new information technologies we were able to offer audio consenting in addition to written options, and interviews not only face-to-face and online but also through written messaging, voice notes, email and similar.

Discussion: Contribution to Mixed Methods Research

Drawing on our experiences described in detail here we distil two key, generalisable, lessons for mixed methods researchers. The first relates to the interplay between theory, methods and data. Although recent scholarship has explored how mixed methods and cases studies can be integrated (Guetterman & Fetters, 2018; Plano Clark et al., 2018) the observation has been made that the strategies used to achieve this are often insufficiently described (Bustamante, 2019; Mason et al., 2020). This article has laid out the practical accomplishment of combining a survey and multiple case studies in a single, sequential, mixed methods project whilst showing, in addition, how substantive theory can be brought into the mix. As we have shown, in studies like ours which are characterised by complexity important decisions need to be made regarding the choreography between theory and data, but detailed accounts of how this is accomplished are often missing from research reports. The approach we have taken in our exemplar project, and reflected on here, drew on our clear intention that theory should frame and inform rather than be an end in itself. Our aim was to deploy theory as a useful prism through which to view the larger environment for services, along with the work being done locally to introduce and sustain crisis responses and the effects of this activity. This involved, amongst other things, the incorporation of a theory-informed survey, followed by the practical use of theoretical concepts to inform interview topic guides and as codes during the analysis of qualitative material as an initial avenue through which to view our within-case datasets. In these endeavours, we appreciated the necessity of theory being worn lightly, via the translation of ideas into the language of the service and practice environment during both our collection and analysis of data. Knowingly we also turned away from a priori theory when it came to the vital task of learning about the experiences of the children, young people and families on the receiving end of crisis provision.

Second, our experiences underscore the extent to which the practical integration of theory, design and methods are highly sensitive to features of the setting in which research is being conducted. In CAMH-Crisis2, our concern was to examine the implementation of complex interventions organised within complex systems, as responses to vulnerable people living with complex difficulties. Judge and Bauld (2001) make the case for combining strong theory with methodological flexibility in studies of this type, and in this article we have shown the value of research partnerships and of adaptive data generation strategies as responses to the 'messiness' associated with fieldwork in real-world settings.

Conclusion

In this paper we have described and reflected on a worked example of theory-informed mixed methods research which examined the implementation of complex interventions in complex systems, and the experiences of people using services. Our contribution lies in surfacing a practical approach to the integration of theory, and by describing how the messiness associated with mixed methods design can be addressed using a collaborative, flexible, style. Our project's

focus on children and young people's mental health crisis care places it in a sensitive field, about which there is substantial public, professional and political interest. Necessarily, our study also involved vulnerable people. In addition to the formal reporting of project outputs in articles such as this, our accessible dissemination strategy (including the creation of a public-facing animation, the production of case study-specific reports to key actors in each locale taking part in our case study component, and the creation of a short study briefing) is intended to help policymakers, commissioners, managers and practitioners to better understand and make practical use of our findings for the improvement of future services.

Acknowledgements

We extend our grateful thanks to all involved in this study, particularly participants, members of our steering and advisory committees, and the young people who helped us develop our materials. We also thank Research and Development staff in participating NHS, third sector and local authority organisations who supported our project, and the members of the Research Ethics Committees which reviewed our project materials and granted favourable opinions.

ORCID iDs

Ben Hannigan  <https://orcid.org/0000-0002-2512-6721>

Leanne Sawle  <https://orcid.org/0000-0001-8478-8816>

Ethical Considerations

Approval for the survey used in this project was granted by the Research Ethics Committee in the School of Healthcare Sciences, Cardiff University, on January 18th 2023 [reference REC 983]. A favourable ethical opinion relating to the case study phase of the project was given by the South West – Cornwall and Plymouth Research Ethics Committee (REC) in May 2023, with approval for the study to proceed also confirmed by the Health Research Authority (HRA) and Health and Care Research Wales (HCRW) [REC reference 23/SW/0063, IRAS project ID 324235].

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This project is funded by the National Institute for Health and Care Research (NIHR) Health and Social Care Delivery Research programme (project number 151811). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Data Availability Statement

This article does not directly report on data, beyond giving a broad overview of types of data collected and headline findings. Substantive findings from our analysis of survey returns are reported in [Bennett et al. \(2025\)](#), and from our analysis of qualitative case studies in [Bennett et al. \(2026\)](#).

References

- Alvesson, M., & Sköldberg, K. (2018). *Reflexive methodology: New vistas for qualitative research* (3rd ed.). Sage.

- Analytical Services Population Health Clinical Audit & Specialist Care Team. (2023). *Mental health of children and young people in England, 2023 - Wave 4 follow up to the 2017 survey*. NHS England.
- Ayres, L., Kavanaugh, K., & Knafl, K. A. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research*, 13(6), 871–883. <https://doi.org/10.1177/1049732303013006008>
- Bennett, C., Fraser, C., Hannigan, B., Sawle, L., Williams, J., Jones, A., Prymachuk, S., Elliott, M. B., Elliott, M., Bennett, N., Hails, E., McMillan, I., & Vaughan, R. (2025). Towards a typology of mental health crisis care services for children and young people in England and Wales: A cross-sectional survey and analysis of implementation practices. *BMC Health Services Research*, 25(1), 1587. <https://doi.org/10.1186/s12913-025-13446-6>
- Bennett, C., Hannigan, B., Elliott, M. B., Elliott, M., Evans, N., Fraser, C., Hails, E., Jones, A., McMillan, I., Prymachuk, S., Sawle, L., & Vaughan, R. (2023). Crisis care for children and young people with mental health problems: National mapping, models of delivery, sustainability and experience (CAMH-Crisis2). A study protocol. [version 2; peer review: 3 approved]. *NIHR Open Research*, 3, 22. <https://doi.org/10.3310/nihropenres.13414.2>
- Bennett, C., Williams, J., Sawle, L., Fraser, C., Vaughan, R., Prymachuk, S., McMillan, I., Jones, A., Hails, E., Evans, N., Elliot, M., Elliott, M. B., & Hannigan, B. (2026). Organising, sustaining, experiencing and integrating mental health crisis care for children and young people: Qualitative findings from eight contrasting case studies in England and Wales. [version 1; peer review: 1 approved, 1 approved with reservations]. *NIHR Open Research*, 6, 99. <https://doi.org/10.3310/nihropenres.14290.1>
- Biesta, G. (2010). Pragmatism and the philosophical foundations of mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Sage handbook of mixed methods in social and behavioural research* (2nd ed.). Sage.
- Braithwaite, J., Churrua, K., Ellis, L. A., Long, J., Clay-Williams, R., Damen, N., Herkes, J., Pomare, C., & Ludlow, K. (2017). *Complexity science in healthcare: Aspirations, approaches, applications and accomplishments: A white paper*. Australian Institute for Health Innovation, Macquarie University.
- Braun, V., & Clarke, V. (2022). *Thematic analysis: a practical guide*. Sage.
- Bryman, A. (1988). *Quantity and quality in social research*. Routledge.
- Bustamante, C. (2019). TPACK and teachers of Spanish: Development of a theory-based joint display in a mixed methods research case study. *Journal of Mixed Methods Research*, 13(2), 163–178. <https://doi.org/10.1177/1558689817712119>
- CASCADE: Children's Social Care Research and Development Centre. (nd). CASCADE voices. Retrieved May 18th 2026 from. <https://cascadewales.org/engagement/cascade-voices/>
- Clark, H., Coll-Seck, A. M., Banerjee, A., Peterson, S., Dalglish, S. L., Ameratunga, S., Balabanova, D., Bhan, M. K., Bhutta, Z. A., Borrazzo, J., Claeson, M., Doherty, T., El-Jardali, F., George, A. S., Gichaga, A., Gram, L., Hipgrave, D. B., Kwamie, A., Meng, Q., ... Costello, A. (2020). A future for the world's children? A WHO–UNICEF–Lancet commission. *The Lancet*, 395(10224), 605–658. [https://doi.org/10.1016/S0140-6736\(19\)32540-1](https://doi.org/10.1016/S0140-6736(19)32540-1)
- Clarke, D. J., Godfrey, M., Hawkins, R., Sadler, E., Harding, G., Forster, A., McKevitt, C., Dickerson, J., & Farrin, A. (2013). Implementing a training intervention to support caregivers after stroke: A process evaluation examining the initiation and embedding of programme change. *Implementation Science*, 8(1), 96. <https://doi.org/10.1186/1748-5908-8-96>
- Coffey, M., Hannigan, B., Barlow, S., Cartwright, M., Cohen, R., Faulkner, A., Jones, A., & Simpson, A. (2019). Recovery-focused mental health care planning and co-ordination in acute inpatient mental health settings: A cross national comparative mixed methods study. *BMC Psychiatry*, 19, 115. <https://doi.org/10.1186/s12888-019-2094-7>
- Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: The new Medical Research Council guidance. *BMJ*, 337, a1655. <https://doi.org/10.1136/bmj.a1655>

- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage.
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11(1), 100. <https://doi.org/10.1186/1471-2288-11-100>
- Davidson, E. (2017). Saying it like it is? Power, participation and research involving young people. *Social Inclusion*, 5(3), 228–239. <https://doi.org/10.17645/si.v5i3.967>
- Demkowicz, O., Chatburn, E., Archer, C., Thompson, R., & Plackett, R. (2025). Advancing mixed methods in mental health research. *BMJ Mental Health*, 28(1), Article e301401. <https://doi.org/10.1136/bmjment-2024-301401>
- Doyle, L., Brady, A.-M., & Byrne, G. (2009). An overview of mixed methods research. *Journal of Research in Nursing*, 14(2), 175–185. <https://doi.org/10.1177/1744987108093962>
- Eccles, M. P., & Mittman, B. S. (2006). Welcome to implementation science. *Implementation Science*, 1(1), 1. <https://doi.org/10.1186/1748-5908-1-1>
- Evans, N., Edwards, D., Carrier, J., Elliott, M., Gillen, E., Hannigan, B., Lane, R., & Williams, L. (2023). Mental health crisis care for children and young people aged 5 to 25 years: The CAMH-crisis evidence synthesis. *Health and Social Care Delivery Research*, 11(3), 1–165. <https://doi.org/10.3310/BPPT3407>
- Finch, T., Girling, M., May, C., Mair, F., Murray, E., Treweek, S., McColl, E., Steen, I., Cook, C., Vernazza, C., Mackintosh, N., Sharma, S., Barber, G., Steele, J., & Rapley, T. (2018). Improving the normalization of complex interventions: Part 2 - Validation of the NoMAD instrument for assessing implementation work based on normalization process theory (NPT). *BMC Medical Research Methodology*, 18(1), 135. <https://doi.org/10.1186/s12874-018-0591-x>
- Gómez, A. (2014). New developments in mixed methods with vulnerable groups. *Journal of Mixed Methods Research*, 8(3), 317–320. <https://doi.org/10.1177/1558689814527879>
- Grant, T. (2017). Participatory research with children and young people: Using visual, creative, diagram, and written techniques. In R. Evans, L. Holt, & T. Skelton (Eds.), *Geographies of children and young people: Methodological approaches*. Springer. https://doi.org/10.1007/978-981-287-020-9_19
- Guetterman, T. C., & Fetters, M. D. (2018). Two methodological approaches to the integration of mixed methods and case study designs: A systematic review. *American Behavioral Scientist*, 62(7), 900–918. <https://doi.org/10.1177/0002764218772641>
- Hamilton, A. B., & Finley, E. P. (2019). Qualitative methods in implementation research: An introduction. *Psychiatry Research*, 280, Article 112516. <https://doi.org/10.1016/j.psychres.2019.112516>
- Hannigan, B. (2022). Observations from a small country: Mental health policy, services and nursing in Wales. *Health Economics, Policy and Law*, 17(2), 200–211. <https://doi.org/10.1017/S1744133120000456>
- Hawe, P., Shiell, A., & Riley, T. (2009). Theorising interventions as events in systems. *American Journal of Community Psychology*, 43(3–4), 267–276. <https://doi.org/10.1007/s10464-009-9229-9>
- Holland, S., Renold, E., Ross, N. J., & Hillman, A. (2010). Power, agency and participatory agendas: A critical exploration of young people's engagement in participative qualitative research. *Childhood*, 17(3), 360–375. <https://doi.org/10.1177/0907568210369310>
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Hwang, S., Birken, S. A., Melvin, C. L., Rohweder, C. L., & Smith, J. D. (2020). Designs and methods for implementation research: Advancing the mission of the CTSA program. *Journal of Clinical and Translational Science*, 4(3), 159–167. <https://doi.org/10.1017/cts.2020.16>
- Jones, A., Maben, J., Adams, M., Mannion, R., Banks, C., Blake, J., Job, K., & Kelly, D. (2022). Implementation of 'Freedom to Speak Up Guardians' in NHS acute and mental health trusts in England: The FTSUG mixed-methods study. *Health and Social Care Delivery Research*, 10(23), 1–124. <https://doi.org/10.3310/GUWS9067>
- Judge, K., & Bauld, L. (2001). Strong theory, flexible methods: Evaluating complex community-based initiatives. *Critical Public Health*, 11(1), 19–38. <https://doi.org/10.1080/09581590010028237>

- Kallemeyn, L. M., Hall, J. N., & Gates, E. (2020). Exploring the relevance of complexity theory for mixed methods research. *Journal of Mixed Methods Research*, 14(3), 288–304. <https://doi.org/10.1177/1558689819872423>
- Kara, H. (2020). *Creative research methods: A practical guide* (2nd ed.). Policy Press.
- Llenas, A. (2018). *The colour monster*. Templar Publishing.
- Lumivero. (2017). NVivo (version 12). Lumivero. Retrieved May 18th 2026 from. <https://lumivero.com/products/nvivo/>
- MacFarlane, A., & O'Reilly-de Brún, M. (2012). Using a theory-driven conceptual framework in qualitative health research. *Qualitative Health Research*, 22(5), 607–618. <https://doi.org/10.1177/1049732311431898>
- Mason, W., Morris, K., Webb, C., Daniels, B., Featherstone, B., Bywaters, P., Mirza, N., Hooper, J., Brady, G., Bunting, L., & Scourfield, J. (2020). Toward full integration of quantitative and qualitative methods in case study research: Insights from investigating child welfare inequalities. *Journal of Mixed Methods Research*, 14(2), 164–183. <https://doi.org/10.1177/1558689819857972>
- May, C., & Finch, T. (2009). Implementing, embedding, and integrating practices: An outline of Normalization Process Theory. *Sociology*, 43(3), 535–554. <https://doi.org/10.1177/0038038509103208>
- May, C., Finch, T., & Rapley, T. (2020). Normalization process theory. In P. Nilsen & S. A. Birken (Eds.), *Handbook on implementation science*. Edward Elgar.
- May, C., Rapley, T., Mair, F. S., Treweek, S., Murray, E., Ballini, L., Macfarlane, A., Girling, M., & Finch, T. L. (2015). Normalization process theory on-line users' manual, toolkit and NoMAD instrument. Retrieved May 18th 2026 from. <https://normalization-process-theory.northumbria.ac.uk/>
- May, C. R., Albers, B., Bracher, M., Finch, T. L., Gilbert, A., Girling, M., Greenwood, K., MacFarlane, A., Mair, F. S., May, C. M., Murray, E., Potthoff, S., & Rapley, T. (2022). Translational framework for implementation evaluation and research: A normalisation process theory coding manual for qualitative research and instrument development. *Implementation Science*, 17(1), 19. <https://doi.org/10.1186/s13012-022-01191-x>
- May, C. R., Cummings, A., Girling, M., Bracher, M., Mair, F. S., May, C. M., Murray, E., Myall, M., Rapley, T., & Finch, T. (2018). Using Normalization Process Theory in feasibility studies and process evaluations of complex healthcare interventions: A systematic review. *Implementation Science*, 13(1), 80. <https://doi.org/10.1186/s13012-018-0758-1>
- May, C. R., Hillis, A., Albers, B., Desveaux, L., Gilbert, A., Girling, M., Kislov, R., MacFarlane, A., Mair, F. S., Potthoff, S., Rapley, T., & Finch, T. L. (2025). Translational framework for implementation evaluation and research: Implementation strategies derived from normalization process theory. *Implementation Science*, 20(1), 34. <https://doi.org/10.1186/s13012-025-01444-5>
- McCabe, E., Amarbayan, M., Rabi, S., Mendoza, J., Naqvi, S. F., Thapa Bajgain, K., Zwicker, J. D., & Santana, M. (2023). Youth engagement in mental health research: A systematic review. *Health Expectations*, 26(1), 30–50. <https://doi.org/10.1111/hex.13650>
- McEvoy, R., Ballini, L., Maltoni, S., O'Donnell, C. A., Mair, F. S., & MacFarlane, A. (2014). A qualitative systematic review of studies using the normalization process theory to research implementation processes. *Implementation Science*, 9, 2. <https://doi.org/10.1186/1748-5908-9-2>
- Merton, R. K. (1968). *Social theory and social structure*. Free Press.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). Sage.
- Moore, G. F., Evans, R. E., Hawkins, J., Littlecott, H., Melendez-Torres, G. J., Bonell, C., & Murphy, S. (2019). From complex social interventions to interventions in complex social systems: Future directions and unresolved questions for intervention development and evaluation. *Evaluation*, 25(1), 23–45. <https://doi.org/10.1177/1356389018803219>
- National Institute for Health and Care Research Chief Scientist Office Scotland, Health and Care Research Wales Public Health Agency Northern Ireland. (2019). UK standards for public involvement: Better

- involvement for better health and social care research. National Institute for Health and Care Research, Chief Scientist Office Scotland, Health and Care Research Wales, Public Health Agency Northern Ireland.
- National Institute for Health and Care Research. (2022). Crisis care for children and young people with mental health problems: National mapping, models of delivery, sustainability and experience (CAMH-Crisis2). <https://fundingawards.nihr.ac.uk/award/NIHR151811>
- NHS England. (2024). Urgent and emergency mental health care for children and young people: National implementation guidance. Retrieved May 18th 2026 from. <https://www.england.nhs.uk/publication/urgent-and-emergency-mental-health-care-for-children-and-young-people-national-implementation-guidance/>
- Plano Clark, V. L., Foote, L. A., & Walton, J. B. (2018). Intersecting mixed methods and case study research: Design possibilities and challenges. *International Journal of Multiple Research Approaches*, 10(1), 14–29. <https://doi.org/10.29034/ijmra.v10n1a1>
- Poth, C., Creswell, J. W., & Plano Clark, V. L. (2023). Revisiting mixed methods research designs twenty years later. In C. Poth (Ed.), *The Sage handbook of mixed methods research design*. Sage. <https://doi.org/10.4135/9781529682663.n6>
- Poth, C., & Mertens, D. M. (2023). Mixed methods designs to further social, economic and environmental justice. In C. Poth (Ed.), *The Sage handbook of mixed methods research design*. Sage. <https://doi.org/10.4135/9781529682663.n8>
- Prymachuk, S., Kirk, S., Fraser, C., Evans, N., Lane, R., Neill, L., Camacho, E., Bower, P., Bee, P., & McDougall, T. (2024). Service design for children and young people with common mental health problems: Literature review, service mapping and collective case study. *Health and Social Care Delivery Research*, 12(13), 1–181. <https://doi.org/10.3310/DKRT6293>
- Rapley, T., Girling, M., Mair, F., Murray, E., Treweek, S., McColl, E., Steen, I., May, C., & Finch, T. (2018). Improving the normalization of complex interventions: Part 1 - Development of the NoMAD instrument for assessing implementation work based on normalization process theory (NPT). *BMC Medical Research Methodology*, 18(1), 133. <https://doi.org/10.1186/s12874-018-0590-y>
- Royal College of Psychiatrists. (2025). *Quality network for community CAMHS: General standards* (8th ed.). Royal College of Psychiatrists.
- Sakata, N. (2023). Embracing the messiness in mixed methods research: The craft attitude. *Journal of Mixed Methods Research*, 17(3), 288–307. <https://doi.org/10.1177/15586898221108545>
- Sanscartier, M. D. (2020). The craft attitude: Navigating mess in mixed methods research. *Journal of Mixed Methods Research*, 14(1), 47–62. <https://doi.org/10.1177/1558689818816248>
- Schnittker, J. (2025). The sociology of mental health and the twenty-first-century mental health crisis. *Society and Mental Health*, 15(1), 1–16. <https://doi.org/10.1177/21568693241303685>
- Sheridan, R., Martin-Kerry, J., Hudson, J., Parker, A., Bower, P., & Knapp, P. (2020). Why do patients take part in research? An overview of systematic reviews of psychosocial barriers and facilitators. *Trials*, 21(1), 259. <https://doi.org/10.1186/s13063-020-4197-3>
- Simpson, A., Hannigan, B., Coffey, M., Barlow, S., Cohen, R., Jones, A., Vřetečková, J., Faulkner, A., Thornton, A., & Cartwright, M. (2016). Recovery-focused care planning and coordination in England and Wales: A cross-national mixed methods comparative case study. *BMC Psychiatry*, 16, 147. <https://doi.org/10.1186/s12888-016-0858-x>
- Skivington, K., Matthews, L., Simpson, S. A., Craig, P., Baird, J., Blazeby, J. M., Boyd, K. A., Craig, N., French, D. P., McIntosh, E., Petticrew, M., Rycroft-Malone, J., White, M., & Moore, L. (2021). Framework for the development and evaluation of complex interventions: Gap analysis, workshop and consultation-informed update. *Health Technology Assessment*, 25(57), 1–132. <https://doi.org/10.3310/hta25570>
- Stake, R. E. (1995). *The art of case study research*. Sage.

- Tariq, S., & Woodman, J. (2013). Using mixed methods in health research. *JRSM Short Reports*, 4(6), 2042533313479197. <https://doi.org/10.1177/2042533313479197>
- Urry, J. (2005). The complexity turn. *Theory, Culture & Society*, 22(5), 1–14. <https://doi.org/10.1177/0263276405057188>
- Walton, J. B., Plano Clark, V. L., Foote, L. A., & Johnson, C. C. (2020). Navigating intersecting roads in a mixed methods case study: A dissertation journey. *Journal of Mixed Methods Research*, 14(4), 436–455. <https://doi.org/10.1177/1558689819872422>
- Wang, Y., Wong, E. L.-Y., Nilsen, P., Chung, V. C., Tian, Y., & Yeoh, E.-K. (2023). A scoping review of implementation science theories, models, and frameworks: An appraisal of purpose, characteristics, usability, applicability, and testability. *Implementation Science*, 18(1), 43. <https://doi.org/10.1186/s13012-023-01296-x>
- Wasti, S. P., Simkhada, P., van Teijlingen, E. R., Sathian, B., & Banerjee, I. (2022). The growing importance of mixed methods research in health. *Nepal Journal of Epidemiology*, 12(1), 1175–1178. <https://doi.org/10.3126/nje.v12i1.43633>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage.