STANDARD PAPER



Factors Affecting Young Mothers' Access to Child Healthcare Services: A Behavioural Analysis to Guide the Development of Interventions

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(Received 16 December 2021; accepted 10 October 2022; first published online 26 October 2022)

Abstract

Young mothers are more likely to access healthcare for their children in emergent care settings and less likely to use preventive care. This study examines the healthcare-seeking behaviours of young mothers to inform the design of tailored interventions. Semi-structured interviews with nine young mothers (aged ≤ 25 years) who were attending a supported playgroup in Brisbane, Australia were conducted and explored using the Capability, Opportunity and Motivation and Behaviour (COM-B) model and the Theoretical Domains Framework (TDF). Five behavioural themes were identified (navigating the system, complex referral pathways, delays and long wait times, understanding child development, and connecting to services) and the role of the supported playgroup in shaping young mothers' understanding of child development and connecting them to services was highlighted. Recommended strategies to address these factors include opportunities for young mothers to learn about child developmental milestones, improving young mothers' health literacy, increasing young mothers' skills and/or the availability of support to help them navigate health services, and providing more accessible entry points for child assessments, referrals, or early intervention programs.

Keywords: child health services; young mothers; health services accessibility; child; pre-school; vulnerable populations; qualitative research; behaviour and behaviour mechanisms; capability, opportunity, motivation and behaviour (COM-B); theoretical domains framework (TDF)

Introduction

The impact of early parenthood has been extensively examined over the past 40 years (Brooks-Gunn & Furstenberg, 1986; Furstenberg, Brooksgunn, & Morgan, 1987). Young mothers are more likely than older mothers to experience broader disadvantages because of their younger age, including access to education, employment, and social support (Australian Institute of Health and Welfare, 2018; Marino, Lewis, Bateson, Hickey, & Skinner, 2016). Consequently, these women are more likely to gain employment in low-paying jobs, limiting their income, and increasing the likelihood of lower socioeconomic outcomes, and thereby need for welfare support (Hovdestad, Shields, Williams, & Tonmyr, 2015; Im & Vanderweele, 2018). They have more difficulty accessing and continuing with comprehensive health services, are more likely to seek care for their children in emergent/urgent care settings, and less likely to utilise preventive care visits (Aujoulat, Libion, Berrewaerts, Noirhomme-Renard, & Deccache, 2010; Harris, Ahlers-Schmidt, & Weeks, 2014; Ray, Escobar, & Lorch, 2010).

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The Australian healthcare system provides a wide range of services, from population health and prevention to general practice and community health. In a setting where disadvantaged populations, such as young mothers experience significant challenges in accessing healthcare, efforts from services such as those provided through supported playgroups, are important. These services are both responsive to local community needs and effectively integrate with, and support healthcare access. Playgroups are a widely accessed program in Australia with approximately half of all families with 2-3-year-old children participating (Gregory, Harman-Smith, Sincovich, Wilson, & Brinkman, 2016; Keam, Cook, Sinclair, & McShane, 2018). Supported or facilitated playgroups are largely developed by State and Territory playgroup associations or not-for-profit organisations. Playgroups are generally facilitated by a trained early childhood educator (Commerford & Robinson, 2016). They aim to support families with particular needs who are often considered vulnerable, at-risk, or hard to reach, such as young mothers, by providing opportunities for parents to meet and share their experiences, and for children to play, learn, and socialise (Armstrong et al., 2021; Hancock, Cunningham, Lawrence, Zarb, & Zubrick, 2015; Jackson, 2013; Warr, Mann, Forbes, & Turner, 2013). They also provide a nonthreatening environment, where the often-underestimated intentions and activities facilitated by staff (i.e., creating a sense of belonging and socialisation or promoting the importance of parent's awareness of their child's developmental needs), are very deliberate (Harman, O'Connor, & Guilfoyle, 2014; Jackson, 2011; Williams, Berthelsen, Nicholson, & Vivani, 2015). This is important given the negative impact that social isolation can play on the quality of parental care (Jackson, 2011).

The evidence surrounding young mothers' experiences accessing child healthcare services is sparse. To address this gap, a better understanding of healthcare-seeking behaviours and influencing factors to optimise interventions and/or service planning activities is warranted. To achieve this, the use of behaviour change theories, which have been applied in many other contexts (including addiction, prevention of disease, and professional practice) have been drawn upon (Michie et al., 2005; Taylor, Lawton, & Conner, 2013). The Behaviour Change Wheel (BCW) merges common components of behaviour change theories and links them together with a broad model of behaviour: the Capability, Opportunity, Motivation and Behaviour (COM-B) model (Figure 1) (Michie, van Stralen, & West, 2011).

This model to designed for the analysis of a behavioural problem, helping to identify the areas that result in behaviour change that should be the focus of the intervention (Michie et al., 2011). It proposes that for a person to participate in a particular behaviour (B), they need to have the physical and/or psychological capability (C) to enact the target behaviour, and there are social and/or physical opportunities (O) that influence the enablement of the behaviour, and are guided by reflective and/or automatic belief systems that motivate (M) the behaviour (Barker, Atkins, & de Lusignan, 2016). It does not place a priority on any of the individual components; however, it explains the interactions between components as a way of identifying how changing one (or more) component could lead to the desired change in behaviour (Michie et al., 2011). To complement the BCW, the Theoretical Domains Framework (TDF) is designed to help understand the concept of behaviour theoretically and provides a lens through which to view cognitive, affective, social, and environmental influences on behaviour. It is a synthesis of 33 theories of behaviour and behaviour change clustered into 14 domains that align to one of the COM-B components (Table 1) (Atkins et al., 2017; Cane, O'Connor, & Michie, 2012).

In this study, we examine the perceived barriers and enablers to accessing child healthcare services by young mothers, to inform the development of future interventions. The COM-B model and the TDF were applied to describe factors that could improve access to child health services for young mothers and inform the design and implementation of interventions for improving access. This involved three steps: (1) interviews with young mothers exploring their healthcare-seeking experiences, (2) a behavioural diagnosis to identify influencing factors, and (3) intervention strategy selection.

Method

This research was conducted in collaboration with the not-for-profit organisation Micah Projects, through their Young Mothers for Young Women (YMYW) Program. This Program assists young

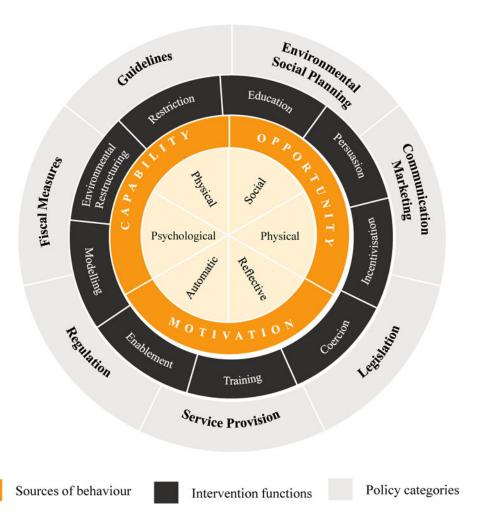


Figure 1. The behaviour change wheel adapted from Michie et al. (2011).

Table 1. Mapping of the COM-B components to the TDF domains

СОМ-В	Component	TDF domain
Capability	Psychological	Behavioural regulation; cognitive interpersonal skills; knowledge; memory; attention and decision processes
	Physical	Physical ability (skills)
Opportunity	Social	Social influences
	Physical	Environmental context and resources
Motivation	Reflective	Beliefs about capabilities; beliefs about consequences; emotion; goals; intentions; optimism; social/professional role and identity
	Automatic	Reinforcement; emotion

COM-B: Capability, Opportunity, Motivation and Behaviour; TDF: Theoretical Domains Framework.

(≤25 years), pregnant, and parenting women along with their children and families from disadvantaged backgrounds. In the context of this study, disadvantaged backgrounds included teenage pregnancy; housing instability/homelessness; exposure to domestic violence; low-income/limited

employment opportunities; limited education; and/or unstable relationships. The YMYW Program provides antenatal care during pregnancy (1 per week), mothers groups (1 per week), occasional care services (3 days a week), and supported playgroups (2 days a week). Ethical approval was obtained from the Griffith University Human Research Ethics Committee (ref no: 2018/898) and the Micah Projects Board.

Participants

A convenience sample of young mothers (≤25 years) whose children were attending the supported playgroup program offered through the YMYW Program was employed. At the time of this study, 13 young mothers had children enrolled in the supported playgroup and were all invited to participate. If young mothers expressed an interest in the study the Centre staff referred them to the research assistant for confirmation of eligibility, and to discuss any questions they might have. Written informed consent was obtained before the interview took place and recruitment continued until the authors agreed that no new themes of note were emerging. Data saturation was achieved when thematic categories were comprehensively interrogated and interpreted by the research team to check they provided a good representation of the findings.

Procedure

A semi-structured interview design was selected to better understand and unpack each participant's experience and to obtain richer data and more open conversation than a focus group methodology (Kallio, Pietila, Johnson, & Kangasniemi, 2016). All interviews were conducted in person, in a private room adjacent to the supported playgroup area and lasted for up to 25 min. An interview guide was developed, and participants were encouraged to expand on their answers to give further insight (Supplementary Material). The questions were applied consistently across all interviews; however, the interviewer could deviate from the interview guide when interesting or unexpected topics relating to the study were raised. The interview questions were designed to explore participants' experiences with accessing health services for their child/ren. The questions explored young mothers' past and/or current concerns about their child's development, whether there was a need to access health services and the perceived enablers and barriers to accessing child health services. The interviewer (author 2) had experience working with young people as a paediatric speech pathologist and was the research assistant for this study. She was supervised by the senior research fellow (author 1) an experienced health researcher.

All interviews were conducted in English, recorded, and stored as an audio (MP3) file. These files were uploaded to an online transcription service and transcribed verbatim. They were checked for accuracy by the interviewer. Qualitative data were analysed using inductive thematic analysis to identify central emergent patterns (Braun & Clarke, 2006). This process was used rather than a theory-driven analysis as responses were brief. This process involved familiarisation with the data through reviewing each transcript and using line-by-line coding to identify the main emerging themes and significant statements, concepts, or sentences. Two reviewers independently completed the coding of the data (authors 1 and 2). A preliminary coding framework was created for key concepts with new codes added as they emerged using a Microsoft Excel spreadsheet. This involved the continual appraisal of items in the dataset between the two researchers and grouping them into overarching themes. Quotes were selected that represented recurrent themes across the whole data set and these were presented and discussed with the wider team.

Behavioural Diagnosis

A behavioural diagnosis was performed to find out what key factors need to be targeted to improve access to child health services for young mothers. Each of the themes identified from the interview

data was deductively mapped to the capability, opportunity, and motivation components of the COM-B and then to the applicable TDF domain. During the reading and initial coding of the transcripts, the researcher allocated pieces of the narrative to components relevant to the COM-B model of behaviour. For example, if a participant described the referral process as being complex, this was coded to the broad category of opportunity (physical). This process was completed in collaboration with the research team and any disagreement was resolved through discussion until a consensus was reached. The results are tabulated, and a narrative synthesis of the findings is provided. This analysis provides both a theoretical and evidence-based understanding of the behaviours best targeted for future interventions and a more granular view of the components of interventions that are most likely to affect change. This study is reported in adherence to the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist (Tong, Sainsbury, & Craig, 2007).

Intervention Strategy Selection

According to the BCW approach, interventions should be targeted at factors that can be influenced in terms of capability, opportunity, and motivation for the behaviour of interest to be achieved. These factors are identified in the behavioural diagnosis using the TDF, with corresponding potential intervention strategies being recommended.

Results

In total, nine young mothers participated in the study (mean age of 23.9 years). Participants talked openly about their past and/or current concerns regarding their child's overall development and their experiences accessing services. Overall, five themes influencing young mothers' access to child healthcare services were identified. Barriers to access included: (1) navigating the system, (2) complex referral pathways, and (3) delays and long wait times. Enablers were (1) understanding child development, and (2) connecting to services. All themes mapped to the COM-B components of physical and psychological capability, physical and social opportunity, and reflective motivation (see Table 2).

Theme 1: Navigating the System

All participants outlined their experience with navigating the healthcare system for their children. One mother described the process of accessing occupational therapy sessions for her son which was greatly assisted by the fact that 'they do home visits' (YM08); this was especially important for this family as they did not have access to regular transportation. However, she also reported that managing her son's disability funding was a challenge. Participants described confusion regarding the rollout of the new disability funding system (the National Disability Insurance Scheme — NDIS). One example is:

'I do not know about the NDIS, I swear I got an email, I got something about it saying that they [the government] were transitioning [from the previous funding model] but I do not know what that means' (YM01).

This suggests that greater support and communication for families of children with a disability to enable them to understand and manage funding options would be valuable. One mother shared her view that the assessment results may not be truly representative of her child's day-to-day abilities, emphasising the need for an integrated approach to child assessments.

'It is just a very long, drawn-out process and they see him on one day of his life, not every day. So [the assessment is] based on one day and how he is feeling on that day. It is just confusing; they give him results [poor] when I see him do all these things' (YM08).

Table 2. Determinants influencing access to child health service for young mothers

Factors	Themes	COM-B component
 Limited knowledge of available funding options 	Navigating the system (B)	Psychological capability
 Unable to access therapy (e.g., no transport) Mistrust in clinicians		Physical capability
Limited access to referral pathways	Complex referral pathways (B)	Physical opportunity
 Confusion about the referral process Accessing specialist care is challenging Shortage of child health providers Locating services is challenging 	Delays and long wait times (B)	
 Supported playgroups are access points for specialist services Supported playgroups provides support and advice for young mothers 	Connecting to services (E)	Social opportunity
 Compare their child's development to other children A belief that their child has a developmental need 	Understanding child development (E)	Reflective motivation

B, Barrier; E, Enabler.

This comment emphasises the need for a holistic approach to child assessments, with significant evidence proposing that parent self-reports are beneficial and can be an accurate measure of a child's ability across contexts (Eaves, Wingert, Ho, & Mickelson, 2006; Kerstjens et al., 2009).

Theme 2: Complex Referral Pathways

Mothers spoke about the complex referral pathways impeding access to child health services. One mother advised:

'My GP [General Practitioner] gives me a book that is full of different services and stuff - it is like massive, and you have got to decide which one you want' (YM03).

One mother noted that following a health check for her 2-year-old she was told by the paediatric specialist medical team that her son would benefit from speech pathology. However, she encountered significant difficulties in getting a referral to a speech pathology service within the same children's hospital. She expressed her confusion with the process, stating:

'They said that my GP put [the referral] through but [children's hospital] rejected the referral because we did not have as many specialist services ... I just found it odd that [children's hospital] rejected the referral when there's all that backup documentation ... We couldn't even get the referral processed in the end' (YM07).

Theme 3: Delays and Long Wait Times

Following a referral, the next step is attending the initial appointment, which can often be delayed when accessing services through public hospitals and state health departments.

'We tried to go privately and then they kept cancelling our referral and we just didn't end up getting it done' (YM01).

Participants claimed that access to specialist care is also limited due to a shortage of child health service providers, particularly those with knowledge and expertise in child development. Several participants complained about the difficulties in finding specialised health services, highlighting the long waiting times. This was particularly disconcerting when their child was young, raising concerns that delayed access to intervention or treatment would further impact child development outcomes.

'Getting the initial assessment was a little bit of a wait, like especially when they are young and there could be an issue and you're like oh, I have to wait for a month and then what's going to happen?' (YM09).

This was further reflected in a comment by one mother, who also recognised that wait times could be much longer than the few months that she experienced.

'I think we were pretty lucky though I have heard of people that have had to wait longer, whereas we waited a few months' (YM03).

Theme 4: Connecting to Services

Several mothers described the benefit of attending the supported playgroup as a key access point for specialist services for their child. In a setting where disadvantaged populations experience challenges accessing health services, efforts from services such as those provided by the YMYW Program are essential. One mother spoke of how 'When you come here, you find out about all other things' (YM09) and 'we've been to other mothers' groups and they didn't really talk to you, it's very judge-y so yeah, this one is amazing, yeah' (YM04).

This included various health professionals attending playgroup sessions to provide support and advice (i.e., child health nurse or dietician). The next excerpt illustrates how a supported playgroup facilitated access to health services for participants.

'I remember when we went to the [4th Trimester] group we also had a speech pathologist just come in for the day when they [child/ren] were like six months old. They [the speech pathologist] were just looking out and seeing what they [child/ren] are up to, crawling and all that so yeah babbling as well' (YM06).

Several participants recalled opportunities for their children to have access to the child health nurse and/or obtain referrals for services through allied health practitioners (i.e., speech pathologists, occupational therapists) visiting the playgroup. This access was especially beneficial when concerns arose.

'The Centre helped with the child health because at fourth trimester, the 9-month group, they had the child health nurse that came every week, so I was able to talk to her about some of the concerns' (YM02).

Theme 5: Understanding Child Development

Participants reported that they regularly compared their child to other children (of the same age), to gauge how their child was developing. This is evident in comments from several participants stating:

'I think compared to all her little friends she's a little bit behind' (YM04), and 'just comparing him to other kids and him not being at the same level they're at' (YM05).

What mothers know about the development of their infants and young children has important implications. Research has shown that mothers with more knowledge of child development are more likely to provide developmental stimulation to their children and that their children in turn have better developmental outcomes (Ertem et al., 2007). Two-thirds of mothers interviewed expressed the view that their child had developmental delays. One mother stated that her child did not 'do much until two, two and a half, close to three' (YM02). Of the participants expressing concern about their child's development, 50% had previously accessed specialist services which included: audiology (2), speech pathology (2), occupational therapy (1), and a neonatal/paediatric specialist (1). A further two mothers reported that they were no longer concerned because:

'I think she's caught up' (YM01) and 'I don't think she is behind for her age; [her peers] are all advanced' (YM04). One mother sought advice from her local GP and was told 'that he was going okay because [the GP] was like whistling and rustling lolly wrappers and [child] was pretty quick to hear that and [the GP] thought he was fine' (YM05).

Here, the ability to engage in healthcare relates to the participation and involvement of the mother in decision-making and treatment, which is strongly related to the notion of health literacy, self-efficacy, and self-management and the importance of receiving appropriate care (Levesque, Harris, & Russell, 2013).

Applying Behavioural Analysis to Describe Factors That Could Improve Access to Child Healthcare Services for Young Mothers

Each of the themes was deductively mapped to the COM-B components and TDF domains and a conceptual diagram of these main findings is presented in Figure 2. Our analysis linked seven of the TDF domains within each component of the COM-B system to at least one of the barriers or enablers identified. This suggests that increasing or reducing aspects of the capability, opportunity, and motivation may be needed to successfully improve access to child healthcare services for young mothers. Furthermore, components linked to more than one TDF domain suggest that multi-component strategies may be needed to address barriers and enablers. For example, 'increased occasions, where young mothers can connect directly with services', is linked to the TDF domains 'environmental context and resources' and 'social influences' (Figure 2).

According to the COM-B model, behaviours identified as capability and opportunity can motivate a behaviour change. For instance, if young mothers have an improved awareness of how to navigate the healthcare system (capability), along with opportunities for preliminary and/or comprehensive child assessments (opportunity) this could build a stronger understanding of their child's development (motivation). Ultimately, a greater emphasis and priority on meeting the healthcare service needs of children by supporting and equipping young mothers would lead to improvements in health and developmental outcomes for their children (i.e., increased rates of immunisation, preventative services, and early intervention).

Discussion

The present study demonstrates the application of a theoretically underpinned approach to identify behaviours that influence access to child healthcare services for young mothers living in disadvantage. Barriers include challenges with navigating the healthcare system, the complexity of the referral pathway, and delays and long wait times experienced. Enablers to access include opportunities for young mothers to connect with services through supported playgroups, and understanding their childs'

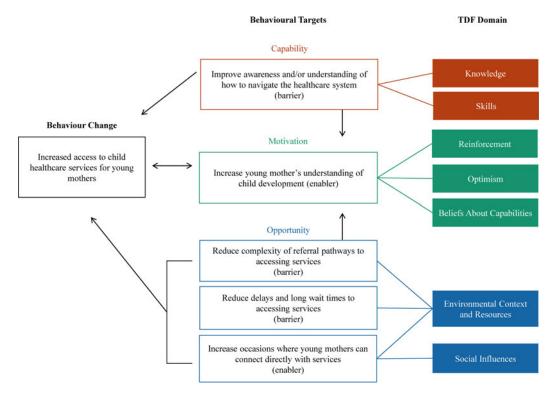


Figure 2. Behavioural themes linked to the COM-B model and the TDF domains to improve access to child healthcare services for young mothers

Note: [†]Definition of TDF domains: *Knowledge*: the awareness of the existence of something; *Skills*: an ability or proficiency acquired through practice; *Reinforcement*: increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus; *Optimism*: the confidence that things will happen for the best or that desired goals will be obtained; *Beliefs About Capabilities*: acceptance of the truth, reality, or validity about outcomes of a behaviour in each situation; *Environmental Context and Resources*: any circumstances of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence, and adaptive behaviour; *Social Influences*: those interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviours (Atkins et al., 2017).

developmental needs. Physical opportunity factors largely drove the health-seeking behaviours of young mothers, while factors related to automatic motivation were not described.

Our findings demonstrate that young mothers who lack the capability (psychological and physical) to navigate healthcare services are predominantly influenced by their understanding or competency of the system. Modification of this barrier could be best achieved by improving young mothers' knowledge, understanding, and/or skills through the facilitation of learning and educational activities and/or support in decision-making. This might include instruction on how to navigate services through the provision of information and resources (i.e., practical skills), or antecedents such as providing scenarios that allow for practice, feedback, and/or support. Assistance with organisational and selfmanagement skills would also be beneficial. Practical approaches, such as home visits for families without regular transportation were viewed favourably, whilst managing government funding for services was described as confusing. Similar findings are reported in the literature which describes a lack of confidence and uncertainty in one's ability to access funding (Howard, Blakemore, Johnston, Taylor, & Dibley, 2015) and highlight the need for accessible, clear, and jargon-free information to increase understanding about government funding schemes so that parents can best support their child/ren. It also emphasises the need for a holistic approach to child assessments, with growing evidence that parent self-reports are beneficial and accurate measures of their child's ability across contexts.

The complexity of referral pathways and the extended delays and long wait times at facilities deterred young mothers from seeking access. To address this barrier associated with physical opportunity, strategies based on environmental context and resources such as environmental restructuring are most appropriate. Our findings also suggest that the perception of the referral pathway was dependent on the hospital or organisation they are attempting to access, such that resources and funding allocated to each service appear to differ and variations in hospital policies and procedures could therefore limit the types of referrals accepted. This is concerning given the well-documented evidence of the benefits of early intervention for a child's long-term education, health, and wellbeing (Senate Community Affairs Committee Secretariat, 2014). In Australia, access to early intervention programs is also often delayed due to significant waiting periods (Senate Community Affairs Committee Secretariat, 2014) and according to the Australian Bureau of Statistics (2020–2021), long waiting times have been identified as a key reason why Australians are not accessing healthcare when required. While wait times were identified as a potential barrier, the delays experienced were viewed as being manageable. While these are important barriers to address, they would be best modified at the service provision level and hence are outside of the scope of this study.

The social opportunity for young mothers to connect or gain entry for child assessments, referrals, and/or health services through supported playgroups was perceived to increase their likelihood of health-seeking behaviours. This includes opportunities to access child health screening (i.e., child nurse), preliminary and comprehensive assessments, health promotion activities, early intervention/ prevention programs, improve their knowledge about their child's development, and build competency in navigating health services. These findings support the view that empowering socially excluded, vulnerable, or marginalised populations experiencing disadvantage, such as the children of young mothers, with the right health and social support needs, can make a considerable contribution to disrupting intergenerational cycles of disadvantage and addressing fragmentation and gaps and service access (Commerford & Robinson, 2016). Early childhood education and care programs such as supported or facilitated playgroups, target families who are from disadvantaged communities such as those from culturally and linguistically diverse backgrounds, young parent families, those socially isolated such as those living in caravan parks and disadvantaged urban areas, and families at risk of homelessness and/or facing complex problems (i.e., child protection issues and drug use) (Lakhani & Macfarlane, 2015). Often, they act as an intermediary, connecting families to social and health services that are specific to their needs, and provide a soft entry point into mainstream early childhood services (Hancock et al., 2015; Harman et al., 2014; Williams, Berthelsen, Viviani, & Nicholson, 2018). Within this context, supported playgroups are critical sites for addressing the health, developmental, and social disparities among pre-school-aged children. Embedding more formal types of support within this setting can assist parents in ways that may have been otherwise unavailable to them. This is consistent with previous reports indicating that supported playgroups and playgroups, in general, provide benefits such as increased exposure and access to a variety of community child health services and regular opportunities to attend sessions with the child nurse (Keam et al., 2018; Lakhani & Macfarlane, 2015).

As a result of attending a supported playgroup, young mothers formed an understanding of their child's developmental needs, which was perceived as an enabler to access. Supported playgroups are shown to have an important role in facilitating a mother's understanding of child developmental milestones and connecting mothers to health services that are specific to their child's needs (Green, Towson, Head, Janowski, & Smith, 2018). This enabler is best modified through reinforcement, optimism, and beliefs about capabilities. For example, imparting opportunities for young mothers to learn about child development and giving them information about the consequences of undiagnosed child health problems and the benefits of screening and/or intervention (for example, child health and development awareness campaigns). Each of these components can influence an individual's ability to perceive the need for care, which is determined by factors such as health literacy, knowledge about health, and beliefs related to health and sickness (Levesque et al., 2013).

Our findings highlight the challenges researchers face in studying health-seeking behaviours and help to understand the challenges faced by young mothers from complex and disadvantaged backgrounds. Importantly, any interventions must be developed with the communities they seek to target, reinforcing the significant role that supported playgroups have in preventing negative life outcomes for people who are most at risk. Improvements in health access behaviours and access opportunities remain imperative, such that future research should identify intervention functions, policy categories, and behaviour change techniques to inform tailored interventions to improve access to child health services for young mothers. Based on the BCW approach, mapping the barriers and enablers to components of the COM-B model and domains of the TDF allowed for the identification of several behavioural themes that may prove useful in the design of future interventions. These include: (1) increasing opportunities for young mothers to learn about child developmental milestones, (2) improving young mothers' overall health literacy, (3) increasing young mothers' skills and/or the availability of support to help them navigate health services, and (4) provide more accessible entry points for child assessments, referrals, or early intervention programs.

A limitation of qualitative studies is the generalisability of results due to the smaller sample sizes in comparison with quantitative studies. It is acknowledged that our sample would not be representative of all 'young mothers' experiencing disadvantage and any generalisation should be made with caution. Future studies may wish to include larger sample sizes, more in-depth, and exploratory interviews, and should consider how to best address specific service environmental factors such as differences in participant population, child healthcare service support structures, organisational culture, playgroup characteristics, and social or environmental resources. However, within the context of the sample used in this study, an in-depth analysis of the barriers to young mothers accessing services and potential enablers that can be targeted in intervention design has been provided. A further limitation is that young mothers who participated in this study were more active or regular attendants to the supported playgroup sessions. Albeit beyond the scope of this study, future consideration should be given to including mothers who do not regularly attend or choose not to participate.

Conclusion

This study identified a range of potential barriers and enablers to young mothers' access to child healthcare services and provides researchers with a tool for designing novel theory-orientated interventions. This study makes two important contributions. Firstly, it identifies four behavioural themes that provide the greatest insight to address the challenges and opportunities for improving access to child healthcare services for young mothers living in a disadvantage. Secondly, it highlights the value that young mothers receive by attending supported playgroups, thus suggesting that they are ideal settings for targeted behaviour change interventions. Together, these findings shed light on important gaps and opportunities that currently exist in child healthcare access research and provide a well-established structure to support the design of interventions within the context of supported playgroups.

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/bec.2022.23.

Acknowledgements. We gratefully acknowledge the women who participated in this study and the staff at the Wellspring Hub and Micah Projects.

Data availability statement. The data that support the findings of this study are available upon reasonable request.

Funding. This study did not receive any funding.

Declaration of interest. There are no known conflicts of interest associated with this publication.

Ethical standards. The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

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Cite this article: Krahe M, O'Leary K, Reilly S, Wallis K, Walsh K (2023). Factors Affecting Young Mothers' Access to Child Healthcare Services: A Behavioural Analysis to Guide the Development of Interventions. *Behaviour Change* 40, 254–266. https://doi.org/10.1017/bec.2022.23