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Public libraries as settings for the development of critical health literacy in children

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Abstract

Health literacy enables people to access, understand, appraise, remember and use information about health. Critical health literacy is a domain of health literacy and enables individuals and communities to engage in social and political processes for action on the determinants of health. Promoting critical health literacy early in the life course may contribute to improved health outcomes in the long term. Yet children's opportunities to develop critical health literacy are limited and tend to be school-based. There are recognised barriers to implementing critical health literacy interventions in schools. The aim of this study is to broaden the range of settings-based approaches available by exploring the potential role of public libraries as community-based supportive environments for children's critical health literacy.

The study was designed in consultation with a Children's Advisory Group of eight children. The setting is a public library system in England. The theoretical and methodological framework is institutional ethnography. Semi-structured interviews were conducted with 13 children, and semi-structured text-elicitation interviews were conducted with 19 public library staff and community stakeholders. The data were analysed through the lens of a conceptual model based on the literature. The model provided an organising framework for the data and informed a keywords approach to analysis.

The findings show that texts produced by the public library sector refer to health literacy support for local communities as part of the public library service offer, but the library was not perceived as a setting for health, and schools influence the health literacy development opportunities available for children there. Critical health literacy was seen as beyond the remit of the library, although one activity promoting critical health literacy was identified. This activity acknowledged the wider determinants of health, was accessible to children, involved children in how it was run, and facilitated children's informed action for health. A revised conceptual model is proposed that identifies the necessary conditions, or antecedents, for public libraries to be a supportive environment for children's critical health literacy development. The revised model situates the public library in a coordinated, multisetting (supersetting) approach with other settings where children spend time, including but not limited to schools.

The study advances the theory and application of a supersetting approach to the development of critical health literacy in children and highlights the possibilities of non-traditional settings for health. It also contributes to the ongoing development of institutional ethnography and health literacy research with children.

Keywords: critical health literacy; children's health literacy; settings-based approach; supersetting approach

Lay summary

Health literacy enables people to access, understand, appraise, remember and use information about health. Critical health literacy is a type of health literacy. It enables people to use their knowledge and experience to take control of health issues that matter to them and their communities. Developing critical health literacy from a young age can improve future health, but it is not easy for children in school to challenge teaching about health that does not match their everyday lives. This project explores children's opportunities to develop critical health literacy in other places where they spend time, not just school. Place is important, because critical health literacy looks different depending on where it is called into action. The place focused on here is a public library.

In England, children can access health information and resources at public libraries for free. To understand how the public library could help children's critical health literacy, an approach called institutional ethnography was used. A group of eight children accepted the job of helping to design the project so that it would be interesting and safe for other children. Thirteen children took part in interviews about what they do at the library when they want to find out about health. Nineteen adults took part in interviews about their work linked to children and health in the library and community.

The project found a mismatch between how the library is viewed by children in relation to health, and what children can actually do for health at the library that they can't do at school. The project also found that school settings matter for how the library works in relation to children's health literacy activities and resources. One library-based group for children was an exception to these findings: Girls' Group provided children with access and opportunities to learn about the politics of health, involved them in how the group was run, and encouraged children to build social action skills. Girls' Group was influenced by Girlguiding, not schools.

To help children develop critical health literacy, these aspects need to be developed across the public library system. Public libraries can work with other places where children spend time learning, such as schools and Girlguiding, Scouts, youth clubs and Young Carers groups. The project puts forward a model of how the public library could work with other places to support children's critical health literacy.

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Abbreviations

ACARA: Australian Curriculum, Assessment and Reporting Authority
ACPHE: Australian Curriculum: Health and Physical Education
AGM: Annual General Meeting
AI: Artificial Intelligence
AMED: Allied and Complementary Medicine Database
ASCEL: The Association of Senior Children's and Education Librarians
CA: Child Advisor
CAG: Children's Advisory Group
CEO: Chief Executive Officer
CHL: critical health literacy
CILIP: Chartered Institute of Library and Information Professionals
CINAHL Plus: Cumulative Index to Nursing and Allied Health Literature
CRediT: Contributor Roles Taxonomy
Critical HL: critical heath literacy
DMP: Data Management Plan
DNA: Did Not Attend
DOI: Digital Object Identifier
elfh: e-Learning for Healthcare
ERIC: Educational Resources Information Center
f2f: face-to-face
HBSC: Health Behaviour in School-aged Children
HEE: Health Education England
HeLit-Schools: Health Literate Schools
HL: health literacy
HLCA: Health Literacy in Childhood and Adolescence consortium
HLO: health-literate organisations
HLS: Health Literacy Survey
HLSAC: Health Literacy for School-Aged Children
HPS: Health Promoting Schools
IAP2: International Association for Public Participation
IE: institutional ethnography
IECSS: Inclusive Early Childhood Service System
IErs: institutional ethnographers

IPS: Industrial and Provident Society

ITTA: Interview to the Alien

ITTD: Interview to the Double

IUHPE: International Union for Health Promotion and Education

IVAC: Investigation, Visions, Actions, and Change

JHA: Just Health Action

KWIC: keywords in context

LIS: library and information science

LISTA: Library, Information Science & Technology Abstracts

LMS: Library Management System

LSBU: London South Bank University

MeSH: Medical Subject Heading

MP: Member of Parliament

NASEM: National Academies of Sciences, Engineering, and Medicine

NCD: noncommunicable diseases

NGO: non-governmental organisation

NHS: National Health Service

OCR: Optical Character Recognition

OpHeLiA: Optimising Health Literacy and Access

OSF: Open Science Framework

PMID: PubMed ID

PPE: Personal Protective Equipment

PPIE: Patient and Public Involvement and Engagement

PRISMA: Preferred Reporting Items for Systematic reviews and Meta-Analyses

PRISMA-ScR: PRISMA extension for Scoping Reviews

PROSPERO: International Prospective Register of Systematic Reviews

RO: research objective

RQ: research question

RSPH: Royal Society for Public Health

SDGs: Sustainable Development Goals

SDOH: social determinants of health

SHIE: Studying Healthcare using Institutional Ethnography

SLS: Schools Library Service

SoL: Sundhed og Lokalsamfund, ‘Health and Local Community’

STEM: science, technology, engineering, and maths

TCBL: transformative and community-based library

TIN: Text Identification Number

Trip: Turning Research into Practice

VCRM: Voice-Centred Relational Method

WHO: World Health Organization

YOI: Young Offender Institution

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Chapter 1 Introduction

This chapter introduces critical health literacy and traces its conceptualisation, as part of a wider typology of health literacy, from the 1990s through to its peri-pandemic applications in the 2020s. The rationale for focusing on how and where children can be supported to develop critical health literacy is explained with reference to the researcher's formative health literacy training and professional background.

1.1 Background to the study

Children's access to and application of health information is influenced by their health literacy and the health literacy of the everyday settings where children spend time, with and without adults. Health literacy is a modifiable determinant of health (Nutbeam and Lloyd, 2021; World Health Organization, 2021a) and set of social practices (Papen, 2009; Samerski, 2019) that enable people to use cognitive and social resources for individual and community health throughout the life course. Critical health literacy extends to making meaning from, and taking action on, the commercial, political, social and structural determinants of health and their discourses (de Leeuw, 2012; Kickbusch, 2021). The following sections define and discuss health literacy, critical health literacy, and critical health literacy in children.

1.1.1 Defining health literacy

Conceptualisations of health literacy are sufficiently multiple to justify a systematic review of definitions and models (Sørensen *et al.*, 2012), a consensus statement that presents health literacy as a critical determinant of health (IUHPE, 2018; IUHPE Global Working Group on Health Literacy, 2019), and more recently a multi-volume report (World Health Organization, 2022a, 2022b, 2022c, 2022d).

In England, health literacy has been proposed as a strategy for reducing health inequalities based on evidence of demonstrable associations between health literacy and health outcomes (Public Health England and UCL Institute of Health Equity, 2015). However, interventions to improve health literacy can risk exacerbating inequalities if not carefully targeted and supplemented by addressing

other health determinants (Rüegg and Abel, 2021). As at 2022, health literacy is not yet part of national policy in England, nor included in the national curriculum.

Historical overviews of health literacy have tended to date its entry into the literature to 1974, when it is positioned as an outcome of health education for school-aged children: '[m]inimum standards for "health literacy" should be established for all grade levels K through 12' (Simonds, 1974, p. 9) (quotation marks in original). This outline of its origin positions health literacy within the field of health education. However, as Pinheiro (2021) has noted, Dixon's earlier (1959, p. 81) discussion of 'increasing health literacy on the part of all our people' represents a more intentional use of health literacy linked to the responsibility of public institutions for population health promotion. Tensions persist around where health literacy research has its institutional "home": e.g. in education (Vamos *et al.*, 2020), health promotion (Abel, 2007; Corvo and De Caro, 2020; Gugglberger, 2019), public health (Sørensen *et al.*, 2012), or community development (Sykes *et al.*, 2017). Its identity as a concept has been difficult to pin down: for example, in library and information science, 'information literacy' – 'how people become informed within a specific setting' (Hicks, 2021, p. 1) – has branched out into 'health information literacy'. For the purposes of the present thesis, 'health literacy' is defined as 'a structured discourse and a set of practices' (Potvin and McQueen, 2007, p. 16) within health promotion.

Some common ground across disciplines is provided by Nutbeam's (2000) tripartite typology as an organising principle for the health literacy concept. This typology distinguishes between functional, interactive, and critical impacts on health and borrows from the terminology used in literacy research to describe what people and institutions are enabled to do to improve health in a given situation (Nutbeam and Lloyd, 2021). The so-called higher (critical) type is not predicated on mastery of functional or interactive health literacy (Aghazadeh *et al.*, 2020; Bollweg *et al.*, 2020; Lane and Aldoory, 2019). It incorporates analysis and application of information to exert greater control over decisions and the wider influences upstream of those decisions. Critical health literacy is the focus of this thesis.

1.1.2 Defining critical health literacy

Critical health literacy (critical HL) encompasses knowledge of community and political structures and critical appraisal of health-related information to inform the

planning, implementation and evaluation of, or reflection on, interpersonal actions for health equity (Chinn, 2011; Dixon *et al.*, 2022; Sykes *et al.*, 2013; Sykes and Wills, 2018). It is a multidimensional and relational concept. 'Relational' here refers to how the dimensions constitutive of critical HL change depending on the social relations where it is called for. In the literature, 'critical HL' and 'CHL' are both used as shorthand for critical health literacy. Critical HL is the term used throughout this thesis, for two reasons: the clear foregrounding of criticality in this abbreviation compared to the opacity of the CHL acronym, and the researcher's familiarity with the corresponding abbreviation 'critical IL' for critical information literacy in the library and information science (LIS) literature (Koltay, 2022).

Critical HL is more political than the functional and interactive types (Sykes and Wills, 2019). Due perhaps to sensitivities around this political action aspect and its links to Freirean critical pedagogy (Sykes and Wills, 2018), research that extends to critical HL has generally focused on the concept's cognitive dimension (e.g., critical appraisal) at the expense of its action orientation. This is now beginning to change, with an updated definition (Abel and Benkert, 2022) and recent conceptualisations of critical HL, such as the sub-type 'critical HL in pandemics', that recognise its potential to equip populations to combat the global infodemic of mis- and disinformation in the wake of COVID-19 (Abel and McQueen, 2021).

However, increased attention to critical HL in academic and policy circles (NASEM, 2021) has not yet translated to increased availability of opportunities to access training in critical HL. Intervention development specific to critical HL remains nascent, and validated instruments that measure critical HL holistically, inclusive of its social action-oriented dimension, are rarely used with preadolescents (Guo *et al.*, 2022; Haugen *et al.*, 2022). Inquiring into the 'where' of critical HL to identify supportive settings for its development is needed to inform how critical HL can be embedded as part of a lifelong learning journey that starts in childhood.

1.1.3 Health literacy and children

The extent of children's health literacy proficiency is largely unknown in England (Public Health England and UCL Institute of Health Equity, 2015). The cross-national Health Behaviour in School-Aged Children (HBSC) survey, in which England participates, collects data every four years on the health and wellbeing,

social environments, and health behaviours of children aged 11 and over, and includes a Health Literacy for School-Aged Children (HLSAC) instrument as an optional supplement. Recent HLSAC outputs, however, have focused on adolescent health literacy in a sample of 15-year-olds (Paakkari *et al.*, 2020). For younger children (aged eight to 11 years old), age-adapted versions of the European Health Literacy Survey Questionnaire (HLS-Child-Q15) have been developed and tested in Germany (Bollweg *et al.*, 2020) and The Netherlands (Rademakers *et al.*, 2022), but not yet in England. 'Young people' are identified as a priority population for health literacy development in a report on the prevention and control of noncommunicable diseases (NCDs) internationally, which highlights actions to advance 'child and adolescent health literacy' by 'supporting children to make daily health-related decisions and empowering them' (World Health Organization, 2022c, p. 10).

Six dimensions of children's health literacy are proposed under the '6D model' (Bröder *et al.*, 2019): demographic patterns and inequalities, differential epidemiology and health perspectives, developmental changes and socialisation processes, dependency within power structures and generational relationships, growing up in a digital world, and active citizenship. These dimensions inform the understanding of children's health literacy in this thesis, alongside the following summary cited in a review by Spencer *et al.* (2021, p. 1) on the optimal settings for Health Literacy Mediator roles:

> a social and relational construct that encompasses how health-related, multimodal information from various sources is accessed, understood, appraised, and communicated and used to inform decision-making in different situations in health (care) settings and contexts of everyday life, while taking into account social, cognitive, and legal dependence

This definition is pertinent to how children's health literacy is 'promoted or hindered by social structures, relationships, and societal demands' (ibid., p. 2), distinct from the circumstances of adults and adolescents under which children's experiences are usually subsumed in the literature (Bröder *et al.*, 2019; Schulenkorf *et al.*, 2022).

Despite the inclusion of children in both of health literacy's early entries in the literature – explicit in Simonds (1974), implicit in Dixon (1959) – it is only recently that children's health literacy has begun to be studied separately from the health literacy of proximal adults (Turner and Dempsey, 2018). While definitions and models of children's health literacy have been the focus of a systematic review

(Bröder *et al.*, 2017), there is a lack of empirical research (Bánfai-Csonka *et al.*, 2022) on how health literacy can be developed in children. Health literacy interventions targeting children tend to be filtered through adults, and opportunities for children themselves to get involved in health literacy research, as participants or co-researchers, remain limited (Jenkins *et al.*, 2023a).

The middle childhood phase – a range between seven and 11 years old – is a foundational period that 'sets the stage for health literacy' (Bhagat *et al.*, 2018, p. 132), independent decision-making, and the formation of health beliefs, attitudes and behaviours (Nsangi *et al.*, 2017a). The association of children's health literacy with age and reading age forms the basis for the Home Literacy Environment single-item screening question on the number of children's books in the home, used to study children's exposure to literacy-rich environments and children's self-reported health (Driessnack *et al.*, 2014), as well as instruments that include access to public library visits as a variable (Zullig and Ubbes, 2010).

Interventions for children's functional and interactive health literacy situated in post-primary education settings predominate in the literature (Fairbrother *et al.*, 2016; Peralta *et al.*, 2021), and 'findings are lacking for children under the age of ten or within a primary school context' (Bröder *et al.*, 2017, p. 21); see also Bánfai-Csonka *et al.* (2022). A recent systematic review of school-based interventions for children's health literacy identifies only six studies, from a total of 21, that are based in primary (rather than secondary) schools, and concludes that 'adolescence is too late' in the life course to begin developing health literacy (Nash *et al.*, 2021, p. 632). Focusing on health literacy in primary school-aged children, or the 'middle childhood' phase of the life course, is justified on this basis.

1.1.4 Critical health literacy and children

Critical HL in children younger than secondary school age is under-studied, and there is no consensus on a definition of critical HL specific to children's needs and social circumstances. The version of critical HL discussed in the literature is by default associated with adults, for whom it covers critical awareness of the twenty-first-century determinants of health relevant to adults' stage in life, combined with the motivation and capacity to exert greater control over individual and collective health events (Chinn, 2011).

Like the critical HL of adults, children's critical HL is not one-size-fits-all, and there are precedents in the literature for 'critical health literacies' (plural) that reflect the plurality of children as a population, including children with intellectual disabilities (Chinn, 2014), Young Carers already responsible for making critical decisions about health (Kambouris, 2010), and sick children and those who are not sick (Liao *et al.*, 2017). Children's critical HL specific to infectious diseases has received some research attention, pre- and peri-pandemic (Kilstadius and Gericke, 2017; Rydström *et al.*, 2021). Pandemic-era research has also highlighted the exacerbation of pre-existing inequities in children's access to health information (Bray *et al.*, 2021b, 2021a). This is despite children's roles as catalysts for changing health behaviour in others (Gadhoke *et al.*, 2015; Kamo *et al.*, 2008; Nolas, 2015; Nolas *et al.*, 2017; Onyango-Ouma *et al.*, 2005; Satchwell, 2013; Simonds *et al.*, 2019), as health information brokers for older family members (Gonzalez *et al.*, 2020; Williams *et al.*, 2012), as change agents (Clausen *et al.*, 2019) and as public health actors (Thompson *et al.*, 2021).

The life course approach in health literacy studies (Guo *et al.*, 2020) has informed understandings of critical HL as developing alongside children's cognitive and social maturation (Maindal and Aagaard-Hansen, 2020). Generic literacy skills are not prerequisite to fluency in critical HL: '[h]ealth promotion researchers in countries where many individuals lack basic reading and writing skills do not assume critical health literacy is dependent on these abilities' (Chinn, 2011, p. 65) (section 1.1.1). Critical HL in children is influenced by different determinants at different times and places (Fairbrother *et al.*, 2022; Maindal and Aagaard-Hansen, 2020; Parisod *et al.*, 2016; Woodgate and Leach, 2010). Being able to navigate and socially "read" settings and systems is therefore important for critical HL (Renwick, 2012). Children's everyday lives place them in situations requiring decision-making about health spontaneously, 'in-the-moment in a hallway or after school on a playground, or alone without adult guidance' (Allen and Auld, 2019, p. e194). When outsourcing their information needs to adults is not feasible, or is discouraged (Bray *et al.*, 2021b), children apply their own somatic knowledge to challenge health messaging irreconcilable with their lived experience (Fairbrother *et al.*, 2020). Consolidating this capability early in the process of lifelong learning is of benefit to children here and now, in the everyday health-work that many children are already doing (Simovska and Paakkari, 2014), as well as preparing them for later responsibilities (Paakkari *et al.*, 2023).

Research on critical HL is mostly conducted and published by adults, to meet adult-led objectives. Some researchers question the need for a health literacy definition specific to children (Weiss, 2019), let alone a critical HL one supportive of children's access to, critical engagement with, and action on the wider determinants of health. A study measuring health literacy in children aged nine to 13 years old, while noting that critical HL has been neglected in children, proceeds to state that 'the related social and political skills are likely to develop in older age groups only' (Schmidt *et al.*, 2010, pp. 547–548). Three further examples support this view: '[t]he critical level should probably be included in the latter part of schooling such as middle school and lower secondary school' (Kilstadius and Gericke, 2017, p. 2280); '[t]he more peripheral inclusion of the transformative social action stage may reflect the relatively young age of the target audience' (Fage-Butler, 2018, p. 1104); and '*even* young adolescents (13–15 years old) can understand complex relationships between social structures and health outcomes' (Haugen *et al.*, 2022, p. 14) (researcher's emphasis).

Underestimating the possibilities for critical HL early in the life course ignores the evidence of critical HL being developed (to some extent, e.g., critical appraisal) by young children. Although Nutbeam's typology is not intended to be viewed as a progressive scale, it has been posited that 'the three levels of HL could start in preschool and continue through primary school' (Kilstadius and Gericke, 2017, p. 2279). Children aged four are reported to have 'reflected on the usefulness of health messages and mobilized their personal, embodied experiences to filter health information in a manner that was meaningful for them', and are described as 'capable of assessing the relevance of information to their own situation as in critical health literacy' (Derwig *et al.*, 2020, p. 371). From age 10, children can be considered active critical HL practitioners (Fairbrother *et al.*, 2020).

Integrating critical HL into school-based health education may contribute to improved health outcomes in the long-term (Dixon *et al.*, 2022; Okan, 2019), and a case has been made for investing in developing critical HL early in the life course to mitigate current and future burdens on health services (McDaid, 2016; Sørensen and Okan, 2020; World Health Organization, 2021a). A cluster-randomised controlled trial has identified several advantages of teaching health-related critical appraisal practices to children in primary schools in low- and middle-income countries, including reaching children before they exit the education system, pre-

empting health-related misconceptions becoming resistant to change in adulthood, improved academic achievement, and future capability as citizens to shape health policies (Nsangi *et al.*, 2017a). The discourse of critical HL in children is often future-oriented, 'to the world that the students will be part of' (Paakkari and Paakkari, 2012, p. 135), but supporting children to develop practices that can help them now – in the pandemic present – is also necessary.

Critical HL can be enacted in 'varied modalities, and different settings of use' (Chinn, 2014, p. 253). The prevalence of action-oriented critical HL in under-13s has not yet been objectively measured (Paakkari *et al.*, 2018) (section 1.1.3), but the everyday settings (Torp *et al.*, 2014) accessible to children are more readily identifiable: schools (Okan *et al.*, 2023), particularly those aspiring or committed to the WHO Health Promoting Schools (HPS) framework (Langford *et al.*, 2015).

As 'a major contributor for health literacy development among children' (World Health Organization, 2022c, p. 10), HPS have tended to be referred to in the literature as *the*, not *a*, setting for health literacy interventions aimed at children. But considering the limited integration of critical HL in school curricula (Haugen *et al.*, 2022), and the recommendation by Maindal and Aagaard-Hansen (2020, p. 4) that 'promoting high levels of health literacy throughout the life-course should be supported by cross-disciplinary teams of professionals across a variety of health promotion settings', there is value in exploring the potential of settings for developing critical HL in middle childhood "outside of" school and HPS settings (Dixon *et al.*, 2022; World Health Organization, 2022c). Public libraries, as informal learning settings that are accessible and free to children in the seven to 11 age group, are explored in this thesis.

1.1.5 Public libraries

Public libraries are everyday settings for children (Vold and Evjen, 2020). They are community-based, provide physical and virtual spaces (Leung *et al.*, 2016), and offer children curated and free access to local and global health information services. Library resources include the staff, some of whom will be trained information professionals (Kyabaggu *et al.*, 2022) with an understanding of the determinants of health relevant to the communities they serve. Within the field of public health, public libraries constitute a comparatively unique, but under-utilised,

community partner (Lenstra and McGehee, 2022; Philbin *et al.*, 2019; Whitelaw *et al.*, 2017; Wynia Baluk *et al.*, 2022), despite international recognition of their role in public health and, to some extent, health equity and health literacy development (ALLIANCE, 2021a; Leung *et al.*, 2016; Wilson *et al.*, 2023). Many public libraries have a consumer health librarianship function (Luo and Park, 2013) and 'routinely assist patrons with unmet health and social needs' (Whiteman *et al.*, 2018, p. 1). Ongoing development of public libraries' role in the provision of consumer health information is observable in the UK and further afield (Harris *et al.*, 2010; Malachowski, 2014; St. Jean *et al.*, 2021). There is evidence that public libraries are responsive and active community settings for health-related activities and information-seeking, as documented in Australia, Canada, Norway, the UK, and the USA (Leung *et al.*, 2016).

Health literacy and library and information science (LIS) scholarship share citation networks: of five identified bibliometric analyses focused on health literacy (Bankson, 2009; Bazm *et al.*, 2019; Kondilis *et al.*, 2008; Massey *et al.*, 2017; Wilson *et al.*, 2022), two trace the involvement of libraries and library staff in health literacy and are published in LIS-affiliated journals (Bankson, 2009; Wilson *et al.*, 2022). A scoping review of librarians researching health literacy describes libraries as trusted recruiters of local participants and 'appropriate settings for [community-based health literacy studies] implementation and evaluation' (Galvin and Lee, 2020, p. 295). LIS research has explored the role of public libraries in health literacy, health information literacy (which focuses on the information appraisal dimension of health literacy) (section 1.1.1), and social justice in libraries, or 'critical librarianship' (referred to on LIS social media using the hashtag #critlib) (Barr-Walker, 2016; Huber *et al.*, 2012). However, lack of wider recognition of the overlaps between health literacy and LIS hinders the construction of a bridge between the two: a meta-narrative review of health literacy describes results 'published in the *Journal of Librarianship and Information Science*' as 'unlikely to be identified in a cursory search by a health researcher' (Pitt *et al.*, 2019, p. 676).

Public library services in the UK operate based on a proportionate universalism approach: resourcing and delivering universal services to improve the lives of all, with proportionately greater resources targeted at the more disadvantaged members of the community (Public Health Scotland, 2014). Proportionate universalism may reduce the risk that health literacy interventions integrated into the core business, or

institutional agenda, of the public library setting inadvertently increase health inequalities (Rüegg and Abel, 2021).

This thesis explores the potential of the public library to support the development of critical HL in children, and to contribute to the literature on the settings-based approach. The thesis inquires into what makes a setting not only health-promoting, but health *literacy*-promoting and a 'supportive environment' for critical HL (World Health Organization, 1986, n.p.). There is 'cautious optimism' shown towards the potential for school-based health education to translate to critical HL in the long-term (Dixon *et al.*, 2022, p. 13), and this might also be applied to other settings.

1.1.6 Situating the research and the researcher

I arrived at the focus of this study following public health outreach work undertaken with public libraries in my post as Health Literacy Project Manager for a National Health Service (NHS) trust in England. This post, embedded in an NHS library and knowledge services team, was created in November 2018 to address the prevalence of low health literacy in adults in the boroughs served by the trust. Health literacy roles within NHS library and knowledge services have become sufficiently widespread for the establishment of a dedicated list-serv, online community of practice, templates for health literacy role descriptors, and an England-wide training programme on health literacy awareness for NHS staff and local authority public health departments. The remit of my role included delivery of this training programme.

Train-the-trainer workshops for the programme are administered by Health Education England (HEE), accredited originally by the Community Health and Learning Foundation (Naughton *et al.*, 2021) and currently by the Royal Society for Public Health (RSPH). I also provided a public-facing health information signposting service in a range of settings: diabetes outpatient clinics, local surgery waiting rooms, primary and secondary school classrooms and staffrooms, hostels for the homeless, and public libraries.

I consider my work with public libraries, whether conducted in-person or online (e.g., through takeovers of the public library's social media accounts), as providing frontline public health services. This view was reinforced by the pivoting and expansion of the public library services with which I worked to continue to support

communities during COVID-19. Expanded services included distributing WiFi hotspots, 3D-printing Personal Protective Equipment (PPE) using in-library makerspace facilities, and proactive wellbeing phone-calls from library staff to digitally-excluded community members.

My involvement in promoting health literacy on-the-ground through interacting with people at my information stand in the reception area of public library buildings and digital foyers led me to the academic research guiding – and circumscribing – my professional practice, beginning with how I was first introduced to health literacy and how I was taught to introduce it to others (Jenkins, 2022). The version of health literacy which I was licensed to teach to trainees required me to adhere closely to an official slide-deck. Deviation from the slides' script, e.g., to acknowledge political factors, invalidated the RSPH certification for trainees' continuing professional development, and compliance was assessed through scheduled observations of training sessions.

When I first looked up the full-text of two references cited in the slides – Nutbeam (2000) and Rowlands *et al.* (2015) – I reflected on how newcomers to health literacy learn about it based on the definition presented to them: an abbreviated version of the definition adopted by the World Health Organization, which did not appear until several slides into the presentation. The definition was accompanied by outdated statistics on low health literacy prevalence, which featured on a "big reveal" animated slide and were drawn from samples collected as part of England's Skills for Life survey in 2010 and 2011. There was no room for off-script commentary beyond small adjustments (e.g., borough-level low health literacy prevalence, relevant to the local area within which trainees worked, was permitted to be included for context).

Looking beyond the prescribed slide notes and tracing citations back to (sometimes paywalled) sources led me to question how "health literacy-friendly" the field itself was. What I perceived as a sense of disconnect between the 'Teach Back' communication technique outlined in the slides, and the closing-off of routes to talk back to the slides' content in practice, became the impetus for my wider reading in health literacy and interest in the process by which certain aspects come to be viewed as researchable within, or properly belonging to, the health literacy evidence base.

The topic of children's critical HL attracted my attention by its absence in the slides and, when I went looking, the literature. Functional and interactive health literacy in adults is the default. When I was invited to represent HEE on a panel of health professionals, educators, and librarians to shortlist a selection of books as part of a public library social prescribing initiative for children's health and wellbeing, I struggled to locate literature on children's health literacy as a concept separate from the health literacy of adults and adolescents (and on children's critical HL as a concept at all). The gap became more frustratingly apparent when I turned to planning health literacy sessions for primary and secondary schools, and was met by a dearth of lesson plans available which referred to critical HL in ways meaningful to pupils in the UK and actionable within school-based settings.

My relationship to the research therefore combines this lived experience in libraries and their discourse with a novice research identity and, as a non-parent/caregiver, limited social links to children. All these aspects required reflexivity to manage and navigate, including consideration of methods to defamiliarise the (to me) familiar public library setting (Mannay, 2010) in order to analyse it in the way that I could analyse the field of health promotion and how it is taught (Jenkins, 2022), and to access both a child rights-based perspective and a child's experiential perspective (Söderbäck *et al.*, 2011). Intellectual humility and recognition of my own blind-spots were also necessary to cultivate. In the process, I aimed to develop a practitioner and researcher role that was neither an 'insider' nor 'outsider', but an 'alongsider' (Carroll, 2009) whose point of departure is the local co-construction of knowledge *alongside* informants in the settings of professional and everyday life that intersect this study (Grahame and Grahame, 2009). It is from this 'alongsider' positionality and context that I decided to pursue a PhD on children's critical health literacy and the public library setting, of all the possible topics within scope of the health literacy studentship that has supported this research.

1.2 Structure of the thesis

The thesis continues in Chapter 2 with a systematic scoping review of the literature available on critical HL in children to formulate the guiding research aim, question, and objectives. Chapter 3 develops the application of the settings-based approach in public health to health literacy research and puts forward a conceptual model that proposes the public library as a potential supportive environment for children's

critical HL development. Chapter 4 explains the methodology and provides the rationale for incorporating children's input to the study design. The arrival of COVID-19 in the UK five months into the PhD timeline changed the norms of ethical research with children and made amendments to the design necessary; the chapter includes reflections on this process of resetting. Chapter 5 reports the findings from iterative data collection and analysis. Chapter 6 discusses the findings in dialogue with the literature. The thesis concludes with Chapter 7, where the implications of the research are considered and next steps for future research and practice are proposed. Supplementary documents (insights from working with children and navigating the research setting, recruitment and data collection tools, and research outputs) are enclosed as appendices.

1.3 Summary

This opening chapter has outlined why critical HL in children requires further study. The background of the decision to focus on public libraries as potential supportive environments where children can develop critical HL outside of school-based settings was described, and a roadmap for how the thesis will proceed was set out.

Chapter 2 Literature review

The previous chapter introduced critical HL in children as an under-researched topic. This chapter reviews the literature on how and where critical HL in children is supported. It includes a protocol for a systematic scoping review of the evidence base and the rationale for conducting this type of review. Implications of the search results for the direction of the study are discussed and inform the research aim, research question, and research objectives.

2.1 Introduction

The cognitive and social practices associated with critical HL, such as critical appraisal of health messages and engagement in health-related advocacy, are of lifelong benefit. Understanding how and where children can be supported to develop these practices may improve health outcomes now and in the future. A comprehensive review of the existing evidence base for critical HL in children is necessary to establish current knowledge and the objectives that will steer this study. The protocol delineated in this chapter aims to offer a robust search strategy for facilitating future searches specific to critical HL in children, including how critical HL in children is conceptualised; the dimensions that constitute it; the validated instruments available to measure it; and the features of interventions designed to develop it.

2.2 Protocol for a systematic scoping review on the development of critical health literacy in children

To ensure an evidence-based approach to situating the current state of research on critical HL development in children, this protocol for a living systematic scoping review was formulated in December 2019. The review is ‘living’, a descriptor borrowed from the approach to updating used in systematic reviews (The Cochrane Collaboration, 2020), because it was continuously refined and re-run to capture new sources up to the time of writing in May 2022. It follows the systematic procedure for scoping reviews advanced by Levac *et al.* (2010) and modelled by Peters *et al.* (2015). The review stages include identification of the review question(s), selection

of evidence sources, refinement of the search strategy, screening, extraction of data into a table, and reporting of results.

2.2.1 Rationale for conducting a systematic scoping review

The decision to conduct a systematic scoping review was reached after consulting Munn *et al.* (2018), which lists indicators for the appropriateness of selecting a scoping review from the typology of reviews by Grant and Booth (2009). The only indicator not met in the case of this thesis is that of a scoping review being intended as a precursor to a systematic review. In contrast to a systematic review, systematic scoping reviews take a more exploratory approach to gain an overview of the evidence available. Capturing evidence types that might otherwise be screened out by the critical appraisal component of a systematic review, such as grey literature and unpublished theses, outweighs quality assurance considerations here, and no follow-up systematic review is planned.

Scoping review methodology is used to clarify concepts, definitions, and gaps in a research area, including the types of evidence that inform practice in that area (Peters *et al.*, 2015). It aims to produce an evidence synthesis that is rigorous, transparent, and replicable. These attributes are in line with recent calls to promote open dissemination and publication strategies within health literacy research (Guo *et al.*, 2020). Scoping reviews are suited to searches across disciplines, where evidence is emergent, complex, or 'not amenable to a more precise systematic review' (Peters *et al.*, 2015, p. 141), and 'when a body of literature has not yet been comprehensively reviewed' (Peters *et al.*, 2015, p. 141), as is the case for critical HL in children.

A further justification for the selection of systematic scoping review methodology for this study is that it supports iterative, reflective searching and further development of the protocol in response to the results returned (Pham *et al.*, 2014). The built-in flexibility of the scoping review framework can therefore facilitate the updating of this living review to keep pace with developments over the duration of the PhD.

2.2.2 Background to the review

Critical HL has been the substantive focus of two reviews, in English (Chinn, 2011) and in German (Benkert and Abel, 2022); and one annotated bibliography entry

(Sykes and Abel, forthcoming). Interventions to develop children's health literacy have also received review attention (Nash *et al.*, 2021), but no review combining the two into a focus on critical HL in children has been registered to date. This protocol is intended to reduce the duplication of research efforts by providing a useful foundation for future searches on critical HL from an early life course perspective.

Interventions designed to target critical HL are 'not new' (Nutbeam, 2000, p. 265): at the outset of this review, it was already known that interventions designed to build all three levels of health literacy report more success in developing functional and interactive health literacy than critical HL (Sykes and Wills, 2019). But prior to the pandemic, research and policy on functional and interactive health literacy generally relegated critical HL to being a 'neglected domain' (Sykes *et al.*, 2013, p. 2), and did not attend to the circumstance that 'many of the disparities in health that we find today may not necessarily (any more) pertain to differences in functional health literacy, but may be due to other dimensions of health literacy, such as critical literacy' (Mantwill and Diviani, 2019, p. 142). Evidence-based, implementation-ready interventions to develop critical HL early in the life course are therefore still sufficiently scarce to justify a comprehensive literature search. The work of the review is to pin down how, and in which contexts, critical HL in children is conceptualized and known to be developed.

2.2.3 Review questions

The gaps in the evidence base identified from the researcher's pre-existing reference collections, and corroborated by professional experience and grey literature, contributed to the formulation of two questions to steer the review:

1. How is critical health literacy conceptualised in relation to children?
2. How and where is critical health literacy developed in children?

Both questions were designed in line with the FINER criteria (Feasible, Interesting, Novel, Ethical, Relevant) (Hulley, 2007).

2.2.4 Inclusion and exclusion criteria

Table 2.1 describes the parameters used to guide decisions on whether evidence retrieved should be included or excluded from onward analysis. These parameters were iteratively refined as familiarity with the literature increased.

Table 2.1 Inclusion and exclusion criteria

Inclusion criteria	**Exclusion criteria**
Critical HL in the title, abstract and/or keyword list (as an indicator of substantive discussion; *not applicable to grey literature*)	Concepts related to critical HL and its dimensions discussed without reference to critical HL (e.g., critical consciousness, critical health education, critical inquiry, critical pedagogy, critical thinking)
Critical HL sub-types discussed with reference to critical HL *(but the sub-type must incorporate 'health', e.g., COVID-specific critical HL, critical digital health literacy, critical media health literacy, critical environmental health literacy, critical mental health literacy)*	Studies focused on measuring critical HL as part of a wider functional / communicative / critical HL scale without discussion of critical HL in its own right; studies that only mention critical HL in the context of summarising health literacy typology
Samples include participants between the ages of seven and 11	Sample includes participants aged 11 but in post-primary school education

Following Otten et al. (2022b), text in italics indicates amendments made during the review process. These are represented in the PRISMA-ScR flow diagram (section 2.2.7) as an additional stage, 'Criteria refined'.

No limitations were placed on study type, discipline, geographical location or origin, setting, date or language (with the stipulation that abstracts must be available for machine translation). Where a single intervention is 'salami-sliced' into different outputs (e.g., Nsangi *et al.*, 2017a, 2017b, 2020), one output representative of the intervention and its underpinning theory is selected.

While previous studies of critical HL have allowed that 'the attributes being developed by a project can be seen as more important when selecting the case, than the name or language used by the project' (Sykes *et al.*, 2017, p. 754), evidence pertinent to this review is restricted to substantive discussion of critical HL as a named concept (i.e., not just mentioned by way of summarising health literacy typology). While this restriction risks missing the sort of interventions that will in effect be taking a critical HL approach (McDaid, 2016), the pay-off is precision. As an example, Paakkari and Okan (2019, p. e163) define 'genuine health literacy' as 'pupils thinking critically, becoming aware of their own values and preferences […] rather than passively following traditions'. Their paper cites Nutbeam (2000) on critical HL, but that term is not used and the paper is therefore excluded from the synthesis. A paper on 'radical food literacy' (Truman *et al.*, 2017) is also excluded because critical HL is not mentioned. Papers using terms such as 'higher HL' and 'level 3 HL' are included if critical HL is also named.

The target population for the review is set at a lower limit of seven years old and an upper limit of 11 years old. This age range aligns with the concrete operational stage of children's cognitive development, which has been theorised in the literature as playing a formative role in health literacy development (Bhagat *et al.*, 2018). The focus on this age range is discussed in sections 1.1.3–1.1.4. From initial search iterations it was clear that, due to inconsistencies in academic databases' definitions of childhood, there would be some overlap with early adolescents in post-primary education if the age-bracketed eligibility criterion was not enforced.

2.2.5 Evidence sources

The multidisciplinary uptake and breadth of health literacy requires reviewers to search across a range of sources (Pinheiro, 2021). Evidence sources listed in table 2.2 were supplemented throughout the review period (5 December 2019–23 May 2022) with sources identified through backwards and forwards citation mining, PubMed's 'Similar articles' algorithm, weekly digests from Google Scholar Alerts for <critical health literacy> and <critical HL>, and intentional searching in list-serv archives and on social media.

Table 2.2 Evidence sources

Source name	Accessed through interface	Source focus
Epistemonikos	-	Reviews and preprints
PROSPERO	-	Reviews and preprints
Trip (non-Pro version)	-	Reviews and preprints
OSF	-	Reviews and preprints
MEDLINE	Ovid	Peer-reviewed literature
PubMed (excluding MEDLINE)	-	Peer-reviewed literature
AMED	Ovid	Peer-reviewed literature
CINAHL Plus	EBSCO	Peer-reviewed literature
ERIC	EBSCO	Peer-reviewed literature
PsycINFO	Ovid	Peer-reviewed literature
LISTA	EBSCO	Peer-reviewed literature
Conference Proceedings Citation Index	Web of Science Core Collection	Conference abstracts and posters
ProQuest Dissertations & Theses Global	ProQuest	Theses
Carrot2 (accessed from England)	-	Web search engine (including grey literature)
Google Scholar (accessed from England)	-	Web search engine (including grey literature)

Reviews and preprints databases are the focus of a preliminary search to gain an overview of the field in aggregate: Epistemonikos (including Cochrane Database of

Systematic Reviews), International Prospective Register of Systematic Reviews (PROSPERO), Turning Research into Practice (Trip) and the Open Science Framework (OSF) repository. Academic databases searched for peer-reviewed literature are as follows: MEDLINE, PubMed (excluding MEDLINE), Allied and Complementary Medicine Database (AMED), Cumulative Index to Nursing and Allied Health Literature (CINAHL Plus), Educational Resources Information Center (ERIC), PsycINFO, and Library, Information Science & Technology Abstracts (LISTA). Conference proceedings are searched via the Conference Proceedings Citation Index – Social Sciences, and theses via ProQuest Dissertations & Theses Global. Web searches are conducted via Carrot2 (which returns 'clusters' of search results for further analysis), and Google Scholar. Returns from Google Scholar are capped to the first page of results only, and the geographic location of web searches is recorded as England (Cooper *et al.*, 2021). Minimising the personalisation of results by using an incognito browser for Google Scholar did not offset the difficulties of exporting results from the Google Scholar interface without a user account.

2.2.6 Search terms and strategy

Search terms use a combination of natural language and medical subject headings (MeSH). Librarian input to the search strategy design advised against the use of <Health Literacy[mesh]> as this could return results with only a passing mention of critical HL. No MeSH exist at a level of granularity sufficient to capture the different levels of health literacy typology, and while the health literacy-specific search string for PubMed contains a workaround, <(functional[tw] AND health[tw] AND literacy[tw])> (National Library of Medicine, 2014), which could be adapted to replace 'functional' with 'critical', this string has not been kept up-to-date with the 2022 release of new MeSH vocabulary.

Instead, the terms <critical health literacy> and <critical HL> are preferred. The inclusion of <critical HL> is based on instances identified in references already compiled in the course of work in the health literacy field, where the acronym of 'HL' for health literacy is established without 'critical health literacy' being written out in full or listed as a keyword in the article metadata, e.g. Abel *et al.* (2015). An adjacency operator like adj2, which allows the insertion of one word between 'critical' and 'health literacy' to capture e.g. 'critical digital health literacy', was trialled

in preliminary searching but led to red herrings like '**critical** health literacy milestones' (where 'critical' describes the significance of children's developmental milestones and does not refer to the concept of critical HL) (Arvanitis *et al.*, 2019, p. 269). Search terms and strings are fine-tuned based on papers identified prior to the formal search as having 'pearl-growing' potential – key papers related to the search questions that provide examples of keywords and index terms likely to retrieve relevant results.

Conceptual conflation (Pinheiro, 2021; Reeve and Basalik, 2014) complicates the task of retrieving literature relevant to critical HL. Lack of consensus on the definition of critical HL (section 1.1.4), combined with the lack of dedicated MeSH for indexing critical HL studies in MEDLINE and PubMed, led to results being returned that refer to e.g. action competence and critical thinking, '[w]ithout explicitly referring to the concept of critical health literacy' (Abel and McQueen, 2020, p. 1478). MeSH however proved useful for other aspects of the search: frequent MeSH assigned to literature relevant to the search query and available in MeSH 2022 include Child, Curriculum, Health Education / methods, Health Literacy / organization & administration, Health Literacy / trends, Libraries, Schools, Social Determinants of Health, and Terminology as Topic.

The abbreviation <CHL> for critical HL is not included as a search term, because this is commonly used in the name of the Functional Communicative Critical Health Literacy Scale (FCCHL) (Ishikawa *et al.*, 2008), and might lead to results being returned that refer to that scale rather than critical HL as a topic. The prevalence of studies that use the FCCHL instrument complicates the search process, as the abstracts for such studies tend to include the string <critical health literacy> in referring to the measure, but do not focus on critical HL specifically. To enforce the criterion of substantive discussion of critical HL, the <ti,ab,kw> (title, abstract, keyword) filter is therefore used to specify that critical HL must appear in the title or abstract of the paper, or as a keyword.

Table 2.3 displays search strings adjusted for application across the different evidence source interfaces. The search strings aim for a balance between precision (i.e., focused on critical HL and child populations) and recall (i.e., using truncation, but avoiding the Boolean operator NOT in case it precludes the return of relevant results). Searches are conducted for critical HL first, then filtered for child

populations. A single search line for critical HL indicates a low return, whereupon the search is discontinued without progressing to target group-specific filtering.

Table 2.3 Search strings by evidence source

Source name	**Search string**
Epistemonikos	(title:("critical health literacy") OR abstract:("critical health literacy"))
PROSPERO	"critical health literacy" *Separate search [which returns non-overlapping results]: "critical HL"*
Trip (non-Pro version)	"critical health literacy" child* "critical HL" child*
OSF	title:("critical health literacy") tags:("critical health literacy")
MEDLINE	(critical adj2 health literacy).mp AND child* *Removal of adjacency operator to reduce irrelevant results, e.g., abstracts focused on functional / parental health literacy but containing red herrings like 'children's **health literacy** is **critical**', 'The ability to understand pediatric medication instructions is a **critical health literacy** and patient safety concern'*
PubMed (excluding MEDLINE)	("critical health literacy"[Title/Abstract]) OR (critical[tw] AND health[tw] AND literacy[tw]) AND (child*) AND (pubmednotmedline[sb]) *Removal of (critical[tw] AND health[tw] AND literacy[tw]) string* *Removal of (pubmednotmedline[sb]) due to high overlap between MEDLINE and PubMed*
AMED	(critical adj2 health literacy).mp
CINAHL Plus	((TI "critical health literacy" OR AB "critical health literacy") OR (TI "critical hl" OR AB "critical hl")) AND AG child: 6-12 years *Returns key papers: Fage-Butler (2018); Fairbrother et al. (2020)*
ERIC	((TI "critical health literacy" OR AB "critical health literacy") OR (TI "critical hl" OR AB "critical hl")) AND AG child: 6-12 years
PsycINFO	("critical health literacy").mp AND child*
LISTA	((TI "critical health literacy" OR AB "critical health literacy") OR (TI "critical hl" OR AB "critical hl"))
Conference Proceedings Citation Index	"critical health literacy" (Topic) OR "critical HL" (Topic) AND child* (Topic)
ProQuest Dissertations & Theses Global	ab("critical health literacy") OR ab("critical HL") AND ab(child*)
Carrot2 (accessed from England)	"critical health literacy"|"critical HL" AND child*
Google Scholar (accessed from England)	"critical health literacy"|"critical HL" AND child*

**The asterisk symbol is used for truncated terms. It instructs the search interface to search for all terms beginning with the letters that come before the asterisk.*
AG = Age Group; database menu offers <Child, 6-12 years> as an option.
.mp = title, abstract, subject heading, MeSH, keyword.
.sb = citations that have not yet completed MEDLINE indexing.

Citation analysis of relevant results was conducted to contextualise the papers in the wider literature and identify citation clusters from which further papers could be located. In the case of reviews, evidence tables within the reviews were also mined for references, as recommended by O'Mara-Eves *et al.* (2014).

2.2.7 PRISMA-ScR flow diagram

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) (Tricco *et al.*, 2018), with updates from Rethlefsen *et al.* (2021) and Rethlefsen and Page (2022), is used to record the screening decision process. Reviews consulted for guidance on reporting the practical steps involved in this stage include Mukamana and Johri (2016); Otten *et al.* (2022b); and Spencer *et al.* (2021).

Results at title- and abstract-level were ranked by the relevance algorithm of the source interface. If the refined eligibility criteria (section 2.2.4) were met, the full-text and supplementary data files were scanned further for hits matching a CTRL+F or CMD+F search for <critical h>. Search results were saved and de-duplicated in Zotero (version 6.0.7) reference management software.

Figure 2.1 shows the PRISMA-ScR flow diagram.

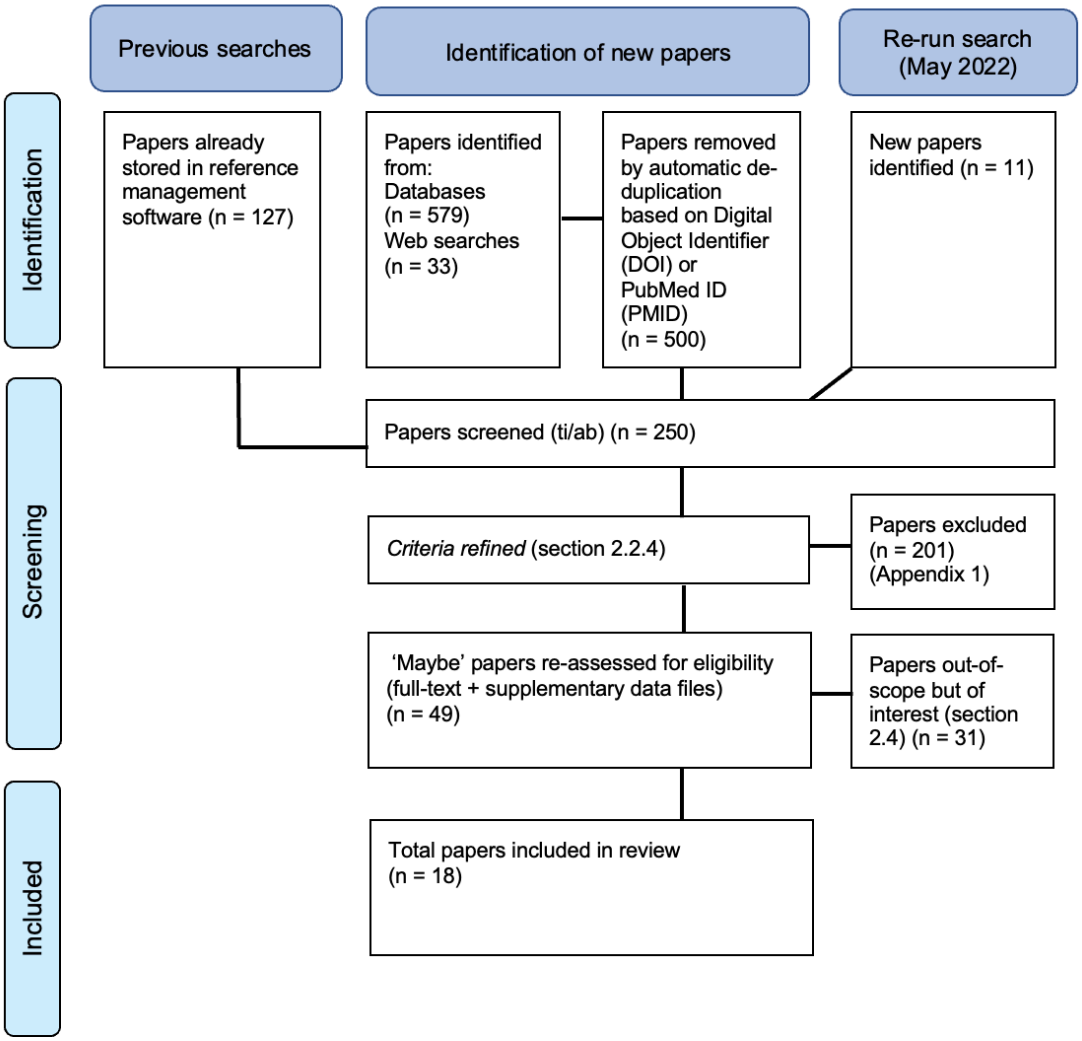

Figure 2.1 PRISMA-ScR flow diagram

The most common reasons for exclusion during screening were the absence of <critical health literacy> or <critical HL> as strings in the ti/ab text; a substantive focus on post-primary education; lack of clarity on the demographics of populations sampled (specifically around the inclusion of seven to 11-year-olds); and salami-slicing of projects already reported elsewhere in the results (see Appendix 1 for indicative references for these exclusions). Papers categorised as out-of-scope based on the refined criteria (n = 31), but nevertheless of interest to the review, are discussed separately in section 2.4.

2.2.8 Data extraction and charting

The final selection of 18 papers meeting the eligibility criteria as at May 2022 (when the living search and associated Google Scholar Alerts were run for the last time), is summarised in table 2.4 and recorded in greater detail in Appendix 2 (table A2.1). For the detailed table, data relevant to the review questions were extracted to provide an overview of each paper. The column headers for the table were refined in response to this charting process to ensure that the table provided a pertinent and systematic charting of the results.

Table 2.4 Summary of papers eligible for inclusion in the review

#	Reference	Full title
1	St Leger (2001)	Schools, health literacy and public health: possibilities and challenges
2	Kambouris (2010)	Developing health literacy in Young Carers: a pilot project for the use of empowerment approaches
3	Mogford *et al.* (2011)	Teaching critical health literacy in the US as a means to action on the social determinants of health
4	Robertson and Thomson (2012)	Teaching in uncharted waters: seeking critical body literacy scripts
5	Corcoran (2014)	Critical psychologies for critical health literacies
6	Renwick (2014)	Critical health literacy: shifting textual–social practices in the health classroom
7	Velardo (2014)	Understanding preadolescent nutrition literacy in a low socio-economic region of South Australia
8	Wrench and Garrett (2014)	Health literacies: pedagogies and understandings of bodies
9	Robertson and Scheidler-Benns (2016)	Using a wider lens to shift the discourse on food in Canadian curriculum policies
10	Bruselius-Jensen *et al.* (2017)	Promoting health literacy in the classroom
11	Kilstadius and Gericke (2017)	Defining contagion literacy: a Delphi study
12	Liao *et al.* (2017)	Defining Taiwanese children's health literacy abilities from a health promotion perspective
13	Renwick (2017)	Critical health literacy in 3D
14	Fage-Butler (2018)	Challenging violence against women: a Scottish critical health literacy initiative
15	Ubbes and Ausherman (2018)	A historical interpretation of how 19th and 20th century books contributed an early language and vocabulary for health literacy
16	Simonds *et al.* (2019)	Guardians of the Living Water: using a health literacy framework to evaluate a child as change agent intervention
17	Fairbrother *et al.* (2020)	Children's learning from a Smokefree Sports programme: implications for health education
18	Thongsong and Neranon (2020)	A causal relationship model of health literacy and health behavior for obesity prevention among primary school students in Bangkok, Thailand

2.3 Results

This systematic scoping review synthesises evidence on the conceptualisation of, and interventions to develop, critical HL in seven to 11-year-olds (including its action-oriented dimension). 18 papers are included in the final synthesis: six theoretical, 10 empirical, and two grey literature (a Masters thesis and a PhD thesis) (tables 2.4 and A2.1). Publication dates span 2001 to 2020. Australia was the most represented study location (seven papers), followed by the United States and Canada (five papers), Scandinavia (two), East and Southeast Asia (two), and the UK (two: one each from Scotland and England). Sixteen out of the 18 papers were based in schools; the two exceptions, an NGO (non-governmental organisation) and a camp, had links with school-based settings.

2.3.1 How is critical health literacy conceptualised in relation to children?

In the 18 included papers where critical HL is discussed, the concept is frequently described in terms of deficit, or appears in the 'Limitations' sections of the included papers: e.g. '[u]nfortunately, critical health literacy was minimally explored in this study' (Ubbes and Ausherman, 2018, p. 38). No reviews of conceptualisations of critical HL in middle childhood, nor protocols for planned reviews, were identified. Reviews are recognised in positivist approaches to examining the literature as the top tier in the hierarchy of evidence and provide a starting-point from which to explore how a topic has been researched. The absence of reviews meeting the eligibility criteria thus suggests a significant gap where the definition of children's critical HL should be in the literature.

Although critical HL is represented in one paper as 'health literacy that has a critical edge and action component' (Robertson and Scheidler-Benns, 2016, p. 163), 'empowerment, social and political actions' are marginalised in some of the 18 papers, which '[reduce] outcome goals to individual higher order cognitive skills' (Bruselius-Jensen *et al.*, 2017, p. 166), such as critical appraisal skills. Fairbrother *et al.* (2020) note the importance of critiquing conceptualisations of critical HL when these emphasise the cognitive dimension to the exclusion of children's embodied experiences in social situations.

The majority (12) of the included papers (conceptual and empirical) define critical HL specific to children (Bruselius-Jensen *et al.*, 2017; Corcoran, 2014; Fage-Butler, 2018; Fairbrother *et al.*, 2020; Kambouris, 2010; Kilstadius and Gericke, 2017; Liao *et al.*, 2017; Mogford *et al.*, 2011; Renwick, 2014; Robertson and Scheidler-Benns, 2016; Simonds *et al.*, 2019; St Leger, 2001). These definitions were variable in their emphases and derivation, and ranged from an explicit intertwining with school-based education (Bruselius-Jensen *et al.*, 2017; Fage-Butler, 2018; Kilstadius and Gericke, 2017; Renwick, 2014) and the Health Promoting School (HPS) framework (St Leger, 2001) (see also section 1.1.4), to social skills or 'power tools' (Kambouris, 2010) accessible from within children's social location and able to be developed and used by them for dismantling structural barriers to health equity.

Of the 12, all provided examples of what children's engagement in the action-oriented aspect of critical HL looks like to supplement their definitions. What it means to be a critically health-literate child depends on the situation that calls for critical HL (section 1.1.4). For children, critical HL can look like learning to view public health issues 'in terms of the benefits to the common good' and recognising where 'there might be a conflict of interest; for example, treatment with antibiotics might cure the disease and the person can go back to work more quickly, but at the same time that person's normal flora might get damaged and antibiotic wastes will be spread' (Kilstadius and Gericke, 2017, p. 2277).

Developing critical HL in children is a joint effort between adults and children who must work together to acknowledge power differentials, recognise health knowledge as subjective, malleable and contestable, and value the sociocultural knowledge that children accrue outside of school and can bring into the classroom. For example, Renwick's (2014) '3D model' posits three interrelated dimensions of work towards classroom-based critical HL: operational, cultural, and critical. These dimensions borrow from literacy studies and are based on a philosophy linked to Freirean praxis: 'combining reflection and action for transformative purposes' (Renwick, 2014, p. 201). Three of the included papers discuss 'critical health literacies' (Corcoran, 2014; Robertson and Thomson, 2012; Wrench and Garrett, 2014) as part of a multiliteracies approach drawing on New Literacy Studies (Fairbrother *et al.*, 2016a) in understanding health literacy as a social practice.

Papers that view children's critical HL through a socioecological lens conceptualise it as grounded in children's everyday and somatic experiences. From a socioecological viewpoint, 'functional and interactive health literacy are dominated by a micro perspective, where the aim is to understand and interpret knowledge in order to take certain actions in personal lives'; but '[a] macro perspective is introduced with critical HL, where societal and population health is also of concern' (Kilstadius and Gericke, 2017, p. 2279). The conceptualisation of critical HL as a macro perspective, with a concomitant focus on its social- and action-oriented dimension, is relevant to the concept's political aspect and to a target group-specific conceptualisation. Fage-Butler (2018) provides one instance of critical HL as a mechanism to prompt older children to consider the broader, "macro" process (which might include policy, e.g. on curriculum development) by which some issues are deemed (by adults) public health issues and prioritised for teaching and study, and how children's own sociocultural knowledge can contribute to the ways in which such issues are taught and studied.

2.3.2 How and where is critical health literacy developed in children?

In terms of "how" to develop critical HL in children, interventions included in the final 18 are underpinned by theories of change that include those informed by the Investigation, Visions, Actions, and Change (IVAC) model of democratic health education (Bruselius-Jensen *et al.*, 2017), Freirean critical pedagogy (Fage-Butler, 2018; Kambouris, 2010; Renwick, 2014), and feminist pedagogy (Fage-Butler, 2018). The Just Health Action (JHA) intervention in the United States (Mogford *et al.*, 2011) works along IVAC lines, but is explicitly linked to critical HL and does not cite the IVAC process. JHA encompasses 'Knowledge' (of rights-based education and the social determinants of health), 'Compass' (activities that orient students as social change agents), 'Skills' (advocacy tools and strategies) and 'Action' (planning and sustainable implementation of actions to address the social determinants of health), but its possibilities for adaptation with primary school-aged children are implicit, rather than clearly outlined. In one instance, the concept of critical HL itself is deployed as a theoretical lens through which to interpret findings in support of children as active critical HL practitioners (Fairbrother *et al.*, 2020).

The results include interventions that attend to classroom layout to support children's participation and mitigate inequalities in access (Robertson and Thomson, 2012), but the involvement of children in intervention design is not common in the interventions described. One paper recommends the involvement of children early in intervention design (Fairbrother *et al.*, 2020), but caveats this with the logistical difficulties (e.g., the longer lead-time required for the research).

In terms of "where" to develop critical HL in children, the results highlight the significance of settings to intervention design, fidelity of implementation, and reporting. The conceptualisations of critical HL in children in the results are almost all conceived with reference to school-based settings: of the 18 papers meeting the eligibility criteria, only two (Kambouris, 2010; Simonds *et al.*, 2019) are not primarily located in school-based settings (and these still report interventions co-located with school-based settings). School-based settings dominate the included conceptual and empirical papers, and while there is some recognition in the sample of the problems of attempting to develop children's critical HL within these settings, recommendations for future research show little sign of shifting away from schools: '[h]ow young people are permitted to enact health literacies in their school or classroom requires ongoing examination' (Corcoran, 2014, p. 283). Schools' frequency in the interventions is despite an established degree of incompatibility between school-based settings and the development of action-oriented critical HL, whereby classroom teaching is limited in the extent to which it can support critical HL beyond cognitive skills (Bruselius-Jensen *et al.*, 2017). Children's reflections on societal structures' effects on health, and questioning of who is responsible for health, are only partially supported and often cut short by teachers who 'failed to seize on such opportunities' to realise critical HL (Bruselius-Jensen *et al.*, 2017, p. 164).

Schools thus influence both the how, and the where, of critical HL development in children across the included papers. Little evidence is available for settings outside of schools: none of the included papers consider the family or the home in relation to children's critical HL, although both settings – and parental/caregiver factors – are represented in the wider literature (Michaelson *et al.*, 2021).

2.4 Out-of-scope papers

The search returned a small body of evidence meeting the inclusion criteria. Reflection on the results that were screened-out is therefore important to understand aspects of the literature ineligible for formal inclusion in this review. What follows is an outline of papers identified in the search that contribute additional insights to the review questions, despite being out-of-scope and excluded from the review.

Reviews not eligible for inclusion in table 2.4 include Chinn (2011) on critical HL, in which children are not mentioned; Nordheim *et al.* (2016) on adolescents, which notes that the few systematic reviews identified that address critical HL as an outcome found weak and inconclusive evidence as to which interventions are effective; and Bröder *et al.* (2017) on children's health literacy, in which critical HL appears briefly in the context of critical media, digital and health literacies, but is otherwise relegated to in-text tables and the references list. Benkert and Abel (2022) trace critical HL back to the 1990s – at least in the Anglo-Saxon context, as health literacy research historically has not considered indigenous perspectives (Ireland and Maypilama, 2021) – but do not mention children. Lindly *et al.* (2020), on 'family health literacy' of parents 'and/or' children and adolescents with developmental disabilities, include one study measuring critical HL in adolescents.

One systematic review (Nash *et al.*, 2021) was identified that would have been eligible if critical HL had been included in its abstract or keywords. Linked to the Health Literacy and Equity Unit at the University of Tasmania, Australia, it focuses on school-based interventions to develop children's health literacy and indicates that children's critical HL is unlikely to be realised in school-based settings. Sykes and Wills (2019) also find no interventions for developing critical HL in pre-adolescents.

Curriculum texts, even those in which health literacy is included, such as the Australian Curriculum: Health and Physical Education (ACPHE), are circumscribed in how far they are able to sponsor children's 'capacity to act across the multiple levels of their social-ecology in an informed, holistic and critical sense' (Alfrey and Brown, 2013, p. 163) and to act on, as well as appraise, health topics meaningful within children's experiences and priorities (Fairbrother *et al.*, 2016a; Leahy *et al.*, 2013; Leahy, 2014).

How critical HL in children is conceptualised in the literature is influenced by setting, including the setting of the research environment in which critical HL is cited and discussed. Citation analysis of the available literature, conducted in the course of this review (section 2.2.6), shows citation clusters around Jensen (1997) and Nutbeam (2000, 2008a). Action-oriented critical HL, as described in the context of Nutbeam's typology, shares similarities with the concept of action competence in the IVAC model (Jensen *et al.*, 2000; Schnack, 2000; Simovska, 2011; Simovska and Paakkari, 2014) (section 2.3.2). Literature referring to action competence without naming critical HL was excluded because this thesis is interested in critical HL specifically, but it is worth noting that action competence can illuminate the social- and action-oriented dimension of critical HL in its focus on enabling people to 'evaluate, reflect, and restructure' (Jensen, 2004, p. 414) towards transformative change for health.

Emphasis on the cognitive dimension is paradigmatic of how critical HL is researched and written about. One of the few citations identified that conceptualises the mobilisation of critical HL as social justice for health (Fleary *et al.*, 2019) had to be excluded from the review because it was undiscoverable in its full-text form. Limiting critical HL to a cognitive skillset limits the scope of health literacy as a field to reflect on itself, including 'rais[ing] questions about who is and who is not considered as qualified to engage in political and social action', and how often it 'stops short of critically interrogating health literacy discourses' (Hicks, 2021, p. 6).

Among the knowledge gaps found by this review is the need to investigate settings for the development and promotion of children's critical HL: '[f]uture studies should investigate whether and how positive attitudes towards health […] promoted within a particular setting (e.g., family, school, or sport clubs) facilitate or mediate the development of children's health literacy' (Fretian *et al.*, 2020, p. 10). Emphasising critical HL as a context-specific, situational concept has implications for methodology in health literacy research and alters the units of analysis: from children's individual behaviours, to the settings where health literacy can be developed and practised by children (Pinheiro, 2021). Taking a settings-based approach may help advance research on critical HL in children by guiding the identification of settings with a core business conducive to this social practice at micro-, meso- and macro-levels.

Pithara's (2020) re-thinking of critical HL from the perspective of the capabilities approach to realising social justice goals represents a significant contribution to studying action-oriented critical HL, but could not be included in the review because the paper does not explicitly consider the potential of this in relation to children. The capabilities approach can be extrapolated to studying critical HL based on the 'possibilities for action' (Renwick, 2017, p. 5) within children's purview, and subsequently what action for health looks like in children and what is needed in a setting to support it.

There is a lack of research represented in the review that makes use of the opportunities to use creative methods in research with children. Such methods are used in papers outside of the review criteria. Drawing elicitation has been used to capture children's views on information about COVID-19 (Bray *et al.*, 2021a), and children's creation of artefacts for later exhibition to the wider school community is essential to the OpHeLiA (Optimising Health Literacy and Access) protocol used in the HealthLit4Kids work package (Nash *et al.*, 2018) (screened out of this review because it did not refer to critical HL in its abstract).

2.5 Discussion

This section discusses what is known and unknown about children's critical HL. It directs attention to the life course approach in health literacy, the primarily school-based interventions in the literature which are intended or purport to develop critical HL in children, the shortcomings of school-based settings in relation to action-oriented critical HL, and the consequent need to consider alternative settings-based approaches for children's critical HL development. The gaps in knowledge arising from the review and that require to be addressed are identified, and the limitations of the systematic scoping review protocol are reflected on.

2.5.1 The life course approach

The life course approach informs how children's critical HL is conceptualised (section 1.1.4). Approaching critical HL from a life course perspective involves viewing it as an asset which accumulates over time. This timeline can be biological (based on age), psychological (cognitive maturation), or sociological (social maturation) (Maindal and Aagaard-Hansen, 2020). The results show that greater

emphasis has been placed on biological and psychological understandings of the life course when applied to children's critical HL development, and less on the sociological aspect: i.e., the sociocultural knowledge that enables children to "read" social situations based on their embodied experiences.

The bias towards biological and psychological conceptions of children's capabilities is framed by research norms, perpetuated by adults, that subsume under-12s within vague cohort descriptors like "youth", or that segment child populations by years of schooling. The absence of detail in such segmentation requires certain assumptions to be made in reviews of research on children's health literacy, and leniency in enforcing eligibility criteria. Bröder *et al.* (2017, p. 3), for example, adjust their eligibility criteria to allow for the vagueness around the inclusion of children in population samples: '[a]rticles incorporating a life-course perspective on health literacy were included as well' and 'added to the comprehensiveness' of the analysis, on the basis that 'even without specifically stating the target group, the life course concept specifically encompasses children'. Health literacy researchers must resist the extrapolation of adult-by-default research practices onto an early life course stage characterised by distinct health literacy needs: children's rights need to be 'more widely and better understood in the health literacy field' (Bond and Rawlings, 2019, p. 593), and their interests (Otten *et al.*, 2022a), if research is to be ethical.

The selection of settings for developing critical HL in children is also informed by a life course perspective, alongside an assessment of settings' potential to afford and harness 'teachable moments' (Maindal and Aagaard-Hansen, 2020). Teachable moments are not limited to classrooms, but the results from the literature do not reflect this. The only two extra-curricular examples are conference rooms within the offices of an NGO, 'utilised as venues for the program' because the intervention took place during the school holidays (Kambouris, 2010, p. 96); and afterschool and summer camps with field trips to local springs and a water treatment plant (Simonds *et al.*, 2019). Both examples retain links with school-based settings.

2.5.2 School-based settings and critical health literacy

School-based settings, understood in this thesis as a contextual setting inclusive of elemental settings, such as classrooms (Galea *et al.*, 2000), are traditional settings

for health literacy interventions (Spencer *et al.*, 2021). Schools' composition can accommodate interventions that are classroom-based, playground-based, or school library-based. Schools are trusted sources of information for children (Curry *et al.*, 2022), including during COVID-19: studies based in Sweden, where primary schools remained open in the pandemic, have highlighted schools' continued centrality to children's health information practices (Rydström *et al.*, 2021).

The review identifies schools as key settings in which to implement interventions for children's functional and interactive health literacy. Work packages in children's health literacy research currently underway in Australia, on HealthLit4Kids and health literacy responsive schools (Elmer *et al.*, 2020); in England, on a health literacy liaison service for schools and paediatric care (Dollard, 2019); in Germany, via the Health Literacy in Childhood and Adolescence (HLCA) consortium, HeLit-Schools (Okan *et al.*, 2021) and GeKoKidS (Franze *et al.*, 2011) projects; and internationally, via the COVID-HL Network, are predominantly school-based. None are focused specifically on critical HL.

The HPS concept (section 2.3.1) provides a set of standards for how all types of schools (including faith-based schools and schools for children with special educational needs) can become health-promoting: Sørensen and Okan (2020, p. 18) note that 'the comprehensiveness of health literacy' – i.e., inclusive of functional, interactive, and critical impacts – 'is largely dependent on the type of school'. HPS, however, are not automatically also *critical HL*-promoting (Simovska, 2012): '[t]he traditional structure and function of schools, and especially the way teaching and learning occurs, are considered as the major obstacle to the attainment of level 3 [critical HL]' (Andorfer, 2020, p. 11). A sole focus on functional health literacy 'decontextualises information – not allowing for barriers and facilitators to the use of information that may be beyond a person's control' (Harris *et al.*, 2015, p. 4). Children should be supported to relate critical HL learning to their pre-existing, contextualised understandings. Neglecting to do this may risk exacerbating health inequalities, because children who struggle to reconcile public health messaging with their everyday experiences may also struggle to put such messaging into practice (Fairbrother *et al.*, 2020) (section 1.1.4).

The weaknesses of school-based settings are evident in the case of critical HL interventions. Schools are limited in the extent to which action-oriented critical HL is

possible in them. Sykes and Wills (2019, p. 173) show that '[t]he hierarchies of the school structure and curriculum expectations' support the cognitive dimension only, with children's actions for health less supported: 'teachers facilitated the functional and, to some extent, interactive, levels of health literacy, but struggled to facilitate critical discussions' and 'could have been more supportive' of children's agency in the classroom (pp. 173–174). This is consistent with other studies (Bruselius-Jensen *et al.*, 2017; Rubene *et al.*, 2015; Velardo and Drummond, 2019). It is a problem almost as old as health literacy: 'many schools stay out of controversial instructional areas, a policy which automatically shuts off some areas of health instruction of vital importance to the education and health behavior of children' (Simonds, 1974, p. 7). Yet, 'the majority of [critical HL interventions] took place in schools' (Sykes and Wills, 2019, p. 170) continues to be the case.

Schools' status as the default setting for researching health literacy as an everyday concept (Cruickshank *et al.*, 2022) is justified in the literature based on the convenient access to children that schools provide. This ignores the marginalisation of children who are school-excluded and the well-established ethical and logistical challenges of school-based research (e.g., Moore *et al.*, 2022). In primary schools, children are likely to have several subjects taught by the same teacher, meaning that there are opportunities to integrate critical HL across the curriculum. But the barriers that exist to actually doing so are well-documented: lack of teacher preparedness and confidence; competing priorities for curriculum coverage and timetabling; variable implementation fidelity; and political sensitivities (Fane and Ward, 2016; Naccarella and Guo, 2022; Schulenkorf *et al.*, 2022).

The school curriculum is an organising device that underpins schools' core business of delivering education (Shah *et al.*, 2022; World Health Organization, 2021a). Critical HL, insofar as the promotion and development of its practice disorganises the status quo, is not easily assimilable to schools' structure. Evidence (from secondary schools) suggests that critical HL is unlikely to be realised if taught in a silo, and requires cross-curriculum integration (MacDonald *et al.*, 2021; McCuaig *et al.*, 2014). Attempts to integrate critical HL contend with competing priorities for space in an already overcrowded curriculum. Other recognised barriers include the need to overcome established teacher-child power differentials (St Leger, 2001); perceived and actual lack of teacher time and training (Nash *et al.*, 2018); lack of teacher experience in encouraging children to critically challenge health messaging

(Nash *et al.*, 2020); and lack of whole-school support for agentive education (including parental/caregiver support and buy-in from community stakeholders) (Naccarella and Guo, 2022).

The ethical implications of health literacy research recruitment in classroom settings must also be considered in relation to critical HL (Coppock, 2010; Elmer *et al.*, 2020; Rubene *et al.*, 2015; Ryan *et al.*, 2012; St Leger, 2001). The location of research within school-based settings may stifle student responses and stories, depending on 'which of [those stories] teachers are prepared to hear', 'which of them students don't tell because they're in a school context', and 'which of them are already penetrated by [school-based] organizational processes and categories' (Darville, 1989, p. 38). Additional issues arise from consent to participation in research being perceived as expected in this context, rather than freely-given (Hill, 2006).

Taken together, these barriers lead to 'health information being taught in isolation and as single units of work, which means that critical HL is unlikely to be attained' (Nash *et al.*, 2021, p. 633). There is sparse evidence in the literature of interventions designed to build children's critical HL being conducted and evaluated in primary schools (Nash *et al.*, 2021; Ringsberg *et al.*, 2020). The Informed Health Choices programme (Nsangi *et al.*, 2017a) and a critical HL initiative focused on violence against women (Fage-Butler, 2018) are rare critical HL interventions tailored to primary schools.

In 2022, critical HL remains unintegrated with the national curricula of most countries. This is a missed opportunity in England and Wales, considering legislation mandating that health education be taught in all state-funded primary schools in England (Department for Education, 2019) and Wales's recent introduction of a curricular Area of Learning and Experience focused on health and wellbeing (Welsh Government, 2020). Northern Ireland, as part of Belfast's Healthy City designation, has developed a Pharmacy Schools Programme with primary schools that targets functional and interactive health literacy development, but at the time of writing Scotland is the only part of the UK where critical HL lesson plans have been piloted (Fage-Butler, 2018). Where critical HL is documented in national curricula (Dixon *et al.*, 2022) – e.g., in Australia (ACARA, 2015) or as part of health education in Finland (Paakkari and Paakkari, 2019) – its implementation to the extent of supporting children to take action for health remains challenging in a

setting not set up structurally to support this. Making possible the development of children's critical HL within the confines of school-based settings and curricula necessitates teachers and children working together to integrate out-of-school learning into the classroom (Peralta *et al.*, 2021). Effective action for health must be based on an understanding of legal and regulatory frameworks. This is what teachers can bring to the table as part of their role. Adults need to build their receptivity to children's health knowledge, as well as building children's own familiarity with the wider determinants of health.

The integrated, holistic approach required to develop critical HL is further hindered by schools' overemphasis on critical appraisal as an attribute of critical HL, compared with action. An action orientation towards health has already been theorised as requiring inter-setting collaboration: e.g. in the IVAC model (section 2.3.2), action is integrated into a series of interdependent processes that look outwards to the wider community.

2.5.3 The potential of non-traditional settings

The situational nature of critical HL links it to the settings-based approach. The results of the review suggest that, rather than answering the call by Bruselius-Jensen *et al.* (2017, p. 156) for 'further research into approaches to support classroom-based critical health literacy development', an exploration of non-school, non-traditional settings for critical HL might more usefully expand the evidence base by presenting additional options. However, non-school-based settings are not in themselves a panacea to the issues surrounding critical HL development: 'a community-based health literacy programme designed to build functional, communicative and CHL [critical HL] skills' (in adults) showed 'no real change in participants' understanding of the determinants of health or involvement in activities to challenge those factors' (Sykes and Wills, 2019, p. 177). It is not enough that the setting be simply not a school-based setting.

The decision to include one LIS database (LISTA) in the systematic scoping review protocol was based on the 'missing link', despite shared citation networks (section 1.1.5), between LIS and health literacy (Hicks, 2021). The possibilities presented for conceptualising and understanding critical HL development by bridging LIS and health literacy, and the potential of library-based supportive environments for health,

have not been fully mined by the LIS, health literacy, or public health literature and contributed to the selection of the public library setting as the focus for this study, rather than e.g. the family-as-setting (section 2.3.2). Distinct from school library settings, which may be subject to the same constraints as schools (as the contextual setting in which the school library, as an elemental setting, is located: section 2.5.2) and which have been used in school-based research to segregate non-participating children from their peers during data collection (Kupersmidt *et al.*, 2010; Solberg, 1996), the public library may have potential as a community-based setting for children's critical HL development.

Public libraries' core business has a wide-ranging remit, and libraries are hybrid (physical and online) supportive environments accessible to children, where children can spend time and engage in informal learning for health (World Health Organization, 1986). There is scope to repurpose the child-centred methods used in LIS studies of children's information practices to address health literacy research questions (Barriage, 2021). The public library setting also overcomes some of the ethical implications of recruitment in school-based settings (section 2.5.2), and may support children to manage the side-effects of critical HL development. Such effects include 'hopelessness and fatalism' (Chinn, 2011, p. 63) or the 'unsettling [of] deeply held beliefs' (Leahy *et al.*, 2013, p. 182), and require resilience (Fane and Ward, 2016) and open discussion (Jensen and Schnack, 1997) to counteract. Public libraries are settings where dialogue about how to change things for the better, through researching and planning for social action locally, might be cultivated; and where there are precedents for such discussions being supported to take place, e.g., discussions related to actions for archieving global Sustainable Development Goals (SDGs) (Tbaishat, 2021).

2.5.4 Limitations

This protocol does not include a consultation exercise with stakeholders to further inform the results, an optional stage in scoping reviews (Arksey and O'Malley, 2005) that can extend to involving stakeholders in the review process itself (Harris *et al.*, 2016), e.g. by presenting ongoing results from the review to a community advisory group to gauge how accurately the research literature captures their experiences and priorities (Koralesky *et al.*, 2023). The absence of this stage is mitigated by the living format of the review, which monitors new evidence as it becomes available up

to a final re-run of the search preparatory to writing about it here, and the early and sustained involvement of children in the design of the study following the review (see Chapter 4).

The limitations that commonly apply to the research norms of reviewing (Alvesson and Sandberg, 2020) apply here too: the influences of subjective judgement in reviews aiming at a systematic approach, and the publishing algorithms behind the technologies deployed in the literature review process that determine which papers get picked up. Further experimentation with approaches to reviewing could have helped manage the effects of these on the results being returned, e.g. in the form of a critical scoping review that combines a more intentional critical analytical lens with the iterative framework of scoping review methodology to continuously keep in view such limitations (Forsey *et al.*, 2021); or a Delphi approach to reviewing which attends to the conditions under which health literacy scholarship takes place by threading the optional stage of stakeholder consultation throughout the process (Partin and Howard, 2021). Both approaches could have enhanced the identification and analysis of how the academic discourse created or perpetuated by researchers has been shaped and how it develops (Koralesky *et al.*, 2023), with anticipated differences to the structure of this study including the more formative impact of the methodology adopted later on the role of the review in informing the study direction (Dalmer, 2020a, 2020b).

The criterion that critical HL be included as a term in titles, abstracts, or other metadata, like keyword lists, restricted the results returned even with allowances made for the inclusion of established non-English equivalents like *kritische Gesundheitskompetenz* (German) (Benkert and Abel, 2022) and *kritisk hälsolitteracitet* (Swedish) (Viklund and Duek, 2022). Results relevant to the review questions, but screened-out because of this criterion, necessitated an additional section in the protocol to extract their contributions (section 2.4). This limitation is however outweighed by the rationale of mitigating scope-creep and maintaining a focus on how the named concept of critical HL is applied, as well as making the review process more manageable for a solo reviewer. One of the out-of-scope papers notes that ‘a curriculum does not have to have an explicit focus on CHL [critical health literacy] to show evidence of learning outcomes related to the concept’ (Dixon *et al.*, 2022, p. 12); similarly, this review demonstrates that iterative refinement of eligibility criteria, applied systematically, can support a focused search

(e.g. explicit inclusion of the named concept in the title/abstract) while also capturing learning from out-of-scope, but relevant, research.

2.5.5 Knowledge gaps

Having reviewed the literature, several knowledge gaps are identified in relation to the review questions (section 2.2.3). The review results confirm the assessment by Pleasant *et al.* (2019, p. 307) that 'we don't know enough about health literacy among children', let alone critical HL among children; and '[w]hile the appeal of "more research is needed" is overly common among academic publications, in this case, it seems entirely justified'. From these gaps, the research aim, research question and research objectives are developed.

The first knowledge gap relates to the conceptualisation of critical HL as a set of practices and resources available from early in the life course. The cognitive dimension is emphasised over the social action dimension, leaving space for possible contributions from practice-based research (e.g. in the LIS literature) to inform more holistic understandings of critical HL in children.

The second knowledge gap relates to target-group-specific empirical methods to study how children's critical HL might be developed *with* children, including how children can be supported to participate in critical HL research that is about them.

The third knowledge gap relates to where critical HL in children might best be developed, and the opportunities available for children to develop critical HL in supportive environments. The literature shows a lack of attention so far directed to the affordances of non-school-based settings for the development and promotion of critical HL in children.

2.5.6 Research aim, question and objectives

The research aim of this study is based on the researcher's work-related knowledge and the knowledge gathered by the above review: *To undertake an inquiry into public libraries as supportive environments for critical health literacy development in children*.

Public libraries' potential for supporting a settings-based approach to the development of health literacy is corroborated by examples from the literature on

health-promoting settings (Naccarella and Horwood, 2020; Whitelaw *et al.*, 2017) and the LIS literature (Hicks, 2021). Alongside the knowledge gaps identified in the review, these examples contribute to the construction of the following RQ to be addressed:

> RQ: Can public libraries be supportive environments for critical health literacy development in children?

To explore this RQ, two research objectives (ROs) are set out:

> RO1: Identify how children's critical health literacy could be developed in public libraries.
> RO2: Identify the antecedents to public libraries as supportive environments for critical health literacy development in children.

The RQ and ROs collectively contribute towards meeting the research aim.

2.6 Summary

This chapter has synthesised the literature on critical HL development in children using systematic scoping review methodology. The review identified three gaps in the current evidence base. The first gap is around conceptualisations of children's critical HL that see it as a resource for social action within the specificities of children's life course stage. The second gap is around what is known about how to support children to participate as active critical HL practitioners in everyday life and in health research. The third gap is around the possibilities afforded beyond school-based settings for promoting children's critical HL development. To address these gaps, a RQ and associated ROs are stated.

Chapter 3 Conceptual review

Following the systematic scoping review of how and where critical HL can be developed in children (Chapter 2), this chapter takes up the settings-based approach in health promotion as the epistemological lens through which the RQ will be investigated. Theoretical underpinnings of the settings-based approach are outlined in a conceptual review, which informs a conceptual model of what a settings-based approach to critical HL for children at the library might look like. The model proposes antecedents to the public library being a supportive environment for children's development of critical HL.

3.1 Critical health literacy through the lens of a settings-based approach

The systematic scoping review highlighted gaps in what is currently known about the development of critical HL in children (section 2.5.5). The lack of available evidence on where critical HL can be developed in this population, beyond the limited scope of school-based settings (section 2.5.2), is one such gap. A conceptual review of the settings concept, to clarify and contextualise it within the settings-based approach to health promotion, is required as a first step towards addressing this gap.

A conceptual review examines the discursive scaffolding of a concept in the literature and contributes more nuanced understandings of the connections between that concept and empirical evidence (Ayala, 2018). It can foster 'revitalization of existing theory', or even 'novel conceptual insights' (Hulland, 2020, p. 28), and brings into focus how concepts proposed by earlier researchers become foundational and continue to organise the discourse of published and grey literature today. The five-stage process involves establishing the parameters of the concept under review, integrating and synthesising the evidence base (both conceptual and empirical), identifying inconsistencies and tensions, highlighting gaps in the existing literature, and outlining an agenda for future research (Hulland, 2020).

The conceptual review in this section has two purposes. Firstly, it enhances the systematic scoping review (Chapter 2) and informs the epistemological lens adopted by the study, which is that children's development of critical HL can be promoted, or

hindered, by the everyday settings accessible to them. Secondly, it contributes to RO2: 'Identify the antecedents to public libraries as supportive environments for critical health literacy development in children' (section 2.5.6), where 'antecedents' are the conditions required to be in place for children's critical HL to be supported. The antecedents identified from the conceptual review are integrated into a conceptual model.

For the conceptual review, a systematic process of searching across grey literature and academic databases of peer-reviewed literature is conducted and includes reading the retrieved literature critically to map and clarify the settings concept in its historical and social context (Ayala, 2018). While the review is conducted systematically, it differs significantly from a systematic review in the way in which this process is reported: there is no extension to PRISMA available for the conceptual review type, and therefore conceptual review reporting tends to be discursive in nature.

The first stage is focused on defining settings in the context of the settings-based approach to health promotion and distinguishing it from related concepts by formulating and applying eligibility criteria to separate out instances of conceptual conflation and terminological confusion. The second stage comprehensively searches the literature and includes citation analysis of canonical or pertinent sources to comprehensively trace the development of the settings concept and its theorisation (sections 3.1.1–3.1.2). Inconsistencies and ambiguities, e.g. between definitions and operationalisations of the concept, are recorded systematically by grouping the amassed evidence into research 'streams' to be examined side-by-side (Hulland, 2020). This examination leads to the next stage: analysis of gaps, specifically where an absence of evidence limits the ability of the settings-based approach to evolve (e.g. to encompass non-traditional and emerging settings for health) or respond to twenty-first-century determinants of health (and critical HL) (sections 3.2.1–3.2.3). From this review, a conceptual model is developed (section 3.2.4) and informs onward data collection and analysis.

3.1.1 Settings for health

In the health promotion literature, 'setting' is used in two ways: health promotion *in* a setting, and where the setting *is* the health promotion intervention. To distinguish

between these, the Jakarta Declaration (World Health Organization, 1997) uses the term ‘settings for health’ in relation to the latter, which it describes as ‘the organizational base of the infrastructure required for health promotion’ (p. 6). Conceptual proliferation has produced further terms for the intentional use of settings integral to – not simply hosts of – health promotion interventions (Whitelaw *et al.*, 2001), including ‘health-promoting settings’ and ‘healthy settings’. These terms are not synonymous: ‘health-promoting setting’ implies dynamism and ongoing accountability (supporting people’s health is a work-in-progress); ‘healthy setting’ suggests an ideal state of healthful equilibrium (Dooris, 2006a; Kokko *et al.*, 2014).

The latest edition of the Health Promotion Glossary of Terms (World Health Organization, 2021b, p. 30) defines ‘settings for health’ as:

> The place or social context where people engage in daily activities, in which environmental, organizational and personal factors interact to affect health and well-being

The 2021 definition is unchanged from the 1998 edition of the Glossary (Nutbeam, 1998) and unaffected by the additional terms included in the interim update (Smith *et al.*, 2006), but the commentary that accompanies the Glossary entry has been updated. The main changes are the addition of a line clarifying that a setting for health ‘is different from using a setting as the basis for delivery of a specific service or programme’ (World Health Organization, 2021b, p. 30); and the extension of the list of examples from “settings” – ‘schools, worksites, hospitals, villages and cities’ (Nutbeam, 1998, p. 362) – to “setting approaches”, which ‘have been implemented many different ways in multiple areas, including healthy cities; health promoting schools; healthy workplaces; healthy islands; health promoting hospitals; health promoting prisons and health promoting universities’ (World Health Organization, 2021b, p. 30). Other changes are minor, and focus on language edits, e.g. from ‘[s]ettings can also be used to promote health by reaching people who work in them’ in 1998, to ‘[s]ettings can also be used to promote health by reaching people directly who live and work in them’ in 2021. The 2021 Glossary does not include the “new normal” of online, ‘unboundaried’ settings (Dooris, 2013, p. 46, quoting Ilona Kickbusch): instead, it states that ‘[s]ettings can normally be identified as having physical boundaries’ (p. 30).

The Ottawa Charter for Health Promotion (World Health Organization, 1986) views health as created within and between the social ecologies of individuals and communities, and as supported in and across the everyday settings that people navigate throughout the life course (Dooris *et al.*, 2022b). Applying the Ottawa Charter to the development of critical HL is helpful for addressing the ROs (section 2.5.6) because it offers a framework for health, including critical HL, as 'lived by people within the settings of their everyday life; where they learn, work, play and love' (World Health Organization, 1986, n.d.). This chapter therefore uses the 2021 Glossary definition of 'settings for health', and, like the ROs, is informed by the Ottawa Charter's action area on creating supportive environments for health.

3.1.2 The settings-based approach: evolution and theoretical underpinnings

The long-standing association between health promotion and settings is traceable through the milestone policy documents of health promotion as a discipline. By convention, these are titled based on the locations of the conferences at which they were ratified (World Health Organization, 1986, 1991, 1997, 2016). The settings-based approach recognises settings as significant determinants of health: '[i]f health is everywhere, every place or setting in society can support or endanger health' (Kickbusch and Gleicher, 2013, p. 65). Rather than relegating settings to the background – as in, 'individually-oriented, lifestyle-focused health promotion *in* a setting' (Dooris *et al.*, 2014, p. 7) – the settings-based approach to health promotion sees settings as interventions in their own right. It considers settings' potential to proactively promote health, not 'simply ensure we don't experience poor health within them' (Hodgins, 2008, p. 17). The approach is versatile in its applications, e.g. to bullying (Hodgins, 2008) and domestic violence (Lazenbatt *et al.*, 2009).

There are precedents for settings-based definitions of health literacy, e.g. health literacy in pharmacy settings (King *et al.*, 2011), and principles for health-literate environments, organisations, or settings (Gugglberger, 2022), but none specific to critical HL in children that consider the interplay between the multiple dimensions of critical HL and how these mediate, or are mediated by, children's experiences in relation to a setting. Research on settings-based approaches specific to health literacy is limited: Lindgren *et al.* (2018), for example, highlight location as an influential factor in health literacy, and distinguish between formal, non-formal and

informal learning settings, but do not take a settings-based approach. Examples of settings-based approaches to (mainly functional, mainly adult) health literacy include a church-based intervention (Tucker *et al.*, 2019), an analysis of a *hälsotorg* or 'healthy town square' initiative leveraging multiple settings (Mahmud *et al.*, 2010), and – pertinent to this thesis – a case study of public libraries as settings for health literacy in the context of a cancer information and support project (Whitelaw *et al.*, 2017). Studies of youth sports clubs (Paakkari *et al.*, 2017) and pop-up public library services co-located in laundromats (Osborne, n.d.) extend the settings-based approach to health literacy in adolescents and early childhood respectively.

The benefits of taking an interdisciplinary approach to conceptualising critical HL through the inclusion of LIS research have been suggested (section 2.5.3) and hold true for theorising settings for critical HL. Critical discussions of the socioecological underpinnings of the settings-based approach have looked beyond health promotion to take in perspectives from organisational development and systems theory (Dooris *et al.*, 2014). A systems perspective acknowledges the importance of external environments and the relations that influence what is possible within a given setting. Informative for the focus of this thesis on settings-based relations, and how these coordinate what is possible for children's development of critical HL in a given setting, is the combination of organisational development and systems theory represented in Dooris's model (Dooris, 2004, fig. 5). This model for understanding the settings-based approach posits that settings for health balance macro-level political commitments with bottom-up engagement and align the setting's core business with a public health-related agenda. Further to this, Whitehead (2011) has suggested a 'lifespan/setting continuum' which combines life course and settings-based approaches. Studying the potential of the public library – commonly referred to as a 'system' in England – to be a supportive environment for critical HL development early in the life course, follows this lead.

3.2 Results

The conceptual review provides several insights into the settings literature, including tensions between settings and the settings-based approach; ways in which the settings concept has been clarified or developed, such as using complexity theory to represent settings as systems; and the integration of principles that view settings as explicitly equity-focused.

3.2.1 Conceptualising settings for children's development of critical health literacy

This section considers the tensions involved in shifting from 'settings for health' to 'settings for health literacy', including children's critical health literacy.

The settings-based approach understands settings as complex systems, with inputs, throughputs, outputs, and impacts open to the wider environment (including other settings). Settings should therefore not be studied in isolation, but as porous systems operating in relation to each other. Intrinsic to this socioecological perspective is that settings are constituted of people's practices at macro-, meso-, and micro-levels, whereby settings are understood as created by networks of local and interpersonal relations shaped by wider social forces. This view of settings moves beyond their physical footprint to consider their 'unboundaried' manifestations (section 3.1.1), e.g. where online searching takes place: a connected infrastructure serving an individual need.

Viewing critical HL as a holistic concept to be supported and sustained through the public library setting distinguishes between interventions designed to develop critical HL *in* the setting (where the setting is the location) (Dooris *et al.*, 2014, 2022b) and settings-based critical HL development (where the setting is "in the business of" supporting people to identify opportunities for health-related action, including political action). Using the settings-based approach to guide identification of the antecedents (RO2) that need to be in place for a public library to be a supportive environment for critical HL development in children requires overcoming several challenges highlighted by this conceptual review. Some of these are well-recognised in the wider settings literature, and some are specific to the lesser-studied aspect of the appropriateness of the settings-based approach for understanding children's experiences in settings.

One challenge is documenting settings-based approaches at all, because the settings literature shares with critical HL the issue of conceptual conflation (section 2.2.6) in how settings are defined and understood outside of the specificities of the settings-based approach. This challenge is exacerbated in the case of critical HL, because studies on how settings can influence the critical HL of the populations who access them are uncommon (section 3.1.2), and less common still for settings

outside of schools and involving children. Evidencing that a settings-based approach is successful is complex, because the settings-based approach "done right" entails the seamless integration of health into the core business of a setting, such that it becomes organisationally normalised and "the way things are done around here". The profile and language of health thus recedes into the setting infrastructure (Dooris, 2006b). Further challenges include the need to prepare for, and seek to mitigate the risks of, negative side-effects of a settings-based approach (Galbally, 1997; Mittelmark, 2014) on the ecosystem in which it is actioned: e.g., the development of critical nutrition literacy to an extent that proves harmful in children exposed to school-based healthy weight initiatives (Pinhas *et al.*, 2013).

To overcome these challenges and plan for an ethical settings-based approach, it is important to keep in mind that 'when practised in a way that is true to its theoretical roots, the approach is explicitly determinants-focused' (Dooris, 2013, p. 46) and empowering:

> If a settings approach is done properly, then it does address the determinants of health – it changes people's working environments, it changes the way work is organised, it empowers them as patients or as school children
> (Dooris, 2013, p. 45, quoting Ilona Kickbusch)

The inclusion of children as beneficiaries of a settings-based approach in the interview with Kickbusch above reaffirms the epistemological lens for this study: that settings, as sites brought into being by adults' and children's practices, can influence the extent to which (if at all) children's critical HL as a social practice is supported.

The requisite antecedents to a setting for critical HL promotion are theorised based on an understanding of settings as supportive environments for the social practice of critical HL. The setting therefore must be conducive to the normalisation of support for critical HL within it. This conceptual review will go on to theorise the salient antecedents that must be present in the setting for it to support critical HL as a multidimensional concept, and to strengthen the case for exploring public libraries' potential as supportive environments for critical HL in children based on these antecedents.

The identification of antecedents begins with filtering out factors already known not to support critical HL, some of which are present in school-based settings. Chapter

2 synthesised evidence which showed that schools are the most frequently-discussed setting in health literacy research (section 2.3.2). They are also the most-researched settings for settings-based approaches addressing the determinants of health inequities (Newman *et al.*, 2015), and the use of schools as research settings, whether part of a settings-based approach or not (i.e., interventions *in* schools to utilise schools' access to child participants), is widespread. The divide between "in-school" and "out-of-school" contexts for learning has been questioned in literacy studies as 'exist[ing] more in the professional literature than in actual practice' (Alvermann and Moore, 2011, p. 156), but it is helpful for thinking about how "in-school" contexts remain oriented to purposes other than health and other than critical HL in ways that differ from community-based settings.

A settings-based approach to critical HL involves studying how critical HL might be effectively integrated within pre-existing structures and priorities (Dooris *et al.*, 2014). Schools' structures and priorities are pre-set for 'educational outcomes – not reducing health problems' (St Leger, 2004, p. 407) (section 2.5.2), and the barriers to health literacy development within them are recognised (Moore *et al.*, 2022; Rowling and Samdal, 2011) (section 2.5.2). Despite this, the Shanghai Declaration recommends that health literacy be developed 'first and foremost through the school curriculum' (World Health Organization, 2016, p. 2), and Sørensen and Okan (2020, p. 18) cite St Leger (2001) to argue that 'schools that demonstrate breadth and depth in how they are led and managed, how the ways they seek to maximise educational outcomes for their students, and how they foster relationships between students and staff provide excellent environments for the increase of empowerment and the achievement of critical health literacy'. Looking beyond school-based settings is necessary to re-evaluate what a settings-based approach to critical HL promotion for children could be.

3.2.2 Non-traditional and emerging settings for health

Settings of everyday life have expanded to encompass 'the political arena' (Kickbusch and Maag, 2008, p. 206) and 'where people google' (Kickbusch, 2022). But there is not yet a formal, twenty-first-century update of the Ottawa Charter (Nutbeam, 2008b) to leverage the opportunities presented by non-traditional and emerging settings for health (Baybutt *et al.*, 2022) and the rise of social media,

augmented reality, and virtual reality (Jenkins, 2022; Levin-Zamir *et al.*, 2022; McElhinney, 2019; TikTok Cultures Research, 2020; Tolentino *et al.*, 2022).

A rapid review of settings for raising awareness of health inequities by Newman *et al.* (2015) has drawn attention to non-traditional settings for health, including online, faith-based, nightlife, green (eco) and temporary pop-up settings. Even before the first wave of the pandemic in early 2020 routinised online home-schooling for children of non-essential workers (with access to the internet and devices), Newman's team had ranked online settings second for frequency of representation in the literature reviewed – below educational settings like HPS (sections 1.1.4 and 2.5.2), and above healthcare settings. Reviewing the settings-based approach from alternative angles and categorisations of affordances based on e.g. opening hours, ecological footprint, and permanence, revitalises the evidence base and ensures that it retains relevance.

Settings that are possible candidates for critical HL development in middle childhood, based on their history as settings for interventions designed to develop children's functional and interactive health literacy, include pharmacies (Kärkkäinen *et al.*, 2018), the family (Michaelson *et al.*, 2021), and a multisetting approach bringing together a local university pharmacology department, public health team, art museum library and public library (to run a lead poisoning curriculum relevant to the community) (Lahoz *et al.*, 2013). In all these cases, schools remain a key partner as a provider of facilities and participants. But in Lahoz *et al.* (2013), it is a deficit on the part of the school-based setting – the lack of on-site library provision at the primary school – that justifies the involvement of the other settings, including library-based settings. This is interesting for what it suggests about the important, but overlooked, role of library-based settings.

3.2.3 The public library system in England

Public libraries in England can reduce barriers to people's engagement with health when people are spending time in them, and share key features of settings for health (Green *et al.*, 2019): they have national and international networks, are represented in (some) texts as having a core purpose aligned with health, have access to (conditional) funding for health initiatives, and can reach disadvantaged groups.

To understand how critical HL might feasibly be embedded within the core business of a public library requires studying how public libraries work in relation to children or require children to work in specific ways within them. Public libraries are everyday settings (Whitelaw *et al.*, 2017) accessible to children, and already have a formal remit to support children's wellbeing and children's literacy, preparatory and complementary to schools' own remit in relation to children's literacy. In England, public libraries have a statutory duty 'to provide a comprehensive and efficient library service for all persons' who live, work, or study in the area served by the library (*Public Libraries and Museums Act 1964*). The responsiveness of the public library system to local communities is enabled by a porous core business adapted to local communities' needs (Leung *et al.*, 2016), making it a complex system for study. Inputs to this system include staff, infrastructure, facilities, and resources. Its throughputs require further exploration in the context of critical HL as an intended output with meaningful and positive impacts for children.

There are several types of library setting, often nested within a broader organisational setting (Galea *et al.*, 2000). Types in the UK include academic/university libraries, business/corporate libraries, equipment lending libraries (for baby slings, cookware, digital devices, tools, toys), medical/hospital libraries (and NHS libraries), legal deposit libraries (comprehensive collections of nationally-significant publications), professional society/special interest libraries (focused on a specific topic or serving a particular population, e.g., military libraries, Royal College libraries), prison/Young Offender Institution (YOI) libraries, school libraries (unlike YOI libraries, not mandatory in the UK), and public libraries. Public libraries are within reach of 'those who do not or cannot attend school […] that is, the most disadvantaged groups in society and those who have the greatest health needs' (Green *et al.*, 2019, p. 502). Public libraries are therefore the type selected for this research.

Public libraries span a spectrum of governance models: community-run (often by volunteers), council-run, run by a non-profit trust, Industrial and Provident Society (IPS) or social enterprise, or combinations of these (Anstice, 2020). Public libraries can also manifest as pop-ups, digital entities, or be co-located with other settings to form multi-purpose community hubs. Public libraries are known by more names than is usual for other settings: they are resilience centers (Klinenberg, 2018), fun palaces, Idea Stores, community data hubs for interrogating and developing local

data (Stihler and Open Knowledge Foundation, 2019), social living labs for informed learning (Hughes *et al.*, 2019), and even emergency naloxone dispensaries (Lowenstein *et al.*, 2019; Whiteman *et al.*, 2018). They are also designated 'Libraries of Sanctuary' (specialised in supporting people to navigate the asylum system), 'safe spaces' for survivors/victims of domestic abuse and female genital mutilation, and community-based 'Warm Spaces' during the UK's cost of living crisis.

Public libraries in England have a mandate for health information provision and health literacy development as part of the Universal Health Offer (Libraries Connected, 2018; The Reading Agency, 2017), which includes a pledge to support children's health and wellbeing (Association of Senior Children's and Education Librarians, 2016). Under this Offer, public libraries provide health literacy development programmes to staff and to members of the public in partnership with NHS libraries, signpost to and curate health-related resources, facilitate public health interventions (Change4Life, 2019), and participate in social prescribing referrals in partnership with primary care. Public libraries' accessibility and reach arguably make them 'unique settings' (Whitelaw *et al.*, 2017, p. 897) where everyone – including non-library members – can 'learn, work, play' (World Health Organization, 1986, n.p.) in relation to health in a single visit. Public engagement partnerships between public libraries and academia include coordinated interventions for public health and health literacy (Libraries Connected and Carnegie UK, 2022), in recognition that '[l]ibraries, schools and public health cannot be solely responsible for teaching health literacy, and there should be a strategy that involves all these organisations' (Butler, 2019, pp. 280–281).

The supersetting approach, or "settings approach 2.0" (Bloch *et al.*, 2014), is a multisetting approach to health that emphasises 'the need for coordinated activities to be carried out in a range of different settings within a local community with the aim of attaining synergistic and sustainable effects' (Dooris *et al.*, 2022a, pp. 30–31). The public library can be considered an open system within a wider complex of settings, in which its activities will be more effective when those activities involve the participation of the local community – including children – in which it is embedded. But opportunities afforded by public library involvement in partnerships for children's critical HL have not been explored in the literature much beyond libraries' implicit inclusion in catch-all "community-based settings".

Critical HL develops throughout the life course (section 2.5.1), and public libraries are positioned to support learning (and the unlearning of outdated information) over time (Hall, 2010). A critical HL-promoting public library for children aligns with the 'transformative and community-based library' (TCBL) concept. TCBLs are 'problem-posing' settings that 'actively seek out issues of concern within the community' and support community members to 'act upon the world in order to change it' (Hall, 2010, p. 167) – both features commensurate with supporting critical HL development. The TCBL provides a setting and a community of practice that, drawing on a Freirean perspective, 'places learning in the context of lived experience and participation in the world' (Riedler and Eryaman, 2010, p. 94). It eschews 'standardized or uniform library curricula' (Riedler and Eryaman, 2010, p. 95) in favour of responsiveness to what community members already know and what is meaningful and relevant to them. The TCBL concept posits that 'the link between internal participation in a transformative library and action in the broader public realm may be even more important for the disadvantaged [including children] because it can provide both the impetus for their participation and engender change in the institutional structures that impede their active involvement' (Eryaman, 2010, p. 135).

There are conceptualisations of the public library that take a settings-based approach (Leung *et al.*, 2016; Linnan *et al.*, 2004; Naccarella and Horwood, 2020; Whitelaw *et al.*, 2017) (section 2.5.6), or that advance the TCBL concept (Hancock, 2021). But libraries are most commonly conceptualised as 'a primary location for the conduct of the study' – the reasoning used for the eligibility criteria in a scoping review of health literacy studies authored by LIS researchers (Klem *et al.*, 2019, p. 103) – i.e., 'health promotion *in* settings' (Dooris, 2006b, p. 59), not a settings-based or TCBL approach. Public libraries as settings for health therefore present some challenges (Flaherty, 2015; Kelly, 2012). Furthermore, the precarity of public libraries in the UK context, increasingly reliant on volunteers and vulnerable to funding cuts, limits their availability as everyday settings for children outside of school hours; and the "openness" of open access to library resources is often curtailed by filters which restrict the content available for younger users on library-loaned devices. These limitations, however, do not detract from the potential value of exploring public libraries as supportive environments for children's critical HL. Considering 'the intractably problematic nature of aligning *any* setting characteristics to the varied facets of the full population and their multiple needs' (Whitelaw *et al.*,

2017, p. 898), public libraries do hold promise in that they are able to reach children who are otherwise excluded from other settings (including schools).

The question of *who* is left out of a settings-based approach matters as much as *which* settings get left out (Galbally, 1997). Both the LIS and health literacy literatures are lacking in regard to children's involvement in public library-based research on health: Klem *et al.* (2019, p. 107) find that '[r]elatively few surveys or interventions reported the inclusion of children' in LIS-led studies, and a report on the use of mobile libraries states that no such inclusion was planned: '[a]lthough the user survey was not designed specifically for children, a few did answer it' (SLIC and Tyler, 2019, p. 22). Whitelaw *et al.* (2017) make the case for public libraries as everyday settings for health, but do not discuss children or critical HL specifically.

The title of the paper by Fairbrother *et al.* (2016b) asks, 'Where are the schools?'; but a more apposite question in the context of children's health literacy and critical HL might be: 'Where are the non-school-based settings?'. Building on the public library's health-promoting potential as a 'given' (Whitelaw *et al.*, 2017, p. 896), this thesis seeks to understand how children experience the public library as a supportive (or otherwise) environment specific to critical HL, and 'the extent to which libraries can go beyond a relatively limited "information provision" model' (Whitelaw *et al.*, 2017, p. 899) and embed action-oriented critical HL for children in public library core business at all structural levels.

3.2.4 Conceptual model

Conceptual models provide a reference-point for theorising settings-based approaches and a reminder to attend to the interconnection between macro-, meso-, and micro-levels of a setting that inform a socioecological, whole-system perspective (Dooris *et al.*, 2014). The conceptual model developed and presented in this section visualises the epistemological lens (section 3.2.1) and proposes antecedents to the public library system which, as identified in the conceptual review, would need to be in place for children's critical HL development to be supported there. It is expected that this initial model will be revised in the course of the empirical research undertaken as part of this thesis.

A systems perspective on settings-based critical HL requires consideration of the inputs associated with making critical HL "business as usual", or part of everyday life

in the setting. The rationale for the settings-based approach has been described as the recognition that health is largely determined by circumstances beyond people's control and outside of their local spheres – i.e., wider determinants of health (Dooris *et al.*, 2014). Critical HL development includes awareness of such determinants, and it is from this vantage-point that the conceptual model in this chapter combines theory and practice to present an equity-focused, praxis-based theory of settings (Dooris *et al.*, 2022a), or 'settings praxis' (Shareck *et al.*, 2013), applied to the public library setting.

From the conceptual review, four antecedents to the public library system as a supportive environment for children's development of critical HL are proposed. The public library setting:

1. Acknowledges the wider determinants of health
2. Is open access
3. Involves local communities in how it is run
4. Facilitates informed action

These antecedents are drawn from the four commonalities identified in a scoping review of the theoretical bases and practical applications of the settings approach by Shareck *et al*. (2013) that should be attended to if the settings approach is to successfully reduce health inequalities (i.e., they are antecedent to an equity-focused settings praxis). Table 3.1 summarises the underpinnings of these commonalities as identified from the review, and their translation into the specific antecedents for this study's conceptual model.

Table 3.1 Antecedents to a settings-based approach for critical health literacy development extrapolated from the conceptual review

Commonalities of a successful settings-based approach identified from the literature and summarised in Shareck *et al.* (2013)	**Antecedents incorporated into the conceptual model for this study, proposing that *The public library setting…***
Focusing on the wider determinants of health and related inequities	*Acknowledges the wider determinants of health*: settings-based approaches may fail if there is inadequate consideration of the social determinants of health. This antecedent refers to 'wider' determinants to reflect the additional influence of e.g. commercial determinants of health.
Addressing the needs of marginalised groups	*Is open access*: the review by Shareck's team finds that intervening to improve the health of the most marginalised populations exclusively (by targeted interventions) may not necessarily lead to

	a narrowing of the difference between them and less marginalised groups, and may actually divert attention away from underlying determinants of inequalities in health, such as power structures (re-emphasising the importance of the antecedent above, particularly for children). This antecedent seeks to reconcile open access to resources and services for all with prioritised support for children's access via a 'proportionate universalism' approach (section 1.1.5).
Involving stakeholders	*Involves local communities in how it is run*: the involvement of people in settings' assessments of local needs is necessary for reducing inequalities in health through the settings approach.
Effecting change in structures	*Facilitates informed action*: effecting change in a setting's structure is central to the settings approach, and to critical health literacy. In order to benefit from structural change, people must be enabled to act on the opportunities created by change. Inequalities in health can result from inequalities in people's capacities to take action for health. This study does not extend to implementing change in the setting, but focuses on supporting the development of knowledge about how to take informed action so as to build readiness to instigate and harness structural change in future. Like the other antecedents, this antecedent depends on the other antecedents all being supported in the setting.

All four antecedents span the public library setting and open it up to other settings linked to the public library. The model posits that these antecedents are required for critical HL to be feasibly developed in children in this setting, and represents the interconnectedness of the different levels at which the setting operates: i.e., macro-level policies/governance, meso-level processes, and micro-level practices (carried out by individuals) (Okan *et al.*, 2018). For example, the antecedent 'Is open access', including access to health-related information, is on its own inadequate for supporting critical HL in children if such information is not meaningful to them and if there is no acknowledgement of the wider social relations, material and discursive apparatuses and politics of children's community-based spatial practices (Jones *et al.*, 2016) that mediate access. The antecedents provide a framework, aligned with the epistemological lens, to guide the subsequent data collection and analysis.

Figure 3.1 shows the first iteration of the conceptual model featuring the four antecedents identified from the conceptual review.

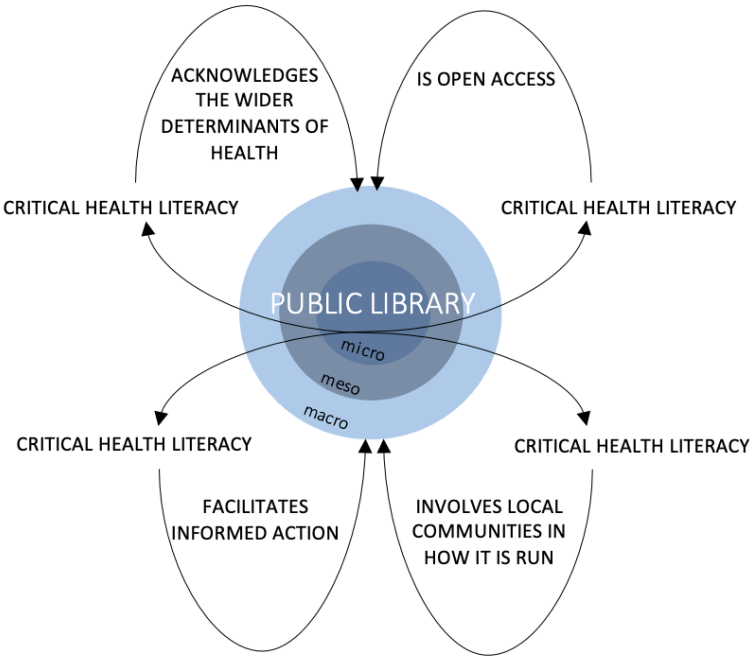

Figure 3.1 Conceptual model of the public library as a supportive environment for children's development of critical health literacy

This initial iteration of the model aims to demonstrate what Bloch *et al.* (2014, p. 10) refer to as the 'connectedness' of the settings-based approach upwards (through a focus on the social determinants of health) and outwards (through partnerships and collaboration between health and non-health settings) (cf. section 2.5.2). To these, the model offers an additional compass point: inwards, back into the setting, to sustain the localised critical HL priorities of the communities it serves.

The model is a visual representation of the results from the conceptual review and the systematic scoping review in Chapter 2, and is intended as a starting-point for addressing RO2 (section 2.5.6). The four 'butterfly wings' overlaying the circles are the proposed antecedents to the public library system required to support children's critical HL. The public library system is depicted as open to its environment (inputs from this environment, not shown in the model, might include staff, funding, and facilities). The model makes use of the visual shorthand of concentric circles, or ripples, to represent the macro-, meso- and micro-levels constitutive of the operational levels of the public library system. The arrows denoting the flow of

critical HL throughout the public library system infrastructure and the wider community reflect the reciprocal benefits to the public library and the community of the circulation of critical HL-related knowledge and practices. This perspective draws attention to the interstitial relations between the socioecological levels, and between the setting-as-system and the other systems with which it is interrelated. The focus on relations foregrounds the 'spaces in between': the 'arrows' (relations) rather than the 'bubbles' (e.g., nodes in a knowledge graph, or roles on an organisational chart) of how settings are depicted (Barić and Barić, 1995; quoted in Dooris, 2006b, p. 60).

There are several representations of settings-based models in the literature that use similar visual language (e.g. concentric rings), but differ in their allocation of setting-specific practices at the various levels. The model in this chapter is informed by the model in Kokko (2014, fig. 1) of the reciprocal interaction of health determinants in a non-traditional setting for health, visualised as nested circles that recall the 'rainbow' model of health (Dahlgren and Whitehead, 2021); the socioecological model in McCormack *et al.* (2017); the superimposing of health literacy levels onto a socioecological model in Dawkins-Moultin *et al.* (2016); the Lundy Model of children's participation in decision-making around services (Department of Children and Youth Affairs, 2015, fig. 3); and the visual aid for introducing participants to the determinants of health provided in Kramer *et al.* (2018). This variety of influence is because, as Dooris *et al.* (2014, p. 15) note, 'the complexity of both "health" and "settings" necessitates that we draw upon multiple theories from multiple disciplines, rather than one overarching theory' to understand the moving parts of the system.

An inquiry into healthy universities (Dooris *et al.*, 2014) suggests that investigations into settings should identify the extent to which the setting promotes health through its policies and expressed purpose (core business). In relation to this thesis and the model, investigative strategies might include identifying any barriers children encounter when using public library resources to critically appraise or react to health information; the meaningfulness and usefulness of available resources for children's action-oriented goals for health; whether library staff and other adult stakeholders understand and agree on an approach to critical HL; whether training available to staff who work with children covers critical HL; whether policies on health literacy translate to adults' frontline work; and whether children experience the library as a setting for health. The model will additionally help to structure the analysis for this

study (Chapter 4). For wider dissemination, the model could be re-labelled in line with recommendations to use the language and wording commonly used in a setting (Kokko, 2014; Paakkari and Okan, 2019) to integrate health there, such as ‘Reading Well’ (a book-based social prescribing scheme). There is also space to include empirical examples at each level of the model as the research proceeds.

3.3 Summary

This chapter has explained the conceptual framework for the study. The settings-based approach offers a systems perspective on how critical HL in children might be developed and supported where children spend time. A model of the public library proposes four antecedents to it potentially being a supportive environment for children’s critical HL development: the public library acknowledges the wider determinants of health, is open access, involves local communities in how it is run, and facilitates informed action.

Chapter 4 Methodology

This chapter introduces and justifies institutional ethnography as the theoretical and methodological framework for the study. A multiphase study design is outlined and incorporates consultation with a Children's Advisory Group. Feedback from children and reflections on the ethics and rigour of the study inform the data collection, organisation, and analysis methods used. The conceptual model developed in Chapter 3 scaffolds the analytical framework applied to the data.

4.1 Methodological rationale

Taking a systems perspective provides a way to study settings holistically (Dooris, 2004). The selection of a methodology to address the ROs (section 2.5.6) was led by two criteria: an evidence base documenting applications of the methodology to the systematic study of settings, and flexibility in response to the research conditions under COVID-19.

Case study methodology was considered following the precedent of Newton *et al.* (2016), in which an instrumental case study approach is used to conceptualise exemplar and contrary cases of the 'healthy university' concept. However, addressing the ROs of the present study requires also foregrounding the setting itself, as well as the concept (of critical HL) and children's involvement. The importance of children's involvement led to considering participatory action research (Nichols and Ruglis, 2021), but the onset of COVID-19 necessitated preparations for desk-based research to manage periods of social distancing. Critical ethnography was identified as potentially appropriate to the study of the macro-perspective of critical HL (section 2.3.1) due to its critique of dominant discourses and prevailing social structures, and fulfils the criteria for settings-related, flexible research. Institutional ethnography (Smith, 2005), however, specifically analyses people's settings-based practices from a social justice orientation, and was therefore selected for this thesis based on its citation across public health (Cupit *et al.*, 2020) and LIS (Stooke, 2010) evidence bases, as well as the possibilities it provides for remote engagement with the setting.

Institutional ethnography (IE) is a theory-informed, empirical and materialist inquiry into how people's everyday practices in settings are mediated by texts (Walby,

2013). It differs from traditional ethnography in its theoretical underpinnings and analytic aims, with implications for the data collection methods used (Kearney *et al.*, 2019; Smith, 1987). For example, IE includes participant observation in its toolkit (Deveau, 2008; Diamond, 2006), but IE's focus on explicating how people's practices in a setting are coordinated by social institutions outside that setting requires methods beyond local observation alone (Balcom *et al.*, 2021), such as in-depth text analysis and interviews.

In IE, "institutions" are 'clusters of text-mediated relations' coordinated around a specific ruling function, e.g. healthcare (DeVault and McCoy, 2006, p. 17). Institutions manifest in local settings, e.g. the institution of healthcare in a health clinic; and participate in some form of standardising work, or "ruling relations", e.g. paperwork in which the people who miss clinic appointments are categorised for reporting purposes as 'Did Not Attend' (DNA). The ruling relations of DNA reach across different areas of the local health clinic and beyond it, e.g. into the homes of those categorised as DNAs, although staff at the clinic will differ in how and when they enforce the DNA policy as they go about their work (Lund, 2012).

IE's focus on tracing work done locally to work done elsewhere, within and across settings, makes IE a useful tool for investigating the public library system *as a system* and for explicating how this system operates as it does in relation to children's critical HL. Tummons's (2010) IE of how a distance-learning provider delivered services across a network of geographically-removed sites convincingly demonstrates the adaptability of IE to not only feasibly accommodate, but actively analyse, physically-distanced research and inform a settings-based approach to the public library system (section 3.2.3).

IE attends to the practicalities of navigating everyday life in which health literacy plays a part. Metaphors of health literacy as 'a map or a compass on what may be a difficult and unpredictable journey', providing 'a here, a there' for people to orient themselves in complex systems (Kickbusch and Maag, 2008, pp. 205–206), echo a description of IE in the literature as a 'You Are Here' marker on a map (Carroll, 2010). IE can both contribute to, and be informed by, critical HL research practice and is well-suited to the study of health literacy development. IE's social justice orientation and attention to the upstream determinants of how people experience settings align it with Freirean critical consciousness-raising. Integrating IE with

critical HL may support people to ‘take over and do [research] for themselves’ (Smith, 1994, p. 20), including equipping them with the organisational literacy or “institutional literacy” (section 4.1.2) needed to make settings work for people as supportive environments for health.

4.1.1 Institutional ethnography and settings for health

Evaluating a settings-based approach is challenging, because the successful integration of health with the core business of a setting can be *too* successful if the language of health becomes normalised in the setting (section 3.2.1). The strength of IE is that it actively seeks to ‘demystify’ such organisational processes of normalisation and standardisation (Dooris, 2006b, p. 59): what IE calls the standardising effects of the prevailing discourse (Næss, 2022), or ‘textually-organised modes of thinking and action’ (Nichols and Guay, 2021, p. 528) that govern people’s practices in relation to a setting. This section outlines the applicability of IE to the settings-based approach and the Ottawa Charter action area on creating supportive environments (Green *et al.*, 2019) (discussed in Chapter 3).

IE has its theoretical foundation in the social organisation of knowledge, and it is from the epistemological perspective of knowledge as socially-organised that IE’s analytic aim sets out to elucidate, in detail, how the scope for practices in a setting is arranged ‘systematically, but more or less mysteriously and outside a person’s knowledge, and for purposes that may not be theirs’ (Campbell and Gregor, 2004, p. 18). IE’s toolkit of methods – text analysis, interviews, and observation, or ‘looking at documents, talking to people and watching their work’ (Tummons, 2010, p. 349) – is directly linked to this epistemological perspective and the importance of keeping in view the setting and the people who work in and around it. Settings in IE are not ‘conceptually substitutable’ (Smith, 1987, p. 97) with other settings of the same type, but specific, local, and complex in their interface with people and other settings.

New practitioners of IE often need to un-learn how they do research in order to be guided instead by IE’s way of looking at the world: a social materialist ontology that views settings as composed of differently-experienced relations between people, produced and sustained by people’s textually-mediated practices (McCoy, 2021), and subject to being changed or transformed by people (see table 4.1).

Table 4.1 Analytic concepts in institutional ethnography relevant to studying settings

Analytic concept in IE	Explanation
Discourse	Text-mediated regulation of local practices
Moments of mismatch (also referred to as 'disjunctures')	Dissonance between people's experiences and the authoritative representation of those experiences
Problematic	A summary statement that directs attention to a possible set of puzzles that are not yet formulated, but are indicative of tensions between what standpoint informants know from their experiential perspective and how settings are organised. IE researchers identify a problematic only after looking at texts, talking with people or watching them at work
Standpoint	The social location or position of a group of people. IE studies begin from, and return to, the standpoint of a particular group of people
Texts	On a day-to-day basis, people refer to texts (policies, protocols, professional competency frameworks) in written, spoken or graphic formats. Texts are replicable and inform people located at different times and in different parts of the setting how to undertake their work. People activate texts locally (e.g., filling in a form, selecting a dropdown menu option) that are regulated by a hierarchy of 'higher order texts' produced elsewhere (e.g., legislation) and part of wider 'ruling relations' (e.g., the apparatus governing the enactment of legislation)
Work	Any purposeful activity that takes effort

Table after Bisaillon (2012) and Foo et al. (2021)

IE's ontology of the social, which spans the local and extra-local social organisation of people's experiences, has been criticised as fostering an aspatial understanding of settings (Billo and Mountz, 2016). But IE is emphatically spatial in its interest in zooming in on interlinked micro-units of action locally which, in aggregate, constitute people's practices and create the setting in response to its wider context. People's use of texts in IE is thus analysed as the means through which the "macro" – i.e., the standardising effects of official instruments and discourse – is brought into people's local everyday work, commensurate with conceptualisations of critical HL as a window onto how macro-level social processes of politics and policy can determine individuals' health (section 2.3.1).

'Texts' in IE are defined generously as the objects through which a setting or system is encountered (McCoy, 2021). Settings are continuously produced via people's participation in an intertextual hierarchy where 'higher order texts' such as policies guide day-to-day activities (Bennwik *et al.*, 2023; Prodinger and Turner, 2013). Where texts prove elusive (Rudrum, 2016; Williams and Rankin, 2015), IE is

equipped to use this very elusiveness as evidence for how the setting supports – or gets in the way of – critical HL development for children.

'Work' is also defined generously in IE, as inclusive of any purposeful activity that requires resources (including time) and effort to get done (Smith, 2005). In the library setting, 'work' could include work done by staff (e.g., training other staff on how to manage children's health-related information requests), community stakeholders (e.g., library trustees' meetings to discuss a system-wide safeguarding policy), and work done by children themselves (Murru, 2021) (e.g., asking library staff how to contact their local Member of Parliament about a public health issue that concerns them). Using IE offers ways for thinking about action-oriented critical HL as "work" in the IE sense, that requires resources and effort (table 4.1).

IE explicates interconnected work processes, 'as these are rendered accountable within the ideological schemata' of that setting (Smith, 1987, p. 176), and examines 'the taken-for-granted order of things' (Suárez Delucchi, 2022, p. 9) to pinpoint how the social organisation of knowledge in the setting could be re-organised. The outcome of an IE is to extend people's knowledge of the setting and its wider operations beyond that initially available from where they stand. It does this by demonstrating how people's experiences are linked to, and mediated by, social and political determinants not discernible in their entirety from a single social location, or 'standpoint' (Nichols and Guay, 2021).

The standpoint group is where the IE project of discovery starts out and where it returns with what is now known (and can be put to use by that group to advance their interests). This study adopts the specific standpoint of children aged seven to 11 (middle childhood), based on the gap in the literature around critical HL and this demographic (sections 1.1.3 and 2.3). Discovery in IE is led by what people are enabled to know about how their practices are linked up to others' practices. Part of this discovery is the identification of a 'problematic'.

The problematic in IE is approached from 'within [the] context of being told one thing but knowing differently' (Deveau, 2014, p. 311). It is an analytical periscope through which the wider determinants of relevance to people's local experience can be traced and brought into their purview (DeVault, 2020). As an example of what is meant by the problematic in IE (from adult standpoints), a study of the work of parents and nurses relating to childhood vaccination practices (MacDonald *et al.*,

2022) identified several entry-points to further inquiry in cases where an appointment booked for one child was attended on the day with more than one child in tow. Pursuing the entry-point of 'why did the nurse ask the parents to return at a later date, rather than vaccinate the other children present during this visit?' led to formulating a problematic of 'one child, one appointment'. This problematic provided a route into the institutional discourses organising vaccinations and the tensions that arise between parents' work (managing the logistics of getting childcare for the siblings not booked for an appointment, and transport costs to attend multiple appointments) and nurses' work (who have limited time allotted in each appointment to administer the vaccination, conduct other checks, and fill out the requisite paperwork).

The relevance of the problematic is engendered by representations of knowledge in the setting that are dissonant or 'out of tune' (Suárez Delucchi, 2022, p. 9) with what people actually know from experience to be the case, e.g. where what is prescribed 'on paper' does not "land" locally, or fails to overlay the version of events represented in texts. IE inquires into these 'moments of mismatch' between what is supposed to happen and what happens in practice in a setting (table 4.1). These 'mismatches' come about when the knowledge of one group in a setting is subordinated to forms of knowledge serving interests arising elsewhere (Teghtsoonian, 2016), resulting in a gap between what people say is done or properly belongs to a setting, and what is observed as *actually* being done or belonging to that setting (Rankin and Campbell, 2009). Similar concepts are found in the settings-based approach to health promotion, e.g. as 'discontinuities' (Poland *et al.*, 2000, p. 350); and in literacy studies, e.g. as 'stuck places' where 'discourses collide and conflict' (Wohlwend, 2021).

Critical HL can bring to the fore mismatches between e.g. official, standardised health information and people's experiential knowledge. Through tracing 'instances, examples, illustrations, or expressions of institutionally constituted virtual realities' (Smith, 2005, p. 123) that collectively make settings work (in the interests of some people), IE aims to set out exactly how things are so arranged, and to bring to light possible rearrangements for improved equity. In this way, IE can help to illuminate the development of critical HL as – borrowing from LIS terminology – a form of 'informational boundary work' (McKenzie, 2020) that involves piecing together information from different domains to make sense of everyday life.

Piecing together knowledge of how a setting actually works requires understanding people's experiences from their embodied standpoints, not from 'the null standpoint of a "generalized other" constructed sociologically' (Nichols and Guay, 2021, p. 528). The analytic emphasis in IE on socially-organised arrangements can foster findings 'generalizable beyond individual accounts' (Bisaillon and Rankin, 2013, p. 4) or cases, but the focus is less on generalisability (i.e., producing findings that span settings) and more on the 'generalizing effects' (DeVault and McCoy, 2006, p. 18) of specific settings (i.e., how what it is possible for people to do within a setting is standardised). Individual IEs, pieced together, can help form a bigger picture of the standardising effects of social organisation across settings (Smith and Griffith, 2022).

Rigour in IE is determined by the "fit" of the research with the ongoing puzzle being pieced together with other IEs, and the recognisability of the researcher's rendering of this puzzle by the people whose work is being described. This recognisability contributes to an IE's catalytic validity: what Lather (1987), with reference to Freirean critical pedagogy, defines as the degree to which the research process reorients people's understanding of how the setting works so that they are better-placed to catalyse structural change (section 4.2.3). It is a measure of the usefulness of the written IE for supporting the standpoint group to know about, or take control of, how their experiences in the setting are determined upstream from where they are locally (Nichols and Guay, 2021).

All four proposed antecedents in the conceptual model (figure 3.1) can be illuminated by IE's directing of attention to upstream determinants of local experiences; the logistics and conditions of access, or how 'a parent's ability to take a child to the public library may be shaped by decisions made by city planners around public transit schedules' (Dalmer *et al.*, 2017, p. 52); who is not invited to get involved in the setting; and whose and which actions are enabled or not in the setting. Extending the application of IE to understand the social organisation of critical HL opportunities for children in a public library therefore answers the call in Mykhalovskiy and McCoy (2002, p. 20) for IE research that 'moves forward in community settings'.

4.1.2 Institutional ethnography for, and with, children

Children's standpoint is not usually taken in IE research, despite the inclusion of children in illustrative examples early in the development of IE. This section discusses possible reasons for this and looks ahead to a study design that re-emphasises IE as a strategy for advancing the interests of children.

By contributing children's (possibly counter-discursive) accounts to the health literacy conversation, this thesis aims to make space for children's experiential knowledge (Jones *et al.*, 2016; Mannion, 2007; Ogle and Vincent, 2022; Spencer *et al.*, 2020; Woodgate *et al.*, 2020). Learning from children's standpoint in an IE approach to health literacy research 'expands the range of interlocutors' (Mykhalovskiy *et al.*, 2008, p. 201) and keeps the research firmly anchored in the interests of children. This IE study starts from children's standpoint, and therefore from their 'bodily experience, relevancies, and everyday knowledge' (Bisaillon and Rankin, 2013, p. 2). Children's knowledge is compared with others' knowledge, and different types of knowledge (e.g., authorised and experiential) (Næss, 2022), to build up a more complete picture of how what children know (or are not "allowed" to know) gets organised in the public library system.

Although it has roots in the women's movement, contemporary IE is intended 'for [all] people' (Smith, 2005, p. 1) to adapt and use. Smith frequently refers to children in recounting the formulation of IE, and Smith's original IE map includes a child-like stick figure on it – the standpoint informant, labelled as 'the small hero' (Smith, 2005, p. 3) – looking up through the complexities of the system with which they are confronted. However, it is the adult standpoint (and what adults presume the best interests of children to be) that has tended to get represented in IE research.

This is apparent in the many more examples of IEs *about* children than *for* them, or from their standpoint (Bell and Campbell, 2003; Blackburn and Ward, 2020; Jahreie, 2022; Ng *et al.*, 2013; Nilsen, 2017; Stooke and McKenzie, 2011, 2011; Tegtmejer *et al.*, 2022; Yan, 2003). As at May 2022, only a handful of IE studies taking the standpoint of children were identified, and all either adopted standpoints older than age 11 (Andow, 2020; Canas *et al.*, 2021; Nichols and Braimoh, 2018; Purcell, 2022), or of very young children: e.g. Christensen (2020) and the Inclusive Early Childhood Service System (IECSS) project, a longitudinal IE that aims to

understand disability in early childhood from the standpoint of children and their families (Balter *et al.*, 2022). Only two IE studies from standpoints within middle childhood were identified at the time of writing, both focusing on homework practices in families: Clarke (2021), which prioritises an eight-year-old's rights – '[o]ne family from Riverdale was eliminated from the study because the child did not want to participate' (p. 3) – and Murru (2021), which explores the work of children aged ten to 16 in shared custody arrangements, including managing homework across different parental/caregiver households.

While not all IEs use the standpoint concept (International Sociological Association, 2022; Smith and Griffith, 2022), the lack of IE research that foregrounds children's interests is concerning, especially in the context of a lack of 'health literacy research *with* children' (Bond and Rawlings, 2019, p. 594, emphasis in original). It is a surprising blind-spot in IE, because standpoint is not about pretending to be someone else (and thus it should not matter that adults cannot fully imagine themselves into occupying children's standpoint), but rather about learning from what is known or unknown from that standpoint, and contrasting that with the knowledge available to other people in the setting. There are no conditions inherent in IE that limit the exploration of children's everyday lives using this strategy for inquiry, so reasons for the reluctance to take on the work of considering children's standpoint are largely about practicalities. The current study thus seeks to advance IE research through introducing a suite of child-friendly interviewing techniques consistent with IE's ontology and epistemology, and that makes visible the role of the "institution" of adult-led health literacy research in shaping the realities of children's opportunities to develop critical HL.

Children are in a position to view adult-created settings as 'fundamentally mysterious' (Smith, 1987, p. 94) in a way productive for interrogating the organisational processes to which adults may be accustomed or have allegiance, because children inhabit a social location outside of the discourse that mediates such processes. By contrast, adults tend to bridge the institutional narrative of what is supposed to happen and what happens in practice (Comber, 2016) by '"working up" the messiness of an everyday circumstance so that it fits the categories and protocols of a professional regime' (DeVault and McCoy, 2006, p. 27) (e.g., filling in a standardised form that fits people into boxes, or represents them as "cases" to be

"processed"). This bridging is a means to an end, and can be described as 'institutional literacy': "playing the game", or talking the language of the setting.

Attaining institutional literacy is part of children's settings-based work, because '[t]hose who can appropriate the institutional discourse can often move with greater ease through its processes; they know what to expect […] and they have the language to advocate for themselves' (McCoy, 2006, p. 119). Supporting children to do this requires re-directing adults' own institutional literacy to the purpose of promoting children's interests in the setting, as eloquently explained by Nichols *et al.* (2017, p. 115) in their study of community-based and participatory approaches to IE with young people:

> In order to get what they wanted and needed during their interactions with frontline staff, young people needed to learn how to differently frame their concerns so that they would be deemed relevant and actionable within institutionally mandated sequences of action […] a degree of institutional literacy was required in order for the processes to work for them. On the other hand, frontline workers needed to be supported to see how their work with youth was organized across institutional settings (e.g., how a young person's experiences of housing instability shape their experiences in school). Frontline workers also needed to learn to recognize how institutional documentary practices and performance metrics framed their interactions with youth, such that they were inattentive to important aspects of young people's care

Within sociology of childhood studies, children's activities are beginning to be taken seriously as 'work' (Mullan, 2020) in the IE understanding of the concept (table 4.1): any activity that is effortful, embodied, and done in service of (or in resistance to) institutional arrangements. Children's work, including the work that critical HL requires, can encompass activities that enable them to 'work on (and change) the factors that constitute their own and others' health chances' (World Health Organization, 2021a). This thesis recognises children's work as *workful*, including their work as consultants on the study design (section 4.2.2).

4.2 Study design

IE offers a toolkit of possible methods for addressing the ROs. This section outlines the integration of texts and interviewing in the study design, and describes changes to the planned design in response to consultations with children and COVID-19.

4.2.1 Overview of study design

IE research is iterative and multiphase in its explorations of local and wider arrangements. Figure 4.1 visualises the study design as a flowchart incorporating the phases of an IE study (Campbell and Gregor, 2004): local orientation to build the researcher's familiarity with the setting, including representations of it in texts; in-depth engagement with how people experience the setting through interviews; and explication of how the setting works based on the data. The arrows in between each phase indicate ongoing analysis threaded throughout the study timeline. IE research participants are referred to as 'informants', in recognition that their knowledge and experiences actively inform the IE researcher's understanding of the setting (Campbell and Gregor, 2004). In this study, the 'child standpoint informants' are the children who share their experiences in interviews.

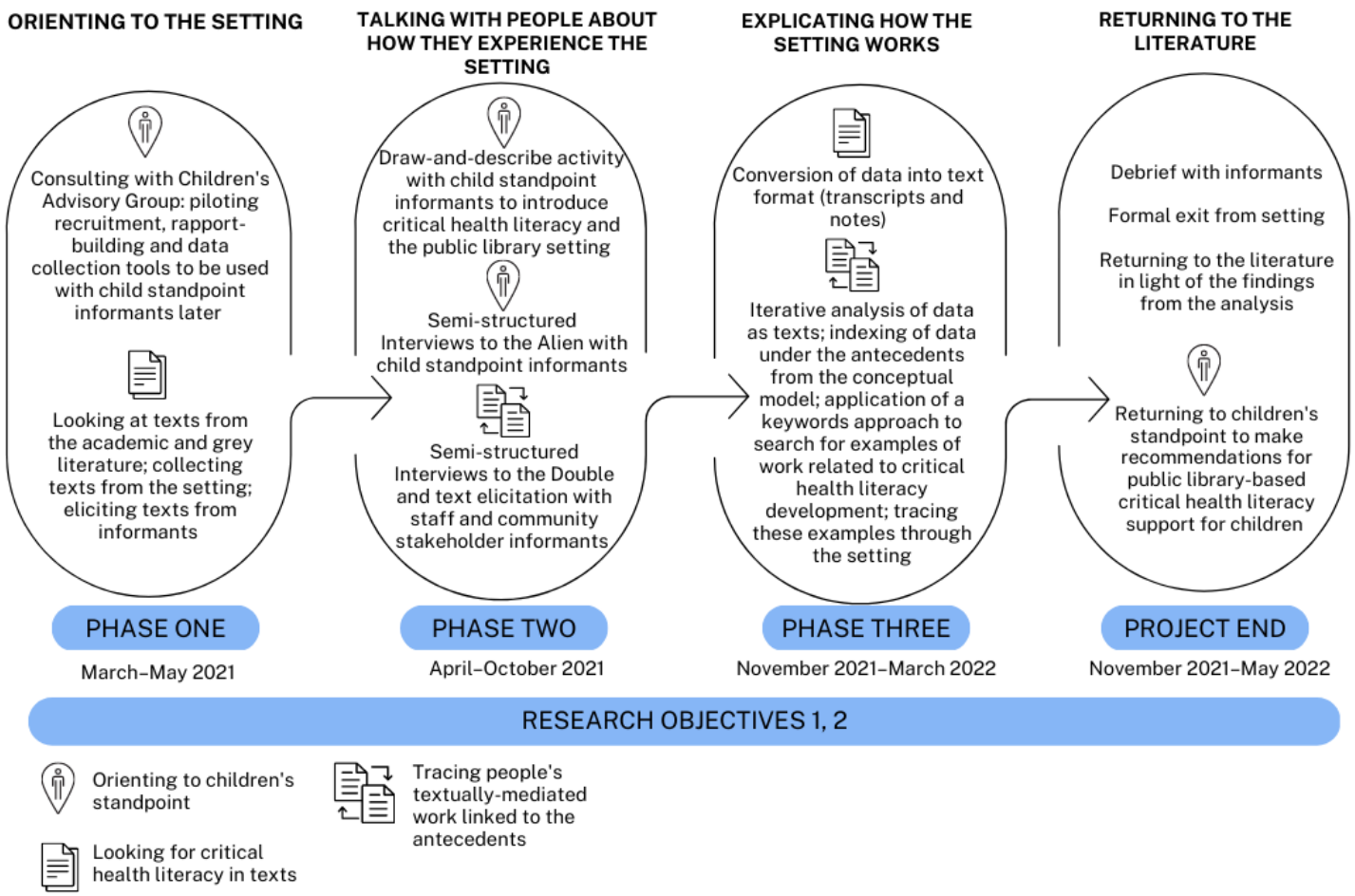

Figure 4.1 Study design flowchart.

Figure 4.2 supplements figure 4.1 and provides an overview of the timeline (Jenkins, 2023).

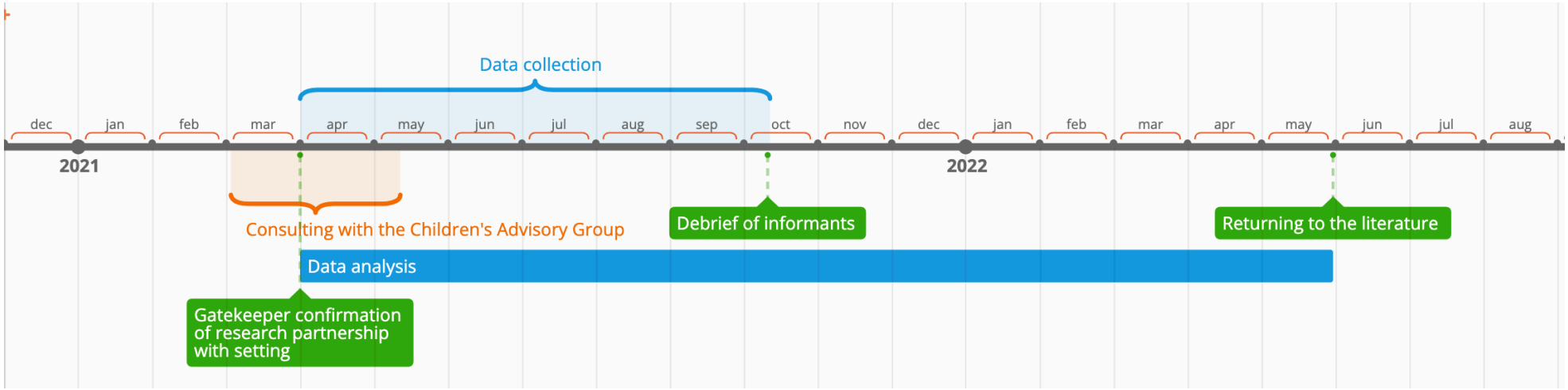

Figure 4.2 Study timeline.

The spread of COVID-19 necessitated changes to the study design, mainly affecting the mode of interviewing (to include online interviewing). However, the reduced opportunities to talk with people as they moved through the setting were counterbalanced by learning about and adapting 'in-situ at a distance' ways of researching (Shareck *et al.*, 2021) (section 4.2.3) and the application of an interviewing technique that encourages people to talk about their work in detail (section 4.2.2.4).

Strategies for eliciting the work children are involved in, or refrain from, are nascent in IE and include variations on mapping, the Photovoice method, and fictive cases (Murru, 2018). The deployment of professional language can cause what is actually involved in doing settings-based work to disappear (Billig, 2013; Kearney *et al.*, 2018; Nilsen, 2021) or 'recede', such that it becomes invisible because integrated into the core business of the setting (Dooris, 2006b, p. 59) (section 4.1.1). The strategy developed during this study to elicit children's library-based work in their own words is to frame the request in terms familiar to children, such as 'a livestream on YouTube Kids', 'a Story/Reel of your day', or 'a TikTok how-to video' (referring to the versions of these platforms for younger users). Making available multiple options for how children can choose to provide information about the work they do in the setting increases researcher workload, but is necessary for enabling children to go into the granularity of detail needed to begin to understand the social organisation of their and others' work in and beyond the setting.

4.2.2 Consulting with a Children's Advisory Group

Best practice guidelines for Patient and Public Involvement and Engagement (PPIE) with children in UK health research are available (NIHR, 2021), and have been reviewed and updated with input from Children's Advisory Groups. Convening a Children's Advisory Group (CAG) to inform the approach to working with children in this study proved essential and demonstrates the need to fully integrate PPIE into IE, because IE's use of standpoint (section 4.1.2) is by itself an inadequate substitution for PPIE.

IE has been used to analyse PPIE (Bidonde *et al.*, 2021), and community advisory groups have been involved in IE studies (Jacobson *et al.*, 2023), but examples of PPIE with children in IE are scarce (Jenkins *et al.*, 2023a). In the absence of an IE-specific guideline, convening a CAG for the study was informed by the PPIE

literature (Collins *et al.*, 2020; Forsyth *et al.*, 2019; Kellett, 2009; Kellett *et al.*, 2004; Rouncefield-Swales *et al.*, 2021) and further reading around the logistics of conducting ethical and inclusive online research with children using Zoom (Child Rights Coalition Asia and ChildFund Korea, 2021; GOSH, 2020; Pothong and Livingstone, 2021) and the implications of researching a setting mediated by technology compared to researching while co-located in that setting with informants (Howlett, 2021).

The degree of PPIE engaged in with children in this study is aligned with the 'consultation' level of involvement. Table 4.2 summarises the role of the CAG.

Table 4.2 PPIE with children: consultation level of involvement

Work package	No involvement	Consultation	Collaboration	Control
Study idea and priority		✓		
Study design		✓		
Ethics application		✓		
Recruiting child standpoint informants		✓		
Piloting data collection tools		✓		
Data analysis	✓			
Debrief		✓		
Writing thesis	✓			
Dissemination		✓		
Future plans		✓		

Table design after Sussex Partnership NHS Foundation Trust's PPI(E) Café.

The CAG's remit did not include being informants, so there was no overlap between the set of children who sat on this group, and the child standpoint informants who were interviewed as part of the formal data collection later (using the interview technique piloted with the CAG).

4.2.2.1 Recruitment of Child Advisors

Recruitment of children to membership of the CAG was promoted under the job title Child Advisors (CAs) and involved the researcher reaching out to adults in their professional network – the NHS and a public health department – who knew children and were willing to show social media posts about the study to them. Information sheets and informed consent forms were provided to interested children and their adults to consider (Appendix 3). Recruited CAs chose their own pseudonyms, which the researcher explained to CAs as being like "research codenames". Pseudonyms were used to balance informants' privacy with crediting

their contributions to the study (Allen and Wiles, 2016). The chosen pseudonyms reflected CAs' passions, e.g. astronomy (for the pseudonym White Hole) and YouTube influencers (for the pseudonym KSI), and CAs expressed their intention to keyword-search these pseudonyms in the open access thesis. Table 4.3 summarises the composition of the CAG.

Table 4.3 Children's Advisory Group

Child Advisors (pseudonyms)	**Age in years**	**Gender**	**Setting-based experience**	**Additional information**
Luna Starshine	7	M	Has visited a public library before (at pre-school age) but makes more use of the school library	Rural area, access to a mobile public library branch and a school library
Jar Jar Binks	8	M	Public library member and regular user	
White Hole	8	M	Has visited a public library before (pre-pandemic) but makes more use of the school library	Remembers the public library as being 'as you would expect, booky, lots of books around'
ASDPENGUIN22	9	F	Public library member and regular user (had their own library card at nine months old)	Experienced in awareness-raising and activism related to their physical disability
Ronaldo	9	M	Has visited a public library before (pre-pandemic) but makes more use of the school library	Dyslexic
KSI	10	M	Has visited a public library before (pre-pandemic) but makes more use of the school library	
Tigerlilly	10	F	Public library member and regular user (visits every week)	Experienced in advising on health-related research; member of Scouts UK (a youth movement with an emphasis on outdoor extracurricular activities)
Willowshot Ebony	11	F	Has visited a public library before (at pre-school age) but makes more use of the school library;	Rural area, access to a mobile public library branch and a school library

			has worked as a school library monitor	

The CAG did not meet collectively, so each CA (and sometimes small-group sibling/friendship twos or threes) had the time and space to make their substantive contribution. Small-group discussions enriched the data in showing how the children interacted with each other to pool their combined experiences relevant to critical HL in the library setting.

4.2.2.2 The process of piloting research tools with Child Advisors

Three sessions between 20–60 minutes, including preliminary ice-breaking activities for prospective CAs to find out more about the project, were held with each CA or small group on Zoom during March–May 2021. Parents/caregivers of CAs were welcome to join the call. Sessions were audio-recorded and permission was granted for screenshots and chat-box content to be saved. Sessions were transcribed in real time using Otter.ai transcription software, and the transcription-in-progress was visible to children via live captioning during the session. As soon as possible after the session, the researcher worked back through the AI-generated transcription manually to check that it was verbatim and to redact any identifying content. Table 4.4 summarises the involvement of the Child Advisors in each of the sessions.

Table 4.4 Summary of consultations with the Children's Advisory Group

Consultation session	**Session activities**
1	'Meet and Greet': introductions and an opportunity for prospective Child Advisors to find out more about the research. Consultations on the idea for the study: Is this research worth doing? Is it ethical?
Post-session	*Evaluation form and recruitment documentation templates sent out by post*
2	Edits to the recruitment documentation for child standpoint informants (poster, information sheet, consent form)
Post-session	*Evaluation form sent out by post*
Pre-session	*Draw-and-describe critical health literacy activity sent out by post*
3	Completion of draw-and-describe critical health literacy activity; piloting Interview to the Alien
Post-session	*Evaluation form sent out by post*
	Research update sent out by post: data collection in progress with child standpoint informants
	Research update sent out by post: analysing data
	Remote debrief, certificates, visual précis of the study findings

Text in italics indicates research communications with Child Advisors in-between sessions and after data collection.

Changes made through consultation with the CAG helped ensure that the proposed research would be ethical (i.e., CAs would be happy to let their siblings or friends take part as standpoint informants) and relevant to child standpoint informants in the same age-range. These included verbal and written edits to the documentation used to recruit and consent child standpoint informants (see Appendix 4 for drafts marked-up with suggested edits by a Child Advisor), ideas for disseminating the research so that other children would see it (e.g., a slide-deck for school assemblies and a YouTube Kids video), and refinement of the tools for introducing children to the study topic (a draw-and-describe critical HL activity) and for data collection (a modified interviewing technique, Interview to the Alien).

4.2.2.3 Draw-and-describe critical health literacy activity as a stimulus to facilitate children's involvement in research

The draw-and-describe critical HL activity piloted with the CAG and used with child standpoint informants was not included as data, because the focus here was on rapport-building, orienting children to the study topic, and listening to children's linked commentaries. It served as a stimulus for discussion, and was suggested by the CAs as a method that would appeal to children.

Blank storyboard sheets were sent out to CAs by post in advance of the third session with the instruction to fill in the first box (of three) by drawing a child with a mask and labelling it (see Appendix 5 for draw-and-describe critical HL activity template and instructions). COVID-19 was not specified in the instructions, but all the CAs interpreted the 'mask' as a COVID-19 one. Not all children labelled their drawings; some preferred to describe their drawing aloud in the live session, or by typing into the Zoom chat-box. CAs were then invited to fill in the second box during the session, this time in response to an instruction to draw the child explaining to an alien why the child has a mask. The alien was another suggestion by a CA and there was consensus with other CAs that an alien would be fun to draw. The device of "explain to an alien" encouraged rich descriptions and helped defamiliarise the public library setting for children preparatory to the third and final box of the mini comic strip, which was completed in the same session. The final box transferred the scene of action to a public library with the invitation for CAs to draw the child showing the alien around (because the alien does not have public libraries on their home planet).

This exercise linked to CAs' stated expertise and interest in livestreaming via platforms like TikTok for Younger Users. CAs adjusted their cameras when filling in the second and third boxes so that the researcher could see their drawings taking shape, accompanied by CAs' live commentaries or voice-overs describing their decisions, e.g. to make edits by erasing part of their drawing, or to include specific pieces of furniture and signage in their public library scene. Framing the draw-and-describe activity in livestreaming terms helped to maintain a focus on children's embodied reflections in an online environment removed from the setting being drawn and discussed. All children gave permission for the researcher to retain their original drawings.

Drawing elicitation has previously been used in health research with children (Driessnack, 2006) and lends itself to producing insights into complex or multidimensional concepts (Hartel, 2019). While this method has been challenged (Horstman *et al.*, 2008) and should ideally be used alongside alternative ways for children to engage, it was useful in this study for introducing CAs to critical HL and for learning from them how best to introduce the topic with child standpoint informants. Changes recommended by the CAG contributed to phrasing the instructions (Lima and Lemos, 2014), the addition of a thought bubble option (Horstman *et al.*, 2008), and bigger boxes on the critical HL activity sheet to allow a larger canvas for adventures with the alien. At a time when an international research collaboration was using children's drawings as a rapid research method to understand the information available to children about the pandemic (Bray *et al.*, 2021a) (section 2.4), these consultations with the CAG were concurrently eliciting drawings that captured, and provided insights into, children's public health knowledge.

4.2.2.4 Interview to the Alien as a method for eliciting children's settings-based work

The popularity of the alien in the livestreamed drawing exercise resulted in its being retained for use in piloting a data collection tool. As in the case of the draw-and-describe activity, the piloting process with CAs focused on tool development and did not itself constitute data collection. The critical HL activity led to the introduction of the interview tool which, for child standpoint informants, would form part of data collection.

The researcher pitched to CAs a semi-structured interview technique for use with child standpoint informants: Interview to the Double (ITTD). ITTD combines in-depth interviewing ('tell me what you do', 'walk me through a day-in-your-life') with the IE concept of the problematic (section 4.1.1) to gather examples where what the informant does in practice may not match what the informant has told the researcher about what they do, or what they do according to texts. ITTD aims to learn from informants what they actually do on a day-to-day basis in sufficient detail that the researcher could replace them in their daily routine the next day (as a body-double or doppelgänger – the 'Double' of the technique's name). For example, the researcher would know the micro-level information of who the informant talks to first on entering the setting; whether they need to sit down after their journey there and where the preferred seating is; how long they normally spend there; what apps they open while there; and any related tasks that need doing after leaving the setting.

ITTD is informed by practice theory (Nicolini, 2009) and has been used in LIS research (Lloyd, 2014). A similar method appears in early fieldwork involving IE's founder, written-up in Livingstone *et al.* (2011), to understand the everyday practices of steelworkers without resorting to jargon or imprecise language that would obscure or displace those practices. ITTD is not cited in the account by Livingstone's team, nor in IE more widely prior to Tartari (2021b), but it shares a common purpose with IE: seeking to learn about institutional practices not only from descriptions of the work people do, but from asking about and observing how people know what to do in the first place.

The CAs, taking the ITTD literally, were understandably skeptical about the researcher's ability to plausibly get away with replacing them in their daily routines. Better by far, ASDPENGUIN22 suggested, would be to ask child standpoint informants to educate the researcher, 'like explaining to someone that's not educated' about how things are arranged on planet Earth. This led to switching out the 'Double' for the 'Alien' in a modified version of the ITTD to create Interview to the Alien (ITTA), thereby situating children as authoritative knowers in contrast to the alien-researcher, who knows very little and is reliant on children sharing their experiences. While there is some precedent for using ITTD with children (Dieumegard and Cunningham, 2019), and for the use of aliens in critical HL interventions for children – e.g. 'Mork' and 'Og' (Fairbrother *et al.*, 2020) and

‘Confused Alien’ (Fage-Butler, 2018), ITTA in this study is indebted to the CAs’ imaginative contributions.

Integrated with draw-and-describe as the stimulus, ITTA can provide a rich picture of children’s experiences of a setting that may not otherwise be articulated. CAs also noted that ITTA prompts the informant to reflect on the work they do in ways they might not have thought about previously and leads to reflection and new insights, making it particularly suitable as a method for exploring critical HL.

The topic guide for the interview (Appendix 6) was refined with CAs’ input to include the critical HL activity at the start, as an informal icebreaker, and clearer prompts to walk children through different scenarios that asked them to teach the “alien” (a proxy for the researcher) how the child goes about finding health information and acting on it at the public library.

There are precedents in the IE literature of methods for analysis that could be used with children, including visual analysis (McCoy, 1995; Tartari, 2021a) and Voice-Centred Relational Method (VCRM), also known as voice-centred relational analysis or The Listening Guide (Gilligan *et al.*, 2006; Reid, 2017). VCRM has been used to ‘facilitate listening to stories on multiple levels’ and to ‘identify larger narrative frameworks structuring individual stories’ (Chadwick, 2017, pp. 65–66). Inspired by Gillett-Swan (2017), possible options for involving children in data analysis were discussed with the CAs, including VCRM, which the researcher explained as “highlighting all the bits where informants say, *I do this* in their Interview to the Alien, and then putting all those bits together to make a story”. However, pressures on CAs’ time as their social activities re-started following the lifting of lockdown restrictions led to neither VCRM nor other forms of collaborative data analysis being pursued.

4.2.2.5 Informing Child Advisors and acknowledging their contributions

Regular communication from the researcher to CAs was agreed as part of the promise made by the researcher, based on the modified International Association for Public Participation (IAP2) spectrum: ‘[w]e will keep you informed, listen to and acknowledge your concerns and aspirations and provide feedback on how your input influenced the research’ (Bammer, 2020) (see Appendix 7 for photographs of the research updates sent to CAs by post). Children’s evaluation forms, externally

designed with reference to the Lundy Model of Participation and updated to include items for evaluating children's experiences of remote research (Hub na nÓg and Lundy, 2021), were provided to CAs and, later, child standpoint informants. In line with the Lundy Model, the forms served to create conditions under which it was unacceptable for the researcher to elicit children's views and then ignore them. The forms also helped gauge what worked and what did not as the research progressed, so that the researcher could take steps to rectify any issues ahead of the next session or research interaction (see Appendix 8 for an example evaluation form completed by a CA).

After data analysis in the wider study (section 4.4), all CAs were debriefed remotely and received a personalised certificate thanking them for their work and a cashless thank-you pack. The thank-you pack consisted of a reuseable tote bag containing materials that children could use to conduct their own research projects (a notepad and pens), a leaflet signposting children to public library-based health resources (The Reading Agency, 2020), and a middle-grade fiction book with a storyline that showed children's critical HL in action (Farooki, 2020). Child standpoint informants were also debriefed and received the same thank-you pack.

4.2.3 Reflections on the ethics and rigour of the study

Reflections throughout this thesis are based on a reflective model by Scollon and Scollon (2004) and grouped into three stages: engaging, navigating, and changing the setting being studied. The following ethical reflections span, and have influenced, all phases of the study design.

The 'Engaging' stage was integrated in the study design through the IE concept of standpoint (section 4.1.2). The involvement of the CAG and their adults informed the initial ethics application to ensure that the proposed research was ethical, both from a child perspective (i.e., what adults perceive to be in the best interests of the child) and from a child's own perspective (sections 1.1.6 and 4.2.2.2) (Söderbäck *et al.*, 2011). Phase One of the flowchart (figure 4.1) was initiated just as COVID-19 arrived in England, so ethics approval was re-sought in response to the changing research conditions (Appendix 9). The timing of the research during a global public health crisis was discussed with the CAG, whose members separately agreed that the proposed research would be of relevance to children navigating the pandemic (including children who do not normally use the public library). COVID-19 also

dominated the rapport-building activities with child standpoint informants and provided a topical example when defining the study's focus on critical HL for them. Final ethics approval was secured from the London South Bank University Ethics Committee (ETH2021-0003) (Appendix 10).

COVID-19 factors most impacting this study included social distancing rules, travel-related quarantine (which curtailed face-to-face site visits and face-to-face interviews with children or adults who had travelled abroad recently), variation across England regarding the status of public libraries as essential services (which remained open), and the distinctive ethical dilemmas of researching on Zoom (e.g., only hearing from children with WiFi at home and a digitally-enabled device; devices being shared with family members; and the research adding further to children's screentime during a period of online home-schooling). Digital exclusion and screen fatigue were addressed by offering offline options for children to engage with the research by telephone and post. A COVID-19 risk assessment was completed with the gatekeepers of the setting prior to in-person visits, and the setting's safeguarding policy helped inform a protocol for post-session debriefs with children.

Informed consent documentation for child standpoint informants, their parents/caregivers, and staff and community stakeholders were created for online and face-to-face research modes and required several iterations to keep pace with COVID-19 policies in England (Appendices 11–13). Concurrent informed consent was required from children and their adults, and this was refreshed prior to each research session. The importance of process consent with children became apparent in one CA's response to their previously-signed consent form being screen-shared for their review at the start of a Zoom call:

> I'm pretty sure my mum did that. I don't remember doing it.
> (Child Advisor, codename: Jar Jar Binks)

'Navigating' is aligned with Phase Two of the study design flowchart (figure 4.1). Procedures for navigating the research setting ethically drew on IE. Ethics is inextricable from IE's epistemology, which views knowledge as accumulated between people: the researcher, the informants whose standpoint the researcher is taking, and other informants (DeVault and McCoy, 2006). Questions around what counts as knowledge, and whose knowledge counts, guide the inquiry (Church, 2021) towards surfacing discursively-organised relations that are tacit or part of a

null curriculum, and ‘generate knowledge that advances people’s collective efforts to resolve a problem that they have identified from the relevancies of their own lives’ (Nichols *et al.*, 2017, p. 112).

A significant challenge in IE stems from the uncertainty its use introduces into the ethics process (because an IE problematic is not defined in advance). This aligns IE with critical HL: both include situations where ‘coming face to face with empirical evidence that things are not always as they appear’, whether in an IE investigative process or a piece of health-related research, ‘can be quite disconcerting’ (Waters and Ringham, 2021). The use of IE compounded the challenge of COVID-19 at the ethics approval stage, because IE’s discovery-led nature makes it difficult to plan out exactly what course the research will take. However, this challenge was offset by the foregrounding of research ethics and social justice in IE for managing ethical issues arising online and in-person.

In the public settings where I collected data, I was always careful to wear a lanyard that identified me as a researcher affiliated with the university, and independent from the setting. I aimed to re-listen to the audio-recording as soon as possible after each research session so that I could separate out background discussions from the conversation with informants and redact any identifying content. For online interviews, I was guided by principles for conducting internet-based research with children (section 4.2.2). In both online and face-to-face modes, I introduced myself transparently to children, their parents/caregivers, and staff and community stakeholders.

IE’s use of texts eased the transition to remote research under stay-at-home mandates and helped navigate the heightened role of textual mediation during these periods. IE as a framework for disruption (challenging how research is done) can thus also be useful for managing the disruption of research norms, as well as studying the everyday social practices linked to such norms. The flexibility within IE to move between desk-based and in-person research was useful when the lifting of COVID-19 restrictions coincided with the return of school trips that put whole classes of children back into quarantine. A one-month extension of Phase Two to allow more time to recruit children had unforeseen benefits, such as the overlap of the revised study timeline with the Summer Reading Challenge, an activity run at most UK libraries in partnership with The Reading Agency to top-up children’s

literacy and learning during the break between school years. The new timeline was also inclusive of Libraries Week, which in 2021 explicitly promoted public libraries' contribution to supporting active and engaged communities under the theme 'Taking action, changing lives', and took place in October – a month celebrated internationally as Health Literacy Month, and during which the researcher presented on their ongoing experiences of consulting with children in health literacy research as part of a series of Health Literacy UK-organised webinars.

IE is not without its critics, including those who identify as institutional ethnographers ("IErs") themselves (Murray *et al.*, 2021; Sorce, 2019; Taylor and Fairchild, 2020; Walby, 2007). A chief criticism of IE is its own use of jargon (table 4.1), and how the need for glossaries to IE terminology (Bisaillon, 2012; Foo *et al.*, 2021; Smith, 2002), "IE made simple" beginners' guides (Campbell and Gregor, 2004; Smith and Griffith, 2022) and personal knowledge management techniques specific to IE (Kariki and Adams, 2021), undercut IE's claims of openness and accessibility. The terminology of IE may impede its goal of knowledge translation: '[a]s researchers, the language we use can impact the visibility of the activities we study, and thus our findings and their implications. So too can the methods that we elect to employ or not employ' (Dalmer and Griffin, 2021, p. 84). On the other hand, the availability of IE user guides under a Creative Commons licence (Rankin, 2017a, 2017b) centres open access and participation in how IE research is done, as does its late founder's Twitter account, to which anyone could submit questions about "how to do IE". These values of openness and accessibility guided how IE was used in this study.

'Changing the setting' was not within the formal scope of the RQ of this study, only the potential for change identified in Phase Three and captured in written form at Project End (figure 4.1). The stage of reflection focused on 'Changing' is therefore confined to identifying possibilities for change and inscribing these as recommendations, in recognition that change is already and always happening as part of the research process and its documentation, and even more so during a pandemic: '[b]y your actions of analysis you are altering trajectories […] and that in itself is producing social change' (Scollon and Scollon, 2004, p. 178). This decision involved reflection on whether it is the IE researcher's responsibility to catalyse change (Ringham and MacKinnon, 2021), or whether such change needs to stem from and be coordinated by standpoint informants themselves. In the study, the ITTA (section 4.2.2.4) provided opportunities for child standpoint informants to

analyse their own actions and reflect on possibilities for change without burdening them with the difficulties of implementing change from their social location (section 1.1.3).

Catalytic validity (section 4.1.1), as an assessment of the potential for the evidence gathered by the IE to reorient informants in relation to the setting and enhance their knowledge of it so that they are better equipped to see how it could be organised differently (Lather, 1986), served to prompt reflections on the researcher's responsibility to CAs and child standpoint informants (Wickins-Drazilova and Williams, 2011). These reflections included the potential for moral distress on the part of CAs and informants and sensitivity to power relations (Campbell and Gregor, 2004; Green *et al.*, 2000) in the context of the researcher's perceived alignment with senior management (the gatekeepers of the researcher's access to the setting). The rigour and trustworthiness of the study were also based on a catalytic validity framework that used recognisability of the setting (as it is, and its potential) for informants, cross-checked across informant interviews, to advance awareness-raising among informants as part of the co-construction of knowledge about the setting and its social organisation.

4.3 Data collection

It is not known which threads of inquiry will be pursued at the outset of an IE study (section 4.2.3). Data collection, concurrent with analysis, lights up potential threads to be pursued in building an account of how the setting is socially organised in ways that extend beyond informants' local knowledge (section 4.1.1). This section outlines the data collection undertaken using text elicitation, text collection, and semi-structured interviews (ITTA and ITTD), supplemented by field notes from remote shadowing of online meetings and in-person site visits. Throughout, data collection is responsive to the researcher's growing knowledge of the setting and insights from the in-progress analysis.

The four antecedents to a supportive public library setting for children's critical HL, as identified from the literature and modelled in figure 3.1 (section 3.2.4), provide the theoretical framing guiding the data collection and sensitise the researcher to possible lines of inquiry to pursue. These lines sketch the problematic (section 4.1.1) to be filled in gradually or re-drawn as the social organisation of the setting

begins to be understood and evidence accrues of an ‘epistemological line of fault’ (Smith, 1990, p. 633): a mismatch between the textual version of how the setting is supposed to be experienced by children, and how they actually experience it (table 4.1). The concept of the problematic is helpful in orienting to entry-points into the social organisation of the local setting and its wider context (Small, 2020) relevant to the antecedents, interactions between them, or even their absence. It also helps circumscribe the scope of data collection to keep it manageable within the doctoral research timeline by setting ‘boundaries around the space within which literacy work [in this case, critical HL work] gets done’ (Darville, 1989, p. 26).

4.3.1 Phase One: recruiting informants, accessing the setting, and exploring its textual organisation

Ethnographic access to the setting for the study was sought by the researcher contacting the gatekeepers of public library systems designated as essential settings supporting communities during COVID-19 (and therefore open to the public), or included in the ‘Engaging Libraries’ shortlist of public libraries already working with, or seeking partnerships with, higher education (Heydecker, 2019). Both these characteristics indicated that a library setting had capacity to support recruitment for research during the challenging conditions of the pandemic (section 4.2.3).

The setting that agreed to partner with the researcher for this study is a public library consortium in the East of England comprising over 40 individual public library branches with provision of online and face-to-face services. It is run on an Industrial and Provident Society (IPS) model with charitable status and limited allocated funding from the local council. The partnership was secured after the researcher delivered health literacy awareness training (section 1.1.6) to the local public health department, an established partner with the consortium on initiatives for health. The researcher was able to access the setting remotely (to shadow online meetings and trainings) and physically (site visits to different library branches). For the purposes of this study, the consortium is considered collectively as one setting (although not all branches informed the study). Fieldwork was conducted from April–October 2021, interspersed with desk-based research and extended by one month to allow time for further recruitment (section 4.2.3). Child standpoint informants were recruited from the same local authority area as the setting, to keep open the possibility of face-to-face research if and when social distancing measures were eased. Like the CAs,

child standpoint informants chose their own pseudonyms (section 4.2.2.1). Children were eligible to join the study if they were aged between seven and 11 years old, had not yet left primary school (sections 1.1.3 and 2.5.2), had provided their own informed consent (Appendix 11), and had permission from their parents/caregivers (Appendix 12). Staff at all levels of seniority were eligible to join the study if they had experience working for the setting (including as a volunteer) or in partnership with it, and had permission from their line manager (Appendix 13). Community stakeholder informants, defined as adults who worked externally to the setting but in partnership with it, were recruited via snowballing referrals from staff informants and provided alternative perspectives on the setting's work. Community stakeholders received the same recruitment documentation as staff (Appendix 13). Table 4.5 summarises the routes to recruitment for all informants.

Table 4.5 Recruitment routes for informants

Recruitment routes: child standpoint informants and their parents/caregivers	**Children's Advisory Group input**
Study promoted via a poster addressed to parents/caregivers and shared on Twitter and Facebook	Poster revised in consultation with Child Advisors and optimised for sharing on social media
Referral from NHS staff, public health staff and public library staff known to the researcher	Poster revised in consultation with Child Advisors attached to email for wider circulation
Information stand at public library branch on Sign-up Saturday (launch day of the Summer Reading Challenge, when a high footfall of children through the library was expected). Information sheets and informed consent sheets were handed out or emailed to prospective informants and their adults to consider	Child Advisors contributed to the design of the recruitment documentation for child standpoint informants by re-writing the proforma legal language of the university-provided templates. Emoji response options were added to each clause of the informed consent form and any responses returned with 'negative' or 'unsure' emoji were followed-up by the researcher
Recruitment routes: staff informants	**Children's Advisory Group input**
Study promoted to staff at all levels of the organisation through gatekeepers, who inserted information about the study and a secure Google Form link to register interest in receiving further information from the researcher into two texts in the organisation: Managers' update and Chief Executive's all-staff update emails. The researcher sent copies of the information sheet and informed consent sheet to staff who provided contact details	Not consulted

Gatekeepers arranged for the researcher to sit in on meetings and training sessions online. From shadowing and early informal interviews with gatekeepers, the researcher snowballed names of further staff informants to talk to. Additional staff informants were identified from being named in interviews, referred to in out-of-office email autoreplies, or featuring in the organisational chart ('org chart')	Not consulted
Guided by information power, a range of job roles and locations in the org chart were sought for interviews across frontline work in the Service Delivery team and back-office work in the Content and Resource Development team	Not consulted
Recruitment routes: community stakeholder informants	**Children's Advisory Group input**
Snowballing from staff referrals: staff arranged an introduction with community stakeholder informants over email, and the researcher replied with the information sheet and informed consent documentation	Not consulted

Sampling in IE emphasises informants' first-hand experience with the topic or processes being studied and diversity of social location (Bisaillon and Rankin, 2013). Recruitment of informants was guided by information power (Malterud *et al.*, 2016; Varpio *et al.*, 2017), meaning that the information potentially available from informants' first-hand and diverse experiences was prioritised over a theoretical saturation threshold (Braun and Clarke, 2019). For the ethics application, purposive sample size was set at a minimum of 10 children to provide a balance between recruiting too few (as the attrition rate was expected to be high, given the research conditions during the pandemic) and too many (risking a superficial understanding of children's experiences). To enhance the understanding of the work involved in critical HL beyond the standpoint informants' experiences (section 4.1.2), semi-structured interviews with at least 10 total staff and community stakeholder informants were also planned.

Tables 4.6–4.8 summarise the three sets of recruited informants: children, staff, and community stakeholders. For child standpoint informants' interviews, the informant descriptor is the pseudonym chosen by the child. Staff informant descriptors refer to the setting's org chart, a text that represents the setting as a business split into two parts: frontline work and back-office work. Job titles are slightly edited from their org chart versions to anonymise identifiable roles. Frontline work is carried out in individual library branches designated by the alphabetical system used as internal shorthand for describing branch resources and targets (where 'A' branches are those with the most resources and highest targets for supporting the health and

wellbeing of local children). Back-office work is distributed across branches. Community stakeholder informant descriptors refer to external stakeholders' roles in relation to the setting.

Table 4.6 Child standpoint informants

Child standpoint informants (pseudonyms)	Age in years	Gender	Setting-based experience	Additional information
Luna Lovegood	7	F	Has visited a public library before (pre-pandemic) but makes more use of the school library	
Sienna	7	F	Regularly visits the public library with their parent	
Tarantula	7	M	Regularly visits the public library with their parent	
April	8	F	Has visited a public library before (pre-pandemic) but makes more use of the school library	
Cat	8	M	Regularly visits the public library with their parent	Liveaboard Boater
Adhina	9	F	Has visited a public library before (pre-pandemic) but makes more use of the school library	
Mad Drumstix	9	M	Regularly visits the public library with their parent	
Pizza	9	F	Regularly visits the public library with their parent	
Toilet Man	9	M	Has visited a public library before (pre-pandemic) but makes more use of the school library	
Ginny Weasley	10	F	Regularly visits the public library with their parent	
Ice Cream	11	M	Public library member and regular user (visits 'quite a lot')	
Nicolai	11	F	Regularly visits the public library with their parent	
Lamp Post	11	M	Has visited a public library before (pre-pandemic) but makes more use of the school library	

Table 4.7 Staff informants

Staff informants (role descriptors)	Location in setting
Property Manager	Branches undergoing renovation*
Head of Service Delivery	Service Delivery
Head of Content and Resource Development	Content and Resource Development

Content and Reader Development Librarian	Content and Resource Development
Wellbeing Manager	Service Delivery
Executive Library Manager	Service Delivery, Co-located B/C
Library Manager 1	Service Delivery, B
Library Manager 2	Service Delivery, B
Assistant Library Manager	Service Delivery, A
Library and Information Advisor 1	Service Delivery, A
Library and Information Advisor 2	Service Delivery, A
Stock Librarian	Content and Resource Development
Information for Living Librarian	Content and Resource Development

**The absence of letters A–C indicates a role that spans different library sites.*

Table 4.8 Community stakeholder informants

Community stakeholder informants (role descriptors)
Library Design Consultant
IPS Trustee
Local Council Business Improvement Manager
Local NHS Library Lead
Local NHS Assistant Librarian 1
Local NHS Assistant Librarian 2

Parents'/caregivers' contributions in interviews were not collected as data, because the study specifically wanted to hear from children. It is however important to acknowledge the role of parents/caregivers in facilitating access to the study for child standpoint informants and also for CAs, despite some challenges around parents/caregivers filling out their child's informed consent form for them (section 4.2.3). As an example of positive parental/caregiver influence, comments by one CA's parent contributed to broadening the options for children's participation in the research to include typing into the chat-box during online interviews:

> schools are not really a place where you're encouraged to have a strong opinion […] if there's been no other kind of online engagement but home-schooling then actually you're quite used to just sitting and listening rather than chipping in and saying stuff […] They're not allowed to type stuff in chat at school […] so it'd be good if Catherine can make this feel like not school. So do the things that you're not allowed to do in in school
> (Parent of CA)

Parents/caregivers were also indispensable in smoothing out the logistics of providing postal addresses for research materials, email addresses for calendar invitations with Zoom links, and managing technology mishaps.

This study uses texts as data, with 'texts' being understood in IE terms (section 4.1.1) as replicable discourses to which people refer for getting things done. To understand how texts mediate people's practices across space and time, IE follows texts around, 'examining how they get taken up' and applied by people (Ahmed, 2007, p. 590). Attending to texts in this way led to reflections from informants. In response to the researcher's request to bring along texts they used in their work to an interview, one staff informant noted: 'I'm sure there are lots [of texts that inform work in this setting], but when you do something on a daily basis, you don't often think about what sources/resources/texts you use. You just use them!'.

The texts sampled by the researcher or elicited from informants are listed (with redactions) in table A14.1 (Appendix 14). They are assigned a Text Identification Number (TIN) and the descriptors 'open', 'closed' and 'elusive', which indicate the researcher's level of access to the texts and are modelled on Grant (2022). 'Open' refers to publicly-available texts. 'Closed' refers to internal texts shared with the researcher. 'Elusive' refers to texts that could not be sighted by the researcher, or "missing" texts that informants would have liked to have brought along to the interview but could not, because such a text did not (yet) exist or was tacit knowledge (Williams and Rankin, 2015).

Given that 'each individual field on an electronic template may be understood as a text representing one end of a thread that extends deep into the institution' (Cupit *et al.*, 2021, p. 31), the texts identified in this study do not constitute the full population of texts available in the setting, but are selected based on references in interviews or their potential information power. The sample includes texts produced in-house by the setting (e.g., the org chart – TIN01) and texts produced externally (e.g., sector policy documents, and promotional materials for children's services at the library related to health). Texts produced in the course of the research (e.g., the automatically-generated keywords summary inserted into transcription files by the Otter.ai software), and researcher-generated handwritten and typed field notes, also informed the study. Data collection continued until no further texts referring to

children's health literacy in the setting were identified or signposted by informants within the timeframe (Caspar *et al.*, 2016; Townsend, 1996).

Data extraction from texts was informed by approaches within IE (Murray, 2020; Prodinger and Turner, 2013; Smith and Turner, 2014) and beyond it (Asdal and Reinertsen, 2021). Interview transcripts were examined for people's explanations of how they used texts in the setting, and all texts referred to, or inferred, were underlined (MacDonald et al., 2022). Outside of interviews, texts were included if they mentioned children's health literacy in the public library setting, or were cited by other texts that did so. Of the 126 texts sampled, 'critical health literacy' is actually named in 0. The texts are still listed in Appendix 14 as evidence of this absence, and are of analytic interest in highlighting work that is not currently institutionally recognised or documented (Smith, 1990).

4.3.2 Phase Two: experiencing the setting

In this study, interviews took the form of ITTD and modified ITTD (the ITTA). The ITTD/A technique was applied to reduce the risk that by analysing texts and interviewing informants without the additional layer of observation to document the realities of talked-about practices (section 4.1), this thesis might unquestioningly rearticulate the institutional standard version of events (Ng *et al.*, 2013; Quinlan, 2008; Rankin, 2021).

Interviewing has been used in previous studies investigating critical HL (Dixon *et al.*, 2022), partly because of the difficulty of measuring collective action for social or political change (Sykes *et al.*, 2013). IE offers extensive resources for interviewing and a catalogue of interview types, including the work practice interview and the text-based interview. The work practice interview is represented by the ITTD/A in this study; the text-based interview, 'to discover how a particular text is produced and used, including who created it, who reads and acts on it, what comprises an [exemplar of the text's genre], what its purpose is, and what extra-local influences shape it' (Pence, 2021, p. 345), approaches this study's use of text elicitation during interviews.

Interviews were conducted with child standpoint informants, staff informants, and community stakeholder informants. Interviews online or in-person, and variations on these – e.g., being interviewed while wandering around the setting – were offered to

informants where possible, to reduce barriers to participation (Barriage, 2021). Overall, six different library branches were visited in-person, and the sample represented children, staff and community stakeholders who lived near at least one of these same six branches of the consortium, including an additional newly-opened branch. Interviews ranged from 10–40 minutes, with the lower range more common for children; staff and stakeholder informants tended to have more time than children and their parent/caregivers (if present). Online interviews tended to be longer than in-person ones, as the latter were often held in public spaces at the library (not in the back-offices) and were vulnerable to interruptions. All interviews were recorded and transcribed using Otter.ai software and the automated transcription was checked manually by the researcher to produce the version collected as data.

Table 4.9 summarises single and group ITTD/A in chronological order. Child standpoint informants were interviewed once. Some staff and community stakeholder informants were interviewed more than once, to confirm or further explore their transcripts.

Table 4.9 Schedule of interviews

Informant	Mode of interview	Total interviews
Head of Service Delivery, Head of Content and Resource Development (gatekeepers) (paired interview)	Online	2 (as a pair)
Library Manager 1	Online	1, with additional clarification by email
Mad Drumstix	Site visit including children's area and garden of Library Manager 1's library branch. Parent/caregiver present	1
April, Adhina (paired interview)	Online. No parent/caregiver present	1 (as a pair)
Information for Living Librarian, Local Council Business Improvement Manager (paired interview)	Online as part of shadowing [local council area name] Information Partnership meeting	1 (as a pair)
Local Council Business Improvement Manager	Online as part of shadowing Introductory/Refresher training on the Warm Handover Referral Scheme (referred by Information for Living Librarian)	1 (solo), 2 (paired with other staff informants)
Head of Content and Resource Development	Online	1 (solo), 2 (paired with other staff informants)

Information for Living Librarian	Online as part of shadowing eLibrary, Digital Information and Reader Development training; site visit	3
Stock Librarian	Online (referred by Information for Living Librarian)	1
Assistant Library Manager	Online; site visit for Sign-up Saturday (launch day of the Summer Reading Challenge)	2
Tarantula, Ginny Weasley (paired interview)	Site visit including children's area of library branch. No parent/caregiver present	1 (as a pair)
Nicolai	Site visit including children's area of library branch. No parent/caregiver present	1
Library Manager 2, Head of Content and Resource Development	Site visit for library-based volunteer work (half-day)	1 (as a pair)
Executive Library Manager	Online including viewing video of newly-opened site co-located with a school, health clinic, council services and leisure facilities	2
IPS Trustee	Online	1
Luna Lovegood, Lamp Post, Toilet Man (group interview)	Online. Parent/caregiver present	1 (as a group)
Sienna	Site visit for opening ceremony of new children's area of library branch. Parent/caregiver present	1
Pizza	Site visit including children's area of library branch. Parent/caregiver present	1
Ice Cream	Site visit including children's area of library branch. Parent/caregiver present	1
Local NHS Library Lead, Local NHS Assistant Librarians X2 (group interview)	Online as part of NHS-delivered health literacy awareness and 'fake news' training	1 (as a group)
Library Design Consultant	Online for opening ceremony of new children's area of library branch (referred by Property Manager in place of formal interview with Property Manager)	1
Wellbeing Manager	Online	1
Library and Information Advisors X2 (paired interview)	Online	1 (as a pair)

Interview topic guides were semi-structured so as not to limit the scope of discovery (Caspar *et al.*, 2016). The topic guide for child standpoint informants incorporates the draw-and-describe activity to introduce critical HL that was developed in consultation with the CAG (section 4.2.2.3) and leads into the ITTA (section 4.2.2.4) (Appendices 5–6). The activity elicited child-generated drawings of an alien that

were then used as stimuli for in-depth descriptions of what work children do in the public library when they want to find out about health or engage in health advocacy. Interviews with staff and community stakeholder informants used text elicitation with ITTD and began by exploring what a working day looked like for them, or what their job description covered or left out, before proceeding to discuss children's health-related use of the public library, all guided by Pence's (2021, p. 345) example question: 'If I had to do your job tomorrow, what would I do, step by step?'. Further questions were responsive to the course of the conversation, and each interview built on subsequent interviews with other informants and, in turn, shaped those that followed by pointing to additional texts and informants (Webster *et al.*, 2022). All informants gave permission to be contacted for additional interviews or in case questions arose during transcribing. Such permission is important to secure for interviewing in IE, which is not 'a unidirectional data collection mechanism, but a means of bringing the institutional relations backgrounding people's experiences into view for both parties' (Nichols and Ruglis, 2021, pp. 544–545). An indicative topic guide for the ITTD with staff and community stakeholders is included in Appendix 15. Both topic guides are based on the conceptual model of antecedents to critical HL in this setting (figure 3.1).

The ITTD facilitated in-depth probing of the actual work involved behind expressions of tacit knowledge, such as 'y'know'. Asking informants to expand on their 'y'knows' helped zoom in on mismatches between work as described officially and as actually done (or worked around) locally, e.g. the processes by which a concept such as 'safeguarding' is translated and actioned by frontline staff, compared to how community stakeholders understand and implement it. Drilling down into the complex work behind the shorthand of e.g. 'safeguarding' highlighted aspects of work for which the textual origin was not explicit to people on the frontline, but was documented for, and monitored by, the senior management layer.

There is one process update to report in the translation of the draw-and-describe activity from its initial development with CAs as a way of setting the scene for critical HL in the library (section 4.2.2.3) to its use with child standpoint informants. This process update relates to cases where child standpoint informants chose not to draw, and reinforces the value of a CAG for piloting multiple ways for children to engage in research. When children chose not to engage with drawing, or were reluctant to complete the boxes in the interview, the researcher switched to asking

children for verbal or typed examples of moments when they had come across health information that made them think ‘wait a minute…’, before introducing the ITTA.

4.4 Data organisation and analysis

Analysis is threaded throughout the IE research process (Smith and Griffith, 2022) (section 4.2.1). It is ‘reflexive, iterative, political, and relentlessly empirical’, and ‘develops as one thinks and writes […] [to] illuminate nuanced practices that expose links into the institution that are not evident at the outset’ (Rankin, 2017b, p. 10). This section outlines the organisation and analysis of the data. ‘Researchers who are alert to the kind of documentary coordination that IE foregrounds find that there are many opportunities in everyday life for pursuing small analyses’ (DeVault, 2020, p. 97), and these ‘small analyses’ collectively contribute to the production of an analytic account of the setting that empirically explicates informants’ work and opens up for scrutiny how informants’ work is coordinated in relation to the wider setting (Cupit *et al.*, 2021).

Knowledge organisation tools consistent with IE’s understanding of data organisation and analysis as ongoing (Ringrose and Renold, 2014) include mapping (Turner, 2012a, 2012b), account-writing (Corman, 2021), and indexing (itself a form of mapping). Indexing is used in this study to organise the data in preparation for analysing it. The antecedents conceptualised as indicative of a public library system supportive of children’s critical HL (figure 3.1) provide the head entries in the index and are expanded and cross-referenced with sub-entries from the data. These antecedents act as analytic lenses that place indexed and tagged datapoints in dialogue with one another for onward analysis (Jerolmack and Khan, 2017). Pursuing the lines of inquiry that come into view from these data dialogues leads to the insights that structure the findings (Chapter 5) and reformulate the conceptual model (Chapter 6).

4.4.1 Phase Three: explicating the setting

Indexing is distinct from coding: the latter, as used in thematic analysis, involves identifying themes based on interpretations of transcribed data, whereas indexing aims to produce a useable outline of empirical work processes to which the

researcher can refer for examples (Koralesky *et al.*, 2022). Rather than 'developing themes and categories that are abstracted from the data and that leave the particularities behind' therefore, indexing preserves the contexts in which these particularities, or 'analytical chunks' (Rankin, 2017b, p. 6), appear in the data.

The resulting index looks like a hyperlinked look-up app, or a 'hypertext', where the sub-entries indexed under the antecedents are 'the equivalent of a button to press' linked to the wider context surrounding that data-point (Smith, 2002, p. 17). In data corpora for linguistics, 'keywords in context' (KWIC) are keywords presented in their original context. This context can be micro-scale, concentrated on 'the small "frame" around the word […] to show how the speaker or writer is treating the sense given to the word'; or macro-scale, where the index sub-entry or KWIC is cross-referenced with the wider body of organised material (Durant, 2006, p. 20). The index displays the tagged data as KWIC and provides an interface where these can be looked up and linked back into their context in the setting.

Table 4.10 illustrates the use of indexing in this study to look for informants' work in the data, preparatory to tracing how discourses in the setting organise that work (Hussey, 2012). Work is cross-referenced under the four antecedents (section 3.2.4) as the index head-entries.

Table 4.10 Extract from index demonstrating how data were organised

Analytical chunk	**Indexed under…**
From interview with library staff informant (Wellbeing Manager) the work that I do is very much around embedding and enhancing our library service and what we already do, as well as looking for kind of other pots of funding that I might be able to kind of add projects and services into, if that makes sense. So yeah, it's not necessarily that there isn't the funding there for children's mental health. It's just, that's not the kind of way that this particular service is funded. Um there are some ways we can get around it. So we've had some funding around families and carers. Um we have our perinatal service Me, Myself and Baby, which very much obviously concentrates on the perinatal period and supporting parents. And many of those parents also have more than one child. So there are ways that, that kind of supporting children and young families kind of trickles through what kind of core funding allows us to do	INVOLVES LOCAL COMMUNITIES **age matters** funding (less available for middle childhood) *cross-ref.* **workarounds**
From CEO's blog (TIN107) People seem to appreciate what we do more than ever and that far from the traditional view of silent, stuffy, book lending services, a library service can adapt to the needs of the people it serves. Events like Libraries Week are great as they help to focus on the	FACILITATES INFORMED ACTION *cross-ref.* INVOLVES LOCAL COMMUNITIES **partnership-working** adapting to meet local needs

contribution of libraries and challenge people's perception. This year's theme hits the spot in terms of the message we want to get out there about how proactive and life-changing libraries can be: 'Taking action, Changing lives' is exactly what we set out to do back in March 2020 […] At our AGM I gave a presentation about libraries being the 'First Place' for levelling up local communities. As we emerge from the pandemic, we have a real opportunity to take a fresh, transformative approach to the way vital local services are delivered and integrated with key national policy initiatives. Libraries can be the glue that connects communities, local public sector infrastructure and nationally led programmes across preventative health, digital inclusion, economic and social development and so much more	*cross-ref.* knowledge of the needs of local communities **promotion of service offer** Libraries Week *cross-ref.* sector calendar for health promotion (TIN15)

Table after Small (2020). Cross-ref. = cross-reference. TIN = Text Identification Number.

Multimodal data were exported into Microsoft OneNote as they were collected, with alt-text, descriptive captions, or Optical Character Recognition (OCR) applied to render them indexable – i.e., machine-readable and searchable, alongside data already in text form – before being exported into NVivo 12 for querying and visualising the relations between the datapoints. This process is summarised in Figure 4.3.

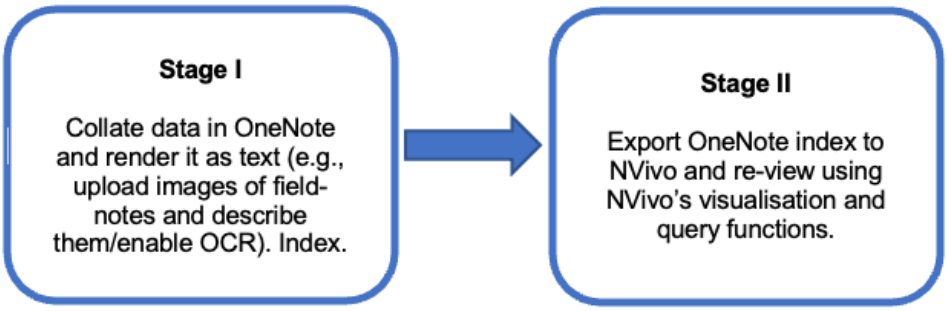

Figure 4.3 Two-stage process to prepare indexed data for text-based analysis.

The two-stage process was designed to facilitate onward text-based analysis of the indexed data. In OneNote, data relating to work that (potentially or actually) contributed to or constrained children's critical HL development in the setting (e.g., children's work of establishing what they were allowed to do in the library) were tagged at keyword-, phrase- and paragraph-level. Collating the tags into an index (see Appendix 16 for screenshot of tagged data) collected together all mentions of a specific text or piece of a wider work process so that these could be read in context (hyperlinked to the evidence source) and alongside each other (Small, 2020). This

provided a ‘macro picture’ (Pence, 2021, p. 345) of what differently-located people in the setting know and do that could then be exported into NVivo.

The use of NVivo was limited to facilitating an overview of the index. NVivo’s querying, slicing, and mapping functions were applied across the index to produce visualisations of how the tagged segments of socially- and textually-organised work practices linked together (or required further interviews to fill in their links). Links were labelled to describe the social relations between people and texts (‘compiled by’, ‘informs’, ‘sounds like comes from’) and people and their textually-mediated work (‘reports to’, ‘sits on’, ‘responsible for’) (Hickey, [preprint], n.d.). The following description, from a framework for health literacy developed using indigenous research methods, is a helpful summary of the relational approach to analysis taken: ‘it’s the strings between the knots that have to work in conjunction in order for the net to function. So any analysis must examine all of the relationships or strings between particular events or knots of data as a whole before it will make sense’ (Ireland and Maypilama, 2021, p. 195). NVivo facilitated the tracing of the ‘strings’ produced by people in the setting. NVivo’s Text Search function was separately used to query for and sense-check data initially screened-out as irrelevant (because not indexable under any of the four proposed antecedents), but did not result in any additional antecedents being identified.

4.4.2 Using the conceptual model as an analytic lens onto the data

Analysis begins early in an IE inquiry and resembles modelling (Ng *et al.*, 2013). It does not rely solely on either inductive or deductive strategies, and does not attempt to generalise findings (section 4.1.1). The analytic lens onto the organised data determines how data analysis proceeds (Jerolmack and Khan, 2017). In this study, the indexed data are viewed through the analytic lens of the antecedents modelled in figure 3.1. While people's experiences do provide entry-points for the inquiry, the analysis is focused on what people are actually doing in relation to these antecedents, not people’s subjective views (Ng *et al.*, 2013).

The conversion of the data into text facilitated an analysis of people’s practices comparable with mediated discourse analysis (Hui *et al.*, 2017; Multas, 2022). Mediated discourse analysis explores ‘the ways in which ideas or objects are linked

together' (Scollon and Scollon, 2004, p. viii) and how people's work is carried out using "mediational means": tangible and intangible affordances in settings, such as social technology, furniture, and policy, to which people refer or with which they interface. People's work in a setting encompasses extended chains of practices. Practices are understood as constituted of local actions over time (Scollon and de Saint-Georges, 2012). In keeping with the worldview outlined in Chapter 3, the analytic outlook is materialist and discursive (Jones and Norris, 2005).

Mediated discourse analysis has been used to understand children's literacy practices (Wohlwend, 2020), health literacy in youth (Multas, 2022), and in information practices research spanning health literacy and LIS fields (Multas and Hirvonen, 2019). Like IE, this approach to analysis is interested in mismatches: instances in the setting where discourses are side-lined or not integrated, such as when there is divergence between the "approved" mediational means available in a setting to complete an action, and the means through which that action actually gets done.

However, mediated discourse analysis is a comprehensive methodology in itself – part of it inspired the reflective framework for this study (section 4.2.3). A keywords approach (Kimathi and Nilsen, 2021) was therefore identified as an alternative, portable method and way forward for analysing the data through the lens of the conceptual model (figure 3.1). Keywords are bits of discourse that, activated by people, constitute and delimit fields of research and the scope of practices. A keywords approach to health literacy attends to texts and the contexts in which health literacy events take place, in recognition that 'health literacy is also determined by the specific time and place […] as well as by the interrelationships between people and their social environments' (Pinheiro, 2021, pp. e94–e95).

4.4.3 Applying the keywords approach alongside the conceptual model as an analytical framework

The analytical framework deployed in this study for empirically tracing work relevant to children's critical HL in the public library setting combines the conceptual model (figure 3.1) with a keywords approach to analysis (Kimathi and Nilsen, 2021), commensurate with the importance of text in IE (section 4.1.1) and with the use of indexing to look for the antecedents in the data (section 4.4.1). The conceptual

model was first used to look for evidence in the data of the four antecedents to the public library being a supportive environment for children to develop critical HL. After indexing evidence under each antecedent, data were further tagged and analysed using a keywords approach.

A keywords approach traces how practices come to be put into words, and how those words then become institutional categories. To do this, it uses ‘sensitising concepts’ in the setting being studied that are themselves devoid of empirical content, but which link to practices that are available for empirical analysis – e.g., ‘healthwork’ (Kimathi and Nilsen, 2021). In place of healthwork, this study uses the concept of critical HL, but the underlying principle is the same: the modelled antecedents (figure 3.1) are sensitising concepts (and head entries in the index) that direct analytic attention to practices potentially relevant to critical HL without presupposing what these are in advance.

The joint application of the conceptual model as a lens onto the data with the keywords approach aims to offer a theoretically-informed, discovery-driven framework that resists imposing or reproducing abstract concepts (Mathiesen and Volckmar-Eeg, 2022; Nichols and Guay, 2021; Timmermans and Tavory, 2012) and keeps the setting, people, and critical HL all in view. Within this framework, the four antecedents to a public library system supportive of children’s critical HL, as distilled from the literature into figure 3.1, are sensitising concepts that guide the empirical analysis and provide keywords for the identification of work relevant to critical HL in the data (e.g., ‘open access’). To ensure that the thesis does not ‘re-mystify’ knowledge production (Small, 2020; Walby, 2007, p. 1010) in reporting the ‘small analyses’ conducted throughout, a worked example of this analytic framework in action is provided in Figure 4.4.

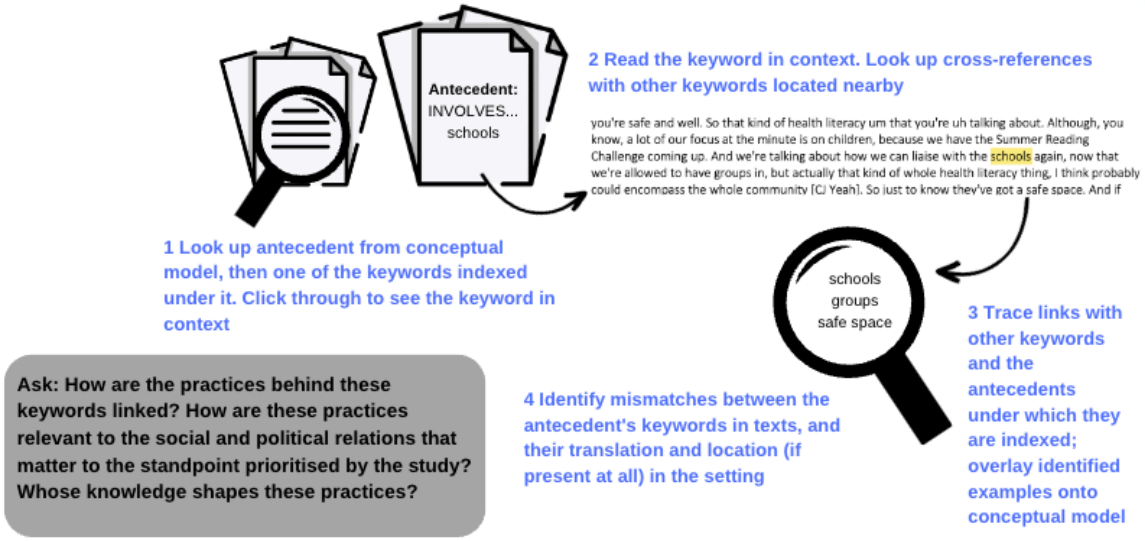

Figure 4.4 Worked example of how indexed data were analysed

This framework helped maintain a focus on the ROs (section 2.5.6) and was refined as the study progressed.

4.5 Summary

This chapter has outlined the strategies for collecting, organising and analysing data in line with the ethical, epistemological and ontological commitments of IE and workable within COVID-19 conditions. The study design was developed in consultation with a CAG, and the chapter highlights how children's contributions inspired methodological innovation and ensured the relevance of the research to a population under-served by other methods used to study health literacy.

Chapter 5 Findings

This chapter reports the findings from the analysis undertaken in Chapter 4, which used the conceptual model (figure 3.1) to organise evidence in the data of the four proposed antecedents to the public library being a supportive environment where children can develop critical HL, followed by a more granular keywords approach. The findings are presented with reference to the model and this analytical framework, which differs from thematic analysis and therefore does not present the data extracts that advance the analysis as themes, but rather as insights or illustrative examples. In general, the proposed antecedents were not identified in the public library setting. However, a standalone example, Girls' Group, provides an important exception that evidences critical HL for children in the public library locally, at the micro-level, as part of a group activity. Girls' Group is accessible to children, involves children in how the activity is run, supports children to learn about the wider determinants of health, and facilitates children's actions on health. These findings have implications for how the antecedents are incorporated in a model of the library as a setting for children's critical HL.

5.1 Overview of findings

The antecedents to critical HL in the conceptual model (figure 3.1) are evidenced in the public library setting only insofar as school-based settings offer precedents for them. Where a lack of school-based precedents exists for an antecedent, that antecedent is hard to find in the library setting. In IE terms, school-based settings constitute a form of 'ruling relations' (table 4.1, section 4.1.1) governing critical HL in public libraries. This governance is demonstrated in informants' talk and practices around how the library works with (or sometimes, differently from) schools. Critical HL for children in public libraries is therefore inextricably linked with other settings, mainly schools.

Two cross-cutting tensions, or problematics (section 4.1.1), span the empirical evidence linked to each antecedent:

1. The public library is not perceived as a setting for health.
2. Children's opportunities in the public library are informed by how school-based settings work.

The problematic in IE (section 4.1.1) is '[t]he gap between textual reality and actuality […] a space in which other values and imperatives direct people's activities, often unintentionally or mundanely, but in quietly disruptive ways' (Murray *et al.*, 2021, p. 4). The role of the problematic in IE is to direct attention to mismatches between what standpoint informants know from their experiential perspective, and the version of events signed off officially (Smith, 1987). The two problematics are predominantly located at the macro-level of the setting and have implications for the initial iteration of the conceptual model (figure 3.1).

Table 5.1 illustrates the significant role of macro (environmental) arrangements in determining what is possible at the meso-level of the public library setting (the organisational level, or library branch management). It also highlights a "quietly disruptive" exception at the micro-level (relations between individuals on-the-ground) in Girls' Group, a collective activity coordinated by one staff informant alongside children at a single library branch that supports opportunities for children to develop critical HL locally.

Table 5.1 Summary of findings grouped by antecedents to the public library as a supportive environment for children's critical health literacy development

THE PUBLIC LIBRARY	**MACRO**	**MESO**	**MICRO**
The public library is not perceived as a setting for health Children's opportunities in the public library are informed by how school-based settings work			
Acknowledges the wider determinants of health	TEXT: The Universal Offers TEXT: The Children's Promise	The UK library sector's Universal Health Offer is not offered	*Girls' Group supports children to raise their and others' awareness of the wider determinants of health*
Is open access	Access to the public library system for children is mediated by school-based settings	Age matters for children's access to and involvement in the public library system	*Girls' Group enables children to access skills-building for critical health literacy*
Involves local communities in how it is run	The public library system seeks to differentiate its offer from that of schools	Children's involvement in the setting is outsourced	*Girls' Group involves children in decisions about how Girls' Group is run*

Facilitates informed action	TEXT: Byelaws Legislation regulates what the public library setting can offer		*Girls' Group facilitates children's action and advocacy for their and others' health*

Findings arising from the problematics are reported below (sections 5.2–5.3), grouped according to the insights they provide into the four modelled antecedents (figure 3.1) and how these interrelate at macro-, meso-, and micro-levels of the setting.

The first group of insights report how the public library service offer can include signposting, or referring, people to health-related information to a limited extent (contributing to functional health literacy), but does not extend to supporting critical health literacy. The Universal Health Offer has a complex relationship with legislation governing library service provision in England.

The second group of insights report the interconnectedness of the library setting with other settings, particularly school-based settings. The working relationship between the public library and school-based settings is complex and has implications for if, and how, children aged seven to 11 years old can access and get involved in how the setting is run (including the provision of funding to support the access and involvement of this age-group).

Girls' Group, a group activity based on the Girlguiding practice model and supported at one library branch, is reported separately (section 5.4) and provides an example of all four antecedents present in the setting.

5.2 The public library is not perceived as a setting for health: 'it's signposting […] without going that step further'

This section reports insights into the capacity of the public library setting to support children in making sense of the wider determinants of health. People's work associated with the antecedent 'Acknowledges the wider determinants of health', as a forerunner to the antecedent 'Facilitates informed action', refers to texts that regulate whether and how health is prioritised by the setting. These texts influence the setting's commitment to and implementation of services that enable children to know about and reflect on the social model of health and the factors shaping

children's and others' healthy life chances. The study finds that the warrant for health-related services as part of public library provision in England is inconsistent, particularly health-related services for children. National legislation exacerbates challenges in funding and resourcing services that could be seen as inappropriate for the setting, or too political.

5.2.1 The UK library sector's Universal Health Offer is not offered: 'I don't know that we offer that many specifically health-based things here'

The public library is not universally perceived as a setting for health. Child standpoint informants tended to view health as incidental, not core, to this setting. From children's standpoint, the setting was a public place where COVID-19 test kits were available, and mask-wearing was advisable:

> Well, they've got [COVID-19] testing where you just do the nose. They've got that
> (Child standpoint informant, code name: Ice Cream)

> you're probably not in the library for ages and ages. So if you just put on your mask it probably doesn't make much of a difference to you but it could make a big difference um to someone else
> (Child standpoint informant, codename: Nicolai)

Child standpoint informants' silence when presented with the possibility of using a public library to find out about health is apparent in the interview transcripts. One parent's interjection to their child to punctuate the silence – 'I think it's probably something you haven't thought about, isn't it?' – was separately borne out by another child:

> I forget about the library
> (Child standpoint informant, codename: Tarantula)

Staff informants similarly did not connect their work, or their workplace, with children's health:

> It's not common for a child to ask about health
> (Library and Information Advisor 1, Service Delivery, A)

> I'm sorry [the research interview] wasn't necessarily super health-based. I don't know that we offer that many specifically health-based things here
> (Assistant Library Manager, Service Delivery, A)

After being introduced in interviews to the possibility of the public library as a setting for health, child standpoint informants talked about what the library offered them in terms limited to functional health literacy:

> There's definitely probably some books with all kinds of diseases, medical books and things
> (Child standpoint informant, codename: Luna Lovegood)

> Maybe if they have any newspapers?
> (Child standpoint informant, codename: Ginny Weasley)

> I don't mostly go– come to the library. So I wouldn't know much. But it probably has the new [COVID] rules in it. That maybe they put up on the wall
> (Child standpoint informant, codename: Ginny Weasley)

> they're [health books] quite hard to digest. As in like you're just trying to find about, if, I dunno your foot hurting. If it's a severe health issue. And it takes you five hours to read three pages just to tell you No
> (Child standpoint informant, codename: Lamp Post)

In interviews, staff informants did not name health literacy until the term was introduced in the course of research communications (as it is used in the project title provided on the informant information and consent sheets) and the delivery of health literacy awareness training by an NHS library team during the research period. Staff then linked health literacy with the need for work to raise awareness in children about health-related misinformation and disinformation:

> And the thing with the fake news, y'know, in the health literacy, I would never have put those things together. So when we had that health literacy training, which the module is just about to get uploaded onto the intranet after push push push push push, um I was amazed at how much it covers [...] that stat around the average reading age of an adult is nine, I still cannot get my head around that. And 43% [prevalence of low health literacy among the adult population in England], I mean it's just, it just blows your mind [...] there's so much like needing awareness, need for further awareness. So I think yes, I'm gonna make that note. We'll do, we should do a children's, a children's one, children's information, resources, children's No Fake News
> (Information for Living Librarian, Content and Resource Development)

There was uncertainty among staff around the extent to which health literacy could be counted as part of the public library setting's core remit (rather than being the responsibility of the school-based setting: section 5.3), or whether it was anybody's job to develop it in library users:

> I think to a degree it [health literacy] is sort of in the job description. But I think it's more as I say it's signposting. And it's ensuring that you know where the information is to support that child, that parent. Um without going that step further
> (Library Manager 1, Service Delivery, B)

For staff informants, the concept of health literacy was used synonymously with 'signposting': guiding people towards information, but 'without going that step further' – towards taking action on the determinants of health – that critical HL entails.

There is inconsistent representation of public libraries' health-related remit in the Universal Offers (TIN02), a key text referred to by staff for benchmarking service provision in this setting (section 3.2.3). The Universal Offers is a composite text produced and updated by the library sector's advocacy organisation, Libraries Connected. The text categorises public library services in England into four strategic areas, or 'offers': Health and Wellbeing (or just 'Health'), Information and Digital, Culture and Creativity, and Reading. The text is written for adults, not for children.

The Universal Offers are not universally offered: different versions of the text co-exist on the Libraries Connected website, reflecting relaunches of the Offers framework over time and, more recently, re-working its priorities for the recovery of public library services post-COVID peaks. Against this backdrop of textual proliferation, the Offers land in the public library setting as vast in scope, overlapping each other, and complex to deliver:

> the Health Offer has somehow kind of fallen into the Information Offer [...] it is quite hard to, like, where do you choose, like, *which* health, you know, it's not like one part, I often think Oh there's so many different conditions that, y'know, we should give more attention to
> (Information for Living Librarian, Content and Resource Development)

The work required by staff to manage the vastness of the Offers makes it difficult to see where children's services fit in:

> I think it would be good to have um maybe like a refresh, if it's to do with [health-related] children's services, I just think maybe like a refresher of everything we can offer. Like if we pull together all our knowledge and resources, everything we could offer, staff could then promote to children […] it'd be good to maybe actually have a, have a little umbrella [training] module developed, which is What can we do to offer support to children
> (Information for Living Librarian, Content and Resource Development)

Neither children's services, nor health literacy, are documented in the org chart (TIN01) for this setting.

Health literacy is inconsistently represented in the Offers and linked texts. The poster version of the Health Offer (TIN06) does not mention health literacy at all, although the infographic version does: 'Libraries support health literacy and self-

management' (TIN07). The post-2019 and 'post-COVID recovery' updates both combine the Offers into (different) infographics, neither of which refer to health literacy.

The text 'Developing a Children and Young People's strand of the Universal Health Offer' (TIN03), produced by The Reading Agency on behalf of The Association of Senior Children's and Education Librarians (ASCEL) – two other professional organisations with responsibility for overseeing the strategic direction of public libraries – recognises that '[h]igh-quality and accessible health information supported by appropriate signposting can play a key role' in children's health outcomes (TIN03, p. 19). It makes recommendations for the development of a children's community health offer to supplement the Health Offer and includes health literacy in its priorities, albeit limited to parental health literacy as a strategy 'for fewer admissions through A&E' (TIN03, p. 12). 'Children's Library Journeys: Report' (TIN29) is an example of libraries borrowing from public health discourse to integrate the life course approach to public health within their services. It maps out children's 'library journeys' parallel with children's developmental stage and years of schooling (section 5.3) and is framed as the early draft of an additional Offer supporting children's transition from early years to primary school, and from primary to secondary school.

Both texts inform the making of 'The Children's and Young People's Promise', also known as the Children's Promise (TIN04), produced by ASCEL and Libraries Connected in 2018 and updated in 2020. The Children's Promise builds on and ostensibly covers all the Offers – not just Health. Like the Offers, it is comprised of multiple and multimodal (HTML, Microsoft Word, PDF, graphic) texts created at different times and downloadable from different locations.

Attention to the wider determinants of health is present in the Children's Promise and the texts that informed it. For example, TIN03 advocates a proportionate universalism approach by public libraries (section 1.1.5):

> Support for children's learning, literacy, social and personal development is also a key strand to any 5-11 years health offer tackling the socioeconomic determinants that create health inequality and impact on life chances. The universality of library provision is also relevant in this context (TIN03, p. 20)

This is distilled in the Children's Promise to:

> [children] should benefit from targeted library service activities that address disadvantage and improve their health and wellbeing (TIN04, p. 1)

However, the Promise does not include provision for making children aware that they are on a 'library journey'. The Promise is an open access text, but not accessible to children themselves; it is kept *from*, not *to*, children, and was not on public display in the library buildings visited. No child referred to the Promise in interviews. It contains no basis for health literacy work, and thus makes no promises of health literacy support for children in the library setting.

Health promotion for children 'tends to happen around special days' (Library and Information Advisor 2, Service Delivery, A), scheduled on a sector calendar (TIN15). On normal days, the text-based recommendation that there be 'direct provision of health information and support services […] that address the wider determinants of health' (TIN03, p. 22) for children translates to an indirect, 'health by stealth' approach:

> We don't actively badge it as Children's Promise or Reading Well for children […] It's a bit, it's kind of subtle (laughs). To the point of almost being non-exist–, non-exis–, a customer wouldn't know, necessarily, that they were being steered towards particular books, or what we were doing. It's all very 'stealth'
> (Executive Library Manager, Service Delivery, Co-located B/C)

This arm's-length approach to health promotion for children contrasts with the approach taken for adults, which can involve some hand-holding: 'Warm Handovers', a signposting and referral scheme informed by the social determinants of health and operated in partnership with other settings, is 'more geared towards helping adults. And that's not because it's set up like that. It's just sort of how it's evolved' (Information for Living Librarian, Content and Resource Development). Receipt by children (including Young Carers) of this 'warmer' end-to-end support is only ever a side-effect of their adults being referred, 'and then other things are highlighted' (Community stakeholder informant, Local Council Business Improvement Manager).

One health and wellbeing resource in the setting that is specifically aimed at middle childhood, the 'Reading Well for children' booklist (TIN74), is a book-based social prescribing scheme recommending quality-assured non-fiction and fiction pre-approved by health, education, and library professionals and a focus group of seven to 11-year-olds. The scheme was perceived by staff as 'narrow' and lacking in depth:

> We can't get all the titles […] [the pandemic] made us rethink a lot of our book collections and promotions that we do to make sure there are digital ones available [...] there's just such a poor offer of digital. The other thing I feel with Reading Well is just in the children's um and the YA [young adult] one, they're trying to cover a very broad range of topics. And sometimes there's just one book, that one topic. So it feels like a good starting place, maybe, and maybe a good showcase collection. I'm not sure if, if you needed to know a lot about one of those conditions or you were wanting to discuss it, or you're struggling with it yourself, how useful that list is [...] It's good there *is* a list of recommended books. I just think it feels very narrow (Stock Librarian, Content and Resource Development)

A book named by several CAs and child standpoint informants as their default resource for health information (Kay, 2020) was not included in the 'Reading Well' booklist.

Support in middle childhood was otherwise limited to a setting-wide subscription to an online encyclopaedia with age-based login access (section 5.3.2) that provided filtered information on health topics, e.g., coronavirus, as an alternative to Google or Wikipedia. Child informants' suggestions for the support they would like to see included having a designated section where resources and inspiration for action could be accessed in one place – a "critical corner" – instead of 'a bit jumbled among the non-fiction' (Child standpoint informant, codename Nicolai).

The Content and Resources Policy (referred to locally as the Stock Policy: TIN10) demonstrates an on-paper commitment to developing children's information literacy (TIN10, p. 8), but health literacy does not feature in the text. The ITTD with the staff informant responsible for procuring children's resources described how efforts to develop children's awareness of the determinants of health in ways that speak to the experiences of children, including those from digitally-excluded households, contends with a societal (macro-level) dearth of accessible resources that are designed to facilitate this:

> [dyslexia-friendly books] would really be a game-changer for lots of children, why aren't we just doing that with all children's books? [...] But if the nonfiction isn't there anyway, it doesn't make any difference really, there just isn't nonfiction in accessible forms […] I do wish there was, um, a child-friendly place we could direct them to […] part of our role is making sure people know where to find the right information. And when the information isn't there to be found, at the level it needs to be at, it's difficult (Stock Librarian, Content and Resource Development)

The lack of print resources for supporting children's engagement with information about the determinants of health applicable to them and their communities was attributed by staff to broader commercial determinants, including publishers' profit-

making priorities: ‘even if we had all the money in the world [...] there just isn’t the, the stuff there […] I can see there’s not enough money to be made in writing a book about diabetes for like an eight-year-old […] those [books] exist, but they tend to get very dated’ (Stock Librarian, Content and Resource Development).

5.2.2 Legislation regulates what the public library setting can offer: ‘we can’t be seen to be involved in anything that might become political’

The extent to which the public library setting could support children to take action on the wider determinants of health was constrained by political considerations and adults’ ideas of what was appropriate for the library to offer. Child standpoint informants’ own suggestions on how the setting could support them to take action on health were framed in terms of what children are ‘allowed’ to do in the setting:

> They could help you maybe like, help you get it [a health-related call-to-action], get it ready, so that you can like show it, or something. Or help you make the poster if you were doing a campaign or something […] maybe stuff up on the wall or stuff on the tables or in books that tell you what is happening right now. At this moment. And what. If you’re allowed. In the library, what you can do in the library and stuff (Child standpoint informant, codename: Ginny Weasley)

Section 19 of the Public Libraries and Museums Act 1964 (section 3.2.3) makes provision for local interpretations of the Act to be set out in Byelaws. The Byelaws ratified by the setting in this study (TIN20) set out standards of conduct for library users and the actions to be taken if such standards are contravened. In the terminology of IE, the Act and local Byelaws are ruling texts (table 4.1) governing library-based work. The Byelaws do not explicitly include health as part of ‘proper use of the facilities’ (TIN20, clause 11). They limit what staff informants reported they were able to do in the study setting to support children’s awareness of and action on the determinants of health:

> in terms of activist and activism and being involved in that, we have to be quite careful as an organisation, um we can’t be seen to be involved in anything that might become political. So our Byelaws and things restrict us from having petitions and campaign um camp–, y’know, personal campaigns and those kinds of things in, in our spaces, so we would have to kind of look at it as, as how we could support or how we could be a space but without kind of throwing our weight behind that because we have to balance, we have to be there for everybody. And we have to be politically neutral, and we have to be un, unbiased […] yeah it’s a bit tricky that one […] around petitions, and political canvassing, all of those kinds of things [...] particularly as, y’know, we move into election periods, and um we have purdah and

> those kinds of things, then we have y'know to be quite careful in what we do and don't have in, in the library space
> (Executive Library Manager, Service Delivery, Co-located B/C)

The Byelaws underlie concerns around the appropriateness of the public library as a setting for children's critical HL development:

> we're in such a unique place, I think it's important to remember that first and foremost, we are a library service. And there's only so much that we can do that's appropriate […] it's quite a delicate balance between what we can do and what's appropriate for us to do […] But what we can do is make sure that the community has access to the best, most up-to-date resources and books and people to talk to or for staff to be able to signpost
> (Wellbeing Manager, Service Delivery)

However, at the micro-level, enforcement of the Byelaws was at staff discretion:

> [the Byelaws] are very, very out of date. But it requires another Act of Parliament in order to update them. And I just don't think it's a priority […] All libraries will have, will be covered by the Byelaws. As I say, it's, most of them it's kind of, it's down to common sense what we would enact and use, they can, they can be pretty draconian […] Mostly, we'll only kind of apply a few of them, as and when they're needed
> (Executive Library Manager, Service Delivery, Co-located B/C)

> we would find MPs' addresses, we would do all that kind of stuff in the same way as we would enable anyone wanting to do anything that needed assistance doing it
> (Stock Librarian, Content and Resource Development)

This extended to professional judgement being prioritised over the Byelaws by some individual staff members, e.g., in navigating controversy and sensitive health topics:

> there are controversial issues around things like transgender at the moment. And again, y'know, our job is to provide information and to provide um uh and for children to see themselves in books. So I will try and do that […] we get asked for books, which are more the kind of books that, that argue the other side, y'know, um maybe children not, not transitioning, things like that, it is very difficult. But we, our, our Stock Policy's quite clear about published, about nonfiction that's been traditionally published. I don't really like buying children's nonfiction that hasn't been traditionally published [...] certainly not medical stuff. So we try and just provide people with the information. And y'know, and let them make their own minds up. But yeah, I never, I kind of think it's part of our jobs to not worry about controversy. So I never do (laughs)
> (Stock Librarian, Content and Resource Development)

> We had one girl who was with us right from the age of eight. And when she was about 14, she started questioning her identity. And we helped support her through becoming a trans male
> (Library Manager 1, Service Delivery, B)

Staff autonomy at the micro-level makes activities like Girls' Group, which provides opportunities for children to take informed action on health, possible (section 5.4).

5.3 Children's opportunities in the public library are informed by how school-based settings work: 'the more we can work together without treading on each other's toes, the better'

This section reports insights associated with the antecedents that a critical HL-promoting library for children 'Is open access' and 'Involves local communities in how it is run'. In the context of the conceptual model, 'access' is the extent to which the setting welcomes children's unmediated physical and digital access to its resources, at no cost to children. Library-based work linked to this antecedent includes managing the relationship with school-based settings as referrers of children into the public library setting and defining 'child' based on school age-banding (with concomitant conditions of access). Data pertaining to the 'Is open access' and 'Involves local communities' antecedents from child standpoint informants, staff, and community stakeholders show a mismatch between how adults view children's involvement and differentiate the library from school-based settings, and children's experiential realities of their involvement as conditional on school-based precedents and ways of working.

5.3.1 Access to the public library system for children is mediated by school-based settings: 'just initially get them in the door. And that's usually through schools'

School-based settings' emphasis on children's age and school stage influence children's access to and autonomy in the public library setting. In the data, the priorities of the school-based setting informed how work in the public library setting was organised relevant to advancing opportunities for children's critical HL development there.

'Literacies work' was compartmentalised in this setting and hived off into silos discursively and materially separated by different funding streams. The library setting studied for this project specialised in research for nurturing early years literacy (TIN13) and at the time of the project was an early adopter of the Reading Sparks intervention to promote science literacy. Institutional literacy in using the

library setting was another type of literacy talked about by child standpoint informants:

> we could use them [library staff] [...] cos they know a lot about the library and what they're doing, to do with the library. So you could ask them questions about stuff
> (Child standpoint informant, codename: Ginny Weasley)

> I've got a question on that [library user data]. How would they [libraries] contact them [children]? That's the question for me
> (Child standpoint informant, codename: Tarantula)

The Children's Promise commits to public libraries '[c]losing the literacy gap in poverty hotspots' via '[o]ut of school engagement with primary aged children' (TIN04, p. 2). The following data extracts situate primary schools as an overlapping or satellite setting in relation to public libraries that do not feature on the initial conceptual model (figure 3.1). Taking the 'Is open access' antecedent first:

> we're talking about how we can liaise with the schools again, now that we're allowed to have groups in, but actually that kind of whole health literacy thing, I think probably could encompass the whole community
> (Library Manager 2, Service Delivery, B)

One text, 'How libraries can support children's wellbeing' (TIN14), a resources pack first published in 2021, states that '[s]chool closures and inequalities in home learning environments mean libraries can offer a vital additional learning environment' (TIN14, p. 3). The public library setting is positioned as 'a vital third space between the school and home that offers children the opportunity to learn, develop and flourish' (TIN14, p. 6). The text outlines how public libraries might support children to make up for '[g]aps in learning especially disadvantaging vulnerable children' (p. 6), so that 'children are healthy and ready to learn' (p. 7). In the public library setting, what is meant by access includes *whose* access, and the usefulness (as decided by adults) of that access for applications in the school-based setting.

Public library-run Schools Library Services (SLS) in England provide an inter-setting bridge between public libraries' access to children and schools' access to children. The SLS also fills a resource gap for schools without access to their own professionally-staffed school library on-site. The recent closure of the SLS at the organisation for this study was viewed by staff informants as challenging for this special inter-setting relationship:

> And it's [SLS] not a gap we can easily fill because of just capacity. So yeah [...] I have found myself in a kind of strange hinterland where I'm trying to build relationships with schools whilst being cautious that I can't offer what, I'm one person for a start, I can't offer what [the SLS] offered [...] what I've noticed lately is more grassroots stuff. So local libraries connecting with their local schools, and um, y'know, helping them curate lists and helping them kind of choose books and stuff like that so. That's kind of a good relationship, because it should be like that, the school and the public library should be working closely together so there's an easy transition between the two, we have a lot more resources than they do. But y'know, they [schools] have the access to the children that we don't so, yeah, the more we can work together without treading on each other's toes, the better really
> (Stock Librarian, Content and Resource Development)

The dissolution of the SLS 'bridge' between the public library system and school-based settings has left behind a gap, or 'odd area', unfilled by library-based learning alone:

> we try and um reflect [the Children's Promise], um in what we buy. And in kind of the variety and the purposes for what we buy. I think I find, of all of them [commitments in the Children's Promise], the hardest one is the learning thing. Because, y'know, in [redacted], we've lost our Schools Library Service. And there's always a bit of a, an odd area between what we provide for leisure reading, and what [the SLS] used to provide for curriculum. And do we want to provide those kind of learning books? [...] I would rather the weight went on learning for pleasure rather than learning for school. So yeah, that's probably my weakest, I guess, subject
> (Stock Librarian, Content and Resource Development)

Health-related work with children in the public library setting thus remained reliant on school-based precedents and norms, even while efforts were made to distance the setting from the school learning environment.

Schools are referrers of children into public library settings. Signalling their importance for how the library conducts its work, 'schools, schools library services and school librarians' are named first in the list of partners for children's 'library journeys' in the Children's Promise (TIN04, p. 1). Schools funnel children through the public library doors:

> just initially get them in the door. And that's usually through schools
> (Library Manager 2, Service Delivery, B)

Staff informants frequently referred to class visits and school-based promotion of the Summer Reading Challenge (a scheme to encourage reading during the summer break by the standpoint age group: section 4.2.3) as routes through which children were introduced to the public library setting:

> Before COVID, we would have regular class visits in, so we worked very closely with one of the primary schools
> (Library Manager 1, Service Delivery, B)

> see what we can do with that [children's library area redesign], hopefully make it a project with some schools […] that will invite children into a space that perhaps they've not been into before and then make them that bit more comfortable. And it's that first step [...] there's just not a lot of time to introduce children to these areas [...] So if you can work with the schools to get the children into the building, they then understand that it's a safe space
> (Library Manager 2, Service Delivery, B)

On paper, the public library is 'a safe and non-institutionalised environment' conducive to at least two of the UK Government's Five Ways to Mental Wellbeing: 'connect' and 'keep learning' (TIN03, p. 19). This characterisation of the library as a 'safe space' is upheld by staff, who describe it as somewhere children wary of scrutiny can access information without repercussions, learn critical appraisal skills, and feel a sense of ownership and control:

> They [children] don't want to do anything [that] may potentially cause problems in terms of social services or there's all these sorts of worries that a lot of young carers and things have as well […] Takes them maybe a long time, but let[s] them realise that this is a safe place that they can come to
> (Library Manager 2, Service Delivery, B)

> a safe space in which [children] can research using computers and sort of give them skills and knowledge on how to find safe and reliable information […] if they're going to look at those [unreliable information sources], then balancing it out with scientific information, from health resources like NHS website […] we can sort of give them that
> (Executive Library Manager, Service Delivery, Co-located B/C)

> you kind of see the dawning moment when they think Oh, oh I am allowed to take ownership of this. Because as a child you're kind of used to the adults doing it all aren't you. Even if, y'know, your adults aren't particularly engaged or they may have issues themselves, whether it be mental health or addiction or whatever
> (Library Manager 2, Service Delivery, B)

However, at the meso-level of the organisation, onboarding training on the use of the library management system (LMS) misleadingly circumscribed the resources available to which staff could refer children, and organisational policies generally against censoring children's access did not always trickle down to frontline work:

> So I'd love to see some sort of maybe like a written policy, especially about censorship, because although the library's policy is to not censor what children can take home, when it comes to books, and anything other than, y'know, legally not allowed items, you do still have a lot of staff members who don't know that. And that's a huge problem. So it would be good to have somewhere written in bold, We do not censor the books, let the kids have the books […] I asked the question, I said, Can kids borrow whatever books they want? Or is there a block on their [library membership] card?. And I was told, Children can only borrow children's materials [...] So I went to my supervisor, and I said, I was told this in training, and I think it's terrible. And she said, Who told you that? That is absolutely not the rule. And I said, Well, a training session of, like, twelve people just heard that as the rule and nobody challenged it. So you have a problem

(Assistant Library Manager, Service Delivery, A)

The above extract demonstrates the importance of texts, because where there is no "written policy" to which staff can refer, assumptions are made to fill the textual gap.

Such gaps may also be filled by importing policies from elsewhere. School-based settings matter for whether the public library studied here can be a supportive environment for children's critical HL. A key factor that limits children's access is age. In the data, the library's age-based access policies are seen to take their lead from schools.

5.3.2 Age matters for children's access to and involvement in the public library system: 'Yes, there's less for seven to 11-year-olds. But that's because they're in school'

Staff informants stated that staff time and funding for work with children was allocated on the assumption that the needs of the standpoint age range are largely already covered by the school-based setting: 'Yes, there's less for seven to 11-year-olds. But that's because they're in school' (Library and Information Advisor 1, Service Delivery, A). Tracing official funding pipelines showed that making health-related services available for seven to 11-year-olds requires piggybacking on funding ringfenced for adults, families, or younger siblings:

> because I'm adult mental health-funded, there's only so much like young people, children stuff that I can sort of get away with in that sense. But I always do try and support whatever I can in terms of young people, and children and families as well. Because we're all about prevention, or our service is anyway […] So yeah, it's not necessarily that there isn't the funding there for children's mental health. It's just, that's not the kind of way that this particular service is funded. Um there are some ways we can get around it. So we've had some funding around families and carers. Um we have our perinatal service Me, Myself and Baby, which very much obviously concentrates on the perinatal period and supporting parents. And many of those parents also have more than one child. So there are ways that that kind of supporting children and young families kind of trickles through what kind of core funding allows us to do
> (Wellbeing Manager, Service Delivery)

Age matters for children's access to and use of this setting. Children's access to the public library is subject to gatekeeping and safeguarding by adults. The Children's Promise text maps children's life course along a timeline of transitions from one school-based setting to another. Access to the setting and its resources is experienced by children differently, depending on where along the timeline children

are located by staff, whether staff define children as customers, and whether staff engage in safeguarding work:

> about support for Young Carers or children, or children with families with y'know that have that [cancer] within there, so in terms of them accessing the [Macmillan Cancer and Information for Living] services, I guess it would be more like it would be via usually via a parent or guardian or caregiver [...] that in itself could be a job, y'know, someone just doing that as a main role. And I guess, you know, there's a safeguarding process as well [...] I guess we would just help them [children] in the same way as we would anyone else. But we'd make sure that there was a parent or guardian's consent. For some, if, depending on the age etc., it's a bit like when a child signs up for a library card, we'd need a parent or guardian to be there to ensure that they would be responsible for any fines and things like that, and for the information
> (Information for Living Librarian, Content and Resource Development)

Knowing how a child is defined for the purposes of this setting is important because 'All children must be accompanied by an adult responsible for their behaviour' (TIN19, n.p.). Children are lumped in with babies ('Children and babies may chew books': TIN19, p. 9), or treated as future voters on service provision ('customers, including children': TIN11, p. 4).

School-based age-banding of children is justified in the pre-Promise report, which states that 'any consideration of children and young people's health priorities has to be related to development stage and age' (TIN03, p. 4). However, the freedom that library branches have to 'determine their own age categorisation' (TIN19, n.p.) has resulted in proliferating definitions of childhood, ranging from 'pre-natal' (TIN04, p. 2) and 'a person under the age of 7 years' (TIN20, clause 1c), to 'ages 5–11' (TIN03, p. 3) and up to secondary school-aged (TIN10). For children in care, access to a tailored library membership that does not incur fines is represented in TIN30 as dependent on an adult carer or support worker being present for registration. Although 'in practice many [libraries] use age 12' (TIN19, n.p.) as the minimum age at which a child can sign up for a library card unaccompanied by an adult, some libraries raised the age limit during the pandemic because '[l]ibrary users include those in vulnerable and high-risk health groups, alongside children whose movements are difficult to control' (TIN19, n.p.).

Digital exclusion was another factor in children's age-restricted access, particularly during the pandemic, 'when the library physical doors were shut [and] the digital doors had to be flung really, really open' (Staff informant, Content and Resource Development):

> their [another library's] policy with the little branch library was when the library wasn't open, the WiFi wasn't on. And it was some sort of logic of, You can't control what people are doing at that point, and we're responsible for any children that might stand outside and use the WiFi
> (Assistant Library Manager, Service Delivery, A)

> We only have at our branch one computer for children […] I would assume that it has filters
> (Assistant Library Manager, Service Delivery, A)

Staff were however trusted by senior management to bend the minimum age rules and use their professional judgement in day-to-day library operations:

> And they can come in on their own and it's okay they're not going to be questioned, they're not going to be, Where's your adult, y'know […] if you've got a very young one then obviously but by the time they're eight nine ten it's okay I think for them to be coming in and left on their own
> (Library Manager 2, Service Delivery, B)

And staff also pointed out that it was parents, not the library setting, who would be interested in surveilling underage borrowing activity:

> as far as kind of free access goes, children at the library, if they have their library card, it's assumed that the parent trusts them enough to use their library card. So if they want to take out books on sexuality [...] their parents have given them the card, that's, there's, there's no limits to the card. So if, if the parent wants to, to monitor what the child is doing, that's going to be the parent's responsibility, rather than the library's responsibility to phone up a parent and say, Did you know your child is interested in or was, y'know, doing this? Um. Because that's how some children kind of explore these things. You know, it's, it's a really safe way to do it [...] They can shut the book and walk away. And probably they don't have a friend there forcing them to continue with anything. And it's not like something on TV or a computer where it might take a second to make it stop. It's, it's a really, I do think books are a really, really safe way of exploring concepts
> (Stock Librarian, Content and Resource Development)

Nevertheless, monitoring children's access was built-in to the physical setting design. Staff and community stakeholder informants discussed how the children's areas of the physical library buildings were designed with safeguarding in mind (for staff and children):

> We've changed this [children's area] all round physically so that we can see what's going on. It was a very different space when I came. There were a lot of blind-spots. And that's something, that is for, for my safety but also for the users' safety as well […] There's still a couple of blind-spots but our Head of Finance has given me the OK to buy some of these corner mirrors [...] if we're comfortable then we are going to be relaxed and welcoming to chil– the boys and girls that y'know may potentially need some support
> (Library Manager 2, Service Delivery, B)

> if we're designing a library in full from scratch, then we will try and design out the possibility of too many blind-spots from, y'know, from the beginning. But when you're

> doing something like [branch name], where the children's library […] their plan is that they want to refurbish that sort of in isolation to the rest of the library, then by not moving the other bits in the library, then they're still going to have that potential issue [blind-spots]. And [corner mirrors] would be one way of solving it
> (Community stakeholder informant, Library Design Consultant)

Children showed awareness in interviews that their access to the public library setting, and being taken seriously once within it, was dependent on adult accompaniment:

> Well, probably with a parent. Because they don't want random children just running into the library
> (Child standpoint informant, codename: Ginny Weasley)

The child standpoint informant's phrasing here is echoed by staff in relation to the library's subscription to Britannica, an online encyclopedia accessible in multiple languages that can be cited and used for school homework:

> Britannica, which I'll probably talk about at some point because it's A Very Good Resource for the Children [...] So the different tiers, adults, student and children, and it's [Britannica] chunked the information to be relevant to those age categories [...] So it's all trusted, you could leave a child on there all day, and it wouldn't matter. They couldn't just randomly wander off onto something that wasn't okay [...] So accessibility, trusted resources
> (Information for Living Librarian, Content and Resource Development)

ASCEL's self-assessment tool for monitoring how well the Children's Promise is being kept in the setting (TIN16) refers to children's access several times, next to boxes to be filled (by staff – the audit tool is not available to children) with evidence of such access being facilitated in the setting, and any actions for improving children's access. The checklist includes the following:

> Children and young people visiting our libraries should be inspired by a welcoming, inclusive, exciting and accessible library (TIN16, p. 2)
>
> There are opportunities for children to access e-books and e-audio (TIN16, p. 3)
>
> There is free and safeguarded access to the internet and IT applications (TIN16, p. 11)
>
> Children have access to age and ability appropriate on-line information and learning opportunities (TIN16, pp. 13–14)

Like the Britannica resource, the Children's Promise serves schools' interests in its provision for library-based work that aids children's school capability, or literacy for the school-based setting, including supporting children's transition from primary to secondary school.

5.3.3 Children's involvement in the setting is outsourced: 'if it's not appropriate for a member of library staff to do something around health, can we get an expert partner in'

Children 'becoming part of the library culture' (Stock Librarian, Content and Resource Development) is enshrined in the Children's Promise:

> [children] should be actively involved in decisions about library service developments
> (TIN04, p. 1)

> The Children and Young People's Promise also reflects the principles of Arts Council England's 7 Quality Principles for work with children and young people [...] ensuring a positive child-centred experience; actively involving children and young people [...] developing a sense of ownership and belonging
> (TIN04, p. 3)

But despite the recognised value in cultivating children's involvement in the library early on to safeguard the sustainability of a service whose funding may one day be voted on by children who have 'come up through the library' (Library Manager 2, Service Delivery, B), children's involvement was frequently relegated to the status of an add-on:

> we work with [a nature trust] on our nature reading project called Wild Reads. And within that, they wanted to do a walking group. And they were saying, Is it okay if they ask to bring their children? And we said, Well, as far as we're concerned it's fine, y'know, it's an adult sort of reading, but if they want to get involved with reading, and we can promote the titles, like [redacted], my colleague, she's the Children's [Stock] Librarian, so she's really keen obviously to promote other nature books, we've come up with reading lists and would help them like that
> (Information for Living Librarian, Content and Resource Development)

Children in the standpoint age group were too young to take up the main youth volunteering opportunities available (helping to run the Summer Reading Challenge, or the Reading Sparks scheme for science literacy), and involvement of this age group in the setting hinged on representatives from other settings coming in to facilitate consultation or activities. Health-related work is regularly outsourced by public library settings:

> Lots of the work that we do is partnership-based [...] if it's not appropriate for a member of library staff to kind of do something around mental health and wellbeing, can we get an expert partner in […] we can provide some kind of access to expertise in the community […] so we could look at bringing in, um, yeah, bringing in the expertise […] we could bring in other charities, other partners

(Wellbeing Manager, Service Delivery)

Children's health-related work was therefore often done at a remove from the setting. Where children were consulted on the design of the 'children's area' of the library, such consultation was conducted through schools. Instances in the data of redesigns of children's areas of the library in partnership with schools and library design consultancies demonstrate that children's involvement counted for less than adult perceptions of a final design as socially-acceptable:

> we operate in public libraries, and also in schools [...] schools might have actually sat down and consulted with their School Council, or, y'know, Year Six, or whatever it happens to be, and had some input from the children themselves. So it can very much vary. But when we're thinking about themes [...] we end up trying to go for the, I'm not saying that they're kind of bland at all, but we're having to go for things that are, y'know, kind of appeal to everybody [...] so they all tend to be in that sense, they tend to be quite safe
> (Community stakeholder informant, Library Design Consultant)

The Library Design Consultant also pointed out a gap in the information that guides such redesigns, specifically around research into how children actually navigate and engage with settings:

> we get input [into setting design] from the public library side, we get y'know, the benefit of our own experience and, and our designers' experiences with our own kids and their own schools [...] but sometimes what we do lack, in a way, is access to a, if you like, kind of research information
> (Community stakeholder informant, Library Design Consultant)

Children's involvement counted still less in relation to library design outside of the designated children's area:

> there is nothing planned in that atrium furniture which will be child-friendly
> (Executive Library Manager, Service Delivery, Co-located B/C)

The stipulation in the self-assessment tool for evaluating the Promise – that '[s]paces are available in the library for groups of young people and partners to develop their own activities' (TIN16, p. 19) – was carried forward in ways that isolated such spaces from the rest of the setting and precluded the meaningful involvement of children in their arrangement.

5.3.4 The public library system seeks to differentiate its offer from that of schools: 'We don't work like that'

The data show a tension between child standpoint informants' perceptions of the public library as 'pretty much the same system' as school libraries, and staff informants' differentiation of their workplace from school-based ways of working.

Supporting children's learning was documented in texts and talked about by staff informants as an essential part of their work. Learning is embedded in the updated 2019 version of the Universal Offers presented in an appendix to the Children's Promise text:

> The new Universal Library Offers aim to connect communities, improve wellbeing and promote equality through learning, literacy and cultural activity
> (TIN04, p. 4)

Facilitating learning features in the Children's Promise itself:

> [children] should be encouraged to take part in formal and informal learning opportunities
> (TIN04, p. 1)

And the self-assessment checklist for auditing the Promise requires 'learning spaces in the children's area where they can learn individually and or in formal/informal groups' (TIN16, p. 14).

Learning in this setting is, however, 'distinct from the school offer' (TIN29, p. 10). Differentiation of children's library-based learning opportunities from school-based ones was discussed as libraries' "unique selling point":

> so we're not actively, y'know how school is You must read this, and you need to do this [...] We don't work like that
> (Executive Library Manager, Service Delivery, Co-located B/C)

> around the seven to 11 age group is we'll have the Summer Reading Challenge, which will hopefully be back in libraries this year. Because last year [2020], there was, where it went all online, there was a massive dip in take-up, because we found that children like coming in, they like coming in and talking to a member of staff [...] they like having that engagement, and doing it online just took all of the, the joy out of it. And I wonder if it also made it a bit like schoolwork. You've got to read this book and then you've got to go online and you've got to fill out the thing. Whereas if you come in and talk to somebody, you've got that interaction, you're going to choose some other books, you might bump into your friends, perhaps it'll turn into a spontaneous playdate [...] it's that added value
> (Executive Library Manager, Service Delivery, Co-located B/C)

In contrast, children with access to a school library described it as sufficiently similar to the public library as to offer a template for use:

> It's, like, pretty much the same system
> (Child standpoint informant, codename: Nicolai)

> there's different sections for different ages [...] which I'm fine with because that's what I'm used to in like a school library
> (Child standpoint informant, codename: Ice Cream)

In a promotional video on how the library setting improves wellbeing (TIN23), the voiceover accompanying a frame showing in-library activities for children states: 'children are in charge […] their parent/guardian becomes the assistant'. The possibility of children taking charge endorsed by the video is another example of the public library setting seeking to differentiate itself from the school-based setting. But examples of children taking control in the library, outside of the video, are limited in the data to a local instance: Girls' Group.

5.4 Girls' Group: a collective activity and supportive environment for children's development of critical health literacy

Girls' Group is a collective activity offered for girls aged eight and older at one library branch. It is run based on the Girlguiding model of skills-building, because the library staff member who set up Girls' Group has a background in Girlguiding work. The researcher identified Girls' Group as an activity advertised on the noticeboard of the first library branch site visited in-person and, as the first in-person activity re-introduced following lockdown, it was talked about early on (and throughout) the ITTD with the library staff member responsible for coordinating it. Outside of the ITTD with Library Manager 1, Girls' Group is also referred to in TIN109 and as an implicit part of "libraryness" in TIN31. Evidence linked to Girls' Group is reported below and demonstrates how each of the antecedents to critical HL in this setting could be realised. In the case of Girls' Group, the public library was considered a setting for health, and the activities of Girls' Group were influenced by settings other than schools, including the Girlguiding model. Girls' Group involves children in how the Group and the individual library branch that supports it operate in children's interests.

5.4.1 Girls' Group supports children to raise their and others' awareness of the wider determinants of health: 'they do like making a display and getting it noticed'

Girls' Group was able to work around the constraints on the antecedents elsewhere in the setting. One workaround related to how Girls' Group was reported up to senior leadership in quarterly statistics – not as a children's activity, but as a wellbeing activity well-placed to attract funding:

> we have to do stats, quarterly stats on different groups, and you have to section them into sort of under-17s, over-55s. But there's also a section for Wellbeing and most of our groups that we run here, I put under Wellbeing […] I rarely put something that's either Children or y'know, unless it's really specific. Yeah, I think most things, if you offer a group, you should be supporting people's wellbeing through that group
> (Library Manager 1, Service Delivery, B)

In deploying this workaround, Girls' Group is acknowledging and acting on the wider determinants of its own health and survival within the setting.

Girls' Group provided examples of work going on in this setting through which children's critical HL could feasibly be developed:

> they do healthy cooking sessions, they will prepare and cook meals to share […] they will plan, find their menu, find their ingredients needed, do me a list of what they need. And y'know, work out the recipes and everything. And then they will come in and they will spend the evening actually preparing their meal [...] And that was something different as well. A lot of them had never sat around a table to eat a meal
> (Library Manager 1, Service Delivery, B)

> we've taken them to BT to a STEMettes event [...] We've taken them to the local radio station and they've spent an evening there being shown around, being given the opportunity to try out the different equipment, try recording, interviewing each other, we've done podcasting projects where they've talked about matters that are important to them
> (Library Manager 1, Service Delivery, B)

> they do understand that there's a wider picture, they like to go out and do um litter picks and things like that
> (Library Manager 1, Service Delivery, B)

Girls' Group' members were supported to raise their own and others' awareness of the wider determinants of health:

> we did a big project with Volunteering Matters. And it was like a social action project with the Girls' Group. And they did a lot of work then on um they created posters and things […] they do like making a display and getting it noticed, same as all their anti-bullying stuff that went up all over the library

(Library Manager 1, Service Delivery, B)

As well as furnishing children with opportunities to learn about and reflect on the wider determinants of health, Girls' Group offered access for children to get involved in making the public library a setting conducive to critical HL development in middle childhood, ranging from displays inside to a mural outside (see Appendix 14).

5.4.2 Girls' Group enables children to access skills-building for critical health literacy: 'similar to what Girlguiding would if they were able to go'

Girls' Group offers a route to critical HL development for children unable to access the action-oriented values of official Girlguiding. Girls' Group was set up with the aim of making Girlguiding accessible to children without the financial means or family support to attend "proper" Girlguiding groups:

> with Girlguiding [...] they have themes on wellbeing and such like, so they work on a whole set of different projects to meet that, y'know, to get that award as such [...] And I think a lot of the girls that we work with are not at a stage or have the privilege to be able to go to Guiding, um uniform costs, um termly fees, parents taking them, bringing them back, that sort of thing, it's, it's a commitment that a lot of our parents are not able to make. So y'know, by bringing the values from Girlguiding into Girls' Group, that helps to give them a very sort of rounded experience, similar to what Girlguiding would if they were able to go
> (Library Manager 1, Service Delivery, B)

Girls' Group's open ethos extends to its openness to new partnerships:

> we're always open to do a project with a new organisation. If someone comes to us and offers us something, we'll talk to the girls about what they're offering. And if the girls are interested, we'll book them in
> (Library Manager 1, Service Delivery, B)

Girls' Group provides a precedent for how non-school-based settings, such as the public library system, can borrow from practices outside the setting to realise action-oriented critical HL.

5.4.3 Girls' Group involves children in decisions about how Girls' Group is run: 'if you want to do that, that and that: we're going to need this much money'

Girls' Group facilitated children's genuine involvement in the running of Girls' Group and, via child-led 'takeover' days, the wider meso- and macro-operations of the library branch where the Group is held:

> they decide on their programme every term [...] the thing they've decided to do for the last few years other than last year [because of the pandemic] was take over the library for the day [...] with staff support in the background, they will help people on the computers, they will help people with issuing their books, they'll basically do anything and then they've got a tub for Children in Need
> (Library Manager 1, Service Delivery, B)

Girls' Group worked differently to the widespread use of outsourcing by this setting described above (section 5.3.3), and instead used in-house expertise to organise its activities:

> we did work with [external partner providing empowerment projects] initially actually right at the very start and I think we worked with them for about a year. But I just didn't feel the set-up was right for us. They worked with a lot of volunteers. So they train up a volunteer, and then a volunteer would come in and try to work through a, a manual that they'd been given to offer the experience. So it was, it was not as interactive and as friendly. And so we felt we had the skills that we needed to actually run it ourselves. So we then took it on ourselves
> (Library Manager 1, Service Delivery, B)

Girls' Group moved beyond consultation to co-production with children, raising awareness of the wider determinants of health and the nuts-and-bolts of creating a setting for health:

> we [at Girls' Group] do talk about, Okay, if you want to do that, that and that: we're going to need this much money. We talk about fundraising
> (Library Manager 1, Service Delivery, B)

> we had some funding from UK Youth that we couldn't spend in the way that we had intended. So we created sixty wellbeing packs. We put things in there like a stress ball, affirmation cards, Amazing Girl colouring books, bubble bath, shower gel trying to think what else a couple of books, I think we researched books and found some books through Mind that were really good and oh journals, wellbeing journals as well […] So we talked to the girls on Zoom. And we did like a wellbeing couple of weeks where they made wellbeing boxes [...] And then from that we talked about If you could have a wellbeing bag with whatever you wanted in it, what would you ask for? And we built up the list through that
> (Library Manager 1, Service Delivery, B)

The library setting's facilitation of Girls' Group enabled a version of ownership by children that comes close to that described by adult advocates for the setting – which is organised according to the Industrial and Provident Society (IPS) model – as 'genuine community involvement and, well, literal ownership' by local people (Community stakeholder informant, IPS Trustee).

5.4.4 Girls' Group facilitates children's action and advocacy for their and others' health: 'in group settings, it's totally possible'

Action was perceived as a collective (group) activity in this setting:

> I think in group settings, it's [critical HL] totally possible. But when it's just a parent and child or customer coming through the door, and asking for information, I think it's more challenging, partly for having the time as much as anything else, to actually give them that fuller experience and more support. But yeah, certainly in Girls' Groups, we're, we're definitely very keen. And as I say, class visits could work really well with that [critical HL] as a theme
> (Library Manager 1, Service Delivery, B)

But while transforming action-oriented work into critical HL by out-of-school groups like Girls' Group was possible, it required an additional step beyond the bread-and-butter library work of signposting:

> Yeah, it's difficult, isn't it? I mean, we have the [Reading Well for children] lists available, we have like a section within the children's area that's labelled Wellbeing, or Health and Wellbeing, something like that. And then we've got like, face-out books that are very relevant [...] but we don't really interact more than that, unless a parent or a child come up and say We want some more information *on*. And then we will, y'know, direct them to that area, order books for them, that sort of thing. And we will like recommend, from our health and wellbeing pages on [website], there's different links to different organisations, so we can recommend different organisations for them to contact if they need support as well. But that's more like signposting and offering information, not the critical side of it, and it's the critical side that's really important, isn't it? So yeah, it's how do we go that step further and actually support those young people to yeah engage and get what they need out of it. And, y'know, use that information to make a difference to their lives really, isn't it?
> (Library Manager 1, Service Delivery, B)

Staff informants suggested that the next step needed to make critical HL happen might look something like a prepared pack of lesson plans tailored to learning critical HL in the library setting:

> Yeah, I think that [critical HL] would definitely be possible, especially when classes start coming back to the library again, because they like us to offer something different. So if, y'know, if there was a package in place, or an opportunity to have

> some information that we could actually use to give them a really good experience, I'm sure that would fit in really well with the schools as well. And we'd definitely be totally on board to do something like that here
> (Library Manager 1, Service Delivery, B)

> especially with as I say with class visits, if there was something [on critical HL] produced that we could use for class visits. I think that would be amazing
> (Library Manager 1, Service Delivery, B)

The above suggestions for how children's critical HL development might be supported in this setting begin to answer this staff informant's call-to-action: 'I can totally see it [critical HL], it's *how* do we do that? (Library Manager 1, Service Delivery, B).

Girls' Group demonstrates that children's critical HL can be promoted in the public library setting at the local level of individual branches with individual staff informants who have the skills to coordinate group activities that are accessible, inclusive, and promote awareness-raising and action. Girls' Group provided evidence of action-oriented critical HL being supported in the setting at the micro-level.

The antecedent proposed in the conceptual model, 'Facilitates informed action', was otherwise absent, for some of the same reasons identified in the literature on the difficulties of implementing critical HL interventions in school-based settings: political sensitivities and staff time and expertise. At the public library, as at schools, it is nobody's job to support children's critical HL development. Health literacy development might be included in a job description, but *critical* HL is extra work.

5.5 Summary

This chapter has explicated the public library's potential to support critical HL development in the standpoint age group based on whether the antecedents proposed in the conceptual model (figure 3.1) were evidenced in this setting.

Two problematics, or tensions, were found: public libraries are not perceived as a setting for health, and their remit for supporting children's health literacy is inconsistent and undermined by legislation in England (section 5.2); and children's opportunities in the public library are informed by how school-based settings work (section 5.3). Both tensions are challenged by the micro-level example of Girls' Group as an exception to the macro-level rule (section 5.4). The implications for the conceptual model will be discussed in the next chapter.

Chapter 6 Discussion

This chapter discusses the implications of the findings reported in Chapter 5 for the conceptual model. In line with IE methodology, the literature (reviewed in Chapters 2 and 3) is revisited to situate the findings in the theory and application of settings-based approaches to health promotion and health literacy, and to consider similarities and differences between the findings and the literature. Overlapping concepts from the literature are identified and used to organise the discussion based on how the public library is understood: as a setting for health, a health-literate organisation, a system, or part of a supersetting approach. The conceptual model of the public library as a supportive environment for children's critical HL is revised to position the library as part of a supersetting approach. The potential transferability of the model is outlined, and limitations of the study are included alongside new reflections.

6.1 Introduction

One of the stated aims of the public library consortium that provided the setting for this thesis is 'to redefine how the public see libraries' (TIN58). The findings of the study redefine libraries' potential role as a non-traditional setting in relation to children's critical HL development. The timing of the study provides a snapshot of the public library as a setting at a specific time in public health history: during and immediately after COVID-19 lockdowns in the UK, and before critical HL for children can be said to be "business as usual", or invisible because embedded (rather than absent) in the library. This is relevant to the challenges of evidencing settings-based approaches as discussed in the settings literature (Dooris, 2006b) (section 3.2.1), and to evidencing the implementation of interventions in IE (Spina and Comber, 2021).

The study findings both confirm and challenge the literature. The findings confirm the dominance of school-based settings in health literacy-related work with children and the underemphasis on the social action dimension of critical HL that was demonstrated in the systematic scoping review (Chapter 2). On the other hand, the findings challenge the emphasis on macro-level influences on settings for health from the conceptual review (Chapter 3) by highlighting a micro-level activity where the antecedents to critical HL development are supported and collectively create the

macro-perspective of critical HL. In addition, the findings indicate the value of returning to the settings literature, specifically the supersetting approach (section 3.2.3), to model how settings might work together for health.

The conceptual model (figure 3.1) is revised to incorporate other settings with which the public library can work in a coordinated supersetting approach (figure 6.1, section 6.3.1). The revised model posits that critical HL development is constrained at the macro-level by sector regulations, but is possible at the micro-level if all four antecedents are in place (6.3.3). A public library-based approach to children's development of critical HL is not enough on its own: it should form part of a wider supersetting approach, in which the library is complemented by (not alternative to) other settings, including schools. The findings show that the literature on the settings-based approach, as reviewed in Chapter 3, may have underemphasised the potential of micro-level collective activities to work within macro-level arrangements. Girls' Group provides evidence of critical HL in children being supported in the public library at the micro-level, but not structurally. However, as part of a supersetting approach – an ecosystem of settings working together – the public library can intersect time (the life course) and place (other settings, including schools) to support, at the macro-level, a combined life course and settings-based framework (Whitehead, 2011).

The study contributes an IE orientation to health literacy research with children, and tools for prioritising children's standpoint to the ongoing development of IE methodology (section 6.4.1). Findings are consolidated in an IE inquiry by returning to the literature, which is viewed by IE as another text that mediates social relations, including research relations (Smith, 2014). Returning to the literature involves "talking back" to and comparing the existing evidence base (reviewed in Chapters 2 and 3) with the findings (Rankin and Campbell, 2009) to place those findings in context. Revisiting the literature in this case identifies significant conceptual clarifications. These are outlined below in three parts. The first part discusses the implications of how the public library is conceptualised for addressing the RQ (sections 6.2.1–6.2.3). The aim of using overlapping concepts from the literature to structure the discussion in this part is to enable a conversation between the findings and the literature. The second part conceptualises the library as part of a supersetting approach and sets out an updated conceptual model (sections 6.3.1–

6.3.3). The third part considers the contributions of IE to this study and to understandings of settings (section 6.4).

6.2 Returning to the literature: clarification of concepts

There is an overlap of concepts in the literature on settings. This study does not seek to resolve such conceptual complexity, but clarification of how the public library is conceptualised – as a "setting for health", "health-literate library", "library system", or as a partner in a "supersetting approach" – matters for how the findings are discussed and how the library can be leveraged as a supportive environment for critical HL development in children. This first part therefore uses the overlapping concepts as an organising frame to outline the differences that arise from whether the library is considered as a setting for health, a health-literate organisation, a system, or part of a supersetting approach.

6.2.1 The public library as a setting for health

The environments where health literacy can be promoted are referred to inconsistently in the literature. Clarification of the different concepts is important for identifying how they might contribute to the Ottawa Charter's action area around creating supportive environments for health (World Health Organization, 1986), beginning with settings for health (section 3.1.1).

A recent report on health literacy development as a strategy for the prevention and control of NCDs demonstrates the overlap in concepts. In it, 'settings for developing health literacy' are defined as 'all the places where people are exposed to health-related information and where their health behaviours may be influenced', including 'prenatal environments, people's homes, villages and cities, schools and workplaces' (World Health Organization, 2022b, p. xi). The typology of settings also refers, under a section on formal education settings, to the Health Promoting School (HPS) (sections 1.1.4 and 2.5.2), which 'continuously develops its capacity as a setting for healthy living, learning and working' and contributes to health literacy development in children (World Health Organization, 2022b, p. 25). In 2022, therefore, schools continue to be a major setting for health and health literacy.

The report refers to 'health-promoting environments' and 'supportive environment', but far more frequently to 'enabling environments'. The difference between 'enabling

environment' and the Ottawa Charter's 'supportive environment' appears to be the degree to which a setting for health 'continuously develops its capacity' to empower people: a distinction which recalls earlier terminological discussion around "healthy settings" and "health-promoting settings" (section 3.1.1). Enabling environments 'support people to access, understand, appraise, remember and use information about health' (i.e., develop health literacy), 'for the health and well-being of themselves and those around them, within the circumstances and demands of their daily lives' (World Health Organization, 2022b, p. x).

In the update to the Health Promotion Glossary of Terms (World Health Organization, 2021b), the definition of 'settings for health' is unmodified from the 1998 version (Nutbeam, 1998): only the commentary accompanying the definition has changed, and the changes highlight an action-orientation. Under a new entry for 'environmental determinants of health', settings for health are referred to as providing the 'structure for practical action' (World Health Organization, 2021b, p. 15), and the 'settings for health' entry states 'people actively use and shape the environment' (World Health Organization, 2021b, p. 30). The implications of conceptualising the public library as a setting for health, therefore, are to locate the library along a scale of agency and action from relative passiveness on the part of the setting to dynamic enablement and empowerment.

6.2.2 The public library as a health-literate organisation

Another concept in the literature is health-literate organisations (HLOs) (section 3.1.2), which by design support people to 'systematically orient their daily routines towards HL [health literacy]' (Nowak *et al.*, 2019, p. 464). HLOs 'equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others' (Brach and Harris, 2021, p. 1084). They comprise 'a settings-based approach aiming at changing organizational conditions to enhance health literacy of relevant stakeholders' (Kirchhoff *et al.*, 2022, p. 1).

The HLO concept has several related terms, including organisational health literacy, health literacy-friendly organisations (Koh *et al.*, 2013; Meggetto *et al.*, 2020; Okan *et al.*, 2021), and 'organisational health literacy responsiveness'. Organisational health literacy responsiveness is defined as:

> the extent to which health workers, services, systems, organizations and policy-makers (across government sectors and through cross-sectoral public policies) recognize and accommodate diverse traditions and health literacy strengths, needs and preferences to create enabling environments that optimize equitable access to and engagement with health information and services, and support for the health and well-being of individuals, families, groups and communities (World Health Organization, 2022b, p. x)

The development of the health-literate schools (HeLit-Schools) concept (Kirchhoff *et al.*, 2022) (section 2.5.2) refers to the HLO concept. The relationship between HeLit-Schools and HPS (6.2.1) is interwined: both represent whole-of-school settings approaches, and the HeLit-Schools team state that their aims are 'to interlink both concepts [organisational health literacy and HPS] and avert conflict' between the two (Kirchhoff *et al.*, 2022, p. 4). There is scope for a relationship between health-promoting settings and HLOs that is like the one between health literacy and health promotion:

> Both concepts as well as both settings (health promoting settings and health literate organizations) are completely compatible […] and can work side by side (if not together), complementing each other […] Settings that have adopted a health promotion approach can easily become health literate settings and vice versa, because structures and processes have already been reoriented and important changes (including awareness) have already been implemented (Gugglberger, 2019, pp. 888–889)

While there is some literature on HLOs in the context of settings where older children spend time beyond schools (Wieczorek *et al.*, 2017), there is scarce evidence available that considers critical HL for middle childhood together with HLOs that are not schools or health care environments. To approach the public library as an HLO, or facilitate the process by which it can become one, requires a reorientation in the literature towards non-traditional or emerging settings without (yet) a 'health-promoting' prefix in widespread use or their own set of HLO principles. Part of such a reorientation would need to consider the antecedents for a setting to be considered an active, responsive, and enabling HLO.

6.2.3 The public library as a system

Health literacy is systemic in an HLO. The settings-based approach has been theorised through a systems lens, and public libraries in England are organised as a system (section 3.1.2). This section considers the implications of viewing the public library system *as a system*: not just in terms of visible structure (multiple branches distributed across a local authority area that share a common operator at the

strategic level), but through the lens of a systems approach (Knai and Savona, 2022).

A systems lens conceptualises the public library system as a complex, dynamic set of interconnected elements, the interactions between which drive the whole to respond to, or resist, external influences (Dooris, 2004, fig. 5; Knai and Savona, 2022). The present study provides evidence, in the example of Girls' Group (section 5.4), that children's critical HL can be feasibly developed in the public library at the micro-level of individual relations where (to a limited extent) it is possible to "play the system" by operating under the radar of the macro-level status quo.

Conceptualising a whole-system approach to the public library sees the individual library branch as more than "where Girls' Group is held": it is where health literacy development is by design, not incidental. The literature provides support for such a systems lens in Naccarella and Horwood (2020), on public libraries as multipurpose HLOs that can improve the health literacy of individuals, communities, and other organisations and systems; and in Riedler and Eryaman (2010), on transformative community-based libraries (TCBL) (section 3.2.3) where people can 'reflect critically […] as politically aware members of a community' and come to see collective learning as 'a socially responsible and ethical course of action' (pp. 92–93) or form of praxis (section 3.2.4). In light of the emphasis in the findings on Girls' Group being a collective (group) activity (section 5.4.4), and considering that in the literature '[m]ore recent definitions and conceptualisations of CHL [critical health literacy] appear to re-assert the centrality of taking collective action in social and political settings' (Dixon *et al.*, 2022, p. 4), the TCBL model is particularly relevant.

Conceptualising the public library system through a systems lens as somewhere collective inquiry into issues faced by local communities can be supported (e.g. through group activities such as Girls' Group) is to position it as greater than the sum of its parts and, by looking outward to the surrounding community, itself part of a wider systems partnership: a supersetting approach (section 3.2.3). The next section contextualises the findings alongside recent advances in the settings literature to conceptualise the public library as part of a supersetting approach coordinated with other settings, including schools.

6.3 The public library as part of a supersetting approach

The findings point towards the supersetting approach as a helpful concept that could contribute to addressing the RQ: Can public libraries be supportive environments for critical health literacy development in children? (section 2.5.6). The supersetting approach is intended 'to mobilise local communities for public health action through coordinated and integrated engagement of multiple stakeholders in multiple community settings' (Jourdan *et al.*, 2016, p. 2). It is open to complexity (Grabowski *et al.*, 2017), appropriate for a focus on critical HL; and recognises the need to combine bottom-up, micro-level actions for health with (managed, minimal) top-down, macro-level pathways to action (Magnus *et al.*, 2016).

The supersetting approach, as an intervention strategy for comprehensive community interventions, works through coordinated engagement and mobilisation of local resources to support collective community action (Magnus *et al.*, 2016). It has five core principles: integration (coordinated action across specific settings); participation (people are motivated to take ownership of processes of developing and implementing activities); empowerment (there are opportunities for equity-focused action on authentic, relevant issues); context-sensitivity (people's everyday life challenges are respected and considered when developing and implementing activities); and knowledge generation and sharing (knowledge produced from coordinated activities is used to inform future activities) (Bloch *et al.*, 2014; Grabowski *et al.*, 2017; Magnus *et al.*, 2016).

Advances in the supersetting approach are linked to Scandinavian public health research. The demonstration project SoL (from the Danish *Sundhed og Lokalsamfund*, 'Health and Local Community'), in the Bloch *et al.* (2014) paper that marks the entry of the supersetting approach into the literature, attends to how a supersetting initiative serves families with children aged three to eight years old using The Future Workshop process. Similar to the IVAC model (section 2.3.2), methods based on the Future Workshop process aim to support people to work towards sustainable action on health in phases: critical, visionary, realistic (Clausen *et al.*, 2019). Children's ideas in the workshops are 'presented to wider audiences of relatives and professionals […] and turned into concrete projects', and children 'experience a connection between their own visions and expressions for a better

physical and social environment, and subsequent responses and actions by adults' (Bloch *et al.*, 2014, p. 7).

The most up-to-date handbook available for settings-based health promotion refers to the supersetting approach only a handful of times, with its most sustained discussion positing that schools should form part of the approach (St Leger *et al.*, 2022, p. 109). The findings in this study demonstrate that public libraries have a potential role to play in a supersetting approach to children's critical HL that is coordinated with schools, and that widens the "pool" of settings beyond school-based settings to embrace other settings with which the library works in partnership to collectively constitute a supersetting approach. Reading the literature in light of the findings highlights new directions for the supersetting approach in relation to the settings where children spend time.

Other informal education settings, or 'extended classrooms', that are accessible to children and that could be coordinated with primary schools (section 5.3) as part of a supersetting approach include 'natural playscapes', families, town squares, local mass media (newspapers, TV, radio), social media, childcare centres, and supermarkets (Buch-Andersen *et al.*, 2021; Bush *et al.*, 2018; Grabowski *et al.*, 2017; Mikkelsen *et al.*, 2018; Pedersen *et al.*, 2022; Toft *et al.*, 2018; Whitaker and Tonkin, 2019). To this, health literacy scholarship adds youth sports clubs (Paakkari *et al.*, 2017) and 'parks, shopping centers, community centers, or libraries' (Paakkari and Paakkari, 2012, p. 146).

Applying the findings from this study back to the literature illuminates a phenomenon of significant interest to the RQ: the public library is part of the historical development of the supersetting approach. At some point between 2014, when the Danish project SoL introduced the supersetting approach (Bloch *et al.*, 2014); and 2019, when 'biblioteket' (library) appears as a label in a figure of the supersetting approach based on the 2014 original (von Heimburg and Hofstad, 2019, fig. 2.1), the library becomes included in the canonical visual language of the supersetting approach. By 2021, the presence of the library (joined by 'sports club' and 'museum') in the standard figure used to illustrate the supersetting approach has passed into the English-language supersetting literature (Tørslev *et al.*, 2021, fig. 1), separately from the Danish project SoL. This linkage is implicit in Whitelaw *et al.* (2017, p. 893), where the supersetting approach is cited and is compatible with

library-based health initiatives that model ‘an inclusive and participative ethic’ and ‘dynamic orientation’. The supersetting approach is also referenced in von Heimburg and Ness (2021, p. 648) in relation to public libraries (and schools) as ‘universal welfare institutions’ and boundary-spanning bridges between people and policy processes.

A case study from Calderdale Libraries in England (which is both grey literature, and a text collected for this study) offers an example approximating a supersetting approach to children’s critical HL development (although not named as such). Profiled by Libraries Connected as demonstrating the Universal Health Offer in action and the difference that library involvement in research partnerships with other settings (a primary school and a university) can make, the ‘Something in the Air?’ initiative added air quality monitors to the Calderdale Libraries catalogue for loan to the local community. The outcome was that ‘primary school children gave a presentation about the low air quality in their playground to the local MP and achieved funding to improve it’ (TIN120; Libraries Connected and Carnegie UK, 2022). This case study provides evidence that micro-level collective activities for children’s critical HL, such as ‘Something in the Air?’ (and by implication, Girls’ Group), do not have to be localised one-offs.

The findings are also indicative of how a supersetting approach works in relation to ‘projectism’ (Whitelaw *et al.*, 2001, p. 200), i.e. when ‘the theoretical framework guiding the work may be rooted in systems thinking and organizational development’, but practice is ‘constrained to smaller-scale project-focused work around particular issues’ (Dooris, 2004, p. 56). Projectism is not necessarily negative. The projectism evidenced in the findings, which show critical HL for children in the study setting being supported on a “project” basis at one library branch, contributes to their wider relevance. The process through which ‘discrete health promotion projects’ at the micro-level, such as Girls’ Group, can become organisationally normalised and part of ‘wider more penetrating settings achievements’ at the macro-level (Whitelaw *et al.*, 2001, p. 340), requires a project that is assimilable across settings.

Children as stakeholders are included in the supersetting approach from its beginnings, and the approach itself is integrated with a life course perspective (Whitehead, 2011): the original figure illustrating the supersetting approach in Bloch

et al. (2014, fig. 1) features partner settings that span the life course, from day care and primary school through to nursing home. Yet interventions outside of the supersetting approach that use health literacy as a strategy (World Health Organization, 2022a) 'are often either based on children's involvement or are multi-setting, but rarely both' (Jourdan *et al.*, 2016, p. 1). In health literacy research, it remains rare for children to have any say in selecting where they would like research that affects them to take place; only one precedent (Syan *et al.*, 2021) was identified at the time of writing, and involved young people (rather than children) in selecting an accessible and youth-friendly setting. Conceptualising the public library as part of a supersetting approach offers two opportunities: to redress a lack of children's involvement in health literacy research, and to apply the supersetting approach to critical HL development.

6.3.1 Returning to the conceptual model of the public library

Based on the findings, and to reflect the public library as part of a supersetting approach, the conceptual model (figure 3.1) requires revision. The antecedents to children's critical HL being supported in this setting (section 3.2.4) provided the analytic headings for indexing and analysing data (section 4.4) and documenting the antecedents' presence (or elusiveness). The process of tracing evidence for the antecedents in the data prompted reflection and redefinition of what each antecedent means in practice. For example, 'access' operates at multiple levels of meaning and application in the data, and 'action' manifests as more subversive than visualised in the initial model (figure 3.1). Pursuing in the data the set of circumstances through which schools are a reference point for other settings-based approaches to children's critical HL – despite little evidence of schools' effectiveness in that area – also informed the re-modelling of figure 3.1.

The revised version (figure 6.1) responds to the findings by including reference to micro-level activities carried on under macro-level arrangements and depicting a wider constellation of settings with which the library is coordinated as part of a supersetting approach. The updated conceptual model integrates, from the findings, the example of Girls' Group at the micro-level (where the proposed antecedents were all found to be located) with the macro-influence of school-based settings and an outer "glow" of other partner settings:

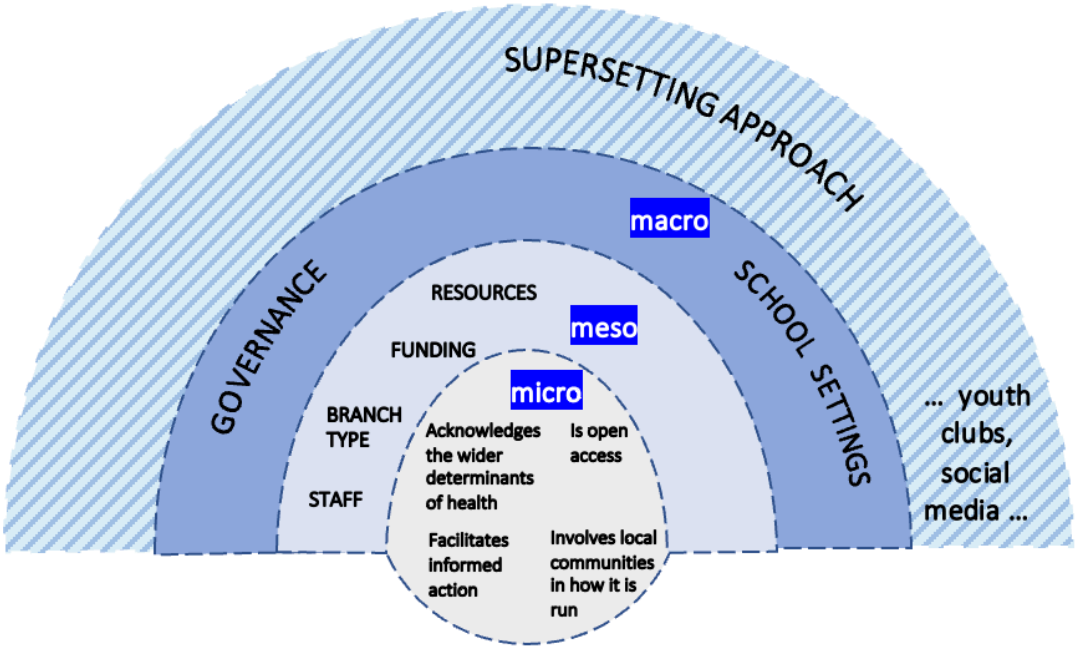

Figure 6.1 Revised conceptual model of the public library as part of a supersetting approach to children's development of critical health literacy

The revised model is based on the "rainbow" representation of health determinants by Dahlgren and Whitehead (1991, 2021), which is also referenced in connection with the supersetting approach (von Heimburg and Hofstad, 2019). The arrows featured in figure 3.1 were intended to be understood as conveying a bidirectional flow of agency, through which 'communities can be empowered to advocate for themselves and to influence and take some control of many determinants of health' (World Health Organization, 2022b, p. 21). The revised model removes the unclear arrows to focus instead on the 'spaces in between' (Barić and Barić, 1995; quoted in Dooris, 2006b, p. 60) the local and extra-local layers of the setting and its wider partners.

Figure 6.1 provides a cross-sectional view in which micro-level pockets of collective activities for children, like Girls' Group, are supported or threatened by meso-level organisational and societal conditions that circumscribe what is possible (staff, branch type, funding, and resources) and macro-level socioecological scaffolding: here, the Byelaws, or "governance", and the influence of school-based settings. Beyond these, in the outer layer, partner settings are depicted: youth group settings and social media are selected for the library example, but further partner settings

could include Young Carers' support groups, summer camps, and Girlguiding and Scouts movements (McDaid, 2016; Sørensen and Okan, 2020).

Optimising the public library for children's critical HL requires a "traffic in practices' (Darville, 2009, p. 18) between all partners that facilitates contact into the community and helps children get things done through social processes that were not designed for children's participation in them (Mannion, 2007). The boundaries between the socioecological levels represented in the model are accordingly permeable and open to knowledge transfer, via e.g. research partnerships with academia (TIN119; Libraries Connected and Carnegie UK, 2022).

Permeable boundaries recast the public library as a subsystem within the wider interconnected system of a supersetting approach. The model of the public library working jointly and synergistically with partner settings to foster and sustain the development of children's critical HL is potentially transferable to other settings where children spend time (with context-specific adjustments at each layer of the model as required), including the settings outlined in the outer layer. However, transferability of the antecedents to other libraries and other settings is linked to the extent to which the 'generalising effects' of the interaction of settings with communities (section 4.1.1) are challenged by the integration, into a setting's core business, of antecedents predicated on unique responsiveness and relevance to community needs.

6.3.2 Action-oriented critical health literacy is constrained in the public library

The findings show that public libraries cannot, on their own, support critical HL development in children to the extent of action on health. The same is known to apply to schools, but for different reasons; public libraries have their own obligations and constraints in this regard. The terms 'obligations' and 'constraints' are inspired by Kokko (2014), who uses these terms to describe the commitments that youth sports clubs make to stakeholders. The public library in this study has 'obligations', as a public body, to the local communities it serves; and 'constraints' under which it operates, such as funding terms and conditions. Libraries should therefore not be seen as an "alternative" to school-based settings, but as an (under-utilised) partner in a supersetting approach inclusive of both (and other) settings.

The complicated relationship between public libraries and school-based settings is one of such obligations and constraints. As shown in the findings (section 5.3), schools are the principal referral route, or pipeline, for introducing and funnelling children into the public library system. This obligates the public library setting to work closely with its 'feeder' schools. The work of distinguishing between learning in class at school, and learning on a class visit to the library, is important for the public library setting's institutional identity and its share of available resources and funding locally. The uneasy tension between public libraries' differentiation from, but also dependence on, schools is illustrated by the 'odd area' described in the data between public library provision for learning and school provision for learning – a 'hinterland' previously bridged by the now-defunct SLS (section 5.3.1). At the same time, fitting in with schools can lead to constraints on what the public library can justify offering to children beyond what schools already offer, and how the library relates to children (e.g., provision of services based on age) (section 5.3.2).

The push-pull of these obligations and constraints helps explain the uneven evidence for the modelled antecedents in this setting. At the meso-level, public libraries are obligated to prepare children for the sorts of literacies required for school (section 3.2.3), and this determines funding for library-based activities for children (sections 5.3.1–5.3.2): one post-COVID recovery aim for libraries to support children's wellbeing is to facilitate children's catching-up on lost learning ahead of re-opening schools (TIN81). But alongside this school-driven purpose, there is space in the public library setting for flexibility – space enough, at least, for group activities like Girls' Group.

Girls' Group overcomes the obligations and constraints in this setting. As a collective group activity, it adds value to the library branch where it is located because of the positive angle at which it is reported up to senior management (such that the Health Offer can be said to be addressed through this activity). It raises awareness of the social determinants of health, operates open access to its activities (including openness to children's ideas for activities), takes a partnership-working approach that involves children in the selection of partners to work with, and supports children to plan and carry out social action (such as library 'takeovers' to fundraise for charity) (section 5.4.3). Girls' Group also manages to overcome the action paralysis, or inaction, that can cripple critical HL in school-based settings, or make critical HL seem like a step too far beyond the already-stretched remit of

public library settings (sections 5.2.1 and 5.4.4). In Girls' Group, the action-oriented dimension of critical HL is achieved following the model of Girlguiding badgework, where children's progress in mastering Girlguiding's 'Make change' skill earns them badges as part of a wider 'Take action' scheme of work encompassing other skills-building (e.g., Campaigning, Craftivism, Influence, Protesting, Speaking out, Volunteering, Voting) (Girlguiding, 2022).

Importantly, the public library is integral to how Girls' Group operates *with*, not *for*, children (Poland *et al.*, 2000; Wenzel, 1997). A Girlguiding group in another setting, e.g., a community hall, would be different from this public library version because the library version is enacting critical HL by proactively applying library infrastructure to serve the Group's interests. Girls' Group is using the library building to spread awareness (e.g., through a mural painted by Girls' Group on the library garden wall, Appendix 14); it is available to children who cannot afford to attend mainstream Girlguiding groups, or who lack parent/caregiver support to do so; it involves children in making decisions about what Girls' Group should do next; and it trains children to utilise library resources to develop and implement critical public health campaigns.

6.3.3 Using micro-level actions to develop macro-level critical health literacy

Critical HL is positioned in the literature as a concept that comes into play at, and is concerned with, the macro-level of social relations (section 2.3.1) (Kilstadius and Gericke, 2017), but this study shows that it can also be invested in and realised at the micro-level. There is 'a relatively small amount of evidence that settings themselves are being changed in ways that address the social determinants of health inequities' at a macro level (Newman *et al.*, 2015, p. ii126). The findings, specifically the data relating to Girls' Group, contribute to the evidence available for the feasibility of developing critical HL in the library by leveraging micro-level relations in a setting (e.g., individual staff informant expertise) to foster a macro perspective (e.g. children's efforts in planning and implementing health-related actions for the benefit of the wider community), as long as all the antecedents are present (figure 6.1).

Girls' Group offers a route, at the micro-level of the setting, for children's critical HL development that gets around governance based on age and developmental stage and the Byelaws' regulation of allowable activities in the public library setting. It does this by acknowledging children's experiences and raising their awareness of how the wider determinants of health contribute to these experiences; opening access to Girlguiding's action-oriented scheme of work; involving children in managing the priorities of Girls' Group; and providing space for children to take action on these priorities. In the data, Girls' Group members within the standpoint age range of seven to 11 years old design and distribute wellbeing packs, participate in takeovers of the setting for fundraising, and decorate the physical library space with anti-bullying displays, all within the governed setting of the public library – because Girls' Group activities are accounted for, and reported up to senior management, under the budget code for 'Wellbeing' (a sufficiently broad term that can accommodate the more political aspects of critical HL without drawing attention to them).

A capabilities approach (Pithara, 2020) recognises the broader enabling and inhibiting factors shaping children's opportunities (section 2.4) and brings into focus how historic and prevailing norms govern the settings where children spend time and limit the scope for their critical HL development there. For example, the Byelaws (TIN20) governing what is appropriate within the public library setting limit the potential for critical HL to be openly supported at the macro-level without workarounds to achieve this. Taking a capabilities approach at the micro-level, e.g., through Girls' Group, could harness micro-level relations in which all four modelled antecedents are present – including action – to enable development of the macro perspective that critical HL requires, and a supersetting approach might facilitate and sustain.

A joint capabilities and supersetting approach is seen in contemporary efforts to reduce NCDs from childhood onwards that encourage multisetting, multisectoral action to make health literacy a 'whole-of-society endeavour' (The Lancet, 2022) and empower children (Paakkari *et al.*, 2023) 'to demand the enabling environment that will lead to good long-term health and avoid NCD risk factors (especially resisting and managing commercial determinants of health' (World Health Organization, 2022c, p. 10). Such efforts could benefit from the provision of opportunities in settings participating in a supersetting approach for the development of critical HL early in the life course.

6.4 The contribution of institutional ethnography to the study of settings

IE is closely linked to the study of settings: to making visible how a setting is "put together" by people, whose actions reify institutional concepts into practices. Its framework for inquiry can explicate how work in one setting, such as a school, is arranged to be responsive to work done – or not done – in another setting, such as the home (Smith and Griffith, 2022, p. 23).

Through utilising IE, all four antecedents (figure 6.1) were evidenced at the micro-level of the setting, in a group activity run with children's involvement (Girls' Group). Girls' Group is this study's example of how '[o]n the surface compliance can often be matched with supplementary or alternative modes of implementing the policy' – e.g., offering group activities within funding constraints – that 'align better with the clients' needs, the workers' ethos, or sometimes just make more sense to them given their own interpretations of the guidance' (Murray *et al.*, 2021, p. 4) – e.g., the categorisation of Girls' Group in reports to senior management under 'Wellbeing', not 'Children', by a staff informant (section 5.4.1).

The present study, when pieced together with the wider jigsaw of IE studies, has implications for the ongoing development of IE and its applications to the study of settings. This section discusses what the methodological decision to use IE added to the findings and the conceptualisation of the public library as part of a supersetting approach to critical HL development in children.

6.4.1 The value of IE for analysing a settings-based approach to health literacy from the standpoint of children

'While other approaches to research seek to avoid or remove the complexity of daily lives by choice of study design or analytical methods', the settings-based approach 'provides a view of everyday life as it is actually lived', and 'sharpens the focus on the complexity associated with health promotion initiatives' (Grabowski *et al.*, 2017, p. 9). The supersetting approach goes further: it 'welcomes complexity and seeks to actively handle, describe and modify it' (Grabowski *et al.*, 2017, p. 9). It is significant that this description of the Danish supersetting approach could equally apply to IE:

the two are ontologically aligned, an alignment which came into increasing focus as this study progressed.

IE's ontology emphasises the importance of understanding people's "actual" everyday experiences in settings for understanding how those settings are socially-organised to work in the ways they do (section 4.1.1). Like the supersetting approach, IE offers a different way of looking at intersecting social relations relevant to the settings-based approach: one that foregrounds complexity and coordination (Lund and Nilsen, 2020). This way of looking is encompassed by the IE concept of standpoint. Understanding another concept, the problematic, as a 'nagging and persistent concern about a situation whose determinants seem to elude those people most affected by the situation' (Stooke, 2010, p. 289), brings into view a problematic within IE itself: children's standpoint is rarely represented in the IE literature (section 4.1.2). This study contributes another example of IE for and with children to the IE literature, alongside methods to facilitate learning from children's standpoint suggested by children themselves, such as ITTA (section 4.2.2.4).

Transferability in IE methodology is based on how 'detailed and holistic explanation of one setting, or set of processes, [can] frame relevant questions about others' (Mason, 2002, p. 196). The focus is on how informants' experiences are – by design – standardised in settings (section 4.1.1), and boxed into a common set of organisational practices (Livingston, 2022). Scope for knowledge transfer, rather than generalisability, thus forms the criteria for the effectiveness of an IE and its contributions to the IE evidence base. What IE adds to this study is an account of how a library setting risks standardising children's health-related experiences and opportunities unless the four antecedents (figure 6.1) that enhance local sensitivity, responsiveness and relevance are in place to support action-oriented critical HL in that setting.

IE contributes to the settings-based and supersetting approaches by bringing into view the exosystem of influences on children's opportunities to develop critical HL. Conducting this IE for, and with, children made visible for the researcher how exosystemic factors, in which children are not participants, still extend into children's lives. These include logistics, e.g., the availability of a parent/caregiver's adult friend to drop-off child standpoint informants to attend an in-person interview and collect

them from the setting afterwards (and the consequent shortening/lengthening of the research encounter to fit this schedule).

The possibilities for children's critical HL in public library settings are circumscribed by school-based precedents (section 5.3). This governance happens physically, in how the public library space is arranged (child standpoint informants with access to a school library used that setting as a template for navigating the public library layout) (section 5.3.4); and discursively, in how texts prevailing in the setting are used to prescribe how the library works with schools. The lack of children's involvement as authors or readers of the texts regulating this setting became part of the data for explicating the mismatches between the documentary reality laid out in e.g. the Children's Promise (section 5.2.1) and children's experiential reality in the setting. The "mapping" process in IE, where work in the setting is traced and "mapped" (in this case, to create table 5.1), used IE's interest in how local and extra-local relations coordinate what actually happens in settings to clarify the conceptual model (figure 6.1).

The settings praxis that informed the conceptual model (Shareck *et al.*, 2013) recalls IE's links with practice theory and the closeness of the "ethnography" in IE with 'praxiography' (Abidin and De Seta, 2020, p. 5). IE has been blended with 'praxeology' to study medication administration practices in a hospital setting (Boonen *et al.*, 2017), and Nichols and Ruglis (2021) title their IE with youth 'a praxis approach'. IE therefore illuminates both the study of health literacy, based on praxeological understandings of health literacy as an embodied, situated social practice (Samerski, 2019), and the study of settings for children's critical HL development.

6.5 Limitations

The timing of this study during COVID-19 contributed to several limitations. Chief among them are the "missing" standpoint informants who could have enhanced the information power of the study (section 4.3.1): no interviews were possible with children who identified as Young Carers, a group whose experiences may have enriched the data (Kambouris, 2010; Medforth, 2022). The same limitation applies to the absence from the data of any informants from Girls' Group, with the exception of the staff member involved. There were no opportunities to talk with Girls' Group

members. Children's participation in research competed with increased demands on their time as society began to open up post-lockdowns, and fast-paced changes to guidelines around post-travel quarantine were difficult to keep up with on the standard timeline for updates to ethics approval. In comparison with staff and stakeholder informant extracts, and even (informal) insights from parents/caregivers, the lower representation of child standpoint informant data in the findings limits the ability of this study to contribute children's standpoint to IE methodology in as much depth as it had set out to do. The drawings created by children as part of the draw-and-describe critical HL activity, if collected and analysed as data, could have redressed this unevenness between child- and adult-provided insights. The drawings were not part of the dataset in this study, because their intended role was to orient children to the study topic and build rapport; but this method for understanding children's experiences of settings enriched and expanded the options available through which children could take part in the study, and should be considered in future studies with children.

The positive rapport that was developed and maintained with the CAG throughout the study (4.2.2), partly through the drawing activity, helped mitigate this reduction in information power. Children are rarely consulted on designing health literacy research projects (Jenkins *et al.*, 2023a), so consulting with the CAG went some way towards outweighing the challenging recruitment conditions that the study contended with in relation to child standpoint informants. It also made an attempt to authentically represent and reflect on children's experiences in intergenerational research encounters (Spencer *et al.*, 2020; Wyness, 2013), given that 'there is always an adult present *somewhere'* (Facca *et al.*, 2020, p. 6, emphasis in original).

As well as the missing informants, there were missing texts that could not be tracked down. Like the absence of the term 'critical health literacy' in the setting (sections 4.3.1 and 5.4.4), in IE the elusiveness of texts can constitute a finding of analytic value (section 4.1.1); but being able to access missing appendices to TIN03, or a footnoted reference to 'Public Library Logic Models for health' in the same text, might have further elucidated the findings reported.

IE is iterative and immersive, features which necessitated careful decisions to draw and redraw boundaries of the investigation to ensure its manageability within the doctoral timeline (Cupit *et al.*, 2021). The complexity of social relations was evident

when indexing the external partners who were recorded or observed working with the library consortium over the course of the research period. Additional partners were continually identified, and the final list was likely a fraction of all the partnership work that the library engages in.

Observational data were limited (sections 4.1 and 4.2.3). While there were some opportunities to informally shadow staff at online meetings and produce synchronous and asynchronous fieldnotes linked to these encounters, participant observation locally, as part of data collection, was not cleared under the COVID-19 risk assessment signed-off by the setting gatekeepers.

The study focused on a public library setting atypical for England in its business model (an IPS with charitable status and a contract with the local council to which its financial performance is held to account), and in its comprehensive involvement in previous research by thinktanks and universities. Staff informants were familiar with the repurposing of their work setting as a focus for research, to the extent that the setting could be said to be over-researched. It is therefore a limitation of the study design that insufficient consideration was given to how this setting *as a research setting* might have influenced gatekeeping procedures and access to texts not in the public domain.

A final limitation relates to the scope of catalytic validity (sections 4.1.1 and 4.2.3) in this IE study, meaning the extent to which it reorients and redefines the standpoint group's understanding of how the setting works or could work better to support the development of children's critical HL. At the time of writing, it remains unusual for children to be involved in health literacy research to the extent of co-authorship and entry into the research conversation themselves. It is also the case that '[o]ne of the ironies of IE studies is that they tend to make visible the trouble […] without providing solutions' (Spina and Comber, 2021, p. 252). An IE study's catalytic validity for children – i.e., its usefulness for spurring and supporting social transformation relevant to children's interests – is filtered through adults' writing-up processes. There are few routes to publish outputs from this thesis that would, beyond the acknowledgements section of a paper, be able to affirm children's contributions in the sort of currency valued by academia, such as CRediT (Contributor Roles Taxonomy), or support catalytic validity from children's social location. Recognising this limitation is necessary for holding the researcher to

account in ensuring that the outcomes of the research are shared with children and adults as a stimulus to discussion and action on what researchers and libraries can do to support a supersetting approach to critical HL development in children. It is also necessary for returning to reflections on the role and responsibilities of the researcher at the outset of the study (section 1.1.6) and throughout (section 4.2.3) in light of the findings. In this case, reflection on the extent to which children – both the CAG, and child standpoint informants – reoriented their previous and potential experiences and knowledge in relation to the public library setting, and what they were enabled to do there for health, is hampered by the lack of follow-up in the study around whether children engaged with the public library differently after their involvement in the research, and lack of expansion on children's feedback on their involvement (Appendix 8). This limitation is however tempered by the focus of the study on the potential of the public library setting, and not on how to catalyse and realise such potential.

6.6 Summary

This chapter has discussed the implications of the findings for the RQ, conceptual model, and methodological development. It revisited the literature to consider where the study's findings sit in relation to settings-based and supersetting approaches and critical HL, and it revised the conceptual model to reposition the library as part of a supersetting approach that incorporates additional settings working in partnership with the library.

Chapter 7 Conclusion

This final chapter clarifies the contributions of the study to knowledge about the potential application of settings-based approaches within non-traditional settings for health, and knowledge about where the development of critical HL in children might be supported beyond solely school-based settings. It considers priorities for future research and makes recommendations for professional practice. The thesis closes with a look ahead to the researcher's continuing professional development and next steps.

7.1 Significance of the study: contributions to new knowledge

The study contributes new knowledge to understandings of the potential of non-traditional settings for health and the potential role of public libraries, as part of a supersetting approach, to be supportive environments for critical HL development in children. This section considers where the study's contributions sit in relation to what was previously known.

The adoption of the settings-based approach in the 1980s (Dooris *et al.*, 2022b; World Health Organization, 1986) and its socioecological perspective on health were reflected within the discourse and practices of health promotion, from which health literacy developed as a social movement (Sørensen *et al.*, 2018) with its own distinct way of viewing health promotion's purpose and possibilities (Wills, 2009). The Shanghai Declaration called for recognition of health literacy as a critical determinant of health requiring intersectoral investment in its development in 'all populations and in all educational settings' (World Health Organization, 2016, p. 25). Yet despite longstanding commitment to the settings-based approach and its continuing centrality to milestone reports (World Health Organization, 2022a, 2022b, 2022c, 2022d), there has to date been little focus on this approach beyond the original twentieth-century conceptualisations of settings. This can be seen in the description of the supersetting approach as 'a development, a modified version 2.0' (Bloch *et al.*, 2014, p. 10) almost three decades post-Ottawa (section 3.2.3).

This thesis contributes to the "settings approach 2.0" juncture in the above trajectory by analysing how children's critical HL can be supported in a non-school-based

setting (RO1) and by providing a conceptual model for the integration of non-traditional settings for health into a supersetting approach (RO2, section 2.5.6). It contributes to the theory and application of the settings-based approach in and beyond the settings literature, extending to health literacy research with children; and it identifies IE's ontology – that people bring into being the systems and settings that shape health – as reconciled with the Ottawa Charter's action area on creating supportive environments for health. It expands the methodological array available to health literacy studies, and contributes methods developed through consultation with children (sections 4.2.2.3–4.2.2.4) to the ongoing development of the IE toolkit.

7.1.1 Contributions to understandings of and approaches to the development of critical health literacy in children

This study set out to identify whether public libraries could support the development of critical HL in children (section 2.5.6). A systematic scoping review of the literature (sections 2.2–2.3), preliminary to formulating the ROs, and a conceptual review (sections 3.1–3.2) identified that a supportive setting for critical HL would require specific antecedents to be in place for critical HL to be supported there. These antecedents were mapped onto a model (figure 3.1). Following analysis, the model was revised to represent a supersetting approach (figure 6.1).

The revised version of the conceptual model proposes that public library-based work to develop critical HL in children should be undertaken as part of a supersetting approach coordinated with other settings where children spend time, including but not limited to schools. The public library as a partner in such an approach acknowledges the wider determinants of health and raises awareness of these in the community it serves; is freely accessible to children at the point of use; involves children in decision-making around how the setting is run; and facilitates children's informed actions for their and others' health. The model acknowledges the specificities of middle childhood and, building on Whitehead (2011), presents a combined life course and supersetting approach that links children's 'library journeys' (TIN04) – and potentially their navigation of other settings, beyond the library (section 6.3.1) – with opportunities for children to learn about and plan for action on the health issues relevant to them and their communities.

The selection of a setting characterised by literacies – early years literacy, digital literacy – draws attention to the silos that have formed around different literacies and the possible value of collapsing these to enable wider learning around how to support children to develop the literacies they will need to navigate in future contexts, including critical HL in pandemics (Abel and McQueen, 2021), critical carbon literacy and planetary health literacy (Satchwell, 2013), and literacies as yet unknown (UNESCO, 2019).

The involvement of a CAG through which children were consulted on the research informs how children's critical HL can be explored with children. Listening to the CAG and piloting rapport-building and data collection tools with them that were taken forward for use with child standpoint informants (the livestreamed draw-and-describe activity and the ITTA), reframed children's participation in health literacy research. The use of the standpoint concept from IE foregrounded research relations and social relations between children and adults (Mannion, 2007) that have been under-studied in the past (section 4.1.2), but which influence children's opportunities to develop health literacy as a social practice (Jenkins *et al.*, 2023a). The thesis contributes to existing work on understandings of critical HL development in children (Fairbrother *et al.*, 2016a) in its proposal of a supersetting approach that reduces over-reliance on school-based settings for health literacy interventions (section 2.5.2) and introduces new settings and partnership possibilities fit for children's everyday health needs in the first half of the twenty-first-century.

7.1.2 Contributions to understandings of non-traditional and emerging settings for children's critical health literacy development

This study contributes to the evidence base underpinning emerging settings for health by identifying and optimising the public library as an example. Even in edited volumes dedicated to the settings-based approach, there is 'considerable selectivity in what settings are addressed' (Green *et al.*, 2000, p. 25). Public libraries are not commonly included among suggested settings for health (World Health Organization, n.d.), but are listed in the International Union for Health Promotion and Education (IUHPE) Global Working Group on Healthy Settings directory (IUHPE Global Working Group on Healthy Settings, 2022). This directory does not specify library type, but the representative citation at the date of last access in 2022 refers

to public libraries (Whitelaw *et al.*, 2017). The same reference serves for the sole mention of public libraries in the most recent handbook to the settings-based approach, where they are listed among the 'new settings' that have emerged since 2000, 'some through formalized initiatives led by the WHO and other bodies, others emerging through pilot studies and projects' (Dooris *et al.*, 2022b, p. 12); the public library is an example of the latter.

Categorisation of the public library as a "less obvious" setting for health (Kickbusch, 1995) highlights the unsystematic selection processes through which settings come to be identified under a health-promoting framework (e.g., HPS), or included in textbooks on the settings-based approach: obviousness is relative. Furthermore, the use of "emerging" to describe settings that are beginning to be studied, such as care homes (Turpie *et al.*, 2017), airports (Crimeen *et al.*, 2018), and supported housing (Nielsen *et al.*, 2021), might better and more dynamically be described as *merging* into acceptability and public health "tradition". Wenzel's (1997, n.p.) definition of settings ('spatial, temporal and cultural domains of face-to-face interaction in everyday life') no longer applies to the "new" settings, including libraries, that merge the offline and online; nor to the distinct online setting types of social media and virtual communities (the CAG can be seen as an example of a distributed virtual community, as can the online version of Girls' Group that operated during the pandemic). Public libraries, as digital community hubs, are well-placed to be a twenty-first-century supportive and enabling environment for harnessing health-promoting opportunities while also safeguarding against health-threatening factors, like digital exclusion.

Public libraries are a unique setting: 'the ubiquity and broad accessibility of the library setting […] was considered by informants to make them unique' (Whitelaw *et al.*, 2017, p. 897). Libraries bring this uniqueness to their participation in a supersetting approach, along with their capacity to reach people, 'and ultimately address deeper inequalities' in health (Whitelaw *et al.*, 2017, p. 897). What makes libraries unique, and can help define the quality of "libraryness" (TIN31), is their role as community hubs that combine environmental (macro) and organisational (meso) levels of social organisation with individual (micro) expertise. The public library setting, based on the evidence in this study, prompts a change to the 2021 definition of settings for health – 'where people engage in daily activities, in which environmental, organizational and personal factors interact to affect health' (World

Health Organization, 2021b, p. 30) – to indicate that the 'personal', micro-level factors, such as staff buy-in and professional expertise, are more important than has previously been understood. This is captured in the conceptual model (figure 6.1) which, backed by empirical data, outlines the antecedents for a library to support critical HL development in children as part of a wider supersetting approach for inter-system action on 'the interrelatedness of (critical) media, digital and health literacies' for children (Bröder *et al.*, 2017, p. 22).

This study therefore projects the public library's role outwards, to other systems, and provides impetus for exploring the value of including the public library in a supersetting approach to children's critical HL development alongside traditional settings like schools and emerging settings like social media. The library is well-positioned to build on the potential of the latter as everyday life increasingly moves online (section 3.1.1): public libraries in England already have an established digital presence in the form of their online catalogue and resources, with plans for a 'single digital presence' in progress (Connolly *et al.*, 2019). They also have experience and thought-leadership in training and hosting digital champions to help members of the public navigate online information (Gann, 2019), and have been early adopters of organisational social media accounts and 'LibraryTok' for library services marketing and advocacy (Mashiyane, 2022). Hicks (2021) has proposed future research into the role of public libraries, among other settings, as 'sponsors' that moderate access to information literacy and health literacy.

The challenges in demonstrating success post-implementation of a settings-based approach (section 3.2.1) may be exacerbated in the supersetting approach, where joined-up evidence across settings is required. To mitigate such challenges, care has been taken to ensure that the conceptual model emphasises collectivity over 'either/or' thinking in its portrayal of the public library as plugged in to partnerships with other settings, each with their special expertise and "unique selling points" that together foster critical HL. The development of critical HL in children was evidenced in the public library as a group activity; its development in other settings for health, both traditional and emerging, is therefore modelled as also being a group activity.

7.1.3 Contributions to the ongoing development of institutional ethnography for, and with, children

Written-up, IEs form a collective work: '[a]s institutional ethnographic research builds up, it begins to be possible to reach beyond specific research into expanded dimensions of the social, informed by the research and discoveries of other institutional ethnographies' (Smith, 2005, p. 44). This study contributes to the ontology and analytical project of IE by 'bring[ing] more bodies [and] places' into IE, as called for by McCoy (2021, p. 42).

In regard to 'bodies', the study brings the researcher's own embodied and experiential standpoint, as well as learning from the experiences and social location of an under-represented group in IE: children (here, CAs and child standpoint informants). The study also adds a new embodied method, modified ITTD, to the IE toolkit.

In regard to 'places', the emphasis in IE on keeping the setting in view (section 4.1.1.) – i.e., focusing on and making visible how people actually experience the setting – enhances the settings-based approach. It addresses criticism levelled against IE for its lack of spatial awareness (Billo and Mountz, 2016) by attending to physical features of the setting, e.g., interviewing a community stakeholder informant about how library settings and the furniture for them are designed (section 5.3.2). The decision in this study to apply IE to a distributed setting (a public library system geographically-dispersed across a local authority region and inclusive of a digital presence) also works towards decentralisation in IE away from single institutional functions to how these intersect across settings (Mykhalovskiy and Hastings, 2021). Similarly, the supersetting approach decentres the settings-based approach and adds to understandings of how IE can be applied to gain insights into the complex, rhizomatic workings of constituent settings and their interrelated social relations locally and extra-locally.

The application of the model to public libraries that operate under different governance arrangements, to libraries outside of the UK, or to non-library settings in a supersetting approach where the antecedents are present (section 6.3.1) is possible if the model's openness to onward development and revision is put to use in guiding evidence-gathering for other examples. This is so as not to hinder

libraries' adaptability to local needs, or risk producing the same 'standardising effects' (section 4.1.1) traced by IE studies. Such a 'one-size-fits-all' model, if imposed without adjustment, would be to the detriment of the sort of innovation at the micro-level demonstrated by Girls' Group.

7.2 Implications of the study for health literacy and health promotion research and practice

This section considers the implications of the new understandings that this study has contributed. It makes recommendations for where research should turn next, and the scope for informing professional practice.

7.2.1 Implications for research

The findings indicate several research directions. Further research into public libraries as part of a supersetting approach is needed to advance the evidence base of the settings literature in relation to non-traditional and emerging settings and to clarify the inclusion of the public library in the landmark Danish SoL study (section 6.3). This could help expand the IUHPE Global Working Group on Healthy Settings directory entry for 'Libraries' from the current single bibliographic reference (section 7.1.2).

Further iterations of the model conceptualising public library participation in a supersetting approach to children's critical HL development could e.g. build on the 'synergy' model (Toft *et al.*, 2018, fig. 3), which considers what is brought forward by target groups (e.g., children); what is already up-and-running and locally prioritised; and what is known to work elsewhere. There may also be value in inquiring into the TCBL concept (sections 3.2.3 and 6.2.3) and how this could be integrated into a supersetting approach, alongside child-identified settings (section 6.3). The design of interventions for children's action-oriented critical HL should make use of children's knowledge and experiences. This requires looking beyond the health literacy literature to learn from e.g. child-centred methods used in library and information science (LIS) (Barriage, 2018) and critical pedagogy (Simovska, 2011). Enhanced interdisciplinary working would be of benefit to all the above priorities.

7.2.2 Implications for practice

Public libraries can support children's critical HL development by coordinating, with children and other settings, an accessible, inclusive and sustainable collective through which children have the opportunity to learn about and take action on the wider determinants of health. This should be a group activity supported by motivated staff with the experience and skills to translate and put into practice models and dynamics from other settings, e.g., Girlguiding and youth clubs. The example of Girls' Group in this thesis suggests that developing children's critical HL via a collective intervention saves staff time (section 5.4.4). For use with further such groups, staff and CAs saw value in co-producing with children a set of critical HL learning materials: a critical HL "pack" (section 5.4.4) or toolkit (Mattern, 2021), possibly one that could experiment with applying IVAC and Future Workshop approaches (section 6.2.1) or complement a recently-published induction guide for frontline staff in public libraries (TIN126). However, it is important to recognise that 'abstracting or simplifying complicated components or concepts into kits for mobility and ease of use […] can make us feel like we are in control, literate and resilient when we are not' (cheapjack, 2018, n.p.). To avoid simplification, the critical HL toolkit could follow the lead of the #CriticalKits project, which aims to improve scientific literacy by balancing accessibility with a discovery-led approach that is open to exploring complexity (cheapjack, 2018). As the kit would benefit from children's involvement in its creation from the outset, the early draft developed by the researcher and appended to this study is indicative only (Appendix 17).

Staff informants made further suggestions for how the research might apply to professional practice. These included provision of a one-page briefing based on this thesis (Appendix 17) to library sector advocacy organisations to support prioritisation by the UK Government of updates to the Byelaws that override locally-ratified versions and make them fit-for-purpose in modern public library settings. This "elevator pitch" briefing is also to be shared with the staff and community stakeholder informants and the gatekeepers of the study setting. It is accompanied by a visual abstract for sharing with all the children who informed the research, other children they know, and on social media (Appendix 17).

Improved support for staff who are willing to bring their non-role-based skills and expertise to work was also identified as important in staff informant interviews (section 5.4) if initiatives such as Girls' Group are to be offered in more than one library branch, wherever there are staff members interested in taking on similar initiatives. Again drawing on a Girlguiding/Scouting model, a capabilities approach to children's critical HL could be adopted to inform badgework, whereby children work towards achieving challenge badges (Pithara, 2020) (section 1.1.4).

Research partnerships between public libraries and other settings for health need to be explored across the UK to facilitate research-informed practice (Latham and Lenstra, 2021), perhaps guided by Health Education England's pilot sites for health literacy and digital literacy (Health Education England, 2022) and best practice collections (Ainsley, 2022; Heydecker, 2019; Libraries Connected and Carnegie UK, 2022). Collaborations like this could build on previous research aligned with, but pre-dating, the supersetting approach (Lahoz *et al.*, 2013; Mahmud *et al.*, 2010).

7.3 Next steps as a researcher and practitioner

It has been noted, in the IE literature, that 'IE colleagues work differently in their day-to-day professional practices and in their future research studies as a result of taking on this standpoint and approach to analysis', but 'this has yet to be systematically documented' (Spina and Comber, 2021, p. 252). This section documents my continuing professional development as a researcher and practitioner.

The process of writing this thesis has fed into four peer-reviewed publications (Appendix 18): an open access journal article based on the main findings of the thesis (Jenkins *et al.*, 2022), published in a Special Issue on 'Health Literacy and Social Contexts' in September 2022 (which had received 740 article views by December 2022); a second open access journal article on involving children in health literacy research (Jenkins *et al.*, 2023a), published in a Special Issue on 'Health Literacy and Health Equity in Children' in December 2022; a third open access journal article drawing on the conceptual review in Chapter 3 (Jenkins *et al.*, 2023b), published in a Special Issue on 'Health Promoting Settings in the 21st Century: New Approaches and Competencies to Address Complexity and Inequity in an Increasingly Globalized World' in February 2023; and a book chapter on

teaching and learning health promotion in offline and online settings (Jenkins, 2022). Two further outputs are planned: a book chapter on community-based settings for children's health literacy in England (in peer review), and a journal article based on the systematic scoping review in Chapter 2 (pre-submission).

The writing process has coincided with increasing recognition nationally of the public library as a setting for health (Smart, 2022). The public library setting is central to the case-study threaded throughout Health Education England's e-learning for healthcare module on health literacy (elfh, 2022), which for many NHS and public health staff forms their introduction to the concept, prior to health literacy awareness training. Although instigating change was not within scope for this study (section 2.5.6), after data analysis I was invited to advise on the draft job description for a new post dedicated to health literacy work in the study setting, which also became a Health Education England pilot site for health literacy and digital literacy. The post was for a temporary Health and Digital Literacy Coordinator, beginning in March 2022 (TIN34). I also accepted a request from the gatekeepers of the study setting to offer all staff a free training session that extended the Health Education England slide-deck on health literacy to focus more on critical HL, health misinformation, and digital exclusion. This session provided a way for me to thank staff for the time they had given the research. A recording of the session was planned to be added to the staff training portal.

Institutional ethnographers ("IErs") develop their 'IE literacy' via a meta-IE approach (IE studying IE) using IE tools: reading, observing, and talking with other IErs about IE supplement the process of carrying out an IE study (Ion, 2021). Networks of novice and more experienced IErs have been instrumental to my personal development in IE, the way I orient to research, and how I reflect on my professional practice through an IE lens.

IE is utilised differently across national contexts (Fishberg, 2021). The application of IE in this study is influenced by a mix of my UK university context, with support from the UK and Ireland Institutional Ethnography Network and the Studying Healthcare using Institutional Ethnography (SHIE) network; and the Nordic IE in which I was trained by the University of Oslo in 2020. Nordic IE is distinct enough to have its own handbook (Lund and Nilsen, 2020), and I maintain links with the Nordic IE research community through 3G-IE, a group of Oslo IE course alumni who self-

identify as “third-generation” IErs. The 3G name is based on grouping the development of IE into three broad waves: early formulation by Dorothy Smith with key contributions from George W. Smith, the publication of *The Palgrave Handbook of Institutional Ethnography* (Luken and Vaughan, 2021), and now IE’s post-*Handbook* directions.

An exchange between IErs on social media summarises the ease with which IE can become a researcher’s default outlook: ‘I hear a possible #institutionalethnography but then again I always hear that!’ (Kearney, 2020), and the reply: ‘Once you have been bitten’ (McNulty Burrows, 2020). I plan to use IE again in public health research, in combination with other approaches, such as mediated discourse analysis (also known as nexus analysis), that share its ontological and epistemological perspective and interest in studying social practices. Two possibilities include: building on existing IEs that have explored the social organisation of universities (Murray, 2018) by placing them in conversation with the Healthy Universities model from the settings literature (Newton *et al.*, 2016), applying IE to health professions education in relation to health literacy (Kearney *et al.*, 2019), or combining IE with critical HL as a joint strategy for studying and addressing the commercial determinants of health.

Earlier in this thesis (section 1.1.5), I wondered whether the ‘cautious optimism’ towards school-based health education translating to critical HL practices in the long-term (Dixon *et al.*, 2022, p. 13) could be extended to the public library setting and its potential to develop critical HL in children. The findings demonstrate grounds for such ‘cautious optimism’, and I would like to be part of future partnership work towards integrating critical HL support in libraries and other settings, perhaps as part of the identification of health literacy as an Area of Research Interest in neighbouring Wales (Senedd Research [@SeneddResearch], 2022).

In their paper, Dixon *et al.* (2022, p. 6) take the reader behind-the-scenes: ‘[o]ur working title for the project was ‘what stuck with you?’ […] this encapsulated the idea that we were interested in exploring the impact of health education learning experiences on participants’ lives beyond school’. There are many aspects of this thesis, and the reading, research, and relationships underpinning it, that will “stick with” me and inform my future ways of working. IE’s wide conception of ‘work’ will continue to be significant for recognising the health literacy-related work that people

do. But what will stick with me most are the contributions of the children who consulted on and informed this research, and the imperative to involve children in health literacy research that seeks to make a difference to their lives.

7.4 Summary

This concluding chapter has positioned the thesis along the timeline of the settings-based approach. The literature on the settings-based approach increasingly recognises the potential of non-traditional settings, but public libraries, and their role in the evolution of the supersetting approach, have not yet figured prominently. Settings-based critical HL for children has been neglected as being complex in its conceptualisation and politically-sensitive in its operationalisation. The potential of micro-level activities to influence the macro perspective that critical HL requires has been underemphasised. This study demonstrates the importance of local collective action for fostering wider support. It contributes a revised conceptual model of the public library as part of a supersetting approach to children's critical HL that is coordinated with other settings accessible to children (including schools), and potentially transferable to other contexts where the modelled antecedents are present.

The study has implications for the literature on the settings-based approach and for the ongoing development of IE. Follow-up work based on the findings includes further research into the supersetting approach to maximise the opportunities to develop critical HL that are available to children. Recommendations include improved involvement of children in the health literacy research process (as advisors, and as informants), and the development of resources to support motivated public library staff to co-develop, with children, group activities for critical HL.

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Senedd Research [@SeneddResearch] (2022, September 21) .@seneddhealth are interested in research and insights on health literacy, which is a person's ability to find, understand, and act on health information, to know which health services to use, when to use them, and to be active partners in their care.🩺 (2/6), *Twitter*. Tweet. Available from: https://twitter.com/SeneddResearch/status/1572519455758090240

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Appendices

Appendix 1: Reasons for exclusions from the systematic scoping review

Papers were screened-out of the systematic scoping review (Chapter 2) for the following reasons:

1. No reference to critical HL in the ti/ab text, e.g., Andorfer (2020), Anselma *et al.* (2019), Baek and Lee (2019), Bhagat *et al.* (2018), Boberova *et al.* (2017) Bollweg *et al.* (2021), Bond *et al.* (2013), Bonde *et al.* (2018), Bray *et al.* (2021a, 2021b), Brey *et al.* (2007), Cowe (2018), Diamond *et al.* (2011), Fairbrother *et al.* (2016), Fane and Ward (2016), Fok and Wong (2002), Friel *et al.* (2015), Gordon *et al.* (2016, 2018), Hyman *et al.* (2020), Jahan (2000), Kalnins *et al.* (2002), Kärkkäinen *et al.* (2018), Kelly and Nash (2021), Knisel *et al.* (2020), Kostenius and Bergmark (2016), Kostenius and Lundqvist (2021), Kostenius and Warne (2020), Kupersmidt *et al.* (2010), Mansfield (2020), Matambanadzo *et al.* (2018), Mc Conell Desaive (2020), Nash *et al.* (2021), Nsangi *et al.* (2017a), O'Toole (2017), Pike and Ioannou (2017), Robinson *et al.* (2018), Rubene *et al.* (2015), Ryan *et al.* (2012), Sabinsky *et al.* (2018), Satchwell (2013), Stjernqvist *et al.* (2019), Tarver *et al.* (2016), Thomson and Robertson (2014), Truman *et al.* (2017), Velardo and Drummond (2017, 2019).
2. Focus on post-primary education, e.g., Barwood *et al.* (2020), Hoffman *et al.* (2019), Parisod *et al.* (2016), Peralta *et al.* (2021), Woods-Townsend *et al.* (2018).
3. Unclear as to whether children aged seven to 11 are included in the sample population, e.g., Drew (2015), Higgins (2014), Im and Swan (2019).
4. Salami-slicing of projects already represented in the results.

Appendix 2: Papers eligible for inclusion in the systematic scoping review

Table A2.1 provides further details on the papers extracted in table 2.4 (Chapter 2).

Table A2.1 Papers eligible for inclusion in the review

#	Reference	Location	Population	Setting / context	Definition / dimensions of critical HL in children	Conceptual framework	Critical HL intervention / methods / outcome measure / implications
1	St Leger (2001)	Australia	Incl. ages seven to 11	School	An important goal of school-based education towards children's autonomy, empowerment and change-oriented engagement in school and community health issues	HPS	Setting-specific challenges prevent schools from developing critical HL in children: the traditional structure and function of schools, teachers' practices and skills, time and resources
2	Kambouris (2010)	Australia	Incl. ages 10–11. Young Carers aged below 10 expressed interest in participating	NGO (non-governmental organisation)	A suite of 'power-tools' for overcoming the potentialities of poor health, breaking down structural 'power-blocks' and increasing the profile of Young Carers	Social learning, Freirean critical consciousness-raising, emphasis on personal strengths	Input from allied health professionals. The younger individuals are when they attain critical HL, the more likely they will be to exert healthy behaviours throughout their life
3	Mogford *et al.* (2011)	United States	Adaptable for ages seven to 11	School	Understanding of the social determinants of health (SDOH) combined with the skills to take action at individual and community level	Just Health Action (JHA) curriculum with 4 dimensions:	Teaching students how to take action on the SDOH increases students' empowerment to act and will lead to improved health equity. The curriculum is intentionally adaptable and

						Knowledge (of the SDOH and rights-based education); Compass (activities that help students find their own direction as change agents); Skills (advocacy tools and strategies); Action (development and implementation of an action – letter-writing, art activism, street theatre, fundraising – to increase health equity by addressing the SDOH)	determined by learners' age and skill level, the learning objectives, and the length of time available. New content and action skills are added in response to new audiences and within different contexts

4	Robertson and Thomson (2012)	Canada	Incl. ages seven to 11	School	Incl. critical HL as a keyword. Critical health literacies (plural) are geared towards building capacity to make changes in society to address the social, environmental, and economic determinants of health	New Literacy Studies	A curriculum highlighting contradictions in the social construction of health issues would encourage the actions of students (and teachers) towards interrogating earlier paradigms of health and address the uses of space in schools to support full participation and inclusion
5	Corcoran (2014)	Australia	Incl. case-study of a 10-year-old	School	Operational definitions of critical HL as a social practice which can manifest differently in different situations are at an early stage of theoretical and methodological development. Critical health literacies (plural) go beyond self-interest to embrace individual and community capacity for action geared towards tackling inequities and encourage a range of epistemologies for understanding health and engaging children from within the lives they occupy and adults sometimes share	Critical health psychology; critical education psychology	Distinction between ameliorative and transformational interventions for critical HL. Transformational interventions are contextual (ecological), political (interrogate power), value-driven (promote social justice) and use a praxis-based approach (work in solidarity with disadvantaged communities to change social systems). Interventions need to consider how issues and problems are framed; acknowledge values and accountability; operate at multiple levels of analysis; aim for equitable outcomes; work in partnership; and include reflection. Transformational interventions attend to power relations. Power imbalances between adults and children mean that how children are permitted to enact health literacies in their school requires ongoing examination
6	Renwick (2014)	Australia	Refers to primary	School	The skills that enable participation in society and control over daily occurrences,	Three-dimensional (3D) literacy	Developing critical HL skills requires the shared work of teachers and students in the process. Teachers and

			school education		especially those that influence health, and provide an important orientation for health literacy in schools with young people who are not ill. Critical HL facilitates students' praxis and gives them the opportunity to reflect and act for transformation by challenging how they locate themselves in the classroom and their taken-for-granted epistemological positioning	model (operational, cultural and critical); Freirean critical pedagogy	students work together to acknowledge power differentials, explore how health knowledge is subjective, malleable and contested, and give educational value to the expertise that students have developed within their cultural context outside of school
7	Velardo (2014)	Australia	Incl. age 11	School	Drawing on social determinants and civic orientation, critical HL can be conceptualised as a form of health citizenship, empowering individuals to join together in social and political processes that act to modify the underlying causes of health inequalities. Critical nutrition literacy should encompass critical appraisal skills alongside increased awareness and participation in action to address barriers to good nutrition	Social constructionism; socioecological framework	Children need opportunities across diverse settings, including schools, to develop and practise interactive and critical HL skills
8	Wrench and Garrett (2014)	Australia	Incl. ages seven to 11	School	Capacities to selectively access and critically analyse health-related information to exercise greater control over	New Literacy Studies; embodiment	Teachers' own health literacies and practices are significant to the project of developing children's critical HL. Bodies, including how they move, are

					personal circumstances and to promote the health and well-being of others; the knowledge, skills, and confidence to take action, to participate and function fully in society with high degrees of control		exercised, nourished, shaped, represented and understood, are central to the development of relevant personal knowledge, capabilities, interpersonal and social skills that enable children to take action in relation to health and well-being
9	Robertson and Scheidler-Benns (2016)	Canada	Incl. ages seven to 11	School	Opening access to information to allow students to make informed decisions about their health and environment; health literacy that has a critical edge and action component	Discourse analysis; policy analysis	A health literacy curriculum that focuses on critical HL offers children a more complete picture of their bodies and their food ecosystems, and encourages a sense of agency and discernment towards healthy eating
10	Bruselius-Jensen *et al.* (2017)	Denmark	Incl. ages 10–11	School	The ability to relate critically to health recommendations, understand the social and structural determinants of physical activity, and use insights to change existing conditions to promote a physically active everyday life for themselves and others and to imagine alternative environmental scenarios that are more conducive to physical activity	Nutbeam's health literacy typology	Curriculum-integrated, classroom-based IMOVE programme. Only a limited number of class discussions supported the development of critical HL beyond cognitive skills. Classes explored the Danish welfare system. Pupils approached critical HL in their reflections on societal structures' effects on health and the question of who is responsible for ensuring an active school day. In the process of imagining initiatives that could increase physical activity levels, some pupils identified current barriers related to school structures and their own agency within them. In some cases, these discussions reached the critical HL level when the pupils questioned whether school structures

							limit personal agency. Pupils questioned the applicability and actual value of step-count recommendations but teachers failed to seize on these opportunities to discuss their validity. Further research into approaches to support classroom-based critical HL development is needed

11	Kilstadius and Gericke (2017)	Sweden	Refers to primary school education	School	Analysing and critically evaluating information in the media; analysing the issue of hygiene from a solidarity point of view (protecting others); differentiating between sound hygiene and excessive behaviour; recognising the importance of protection for the population, not only the individual; critiquing the spread of misinformation; analysing what the spread of antibiotic resistance can lead to at the personal as well as societal level. Critical HL involves stepping out of ourselves and viewing health issues in terms of the benefits to the common good, and recognising conflicts of interest, e.g., treatment with antibiotics might cure the disease and the person can go back to work more quickly, but antibiotic wastes will be spread in the sewers	Nutbeam's health literacy typology; Bloom's taxonomy of learning objectives	Functional and interactive levels of health literacy are dominated by a micro perspective, where the aim is to understand and interpret knowledge in order to take certain actions in personal lives. A macro perspective is introduced with critical HL, where societal and population health is also of concern. The knowledge we need to develop is not based on cognitive understanding alone, but also involves establishing good routines, which need to be established early in life, and action competence. The levels of health literacy cannot be viewed as totally separate and talked about disjointedly. Instead, the levels should be viewed as corresponding vessels always informing each other, although with a stronger emphasis on the higher levels as the child gets older. Future research: at what age is it possible to include critical HL perspectives? What is the relationship between cognitive and affective dimensions related to action competence? What is the relationship between intended and enacted curriculum?
12	Liao *et al.* (2017)	Taiwan	Incl. age 11	School	Critical thinking skills that can be used to analyse health-related information to exert control over health-related life situations and events	Nutbeam's health literacy typology; children's	There have been limitations in the measurement of children's health literacy, including use of instruments not designed for children or designed only for sick children

						real-world experiences; proficiency-based Competence Indicators from the Taiwan Health Education Curriculum Guidelines	
13	Renwick (2017)	Australia	Refers to children	School	Critical HL challenges the biomedical approach to health literacy, which is not sufficient for a person to build a critical social consciousness and illuminate how social determinants of health create inequitable health or how it could be ameliorated. Critical HL includes understanding what creates health and seeing opportunities for empowerment to shape and recreate social reality. As a situated social practice, critical HL is able to reveal how social, economic, and environmental conditions impact the health of diverse social groups. This is not sufficient in and of itself and, therefore, a critical health literate person is also able to	Three-dimensional (3D) literacy model (operational, cultural and critical); Freirean critical pedagogy (cf. Renwick, 2014)	Further research is warranted as to the difference to be made when health literacy makes visible knowledge and cultural expectations and builds a repertoire of reflective practice through understandings of power and social justice

					see and enact possibilities for action on social determinants of health		
14	Fage-Butler (2018)	Scotland	Incl. ages 10–11	School	An outcome of feminist pedagogy that can counter health inequities	Freirean critical pedagogy; gender theories (as Freire's approach lacks gender sensitivity)	RESPECT programme to develop discussion with children about the links between violence against women and wider gender equality issues. Children's critical reflections about health, though they may not convert to action, can be valuable in themselves. The more peripheral inclusion of the transformative social action stage may reflect the relatively young age of the target audience. There is value in combining critical pedagogy, gender theories and critical HL when addressing public health issues with sociocultural foundations
15	Ubbes and Ausherman (2018)	United States	Incl. ages seven to 11	School	Addresses issues of access and equity for health information and services. This process includes critical problem posing with creative solutions to empower people who have a variety of backgrounds, health needs, and interests	Nutbeam's health literacy typology; critical content analysis	Since health education lacks adequate time in the school curriculum, it may be important to teach health educators how to find health-related topics, concepts, and skills in reading materials for children from different cultural, linguistic, and geographic backgrounds to increase connections to critical HL. There was an emphasis on accessing books both in archival hard copy and digital formats to characterise how health is represented in available collections. Critical HL was minimally explored in this study

16	Simonds *et al.* (2019)	United States	Incl. ages nine to 11	Camp (summer / afterschool), field trips to local springs and rivers	Where the child is the change agent working with others to take action as needed	Nutbeam's health literacy typology	Projects undertaken by children collecting and interpreting data to build new knowledge and determine needed action. Children collected and tested their own water samples and presented results to their families. They shared ideas for reaching other children, such as presenting at school assemblies. Returning children served as role models for children new to the programme. Recruitment methods may have biased the sample to highly motivated children and engaged parents. However, the initial goal was to identify these types of children – those with the potential to be change agents in their community. Future research will focus on further increasing critical HL among child participants by asking them to co-lead research projects investigating water-related issues in their community
17	Fairbrother *et al.* (2020)	England	Incl. ages 10–11	School	Critiques conceptualisations of critical HL which take an individualistic approach depicting citizens as cognitive agents instead of as emotional, social and embodied beings; instead, critical HL is context-specific, makes use of the resources at hand and is prompted and shaped by personal	Health belief model; theory of planned behaviour; social cognitive learning; socioecological framework	Love Life, Smokefree Sports preventive tobacco intervention. Children assemble their understandings of health through visual and material representations and their contextualised understandings based on past and envisaged experiences. Health education should be meaningful in the context of children's everyday lives. Starting from the premise that children are active critical health literacy

					experience and somatic (bodily) knowledge		practitioners and working with them to design and evaluate health education initiatives can promote this. Involving children at an early stage in the intervention development process can help to ensure that their views are mobilised in the design of the intervention. Children strive to make sense of their learning for their everyday lives and welcome the opportunity to share their contextualised understandings to make links. Affording children opportunities to engage in critical HL is paramount for meaningful health education. Neglecting to do so risks inadvertently exacerbating inequalities in health since children for whom key intervention messages may be the most difficult to reconcile with their everyday experiences may struggle most to take them on board
18	Thongsong and Neranon (2020)	Bangkok	Incl. ages seven to 11	School	Media literacy and self-management skills	Nutbeam's health literacy typology	Health behaviour for obesity prevention among primary school students is directly influenced by students' critical HL

Appendix 3: Recruitment of Child Advisors: poster, information sheet, and consent form for Child Advisors and parents/caregivers of Child Advisors

EST 1892 LSBU

Information Sheet – Child Advisor (online research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins, PhD student

Contact Details of Researcher: jenkinc7@lsbu.ac.uk

You are being invited to take part in a research project. Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What's the research about?

This project aims to answer the question **Can public libraries develop critical health literacy in children?**

- Literacy means being able to read and write. It enables you to do things that you wouldn't be able to do otherwise.
- **Critical health literacy** means being able to understand health information, agree or disagree with its relevance to yourself or your community, and take action or make changes in response to the information.
- I am interested in finding out how **public libraries** can support **children aged 7–11** to develop critical health literacy.

I'm 7–11 years old and I would like to help with research in my local community – should I take part?

It is up to you! Taking part is **voluntary**, and you will need **permission from your parent/caregiver** too.

Taking part will involve you being a **Child Advisor** – an expert in being a child! You will be helping me to make decisions on the design of the project so that it is interesting and safe for other children.

If you decide to take part, you will be given this information sheet to keep and be asked to sign a consent sheet. You will still be **free to withdraw** at any time – you don't have to say why. I'll check you're still happy at each stage of the research, and you can contact me if you don't want to take part anymore (up to the time when I finish collecting data for the research).

What will I be asked to do?

If you decide to take part:

- You will need to be available online for 1–3 separate sessions (you don't have to get involved in all 3 sessions, but you can if you would like to!)
- In the first session, I will ask for your feedback on project documents and ideas for non-money rewards to thank you and other children involved in the research.
- In the second session, I will test out my interview technique by asking you to train me in 'being you' during a situation where you are researching a piece of health information – you will teach me your steps. You will get to give me honest feedback on how I do the interview, and what I need to do better.
- In the third session, I will update you on what I have discovered so far and we can talk about how to share the research findings with children across the UK.

What are the disadvantages of taking part?

Taking part in the research will require you to give up some of your time.

If you join the research via a video-link, I may be able to see/hear part of your surroundings when you are speaking to me.

What are the benefits of taking part?

You will find out what it is like to design a research project – this is a great skill to have!

You will have the opportunity to improve the experience of other children involved in the research.

What will happen to the data that gets collected?

All the information collected about you and other people taking part will be kept private. To protect your identity, you will be able to choose a pseudonym (a research codename or nickname) that will be used when I refer to you and your work in my dissertation (a document about what we find out that I will write after the project for my degree). The dissertation will be published online for other researchers and members of the public to read.

Personal data will be stored safely until the end of the project, and then destroyed. Data collected from talking with you will be stored safely for 5 years after the end of the project.

If you tell me something about you or anybody you know being in any danger, I will need to tell someone else about it so that they can help.

Who can I contact to find out more?

- If you have any questions about the research or would like to find out more, you can contact me by email (jenkinc7@lsbu.ac.uk).
- If you have any worries about the research, please contact my manager, Dr Susie Sykes, Associate Professor in Public Health, by email (sykess@lsbu.ac.uk).

Thank you for taking the time to read this information and for considering taking part!

Child Advisor Name:

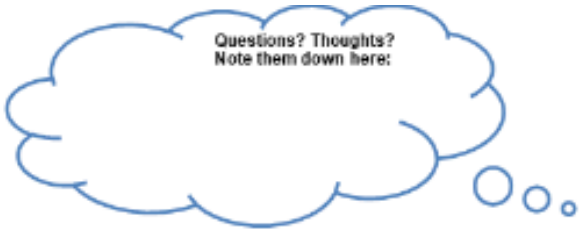
Signature:

Date:

Researcher Name:
Catherine Jenkins
Signature:

Date:

EST 1892 LSBU



Research Project Consent Sheet – Child Advisor (online)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Please read each option and place the initials of your name (e.g. CJ) next to the ones you agree with. You will be given a copy of this sheet to keep.

Taking part	Initials
I confirm that I have read and understood the information sheet and/or the researcher has explained the above study. I have had the opportunity to ask questions.	
I understand that my participation is voluntary and that I am free to withdraw at any time, without providing a reason.	
I agree to take part in the above project.	

Use of my information	Initials
I understand my personal details such as phone number and address will not be revealed to people outside the project.	
I understand that my data/words/handwriting/drawings may be quoted or reproduced in publications, reports, posters, web pages, and other research outputs.	
I agree for the data I provide to be stored (after it has been anonymised) in a specialist data centre and I understand it may be used for future research.	
I agree to the sessions being audio and video recorded.	
I agree to the use of pseudonymised quotes in publications.	
I agree to assign the copyright of any materials I produce in this project to the researcher.	

Child Advisor Name:

Signature:

Date:

Researcher Name:
Catherine Jenkins
Signature:

Date:

If you have any concerns about the project, please contact the project supervisor:
Dr Susie Sykes, Associate Professor in Public Health
Email address: sykess@lsbu.ac.uk

EST 1892 LSBU

Information Sheet – Parents/Caregivers (online research with Child Advisor)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins, PhD student

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Children **aged 7–11 years** are being invited to take part in a research project. Before you decide whether you would like your child/children to consider taking part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What is the research about?

This project aims to answer the question **Can public libraries develop critical health literacy in children?**

- Literacy enables us to do things we wouldn't be able to do otherwise. **Critical health literacy** means being able to understand health information, assess its relevance to ourselves or our communities, and take action as a result.
- Practising critical health literacy early in life, during childhood, can have health benefits later.
- The setting where critical health literacy is practised can shape what critical health literacy looks like.
- I am interested in finding out how children can be supported to practise critical health literacy in digital public library settings.

Why is/are my child/children invited to participate?

I am forming a group of Child Advisors to support the development of tools in my research. Taking part is **voluntary**. Your child/children will require consent from you before they can give their own consent to take part. If you are happy for your child/children to take part, you will be given this information sheet to keep and be asked to sign a consent sheet. You will still be free to withdraw your child/children at any time – you don't have to say why. You can contact me if you don't want them to take part anymore (up to the end of the data collection stage for this project).

What will taking part involve for my child/children?

If your child/children is/are eligible and you're both happy for them to take part:

- They will need to be available online for 1–3 separate sessions (they will not be expected to get involved in all 3 sessions, but they can if they would like to). You are welcome to accompany your child/children on the video-link.
- In the first session, I will ask for their feedback on project documents and non-monetary incentives for their involvement.
- In the second session, I will pilot my interview technique with them. The interview will ask them to describe in detail their process for researching a health topic, and I will ask them for their views on how I conduct the interview.
- In the third session, I will share the research findings so far with them and request their ideas on how these should be shared with children in future.

Possible disadvantages/risks to participation

Taking part in the research may require you to give up some of your time to accompany your child/children on the video-link and provide them with a quiet place where they can join the research using a digital device. Ideally it will also require WiFi/cellular data, but if this is not possible I can conduct the sessions by telephoning you and your child/children instead.

Possible benefits to participation

Your child/children will experience what it is like to get involved in designing a research project. This may be useful to them at school and in later life.

What will happen to the data that gets collected?

All the information collected about your child/children will be kept strictly confidential (subject to legal limitations). They will choose a pseudonym to protect their identity and ensure their privacy and anonymity in the collection, storage and publication of data. All data generated in the research will be stored securely in paper or electronic form. Data generated by the study will be retained in accordance with the University's Code of Practice and destroyed 5 years after the end of the project.

If your child/children tell/s me something that may be a safeguarding concern, I will need to report it.

What will happen to the results of the research study on completion?

The results will be uploaded to the University's open access repository as part of my dissertation.

Who is organising and funding the research?

I am conducting the research as a student at the School of Health and Social Care, London South Bank University. The research is unfunded.

Who has reviewed the study?

The research has been reviewed by the School of Health and Social Care Ethics Panel at London South Bank University. I have been approved to work with children through a Disclosure and Barring Service (DBS) check.

Who can I contact for further information?

- If you have any questions about the research, please contact me by email (jenkinc7@lsbu.ac.uk).
- If you have any concerns about the research, please contact the project supervisor, Dr Susie Sykes, Associate Professor in Public Health, by email (sykess@lsbu.ac.uk).

Thank you for taking the time to read this information.

Parent/Caregiver Name:	**Researcher Name:**
Child Name:	Catherine Jenkins
Signature:	**Signature:**
Date:	**Date:**

EST 1892 LSBU

Research Project Consent Sheet – Parents/Caregivers (online research with Children's Advisory Group member)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Please read each option and place the initials of your name (e.g. CJ) next to the ones you agree with.

Participation of my child in the project	Initials
I confirm that I have read and understood the information sheet and/or the researcher has explained the above study. I have had the opportunity to ask questions.	
I understand that my child's participation is voluntary and that I am free to withdraw them at any time, without providing a reason.	
I agree to my child taking part in the above project.	

Use of my child/children's information	Initials
I understand my child's personal details such as phone number and address will not be revealed to people outside the project.	
I understand that my child's data/words/handwriting/drawings may be quoted or reproduced in publications, reports, posters, web pages, and other research outputs.	
I agree for the data provided by my child to be stored (after it has been anonymised) in a specialist data centre and I understand it may be used for future research.	
I agree to the sessions being audio and video recorded.	
I agree to the use of anonymised quotes in publications.	
I agree to assign the copyright of any materials produced by my child related to this project to the researcher.	

Parent/Caregiver Name:
Child Name:
Signature:

Date:

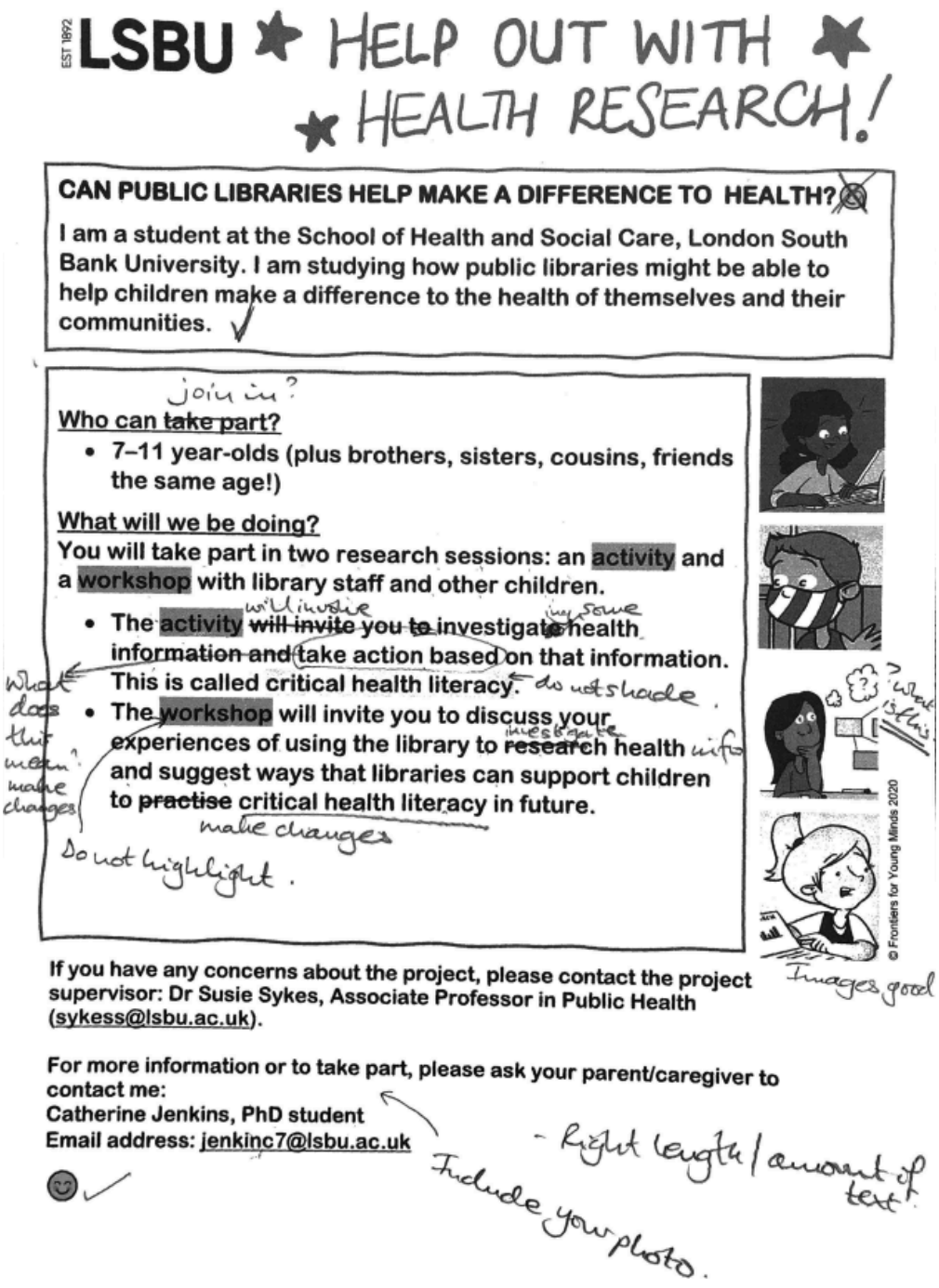
Researcher Name:
Catherine Jenkins
Signature:

Date:

If you have any concerns about the project, please contact the project supervisor:
Dr Susie Sykes, Associate Professor in Public Health
Email address: sykess@lsbu.ac.uk

Appendix 4: Recruitment of child standpoint informants: draft poster, information sheet, and consent form marked-up with suggested edits by a Child Advisor

The CA dictated the changes they wanted to see to their parent, who noted them directly on the form and scanned it back to the researcher.



EST 1892 LSBU ★ HELP OUT WITH ★ ★ HEALTH RESEARCH!

CAN PUBLIC LIBRARIES HELP MAKE A DIFFERENCE TO HEALTH?

I am a student at the School of Health and Social Care, London South Bank University. I am studying how public libraries might be able to help children make a difference to the health of themselves and their communities. ✓

join in?

Who can ~~take part~~?

- 7–11 year-olds (plus brothers, sisters, cousins, friends the same age!)

What will we be doing?

You will take part in two research sessions: an activity and a workshop with library staff and other children.

- The activity ~~will invite you to investigate~~ will involve in some health information and take action based on that information. This is called critical health literacy.
- The workshop will invite you to discuss your experiences of using the library to ~~research~~ investigate health info and suggest ways that libraries can support children to ~~practise~~ critical health literacy in future.

What does this mean? make changes

make changes

Do not highlight.

do not shade.

Images good

If you have any concerns about the project, please contact the project supervisor: Dr Susie Sykes, Associate Professor in Public Health (sykess@lsbu.ac.uk).

For more information or to take part, please ask your parent/caregiver to contact me:
Catherine Jenkins, PhD student
Email address: jenkinc7@lsbu.ac.uk

Include your photo.

- Right length / amount of text

EST 1892 LSBU

Questions? Thoughts? Note them down here:

Information sheet – children (online research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins, PhD student

Contact Details of Researcher: jenkinc7@lsbu.ac.uk

Photo

You are being invited to take part in a research project. Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What's the research about?

This project aims to answer the question **Can public libraries develop critical health literacy in children?**

- Literacy means being able to read and write. It ~~enables~~ allows you to do things that you wouldn't be able to do otherwise.
- ~~**Critical health literacy** means being able to understand health information, agree or disagree with its relevance to yourself or your community, and take action or make changes in response to the information.~~
- I am interested in finding out how **public libraries** can support **children aged 7–11** to ~~develop critical health literacy~~ find health information, see how it effects me + my community + friends + respond to the information

I'm 7–11 years old and I would like to help with ~~research in my local community~~ – should I take part?

~~It is up to you!~~ Taking part is ~~**voluntary**~~, ~~and~~ you will need **permission from your parent/caregiver** ~~too~~ as well.

You have been asked to participate so that I can understand what it's like for you when you use online library resources to research health issues by yourself and want to take action on what you find out.

If you decide to take part, you will be given this information sheet to keep and be asked to sign a consent sheet. You will still be **free to ~~withdraw~~** change your mind + leave the project at any time – you don't have to say why. I'll check you're still happy at each stage of the research, and you can contact me if you don't want to take part anymore (up to the time when I finish collecting data for the research).

What will I be asked to do? – If I take part?

~~If you decide to take part:~~

- You will need to be available online for **two** research sessions between May and July 2021 (you don't have to be a member of the library).
- In the first session, you will use online library resources to ~~research~~ investigate a health topic. This activity is designed to help you practise ~~critical~~ health ~~literacy~~. finding information I'll interview you and observe how you use the library resources.
- In the second session (later in the project), you will join an online workshop with library staff and other children to plan how the library setting can help you to ~~practise your critical health literacy skills in future~~.

find health information + see how it effects you + your community

What are the disadvantages of taking part?

Taking part in the research will require you to give up some of your time.

You will be joining the research via a video-link. I may be able to see/hear part of your surroundings when you are speaking to me.

What are the benefits of taking part?

You will be helping researchers to understand how public libraries can make children feel more welcome when they have questions about health or ideas for action to resolve health issues locally.

You will have the opportunity to make a difference in your community.

What will happen to the data that gets collected?

All the information collected about you and other ~~people~~ taking part will be kept private. To protect your identity, you will be able to choose a pseudonym (a research nickname) that will be used when I refer to you and your work in my ~~dissertation (a document about what we find out that I will write after the project for my PhD degree)~~. The ~~dissertation~~ will be published online for other researchers and members of the public to read.

Personal data will be stored safely until the end of the project, and then destroyed. Data collected from talking with you and noticing what you do in the health information activity ~~online~~ will be stored safely for 5 years after the end of the project.

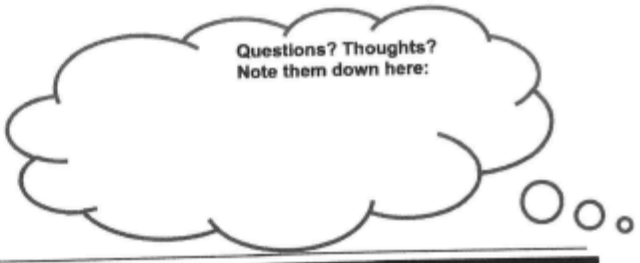
If you tell me something about you or anybody you know being in any danger, I will need to tell someone else about it so that they can help.

Who can I contact to find out more?

- If you have any questions about the research or would like to find out more, you can contact me by email (jenkinc7@lsbu.ac.uk).
- If you have any worries about the research, please contact my manager, Dr Susie Sykes, Associate Professor in Public Health, by email (sykess@lsbu.ac.uk).

Thank you for taking the time to read this information and for considering taking part!

EST 1892 LSBU



Consent sheet – children (online research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Would need a parent to go through it.

Please read each option and place the initials of your name (e.g. CJ) next to the ones you agree with. You will be given a copy of this sheet to keep.

Taking part	Initials
I confirm that I have read and understood the information sheet and/or the researcher has explained the above study. I have had the opportunity to ask questions.	
I understand that my participation is voluntary and that I am free to withdraw at any time, without providing a reason.	
I agree to take part in the above project. ↓? ↓?	

Use of my information	Initials
I understand my personal details such as phone number and address will not be revealed to people outside the project. ↓? would you have this? Parents place N?	
I understand that my data/words/handwriting/drawings may be ~~quoted or reproduced~~ used in publications, reports, posters, web pages, and other research outputs.	
I agree for the data I provide to be stored (after it has ~~been anonymised~~ had my name + details removed) in a specialist data centre and I understand it may be used for future research.	
I agree to the sessions being audio and video recorded.	
I agree to the use of anonymised quotes in publications ✓ repeated.	
I agree to assign the copyright of any materials I produce in this project to the researcher. ??	

Participant Name:

Signature:

Date:

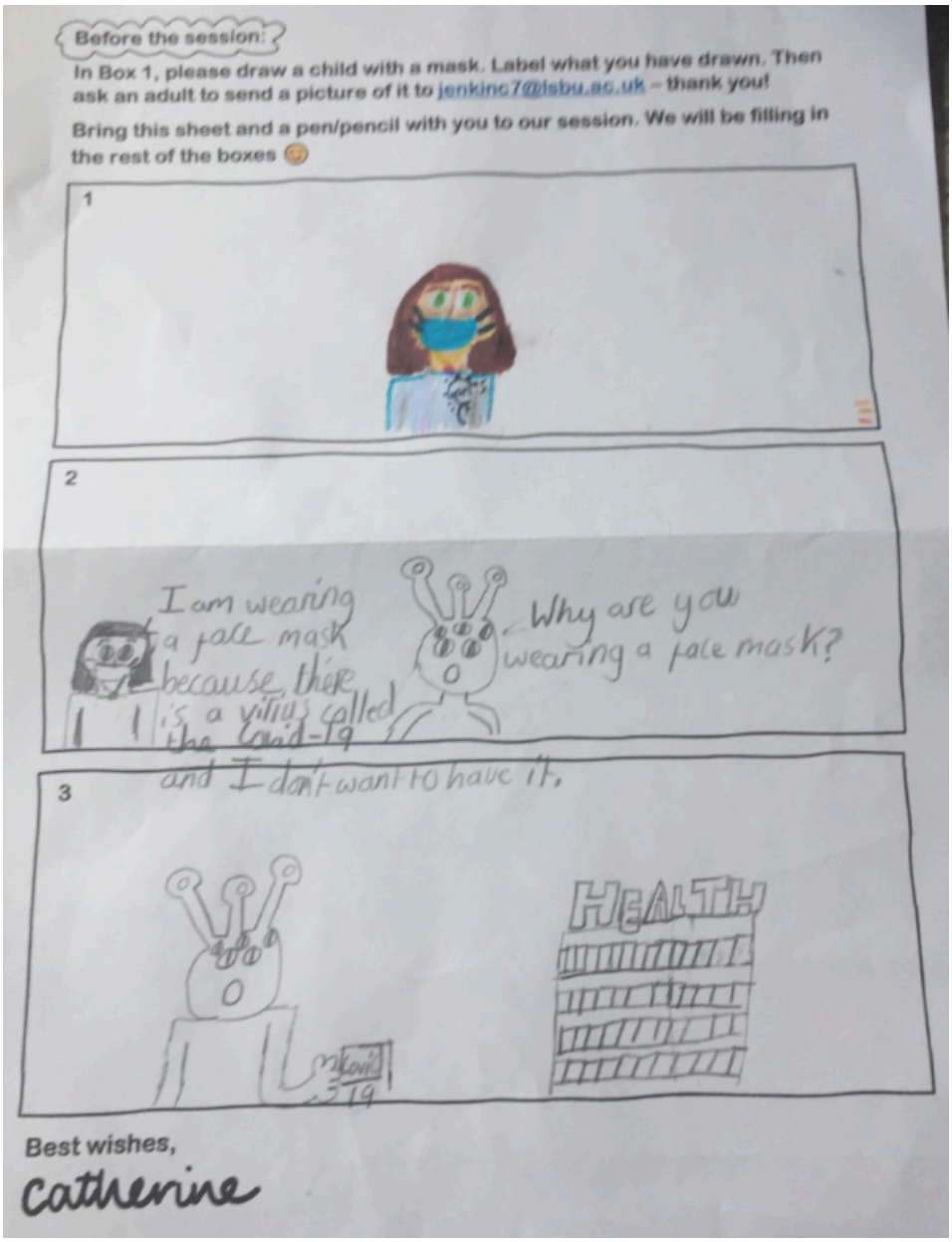
Researcher Name:
Catherine Jenkins
Signature:

Date:

Appendix 5: Draw-and-describe critical health literacy activity template and instructions

Two versions were developed to enable switching between online and face-to-face (f2f) research modes in response to COVID-19 policy changes.

Example from online research (posted in advance and scanned back to the researcher afterwards by the child's parent):



Example from f2f research:

Ginny Weasley

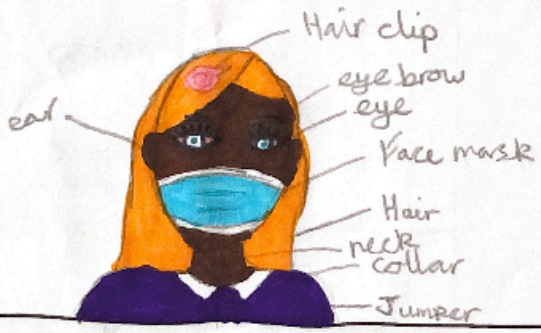
RESEARCH SESSION

Before the session:

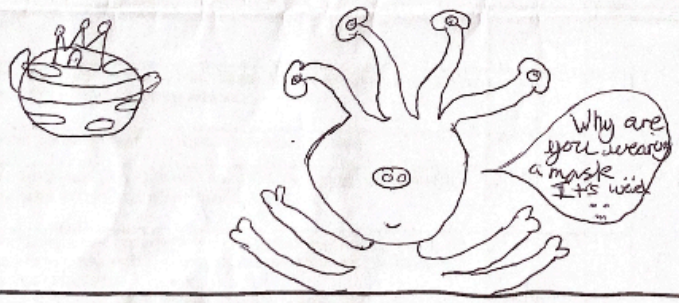
In Box 1, please draw a child with a mask. Label what you have drawn. Then ask an adult to send a picture of it to jenkinc7@lsbu.ac.uk – thank you!

Bring this sheet and a pen/pencil with you to our session. We will be filling in the rest of the boxes 😊

1



2



3

Best wishes,

Catherine

Appendix 6: Topic guide for Interview to the Alien piloted with Child Advisors and used with child standpoint informants

Two versions of the information sheet and consent form were created to enable switching between online and face-to-face (f2f) research modes in response to COVID-19 policy changes.

Version for online research:

Interview to the Double – child informants (online)

Before the session: Box 1

Prompt posted out in advance: In Box 1, please **draw** a child with a mask. **Label** what you have drawn. Then ask an adult to send a picture of it to jenkinc7@lsbu.ac.uk – thank you!

Bring this sheet and a pen/pencil with you to our session on Zoom. We will be filling in the rest of the boxes 😊

If you would like to do a practice-run of this in advance, please let me know.

Zoom session: sequential drawing elicitation and ITTA

Welcome and thank you for joining this research project.

Health literacy means accessing and understanding information about health. Critical health literacy means doing something about that information in an informed way. 'Informed' means 'provided with information'. For this research, you are my 'informants' – 'people who provide information'.

Places that are health literacy friendly make it easy for you to learn about being healthy when you spend time in them or use their resources online. Places that are critical health literacy friendly make it easy for you to take actions towards making healthy changes for yourself or for others when you spend time in them or use their resources online.

Today we'll spend about 45 minutes together talking about why critical health literacy matters to children, what opportunities you have for practising critical health literacy in public library settings, and how those opportunities could be made better.

I'm going to record our session so that I don't have to write everything down. I might still make a few notes though. Afterwards, I'll keep the audio-visual recordings, any comments in the Zoom Chat box, any screenshots and the images of your drawings and handwriting safely stored under your pseudonym. You're free to leave the project any time up until one month after today, and you don't have to tell me why.

Any questions before we begin? Feel free to ask questions at any time during the session, too.

In a moment I'm going to turn on the audio and video recording – is that OK?
OK, I'm turning the recording on now.
Please say your pseudonym, that it's OK for me to record, and then share your favourite place to go for health information.
For example, my name is Cath, I'm happy to be recorded, and my favourite place to go for health information is the NHS website.

Box 1: review

Thank you for sending me your drawing!
Can you tell me about what you've drawn? [then move on to the prompts as needed]

- What sort of mask is that?
- Do other children wear masks like that too?
- Do you also wear that sort of mask? Why?
- Is someone else telling the child that they have to wear a mask?
- Do you decide whether to wear a mask, or not?
- Are there rules for mask-wearing? Who makes these rules? What happens if you break the rules?
- What do children need/want to know about wearing masks?

Livestreaming Box 2: meeting the alien

Now we're going to continue the story – like a comic strip!
Imagine you're doing a livestream for YouTube. Can you angle the camera so that I can see your paper, and provide a running commentary for me as you draw?

Now the next bit of the story is: the child meets an alien! The alien wants to know why the child has a mask. Draw label the child explaining to the alien why they have a mask. You can use thought bubbles and speech bubbles. You can label your drawing on the paper, or use the Chat box.

What's the alien's name? Is it a boy, a girl, or something else?

Livestreaming Box 3: what does critical health literacy look like in the public library setting?

Next the child takes the alien [use alien name chosen by child] to the public library. Your public library can be online, or a building – it's up to you. Draw and label what they do there to help the alien find out more.

What is it that the alien needs to know to take action on wearing a mask (or not)?

How might the public library help? Can you give examples?

ITTD/ITTA (Interview to the Alien): using online public library resources to take action for health

Now we're going to visit the public library online.

Imagine the alien is online and can see the screen too. The alien has never been online before. The alien wants to learn from you by watching you 'do you'. The alien wonders if the resources on this page can help answer some questions…

Scenario 1

The alien decides not to wear a mask because she/he thinks that it is impossible for non-humans to catch or spread COVID. What would you tell the alien in response to her/him acting this way? Do you agree with the alien's decision?

Is it true that non-humans can't catch or spread COVID? How do you know?

What resources could you use to talk back to the alien's decision? How would you do that? Why?

Would you look at the library YouTube channel/podcast list? How would you do that? Why?

What made you choose that resource? Is it aimed at children? How does the information here compare with what you know? Did anything surprise you?

Is it fair for the alien to decide not to wear a mask? What sorts of things should be taken into account?

Scenario 2

Part of critical health literacy is about being able to make healthy changes for yourself, but it is also about taking action to help your family, friends or community be healthier – we call this **action for health**.

The alien wants to know, if you wanted to take action to make a healthy change for your community [like making other aliens visiting Earth aware that they should wear a mask after all!], how would you use the public library resources online to do that?

What can you ask the library staff member we have on the call to help you use the library for action for health?

What's tricky about children using the public library to inform – provide information for planning – their healthy actions? What do children need to watch out for? What could be organised better? What could be easier for children to access?

What could the library do to help you take informed actions to improve your own health, and the health of your family, friends or community?

Who could you contact outside of the library? How would you do that?

Member-checking and debrief

We're nearly at the end of our time – thank you so much for taking part in this research.

Is there anything that you didn't get a chance to explain to the alien fully?

Thank you. You can stop sharing your screen now.

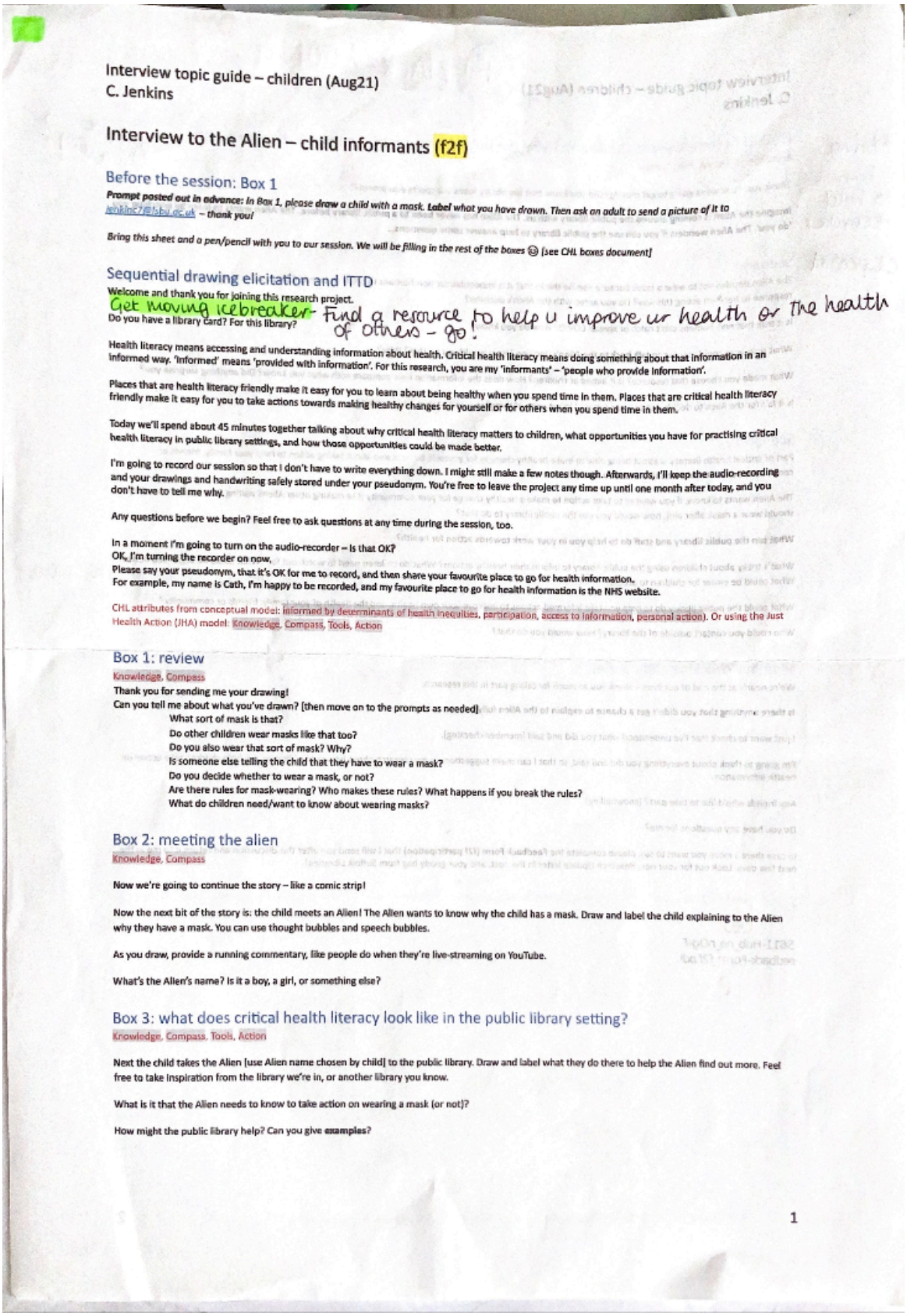
I just want to check that I've understood what you did and said [member-checking – could share my screen and summarise as bullet-points on a slide?].

I'm going to think about everything you did and said, so that I can make suggestions in my research about how public libraries can help children take action on health information.

Do you have any questions for me?

In case there's more you want to say, please complete the **Feedback Form (online participation)** that I will send you after this discussion and return it to me in the next few days. Look out for your next Research Update letter in the post, and your goody bag!

Version for f2f research:



Interview topic guide – children (Aug21)
C. Jenkins

Interview to the Alien – child informants (f2f)

Before the session: Box 1

Prompt posted out in advance: *In Box 1, please draw a child with a mask. **Label** what you have drawn. Then ask an adult to send a picture of it to* jenkinc7@lsbu.ac.uk *– thank you!*

Bring this sheet and a pen/pencil with you to our session. We will be filling in the rest of the boxes ☺ [see CHL boxes document]

Sequential drawing elicitation and ITTD

Welcome and thank you for joining this research project.
Get moving icebreaker – Find a resource to help u improve ur health or the health of others – go!
Do you have a library card? For this library?

Health literacy means accessing and understanding information about health. Critical health literacy means doing something about that information in an informed way. 'Informed' means 'provided with information'. For this research, you are my 'informants' – 'people who provide information'.

Places that are health literacy friendly make it easy for you to learn about being healthy when you spend time in them. Places that are critical health literacy friendly make it easy for you to take actions towards making healthy changes for yourself or for others when you spend time in them.

Today we'll spend about 45 minutes together talking about why critical health literacy matters to children, what opportunities you have for practising critical health literacy in public library settings, and how those opportunities could be made better.

I'm going to record our session so that I don't have to write everything down. I might still make a few notes though. Afterwards, I'll keep the audio-recording and your drawings and handwriting safely stored under your pseudonym. You're free to leave the project any time up until one month after today, and you don't have to tell me why.

Any questions before we begin? Feel free to ask questions at any time during the session, too.

In a moment I'm going to turn on the audio-recorder – is that OK?
OK, I'm turning the recorder on now.
Please say your pseudonym, that it's OK for me to record, and then share your favourite place to go for health information.
For example, my name is Cath, I'm happy to be recorded, and my favourite place to go for health information is the NHS website.

CHL attributes from conceptual model: informed by determinants of health inequities, participation, access to information, personal action). Or using the Just Health Action (JHA) model: Knowledge, Compass, Tools, Action

Box 1: review

Knowledge, Compass

Thank you for sending me your drawing!
Can you tell me about what you've drawn? [then move on to the prompts as needed]

- What sort of mask is that?
- Do other children wear masks like that too?
- Do you also wear that sort of mask? Why?
- Is someone else telling the child that they have to wear a mask?
- Do you decide whether to wear a mask, or not?
- Are there rules for mask-wearing? Who makes these rules? What happens if you break the rules?
- What do children need/want to know about wearing masks?

Box 2: meeting the alien

Knowledge, Compass

Now we're going to continue the story – like a comic strip!

Now the next bit of the story is: the child meets an Alien! The Alien wants to know why the child has a mask. Draw and label the child explaining to the Alien why they have a mask. You can use thought bubbles and speech bubbles.

As you draw, provide a running commentary, like people do when they're live-streaming on YouTube.

What's the Alien's name? Is it a boy, a girl, or something else?

Box 3: what does critical health literacy look like in the public library setting?

Knowledge, Compass, Tools, Action

Next the child takes the Alien [use Alien name chosen by child] to the public library. Draw and label what they do there to help the Alien find out more. Feel free to take inspiration from the library we're in, or another library you know.

What is it that the Alien needs to know to take action on wearing a mask (or not)?

How might the public library help? Can you give **examples**?

1

*bring bumbag to hold recorder

clipboard

ITTD/ITTA (Interview to the Alien): using the public library setting to take action for health

Knowledge, Compass, Tools, Action

& walk along?

Thank you. Now we're going to get moving! Did you know that the library loans out sports equipment?!

Imagine the Alien is coming around the public library with us. The Alien has never been to a public library before. The Alien wants to learn by watching you 'do you'. The Alien wonders if you can use the public library to help answer some questions...

Scenario 1

The Alien decides not to wear a mask because she/he thinks that it is impossible for non-humans to catch or spread COVID. What would you tell the Alien in response to her/him acting this way? Do you agree with the Alien's decision?

Is it true that non-humans can't catch or spread COVID? How do you know?

What resources could you use to **talk back to** the Alien's decision? How would you do that? Why?

What made you choose that resource? Is it aimed at children? How does the information here compare with what you know? Did anything surprise you?

Is it fair for the Alien to decide not to wear a mask? What sorts of things should be taken into account?

Scenario 2

Part of critical health literacy is about being able to make healthy changes for yourself, but it is also about taking action to help your family, friends or community be healthier – we call this **action for health**.

The Alien wants to know, if you wanted to **take action to** make a healthy change for your community [like making other Aliens visiting Earth aware that they should wear a mask after all!], how would you use the public library to do that?

What can the public library and staff do to help you in your work towards action for health?

What's tricky about children using the public library to inform their healthy actions? What do children need to watch out for? What could be organised better? What could be easier for children to access? How can encourage other children to use the lib for health work?

What could the public library do to help you take informed actions to improve your own health, and the health of your family, friends or community?

Who could you contact outside of the library? How would you do that?

Member-checking and debrief

We're nearly at the end of our time – thank you so much for taking part in this research.

Is there anything that you didn't get a chance to explain to the Alien fully?

I just want to check that I've understood what you did and said [member-checking].

I'm going to think about everything you did and said, so that I can make suggestions in my research about how public libraries can help children take action on health information.

Any friends who'd like to take part? [snowballing]

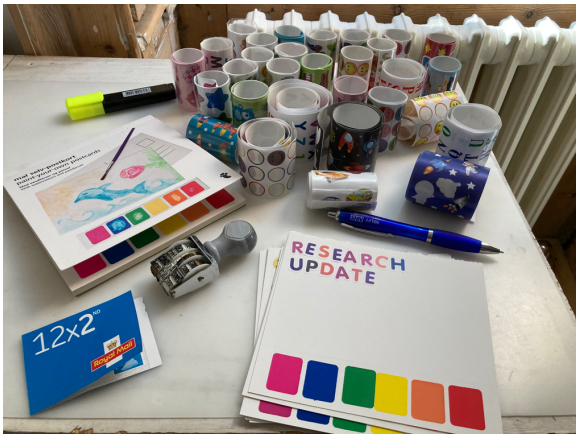
Do you have any questions for me?

In case there's more you want to say, please complete the **Feedback Form (f2f participation)** that I will send you after this discussion and return it to me in the next few days. Look out for your next Research Update letter in the post, and your goody bag from [redacted]

PDF

5611-Hub_na_nOg-Feedback-Form_f2f.pdf

Appendix 7: Research updates sent to Child Advisors by post



Research update: Public libraries as settings for developing critical health literacy in children
June 2022

Hello again!
I am sorry it has been a while since my last update. Lots of thinking and writing has been going on in the meantime! This is the final update on the research project that you have helped me with, and it is accompanied by your certificate. Thank you for taking part and letting me learn from you!

What did the research find out?
The research found out that the public library is a space where it is possible for children to develop and practise critical health literacy. Children's critical health literacy at the public library looks like this:

- Children can make sense of the things outside of their control that affect health.
- Children can access information about health.
- Children can get involved in deciding how the public library is run.
- Children can use public library resources to take action to promote their health and the health of their friends and family.

However, the research also found out that all four of these pieces of critical health literacy are only possible sometimes, in some "pockets" of the public library. I could only see critical health literacy happening in one activity at one public library – not in other activities at other public libraries. This one activity was a social group for children. It was a bit like Brownies, Girlguiding or Scouts groups. The children taking part in the activity experienced all four pieces of critical health literacy. They learned about the causes of good and bad health that are outside of people's control, researched and had a say in ideas for creating wellbeing boxes for other children during lockdown, planned a take-over of the public library to raise money for Children in Need, and planned to take action to improve health with help from the public library staff. Actions included creating a display to raise awareness of the effects of bullying on children's wellbeing, recording a podcast to make children's voices heard, and writing to local MPs to campaign for a health issue that affects children.

Things that got in the way of critical health literacy happening included:

- Grown-ups and children didn't think of the public library as somewhere they could go to learn about and take action on health.
- The way that schools work had a big influence on how public libraries approached children's health and wellbeing.
- Age matters: children's ages limited their access to resources and their freedom to wander around and follow their curiosity at the public library.
- There wasn't a lot of money available to create or buy resources abut health for older children, or to fund activities where children could get involved in designing public library services that matched their interests.

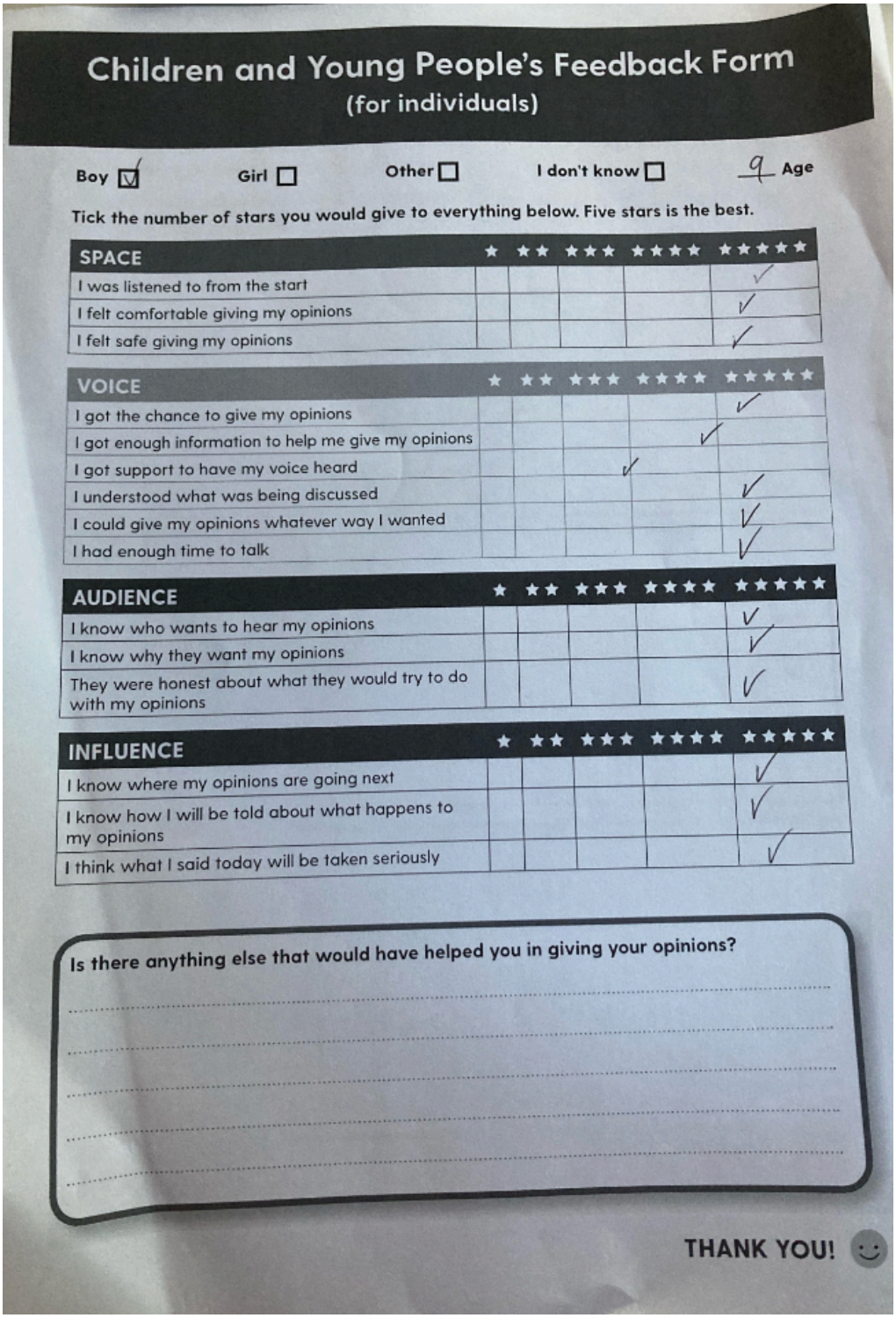
What's next?
I would like the research to make a difference to children who want to plan out and take action on the health topics that matter to them now and in the future! Here are a few ideas of how to make this happen:

- Future research projects on health literacy should involve children as advisors on the research proposal and the research ethics. Children should also be invited to participate in the planned research, after the children who helped to design it are happy with it.
- Rules on what children can and can't do about health in the public library should be rewritten and agreed with children.
- Public libraries should work with other settings that are different from them, like schools, to promote children's health.
- More public libraries could support free activities that are a bit like Brownies, Girlguiding and Scouts groups, with special badges for doing things that promote health in the community.

Stay in touch
Please email me at jenkinc7@lsbu.ac.uk if you have any feedback about the research.

Best wishes,
Catherine

Appendix 8: Evaluation form filled out by a Child Advisor



Children and Young People's Feedback Form
(for individuals)

Boy ☑ Girl ☐ Other ☐ I don't know ☐ 9 Age

Tick the number of stars you would give to everything below. Five stars is the best.

SPACE	★	★★	★★★	★★★★	★★★★★
I was listened to from the start					✓
I felt comfortable giving my opinions					✓
I felt safe giving my opinions					✓

VOICE	★	★★	★★★	★★★★	★★★★★
I got the chance to give my opinions					✓
I got enough information to help me give my opinions				✓	
I got support to have my voice heard			✓		
I understood what was being discussed					✓
I could give my opinions whatever way I wanted					✓
I had enough time to talk					✓

AUDIENCE	★	★★	★★★	★★★★	★★★★★
I know who wants to hear my opinions					✓
I know why they want my opinions					✓
They were honest about what they would try to do with my opinions					✓

INFLUENCE	★	★★	★★★	★★★★	★★★★★
I know where my opinions are going next					✓
I know how I will be told about what happens to my opinions					✓
I think what I said today will be taken seriously					✓

Is there anything else that would have helped you in giving your opinions?

.....

.....

.....

.....

.....

THANK YOU! ☺

Appendix 9: Ethics amendments

Catherine Jenkins (January 2021)

Statement of revisions to ethics application

Thank you for your feedback on this application. The changes made in response to your recommendations are outlined below. In addition to these revisions, I have included a PPIE strategy in response to feedback at my RES3 panel. The PPIE strategy (attached in the 'Data collection and sharing' module of the revised ethics form) incorporates a Children's Advisory Group (CAG). These children will be consulted individually on the research tools to be used with the separate set of child informants later in the project.

PPIE and pandemic contingency plan

Recommendation

Careful consideration has been given to mitigate the ongoing issues of access due to COVID19, however there is a need to have different PIS and Consent forms for instances where data will be collected face-to-face or online. Please produce forms for online data collection.

Response

I have revised the PI and consent sheets by separating them into 'face-to-face' and 'online' research documentation. The following revised documents have been uploaded to the application form:

PI sheet - child informants (face-to-face)
PI sheet - child informants (online)
PI sheet - parents-caregivers of child informants (face-to-face)
PI sheet - parents-caregivers of child informants (online)
PI sheet - staff (face-to-face)
PI sheet - staff (online)
Information sheet - parents-caregivers of CA
Information sheet - CA (online)
Consent sheet - child informants (face-to-face)
Consent sheet - child informants (online)
Consent sheet - parents-caregivers of child informants (face-to-face)
Consent sheet - parents-caregivers of child informants (online)
Consent sheet - staff (face-to-face)
Consent sheet - staff (online)
Consent sheet - parents-caregivers of CA (online)
Consent sheet - CA (online)
Recruitment flyer - staff
Recruitment flyer - child informants
Recruitment flyer - CA

For the face-to-face documentation, clauses on COVID have been included. For the online documentation, clauses on COVID have been removed and information related to privacy and data use included.

Recruitment

Recommendation

Based on the gatekeeper permission letter – what is your contingency plan in the event that public places are not accessible by people, or that the library staff are not available in your given timeframe? Will you need to amend your recruitment strategy?

Response

If public places are not accessible, my research will be conducted online and the recruitment strategy will be amended, including use of the versions of the recruitment and consent documentation for online research. Access to the public library social media accounts, directly or via the gatekeeper, will be discussed with senior management for the research site when I present my research proposal to them remotely. If library staff are not available in the proposed timeframe (January–May 2021), I plan to leverage the Engaging Libraries project, a nationwide initiative which shares the same implementation timeframe (with leeway to allow for disruption by COVID) and pairs public libraries with researchers to collaborate on a research project incorporating public engagement. I have already taken steps towards this by identifying public libraries listed on https://www.carnegieuktrust.org.uk/libraries/ as having received grant funding to undertake research projects, but which have not yet found a research partner. This will give me a wider pool of research sites and staff to work with if there is low staff availability at my original research site.

Recommendation

It is not clear how you will recruit the children? The assumption is that they will view the posters and tear of a contact strip; however in light of COVID do you have alternative recruitment strategy? Will you be accessing them through contacting parents via social media and the library? Or other parent platforms?

Response

Social media cards summarising the research and inviting interested parents/caregivers to contact me will be designed using Canva (to ensure optimum display across different social media platforms). My use of social media for recruitment will be limited to addressing parents/caregivers because the social media platforms I intend to use are age-restricted. These platforms include:

- Facebook
- Instagram
- Twitter
- Mumsnet

PDF flyers have also been uploaded to the application form. I will send these flyers (first the flyer for recruiting Child Advisors (CAs), then the flyer for recruiting child informants) to primary schools that I am in contact with and request that it be shared through their communication channels/online notice boards. The PDF flyer for staff will be shared via the organisational gatekeeper.

Sampling and saturation

Recommendation

Please provide a rationale for 8–10 participants – will this be enough?

Response

Other studies using institutional ethnography range between 20–25 informants (cf. Klostermann et al., 2020), but Braun and Clarke (2019) recommend that conceptual depth be prioritised over an ambitious sample size. I therefore plan to balance quantity with quality by aiming for a minimum of 10 CAs, 10 child informants and 15 staff informants. I envisage that staff may be easier to recruit, and have reflected this in the higher target figure for this group. The lower target for children – my standpoint group – takes into account that I will be using the Interview to the Double technique with them, from which I expect to elicit rich data.

The ethics application has also been updated to reflect that I will form a CAG to guide the research and provide an additional layer of data validation. CAs will be consulted individually (not as a group) on data collection tools (using a sample selected to represent all ages within the target age-group of 7–11 years old). CAs will also be consulted on non-monetary incentives that could be offered to them and to child informants.

Safeguarding

Recommendation

Is there value in recommending parents to be with their children during your interaction with the children online?

Response

Yes, I agree there is value. This recommendation on online safeguarding has been taken up by the addition of a line in the PI sheet for parents/caregivers (online research version) inviting them to accompany their children on the video-link.

Recommendation

The current DBS certificate was issued in 2016 – there is a recommendation that DBS be done every 3 years.

Response

Updated DBS now uploaded.

Linking ROs to theoretical and methodological framework

Recommendation

The research outcomes do not contain the word "observe" which I would have expected as one of the elements of Institutional Ethnography is stated as observation.

Response

I have updated the ROs to reflect that observation is an element in IE. RO3 now reads: 'Observe how children experience public libraries as settings for developing critical health literacy'.

References

Braun, V. and Clarke, V. (2019) To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales, *Qualitative Research in Sport, Exercise and Health*, pp. 1–16. DOI:10.1080/2159676X.2019.1704846.

Klostermann, J., McAleese, S., Montgomery, L. and Rodimon, S. (2020) Working the project: research proposals and everyday practices for emerging feminist researchers, *Canadian Review of Sociology/Revue Canadienne de Sociologie*, 57 (2), pp. 305–325. DOI:https://doi.org/10.1111/cars.12283.

Catherine Jenkins (January 2021)

PPIE Strategy: Technology risk assessment

Technology	Use case	Mode of access	Digital safeguarding and security
Canva Pro	Design of research tools for recruitment and data collection	GitHub Student Developer Pack	Canva Pro licence expires after one year, so all designs will be downloaded and saved on a secure online drive before the expiration period
Facebook	Recruitment of CAs (targeted at parents/caregivers)	PDF flyer and social media card shared from personal, public library and local community accounts	The minimum age for using Facebook is 13 years, so all communications via social media will be mediated by parents/caregivers
Instagram	Recruitment of CAs (targeted at parents/caregivers)	PDF flyer and social media card shared from personal, public library and local community accounts	The minimum age for using Instagram is 13 years, so all communications via social media will be mediated by parents/caregivers
Twitter	Recruitment of CAs (targeted at parents/caregivers)	PDF flyer and social media card shared from personal, public library and local community accounts; tagging leaders in child health research to spread the word through their networks (e.g. @Dr_LoucaMai)	The minimum age for using Twitter is 13 years, so all communications via social media will be mediated by parents/caregivers
Zoom – free personal account	Chat-box function for collecting feedback if the child feels more comfortable in writing out their thoughts; screen-sharing can be used to demonstrate how the child's input is prioritised and to conduct member-checking in real-time, e.g. through incorporating their suggested revisions into a displayed document	Password-protected link emailed to parents/caregivers. Waiting room will be enabled and pseudonyms (the 'research nicknames' agreed with children in advance) will be used to sign in and will form the child's virtual name-badge (their Zoom display name). Parents/caregivers are welcome to accompany their child	Process consent for recording, taking screenshots and the copyright of chat content will be reviewed at the beginning of each interaction. Recordings, screenshots and chat logs will be saved on a secure online drive
Self-transcription from Zoom recording	Inform reflection on my interview technique and feed into ongoing analysis		Transcriptions will be saved on a secure online drive
Padlet – free personal account	A secure, researcher-moderated online bulletin board with a custom URL. Supports a range of file-types (useful for the text elicitation component of the research)	Password-protected link emailed to parents/caregivers	With permission (obtained through process consent), Padlets will be saved as PDFs on a secure online drive
Telephone	Back-up method of communication if internet connection is unstable	I will call CAs. Parents/caregivers are welcome to supervise the call at their end	With permission (obtained through process consent), I will record calls using a third-party app for the iPhone. Recordings will be saved on a secure online drive

Appendix 10: Ethics approval letter

Decision - Ethics ETH2021-0003: Miss Catherine Jenkins (Medium risk)

LSBU PGR Manager <do-not-reply-pgr-manager@lsbu.ac.uk>
Thu 14/01/2021 12:52
To: Jenkins, Catherine 7 <jenkinc7@lsbu.ac.uk>

London South Bank University

Dear Catherine

Application ID: ETH2021-0003

Project title: Libraries as settings for the development of critical health literacy in children.

Lead researcher: Miss Catherine Jenkins

Thank you for submitting your proposal for ethical review.

I am writing to inform you that your application has been approved.

Your project has received ethical approval from the date of this notification until 14th January 2025.

Yours

Dr. Adéle Stewart-Lord

Chair HSC School Ethics Panel

Ethics ETH2021-0003: Miss Catherine Jenkins (Medium risk)

Appendix 11: Recruitment of child standpoint informants: poster, social media graphic, information sheet, and consent form

LSBU

HELP OUT WITH HEALTH RESEARCH!

CAN PUBLIC LIBRARIES HELP CHILDREN TO MAKE A DIFFERENCE TO HEALTH?

I am a student at the School of Health and Social Care, London South Bank University. I am studying how public libraries might be able to help children make a difference to the health of themselves and their communities.

WHO CAN JOIN IN?

- 7–11 year-olds (plus brothers, sisters, cousins, friends the same age!)

WHAT WILL WE BE DOING?

You will take part in two research sessions: an activity and a workshop with library staff and other children.

- The activity will involve you investigating health information and making healthy changes based on that information. This is called critical health literacy.
- The workshop will invite you to discuss your experiences of using the public library to investigate health information and suggest ways that public libraries can support you, your friends and your communities to make healthy changes in future.

For more information or to take part, please ask your parent/caregiver to contact me:
Catherine Jenkins, PhD student.
Email: jenkinc7@lsbu.ac.uk
😊

If you have any concerns about the project, please contact the project supervisor: Dr Susie Sykes, Associate Professor in Public Health.
Email: sykess@lsbu.ac.uk


LIBRARIES
NHS
CHILDREN TAKING ACTION FOR HEALTH @ PUBLIC LIBRARIES!
'TOTALLY BRILLIANT!'
ADAM KAY
ILLUSTRATED BY HENRY PAKER
KAY'S ANATOMY
A COMPLETE (AND COMPLETELY DISGUSTING) GUIDE TO THE HUMAN BODY
• Aged 7-11? (or know someone who is!)
• Interested in taking part in research?
Email jenkinc7@lsbu.ac.uk for more info!
EST 1892
LSBU

Two versions of the information sheet and consent form were created to enable switching between online and face-to-face (f2f) research modes in response to COVID-19 policy changes.

Versions for online research:

EST 1892 LSBU

Questions? Thoughts? Note them down here:

Information sheet – child informants (online research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins, PhD student

Contact Details of Researcher: jenkinc7@lsbu.ac.uk

ME!

You are being invited to take part in a research project. Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What's the research about?

This project aims to answer the question **Can public libraries help children to make a difference to health?**

- Literacy means being able to read and write. It lets you do things that you wouldn't be able to do otherwise. **Critical health literacy** is a type of literacy. It means being able to understand health information, agree or disagree with it, and make changes because of it.
- I am interested in finding out how **public libraries** can support **children aged 7–11** to find health information, investigate how it affects you and your friends, and respond to the information.

I'm 7–11 years old and I would like to help with research! Should I take part?

Taking part is up to you. You will need permission from your parent/caregiver as well.

If you decide to take part, you will be given this information sheet to keep and you will be asked to sign a consent sheet. You will still be free to change your mind and leave the project at any time during data collection – just contact me. I'll also check you're still happy at each stage of the research.

What will I be asked to do if I take part?

- You will need to be available online for one or two research sessions (you don't have to be a Suffolk Libraries member).
- In the first session, you will use online library resources to investigate a health topic. This activity is designed to help you practise finding health information and reflecting on it. I'll interview you and observe how you use the library resources.
- In the second session (later in the project), you will join an online workshop with library staff and other children (some who helped to design the research, and some like you who are taking part in it) to plan how the library setting can help you to develop critical health literacy skills in future.

1

What are the disadvantages of taking part?

Taking part in the research will require you to give up some of your time.

You will be joining the research via a video-link. I may be able to see/hear part of your surroundings/screen when you are speaking to me.

What are the advantages of taking part?

You will be helping researchers to understand how public libraries can make children feel more welcome when they have questions about health or ideas for action to resolve health issues locally.

You will have the opportunity to make a difference in your community.

What will happen to the data that gets collected?

All the information collected about you and other people taking part will be kept private. To protect your identity, you will be able to choose a **pseudonym** (a research nickname) that will be used when I refer to you and your work in my dissertation (a document about what we find out that I will write after the project for my PhD degree). The dissertation will be published online for other researchers and members of the public to read.

Personal data will be stored safely until the end of the project, and then destroyed. Data collected from talking with you and noticing what you do in the health information activity online will be stored safely for 5 years after the end of the project.

If you tell me something about you or anybody you know being in any danger, I will need to tell someone else about it so that they can help.

Who can I contact to find out more?

- If you have any questions about the research or would like to find out more, you can contact me by email (jenkinc7@lsbu.ac.uk).
- If you have any worries about the research, please contact my manager, Dr Susie Sykes, Associate Professor in Public Health, by email (sykess@lsbu.ac.uk).

Thank you for taking the time to read this information and for considering taking part!

Child Informant Name:	**Researcher Name:** Catherine Jenkins
Signature:	**Signature:**
Date:	**Date:**

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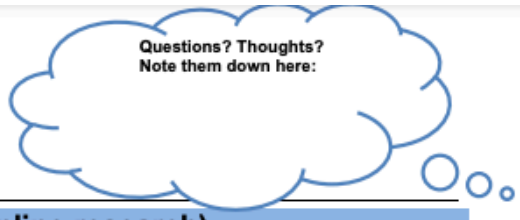

Consent sheet – child informants (online research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Please read through this consent sheet with your parent/caregiver and tick (✔) the boxes which best describe how you feel about each statement. You will be given a copy of this sheet to keep.

Taking part			
I confirm that I have read and understood the information sheet and/or the researcher has explained the above study. I have had the opportunity to ask questions.			
I understand that taking part is up to me, and I can change my mind about taking part at any time (up until one month after final data collection).			
I agree to take part in the above project.			
Use of my information			
I understand my personal details, like my name and address, will not be revealed to people outside the project.			
I agree to the sessions being audio and video recorded, and to screen-captures being taken.			
I understand that my data (what I say, my handwriting, my drawings) may be used in print and online research outputs.			
I agree for the data I provide to be stored (after any details that identify me have been removed) in a specialist data centre and I understand it may be used for future research.			

Child Informant Name:
Signature:
Date:

Researcher Name:
Signature:
Date:

If you have any concerns about the project, please contact the project supervisor:
Dr Susie Sykes, Associate Professor in Public Health. Email address: sykess@lsbu.ac.uk

Versions for f2f research:

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Questions? Thoughts? Note them down here:

Information sheet – child informants (face-to-face research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins, PhD student

Contact Details of Researcher: jenkinc7@lsbu.ac.uk

ME!

You are being invited to take part in a research project. Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What's the research about?

This project aims to answer the question **Can public libraries help children to make a difference to health?**

- Literacy means being able to read and write. It lets you do things that you wouldn't be able to do otherwise. **Critical health literacy** is a type of literacy. It means being able to understand health information, agree or disagree with it, and make changes because of it.
- I am interested in finding out how **public libraries** can support **children aged 7–11** to find health information, investigate how it affects you and your friends, and respond to the information.

I'm 7–11 years old and I would like to help with research! Should I take part?

Taking part is up to you. You will need permission from your parent/caregiver as well. Unfortunately, you **won't be able to take part** if you:

Are displaying COVID symptoms, or live with someone who is displaying symptoms.

If you decide to take part, you will be given this information sheet to keep and you will be asked to sign a consent sheet. You will still be free to change your mind and leave the project at any time during data collection – just contact me. I'll also check you're still happy at each stage of the research.

What will I be asked to do if I take part?

- You don't have to be a Suffolk Libraries member.
- You will use library resources to investigate a health topic. This activity is designed to help you practise finding health information and acting or reflecting on it. I'll interview you and observe how you use the library resources.

What are the disadvantages of taking part?

What are the advantages of taking part?

1

What are the disadvantages of taking part?

Taking part in the research will require you to give up some of your time.

You will be visiting an indoor public space (the library). We will be careful to open windows and minimise your contact with other people, but there may be an increased risk of you catching COVID if you take part.

What are the advantages of taking part?

You will be helping researchers to understand how public libraries can make children feel more welcome when they have questions about health or ideas for action to resolve health issues locally.

You will have the opportunity to make a difference in your community.

What will happen to the data that gets collected?

All the information collected about you and other people taking part will be kept private. To protect your identity, you will be able to choose a **pseudonym** (a research nickname) that will be used when I refer to you and your work in my dissertation (a document about what we find out that I will write after the project for my PhD degree). The dissertation will be published online for other researchers and members of the public to read.

Personal data will be stored safely until the end of the project, and then destroyed. Data collected from talking with you and noticing what you do in the health information activity will be stored safely for 5 years after the end of the project.

If you tell me something about you or anybody you know being in any danger, I will need to tell someone else about it so that they can help.

Who can I contact to find out more?

- If you have any questions about the research or would like to find out more, you can contact me by email (jenkinc7@lsbu.ac.uk).
- If you have any worries about the research, please contact my manager, Dr Susie Sykes, Associate Professor in Public Health, by email (sykess@lsbu.ac.uk).

Thank you for taking the time to read this information and for considering taking part!

Child Informant Name:	**Researcher Name:** Catherine Jenkins
Signature:	**Signature:**
Date:	**Date:**

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Questions? Thoughts? Note them down here:

Consent sheet – child informants (face-to-face research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Please read through this consent sheet with your parent/caregiver and tick (✓) the boxes which best describe how you feel about each statement. You will be given a copy of this sheet to keep.

Taking part			
I confirm that I have read and understood the information sheet and/or the researcher has explained the above study. I have had the opportunity to ask questions.			
I understand that taking part is up to me, and I can change my mind about taking part at any time (up until one month after final data collection).			
I confirm that I am not displaying COVID symptoms, and I don't live with anyone who is displaying symptoms.			
I agree to take part in the above project.			
Use of my information			
I understand my personal details, like my name and address, will not be revealed to people outside the project.			
I agree to the sessions being audio and video recorded.			
I understand that my data (what I say, my handwriting, my drawings) may be used in print and online research outputs.			
I agree for the data I provide to be stored (after any details that identify me have been removed) in a specialist data centre and I understand it may be used for future research.			
I consent for London South Bank University to share data with outside organisations for the purpose of COVID infection tracking. I understand that choosing to leave the project will not lead to data relevant to Track-and-Trace being destroyed.			

Child Informant Name:
Signature:
Date:

Researcher Name:
Signature:
Date:

If you have any concerns about the project, please contact the project supervisor:
Dr Susie Sykes, Associate Professor in Public Health. Email address: sykess@lsbu.ac.uk

Appendix 12: Recruitment of child standpoint informants: information sheet and consent form for parents/caregivers

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Information sheet – parents/caregivers (online research with children)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins, PhD student

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Children **aged 7–11 years** are being invited to take part in a research project. Before you decide whether you would like your child/children to consider taking part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What is the research about?

This project aims to answer the question **Can public libraries develop critical health literacy in children?**

- Literacy enables us to do things we wouldn't be able to do otherwise. **Critical health literacy** means being able to understand health information, assess its relevance to ourselves or our communities, and take action based on the information.
- Practising critical health literacy early in life, during childhood, can have health benefits later.
- The setting where critical health literacy is practised can shape what critical health literacy looks like.
- I am interested in finding out how children can be supported to practise critical health literacy in public library settings (including online).

Why is/are my child/children invited to participate?

Children have been invited to participate so that I can understand what it's like for them when they use the library to practise critical health literacy skills. Taking part is **voluntary**. Your child/children will require consent from you before they can give their own consent to take part. If you are happy for your child/children to take part, you will be given this information sheet to keep and be asked to sign a consent sheet. You will still be free to withdraw your child/children at any time – you don't have to say why. You can contact me if you don't want them to take part anymore (up to one month after final data collection).

What will taking part involve for my child/children?

If your child/children is/are eligible and you're both happy for them to take part:

- They will need to be available online for one or two research sessions (they don't have to be a Suffolk Libraries member). You are welcome to accompany your child/children on the video-link on both occasions.
- In the first session, they will use online library resources to research a health topic. This activity is designed to help children practise critical health literacy. I'll interview them about what they're doing and observe how they interact with the resources.
- In the second session (later in the project), they will join an online workshop with library staff and other children to plan how the library setting can better support them to practise critical health literacy skills in future.

Possible disadvantages/risks to participation

Taking part in the research may require you to give up some of your time to provide your child/children with a quiet place where they can join the research using a digital device. It will also require the use of WiFi/cellular data.

Possible benefits to participation

Your child/children will be helping researchers to understand how libraries can make children feel more welcome when they have questions about health or ideas for action to resolve health issues locally. They will also help to make a difference in their community.

What will happen to the data that gets collected?

All the information collected about your child/children will be kept strictly confidential (subject to legal limitations). They will choose a pseudonym to protect their identity and ensure their privacy and anonymity in the collection, storage and publication of data. All data generated in the research will be stored securely in paper or electronic form. Data generated by the study will be retained in accordance with the University's Code of Practice and destroyed 5 years after the end of the project.

If your child/children tell/s me something that may be a safeguarding concern, I will need to report it.

What will happen to the results of the research study on completion?

The results will be uploaded to the University's open access repository as part of my dissertation.

Who is organising and funding the research?

I am conducting the research as a student at the School of Health and Social Care, London South Bank University. The research is unfunded.

Who has reviewed the study?

The research has been reviewed by the School of Health and Social Care Ethics Panel at London South Bank University. I have been approved to work with children through a Disclosure and Barring Service (DBS) check.

Who can I contact for further information?

- If you have any questions about the research, please contact me by email (jenkinc7@lsbu.ac.uk).
- If you have any concerns about the research, please contact the project supervisor, Dr Susie Sykes, Associate Professor in Public Health, by email (sykess@lsbu.ac.uk).

Thank you for taking the time to read this information and for considering taking part.

Parent/Caregiver Name:	**Researcher Name:**
Child Name:	Catherine Jenkins
Signature:	**Signature:**
Date:	**Date:**

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Consent sheet – parents/caregivers (online research with children)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Please read each option and place the initials of your name (e.g. CJ) next to the ones you agree with.

Participation of my child in the project	Initials
I confirm that I have read and understood the information sheet and/or the researcher has explained the above study. I have had the opportunity to ask questions.	
I understand that my child's participation is voluntary and that I am free to withdraw them at any time (up to one month after final data collection), without providing a reason.	
I agree to my child taking part in the above project.	

Use of my child/children's information	Initials
I understand my child's personal details such as name and address will not be revealed to people outside the project.	
I understand that my child's data/words/handwriting/drawings may be quoted or reproduced in publications, reports, posters, web pages, and other research outputs.	
I agree for the data provided by my child to be stored (after it has been anonymised) in a specialist data centre and I understand it may be used for future research.	
I agree to the sessions being audio and video recorded, and to screen-captures being taken.	

Parent/Caregiver Name:
Child Name:
Signature:

Date:

Researcher Name:
Catherine Jenkins
Signature:

Date:

If you have any concerns about the project, please contact the project supervisor:
Dr Susie Sykes, Associate Professor in Public Health
Email address: sykess@lsbu.ac.uk

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Information sheet – parents/caregivers (face-to-face research with children)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins, PhD student

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Children **aged 7–11 years** are being invited to take part in a research project. Before you decide whether you would like your child/children to consider taking part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What is the research about?

This project aims to answer the question *Can public libraries develop critical health literacy in children?*

- Literacy enables us to do things we wouldn't be able to do otherwise. *Critical health literacy* means being able to understand health information, assess its relevance to ourselves or our communities, and take action as a result.
- Practising critical health literacy early in life, during childhood, can have health benefits later.
- The setting where critical health literacy is practised can shape what critical health literacy looks like.
- I am interested in finding out how children can be supported to practise critical health literacy in public library settings.

Why is/are my child/children invited to participate?

Children have been invited to participate so that I can understand what it's like for them when they use the library to practise critical health literacy skills. Taking part is **voluntary**. Your child/children will require consent from you before they can give their own consent to take part. If you are happy for your child/children to take part, you will be given this information sheet to keep and be asked to sign a consent sheet. You will still be free to withdraw your child/children at any time – you don't have to say why. You can contact me if you don't want them to take part anymore (up to one month after final data collection).

Unfortunately, your child/children won't be able to take part if you:

- Have not complied with requirements for COVID testing after travel abroad in the last 14 days.
- Are displaying COVID symptoms, or live with someone who is displaying symptoms.

What will taking part involve for my child/children?

If your child/children is/are eligible and you're both happy for them to take part:

- You and/or your child/ren don't have to be a Suffolk Libraries member. You are welcome to accompany your child/children.
- They will use library resources to research a health topic. This activity is designed to help children practise critical health literacy. I'll interview them about what they're doing and observe how they interact with the resources.

Possible disadvantages/risks to participation

Taking part in the research may require you to give up some of your time to transport/accompany your child/children to and from the library.

The library is an indoor public space. We will be careful to open windows and minimise your child/children's contact with other people, but there may be an increased risk of them catching COVID if they take part.

Possible benefits to participation

Your child/children will be helping researchers to understand how public libraries can make children feel more welcome when they have questions about health or ideas for action to resolve health issues locally. They will also help to make a difference in their community.

What will happen to the data that gets collected?

All the information collected about your child/children will be kept strictly confidential (subject to legal limitations). They will choose a pseudonym to protect their identity and ensure their privacy and anonymity in the collection, storage and publication of data. All data generated in the research will be stored securely in paper or electronic form. Data generated by the study will be retained in accordance with the University's Code of Practice and destroyed 5 years after the end of the project. If your child/children tell/s me something that may be a safeguarding concern, I will need to report it.

What will happen to the results of the research study on completion?

The results will be uploaded to the University's open access repository as part of my dissertation.

Who is organising and funding the research?

I am conducting the research as a student at the School of Health and Social Care, London South Bank University. The research is unfunded.

Who has reviewed the study?

The research has been reviewed by the School of Health and Social Care Ethics Panel at London South Bank University. I have been approved to work with children through a Disclosure and Barring Service (DBS) check.

Who can I contact for further information?

- If you have any questions about the research, please contact me by email (jenkinc7@lsbu.ac.uk).
- If you have any concerns about the research, please contact the project supervisor, Dr Susie Sykes, Associate Professor in Public Health, by email (sykess@lsbu.ac.uk).

Thank you for taking the time to read this information and for considering taking part.

Parent/Caregiver Name:
Child Name:
Signature:
Date:

Researcher Name:
Signature:
Date:

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Consent sheet – parents/caregivers (face-to-face research with children)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Please read each option and place the initials of your name (e.g. CJ) next to the ones you agree with.

Participation of my child in the project	Initials
I confirm that I have read and understood the information sheet and/or the researcher has explained the above study. I have had the opportunity to ask questions.	
I understand that my child's participation is voluntary and that I am free to withdraw them at any time (up to one month after final data collection), without providing a reason.	
I confirm I am not clinically vulnerable, I have complied with requirements for COVID testing if I have travelled abroad in the last 14 days, I am not displaying COVID symptoms, and I don't live with anyone who is displaying symptoms.	
I agree to my child taking part in the above project.	

Use of my child/children's information	Initials
I understand my child's personal details such as phone number and address will not be revealed to people outside the project.	
I understand that my child's data/words/handwriting/drawings may be quoted or reproduced in publications, reports, posters, web pages, and other research outputs.	
I agree for the data provided by my child to be stored (after it has been anonymised) in a specialist data centre and I understand it may be used for future research.	
I agree to the interviews being audio and video recorded.	
I consent for London South Bank University to hold data about my child's participation and share this with outside agencies for the purpose of COVID infection tracking. I understand that withdrawal from the study will not lead to data relevant to Track-and-Trace being destroyed.	

Parent/Caregiver Name:
Child Name:
Signature:

Date:

Researcher Name:

Signature:

Date:

If you have any concerns about the project, please contact the project supervisor:
Dr Susie Sykes, Associate Professor in Public Health
Email address: sykess@lsbu.ac.uk

Appendix 13: Recruitment of staff and community stakeholder informants: poster, information sheet, and consent form

EST 1892 **LSBU**

CAN PUBLIC LIBRARIES HELP CHILDREN TO MAKE A DIFFERENCE TO HEALTH?

I am a student at the School of Health and Social Care, London South Bank University. I am studying how public libraries might be able to help children to make a difference to the health of themselves and their communities.

Are you a **member of staff or a volunteer working in** or **partnered with** Suffolk Libraries?

Interested in improving service provision and contributing to your professional development by taking part in **health literacy research**?

Talk about texts

- I would like to **interview** staff at all levels about how the library supports children and young people to access, understand and apply health information and identify fake health news. These skills are critical health literacy skills.
- I will be looking at how children's critical health literacy fits in with your everyday work using the evidence of documents, images, audio and social media.

Engage with your users

- I will be inviting staff to participate in a **workshop** with children and young people to discuss their experiences of using the library to research and take action on health issues and how they can be supported by the library to practise critical health literacy in future.

© Libraries Connected 2020

Health and Wellbeing
Healthier, Happier, Connected
To support the health and wellbeing of local people and communities through services that inform, engage and connect.

Information and Digital
Inform, Inspire, Innovate
To ensure local communities have access to quality information and digital services, to learn new skills and to feel safe online.

If you have any concerns about the project, please contact the project supervisor: Dr Susie Sykes, Associate Professor in Public Health (sykess@lsbu.ac.uk).

For more information or to take part, please tear off one of the tabs below and contact me by email. Thank you!

For more information or to take part, please email Catherine Jenkins: jenkinc7@lsbu.ac.uk	For more information or to take part, please email Catherine Jenkins: jenkinc7@lsbu.ac.uk	For more information or to take part, please email Catherine Jenkins: jenkinc7@lsbu.ac.uk	For more information or to take part, please email Catherine Jenkins: jenkinc7@lsbu.ac.uk	For more information or to take part, please email Catherine Jenkins: jenkinc7@lsbu.ac.uk

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Information sheet – staff/stakeholders (online research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins, PhD student

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Staff and volunteers working in or with Suffolk Libraries are being invited to take part in a research project. Before you decide whether you would like to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What is the research about?

This project aims to answer the question **Can public libraries develop critical health literacy in children?**

- Literacy enables us to do things we wouldn't be able to do otherwise. **Critical health literacy** means being able to understand health information, assess its relevance to ourselves or our communities, and take action based on the information.
- Practising critical health literacy early in life, during childhood, can have health benefits later.
- The setting where critical health literacy is practised can shape what critical health literacy looks like.
- I am interested in finding out how children can be supported to practise critical health literacy in public library settings (including online during physical library closures).

Why are staff and volunteers being invited to participate?

You have been invited to participate so that I can understand how the public library setting is organised in relation to children using it to research and take action on health issues. Taking part is **voluntary**.

If you decide to take part, you will be given this information sheet to keep and be asked to sign a consent sheet. You will still be free to withdraw at any time – you don't have to say why. I'll check you're still happy at each stage of the research, and you can contact me if you don't want to take part anymore (up to one month after data collection).

Unfortunately, you won't be able to take part if you:

- Do not have permission from your line manager.

What will taking part involve?

- I will arrange an online interview with you. I will ask you to bring along, or email in advance, texts that inform your work in/with the public library setting related to children's critical health literacy. In this project, 'texts' are defined broadly, covering not only documents but also images, audio, video and social media posts (and anything else you can think of!). We will discuss what you have brought in the interview. I may need to follow-up with you afterwards.
- Later in the project, you will be invited to a workshop with children who helped design the research and who provided their expertise as informants. At this workshop we will discuss the research findings and use them to plan how changes can be made to the setting to support children's critical health literacy practices.

Possible disadvantages/risks to participation

Taking part in the research may take you away from your regular duties for a brief period.

Possible benefits to participation

You will be contributing to health research by furthering understanding of how public libraries can support children when they have questions about health or ideas for action to resolve health issues locally.

Participating in research may contribute to your continuing professional development, provide opportunities for reflection, or lead to co-authored articles in the LIS field.

What will happen to the data that gets collected?

All the information collected about you will be kept strictly confidential (subject to legal limitations). To protect your identity and ensure your privacy and anonymity in the collection, storage and publication of data, I will use a pseudonym and generic role descriptor when I refer to you and your work. All data generated in the research will be stored securely in paper or electronic form. Data generated by the study will be retained in accordance with the University's Code of Practice and destroyed 5 years after the end of the project.

What will happen to the results of the research study on completion?

The results will be uploaded to the University's open access repository as part of my dissertation.

Who is organising and funding the research?

I am conducting the research as a student at the School of Health and Social Care, London South Bank University. The research is unfunded.

Who has reviewed the study?

The research has been reviewed and approved by the School of Health and Social Care Ethics Panel at London South Bank University.

Who can I contact for further information?

- If you have any questions about the research, please contact me by email (jenkinc7@lsbu.ac.uk).
- If you have any concerns about the research, please contact the project supervisor, Dr Susie Sykes, Associate Professor in Public Health, by email (sykess@lsbu.ac.uk).

Thank you for taking the time to read this information and for considering taking part.

Participant Name:	**Researcher Name:** Catherine Jenkins
Signature:	**Signature:**
Date:	**Date:**

EST 1892 LSBU

Consent sheet – staff/stakeholders (online research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Please read each option and place the initials of your name (e.g. CJ) next to the ones you agree with.

Taking part	Initials
I confirm that I have read and understood the information sheet and/or the researcher has explained the above study. I have had the opportunity to ask questions.	
I understand that my participation is voluntary and that I am free to withdraw at any time, without providing a reason.	
I agree to take part in the above project.	

Use of my information	Initials
I understand my personal details such as name will not be revealed to people outside the project.	
I understand that my data/words/handwriting/drawings may be quoted or reproduced in publications, reports, posters, web pages, and other research outputs.	
I agree for the data I provide to be stored (after it has been anonymised) in a specialist data centre and I understand it may be used for future research.	
I agree to the interviews being audio and video recorded.	

Participant Name:

Signature:

Date:

Researcher Name:
Catherine Jenkins
Signature:

Date:

If you have any concerns about the project, please contact the project supervisor:
Dr Susie Sykes, Associate Professor in Public Health
Email address: sykess@lsbu.ac.uk

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Information sheet – staff/stakeholders (face-to-face research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins, PhD student

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Staff and volunteers working in or with Suffolk Libraries are being invited to take part in a research project. Before you decide whether you would like to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What is the research about?

This project aims to answer the question **Can public libraries develop critical health literacy in children?**

- Literacy enables us to do things we wouldn't be able to do otherwise. Critical health literacy means being able to understand health information, assess its relevance to ourselves or our communities, and take action based on the information.
- Practising critical health literacy early in life, during childhood, can have health benefits later.
- The setting where critical health literacy is practised can shape what critical health literacy looks like.
- I am interested in finding out how children can be supported to practise critical health literacy in public library settings.

Why are staff and volunteers being invited to participate?

You have been invited to participate so that I can understand how the public library setting is organised in relation to children using it to research and take action on health issues. Taking part is **voluntary**.

If you decide to take part, you will be given this information sheet to keep and be asked to sign a consent sheet. You will still be free to withdraw at any time – you don't have to say why. I'll check you're still happy at each stage of the research, and you can contact me if you don't want to take part anymore (up to one month after data collection).

Unfortunately, you won't be able to take part if you:

- Have not complied with requirements for COVID testing following travel abroad in the last 14 days.
- Are displaying COVID symptoms, or live with someone who is displaying symptoms.
- Do not have permission from your line manager.

What will taking part involve?

- I will arrange an interview with you. I will ask you to bring along, or email in advance, texts that inform your work in/with the public library setting related to children's critical health literacy. In this project, 'texts' are defined broadly, covering not only documents but also images, audio, video and social media posts (and anything else you can think of!). We will discuss what you have brought in the interview. I may need to follow-up with you afterwards.
- Later in the project, you will be invited to a workshop with children who helped design the research and who provided their expertise as informants. At this workshop we will discuss the research findings and use them to plan how changes can be made to the setting to support children's critical health literacy practices.

Possible disadvantages/risks to participation

Taking part in the research may take you away from your regular duties for a brief period.

We will be careful to minimise interpersonal contact, but there may be an increased risk of you catching COVID if you take part.

Possible benefits to participation

You will be contributing to health research by furthering understanding of how public libraries can support children when they have questions about health or ideas for action to resolve health issues locally.

Participating in research may contribute to your continuing professional development, provide opportunities for reflection, or lead to co-authored articles in the LIS field.

What will happen to the data that gets collected?

All the information collected about you will be kept strictly confidential (subject to legal limitations). To protect your identity and ensure your privacy and anonymity in the collection, storage and publication of data, I will use a pseudonym and generic role descriptor when I refer to you and your work. All data generated in the research will be stored securely in paper or electronic form. Data generated by the study will be retained in accordance with the University's Code of Practice and destroyed 5 years after the end of the project.

What will happen to the results of the research study on completion?

The results will be uploaded to the University's open access repository as part of my dissertation.

Who is organising and funding the research?

I am conducting the research as a student at the School of Health and Social Care, London South Bank University. The research is unfunded.

Who has reviewed the study?

The research has been reviewed and approved by the School of Health and Social Care Ethics Panel at London South Bank University.

Who can I contact for further information?

- If you have any questions about the research, please contact me by email (jenkinc7@lsbu.ac.uk).
- If you have any concerns about the research, please contact the project supervisor, Dr Susie Sykes, Associate Professor in Public Health, by email (sykess@lsbu.ac.uk).

Thank you for taking the time to read this information and for considering taking part.

Participant Name:	**Researcher Name:** Catherine Jenkins
Signature:	**Signature:**
Date:	**Date:**

EST 1892 LSBU

Consent sheet – staff/stakeholders (face-to-face research)

Project Title: Public libraries as settings for the development of critical health literacy in children

Ethics Approval Registration Number: ETH2021-0003

Researcher Name and Position: Catherine Jenkins

Researcher Contact Details: jenkinc7@lsbu.ac.uk

Please read each option and place the initials of your name (e.g. CJ) next to the ones you agree with.

Taking part	Initials
I confirm that I have read and understood the information sheet and/or the researcher has explained the above study. I have had the opportunity to ask questions.	
I understand that my participation is voluntary and that I am free to withdraw at any time, without providing a reason.	
I confirm I am not clinically vulnerable. I have complied with requirements for COVID testing if I have travelled abroad in the last 14 days, I am not displaying COVID symptoms, and I don't live with anyone who is displaying symptoms.	
I agree to take part in the above project.	

Use of my information	Initials
I understand my personal details such as name will not be revealed to people outside the project.	
I understand that my data/words/handwriting/drawings may be quoted or reproduced in publications, reports, posters, web pages, and other research outputs.	
I agree for the data I provide to be stored (after it has been anonymised) in a specialist data centre and I understand it may be used for future research.	
I agree to the interviews being audio recorded.	
I consent for London South Bank University to hold data about my participation and share this with outside agencies for the purpose of COVID infection tracking. I understand that withdrawal from the study will not lead to data relevant to track and trace being destroyed.	

Participant Name:
Signature:
Date:

Researcher Name:
Signature:
Date:

If you have any concerns about the project, please contact the project supervisor:
Dr Susie Sykes, Associate Professor in Public Health
Email address: sykess@lsbu.ac.uk

Appendix 14: Texts

Table A14.1 Texts sampled

TIN	Title	Produced by	Access	Notes
01	Org chart	In-house	Closed	Redacted version shared with researcher
02	The Universal Offers	Libraries Connected	Open	
03	Developing a Children and Young People's strand of the Universal Health Offer. A report	The Reading Agency on behalf of The Association of Senior Children's and Education Librarians (ASCEL)	Open	Refers to health literacy of parents and young people
04	The Children's and Young People's Promise	ASCEL and Libraries Connected	Open	Also referred to as 'The Children's Promise', 'The Promise'
05	COVID-19 Generic Organisation Risk Assessment	In-house	Open	
06	Health and Wellbeing Offer summary (poster)	Libraries Connected	Open	
07	Public Library Universal Health Offer (infographic asset)	Libraries Connected	Open	Refers to health literacy
08	Children, young people and audiobooks before and during lockdown	National Literacy Trust	Open	
09	Universal Library Offers virtual seminar #ULOseminar21	Libraries Connected	Open	Incl. pre-recorded videos
10	Content and Resources Policy	In-house	Open	Also referred to as 'Stock Policy'. The research period coincided with it being updated
11	[setting name] Board Meeting minutes throughout 2021	In-house	Open	
12	In-setting photographs	Researcher-generated	Open	
13	Community Health & Wellbeing Manager role profile	In-house	Open	
14	How libraries can support children's wellbeing: resource pack	Libraries Connected	Open	
15	Universal Library Offers Calendar 2021	Libraries Connected	Open	
16	Children's Promise: Self-Assessment Tool (Revised 2021)	ASCEL	Open	

17	What are you using this computer for today? (survey)	In-house	Open	
18	[setting name]: A Predictive Impact Analysis	Moore Kingston Smith Fundraising and Management	Open	Also referred to as 'MKS report', 'impact report'
19	Library service recovery toolkit	Libraries Connected	Open	
20	Byelaws for regulating the use of libraries	Local Council	Open	Refers to Section 19 of the Public Libraries and Museums Act 1964
21	Making a difference: libraries, lockdown and looking ahead	Carnegie UK	Open	
22	[setting name] launches new self-help books for World Mental Health Day	In-house	Open	'If it's on your mind, it's on our shelf'
23	How [setting name] can improve your wellbeing (video)	In-house	Open	
24	Universal Library Offers Plan 2021–22	Libraries Connected	Open	
25	Universal Library Offers Calendar 2021	Libraries Connected	Open	
26	Core values of a B library	In-house	Closed	
27	Making life better: our vision for 2019–2022 [setting's organisational strategy]	In-house	Open	'safe, fun and inspiring spaces that: expand knowledge; connect people; stimulate creativity; foster a sense of community'. Four strategic pillars: 'Delivering the core offer to everyone; Developing new partnerships and personalised services to attract new customers and increase income; Inspiring existing stakeholders and promoting our brand and services to more people; Establishing, measuring and monitoring our social impact'
28	Creating positive wellbeing and making lives better (August 2020)	In-house and Mind	Open	Takes into account the impact of lockdown on library services, and the implications of coronavirus for libraries' social value. 'The link between our services, wellbeing and a better life:

				Where I discover, create, learn *[echoing the Ottawa Charter]*; Makes me feel like I belong; Improves my wellbeing; Makes my life better'
29	Children's Library Journeys: Report	ASCEL	Open	
30	Children-in-care leaflet	In-house	Open	
31	Libraries Connected Awards 2021: Health and Wellbeing shortlist	Libraries Connected	Open	Refers to "libraryness"
32	Universal Library Offer Project Manager role profile	Libraries Connected	Open	
33	Library and Information Advisor role profile	In-house	Open	
34	Health and Digital Literacy Project Coordinator role profile (draft)	In-house	Open	Researcher consulted on this role profile
35	Why the Public Library Children and Young People's Promise is vital (blog)	Books2all	Open	
36	Libraries in Lockdown: Connecting communities in crisis	Libraries Connected	Open	
37	Libraries in the pandemic – final	Libraries Connected	Open	
38	We're still here – A message to our customers (video)	In-house	Open	
39	Warm Handovers – Guidance	Local Council	Open	
40	Warm Handovers – Hints and Tips	Local Council	Open	
41	Warm Handovers – Referral Form	Local Council	Closed	
42	Warm Handovers – Case Study	Local Council	Closed	
43	[setting council area name] InfoLink	Local Council	Open	
44	[setting council area name] Information Partnership Relaunch (video)	Local Council	Open	
45	[setting council area name] Information Partnership meeting agendas, minutes and newsletters (January 2019–July 2021)	Local Council	Open	
46	Reading Sparks in [setting council area name]	The Reading Agency	Open	

47	[setting council area name] Joint Strategic Needs Assessment	Local Council	Open	
48	Locations and times	In-house	Open	Information about individual branches of the public library service
49	What's on (and filters by event type)	In-house	Open	
50	Free Speech podcast, *Youth Takeover* (Ep. 30) (2021)	In-house	Open	
51	[setting name] monthly newsletters	In-house	Open	
52	Looking at building new library self-service software	In-house	Open	
53	Making self-service flexible	In-house	Open	
54	Our catalogue	In-house	Open	
55	Managers' update	In-house	Closed	
56	Chief Executive's all-staff update	In-house	Closed	
57	Volunteer role profile	Macmillan Cancer Support	Open	
58	Volunteer role profile	In-house	Open	Includes the line: '[setting name] is looking to redefine how the public see libraries'
59	Health Information Week notes	Health Information Week	Open	
60	Confidentiality Policy 2021–2024	In-house	Closed	Refers to the CILIP Ethical Framework [library sector organisational standards]
61	Online Privacy Policy	In-house	Open	
62	Privacy Notice for Test and Trace Information Collection	In-house	Open	
63	Library Services Contract Schedules	In-house	Open	
64	Library [financial] accounts for period ended 31 March 2020	In-house	Open	
65	[setting name] Annual General Meeting minutes 2020 and 2021	In-house	Open	Incl. video
66	Brand Identity	In-house	Closed	The research period coincided with a re-branding exercise by the setting: 'We are a place with no barriers and no bias, a place where you decide what you want us to be: today a sanctuary and tomorrow a place to be informed, a

				place to think or a place to create: a wide spectrum of connections for everyone in our community […] we created a structure to support the unifying proposition of 'Where I belong', looking at the different ways people can connect with us, so for example: • Where I create • Where I have fun • Where I feel safe • Where I learn • Where I stream We use these supporting ideas within our marketing both explicitly and implicitly' (p. 4) (Incl. suite of allowed icons)
67	Staff Brand Guidelines	In-house	Closed	Refers to the setting's 'Values' (with some variation): Knowledgeable, Empathetic, Welcoming [& Helpful], Creative, Resilient, Passionate [& Dedicated] Provides instructions for email signatures
68	Safeguarding Children and Vulnerable Adults Policy	In-house	Open	Being updated at the time of the interviews
69	Equality, Diversity and Inclusion Policy	In-house	Open	
70	Making Guiding happen	Girlguiding UK	Open	
71	Staff picks: health and wellbeing	In-house	Open	
72	Staff picks: read for empathy – eBooks for kids	In-house	Open	
73	Advice: anti-bullying	In-house	Open	
74	Reading Well for children	The Reading Agency	Open	
75	Parenting reading lists	In-house	Open	
76	[setting council area name] 2021/22 Business Plan	Local Council	Open	
77	Here's your ticket to… (library membership card leaflet)	In-house	Open	
78	Strategy; Our Governance; Strategic Priorities	Health Education England	Open	

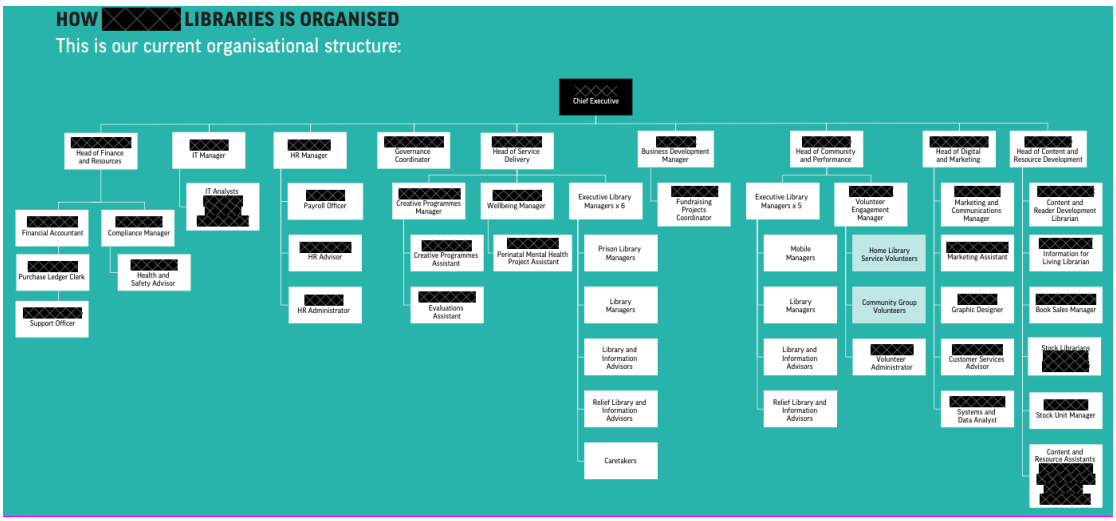
79	One Public Estate	Local Government Association	Open	
80	Get Your Facts Right! Fact-checking tips from [setting name]	In-house	Open	
81	The Big Catch-Up (bookmark)	In-house	Open	
82	The Summer Reading Challenge	The Reading Agency	Open	Also referred to as 'the SRC'
83	Design plans for new children's area in one library branch	In-house	Elusive	
84	Britannica Junior Edition	In-house	Closed	
85	Access Guides	AccessAble	Open	
86	Joining the library as a new member (email thread)	Zendesk	Closed	
87	Get [setting council area name] Reading: Secret Agent Challenge	In-house	Open	
88	Community fridge project launches at [name of a branch of the setting]	In-house	Open	
89	LEGO Libraries – A year on...	DCMS [Department for Digital, Culture, Media & Sport] Libraries, UK Government	Open	
90	Lego in libraries	Public Libraries News	Open	
91	Consultation – Collective Force for Health and Wellbeing: Refreshed action plan	Health and Social Care Alliance Scotland (the ALLIANCE)	Open	
92	Accessibility Awareness cheat-sheet for staff	In-house	Closed	
93	Information-gathering spreadsheet for accreditation pilot	In-house	Closed	The accreditation scheme aims to provide an assessment of each public library service in England to demonstrate how it: monitors and responds to user and community needs; develops resources, activities, services and collections to meet these needs; is managed, funded, staffed and resourced to meet these needs
94	Staying Safe Online (poster)	In-house	Open	

95	Children's services refresher (intranet module)	In-house	Elusive	Not yet produced – wishlist item
96	Perinatal Wellbeing Coordinator role profile	In-house	Open	
97	Libraries in Lockdown – [setting name]'s impact in figures	In-house	Open	
98	Research project launched to explore the wellbeing impact of libraries	In-house	Open	
99	[name of a branch of the setting] children enjoy new library facilities	In-house	Open	
100	Invitation to Tender: Information and Digital Learning Module for Library Staff	Libraries Connected	Open	
101	Sensory StoryWall®	[Company name]	Open	
102	Case studies	[Company name]	Open	
103	Where To Take Our Children	[setting council area name] Kids	Open	
104	[name of a branch of the setting] zones (map of co-located branch in context)	Local Council	Open	
105	Basecamp forum	Libraries Connected	Closed	Safer Libraries presentations
106	The Network supports libraries, museums, archives, galleries and other cultural and heritage organisations (as well as individuals) who are working to tackle social exclusion and towards social justice	The Network	Closed	
107	Taking Action, Changing Lives – A Libraries Week message from our CEO [name] (blog)	In-house	Open	
108	National Libraries Week – Library Heroes	In-house	Open	
109	This is what my local library means to me | #LibrariesWeek	DCMS Libraries, UK Government	Open	
110	Code Creatures leaflet (coding activities for children)	In-house	Open	
111	Charity Christmas cards	In-house	Open	'All profits from the sale of these cards will support our work to nurture children's literacy, support

				vulnerable people and promote wellbeing across [setting council area name]'
112	Libraries in a Year – Virtual art exhibition reflects on a year of library life	In-house	Open	
113	Reading and STEM: What can libraries do to help bridge the learning gap? (webinar)	The Reading Agency	Open	
114	NewsFlash! (online game)	Sutton Council Cultural Services	Open	
115	Library and sector support of people living with no fixed abode: Research review	The Reading Agency and Libraries Connected	Open	
116	The Reading Agency to pilot integrated local authority model for Summer Reading Challenge 2021	The Reading Agency	Open	Incl. pilot with primary schools
117	Libraries are no longer stocking lateral flow test kits	In-house	Open	Banner on setting website
118	We Need to Talk About Libraries (sketch note)	In-house	Open	
119	Engaging the public with research: a toolkit for higher education and library partnerships	Libraries Connected	Open	
120	Something in the Air? Calderdale Libraries case study	Libraries Connected	Open	
121	Expert bank: partnership toolkit	Libraries Connected	Open	
122	Bumping spaces: project report	Made by Play	Open	
123	Girls' Group end-of-funding report	In-house	Elusive	
124	Girls' Group submission for [setting name] Annual General Meeting	In-house	Elusive	
125	Annual Report 2021	Libraries Connected	Open	
126	Welcome to Libraries induction pack: your guide to working in public libraries	CILIP	Open	One mention of 'health literacy': 'Health and wellbeing: Services, advice and signposting to partner organisations to improve health outcomes for individuals and groups. Delivering Books on Prescription and health literacy sessions.'

TIN = Text Identification Number.

The setting's org chart, organisation-wide values, and 'B library' values



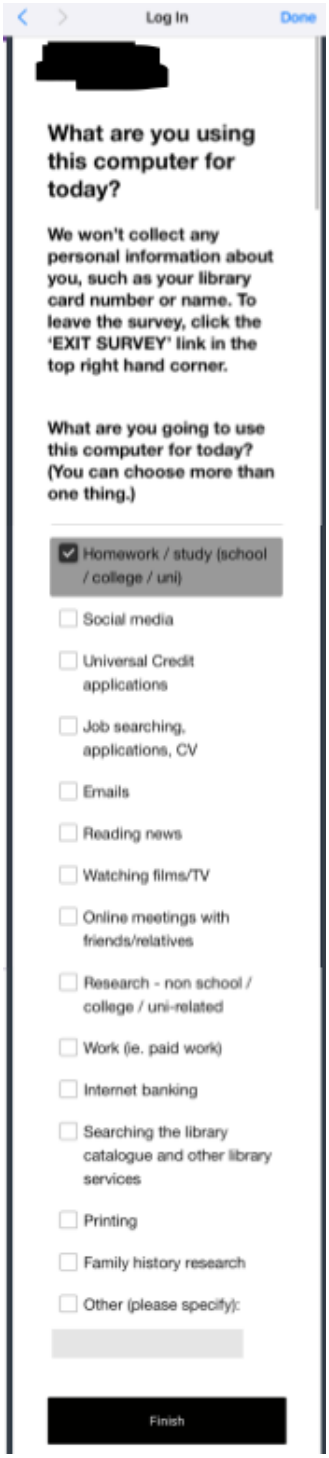
Photographs and screenshots from site visits: a selection of photographs and screenshots taken by the researcher. Captions, alt-text and OCR were added to images to render them machine-readable for analysis.

Library activities noticeboard featuring Girls' Group

‘Reading Well for children’ booklist

Social distancing floor markers

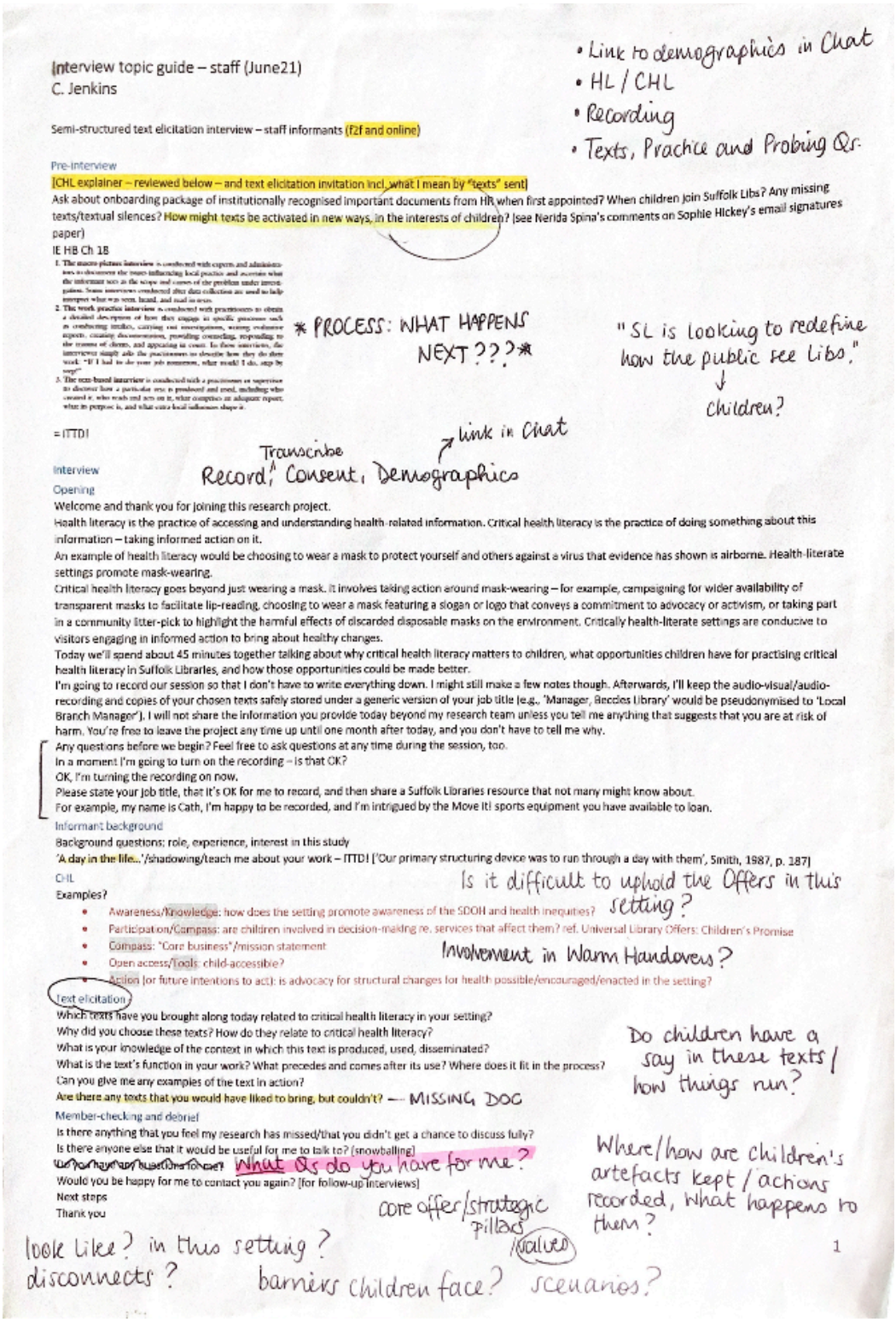
‘Girls’ Group is the Best!’ mural in library garden



Library WiFi use survey

Welcome sign: '…make it part of **your** routine'

Appendix 15: Topic guide for Interview to the Double used with staff and community stakeholder informants



Interview topic guide – staff (June21)
C. Jenkins

- Link to demographics in Chat
- HL / CHL
- Recording
- Texts, Practice and Probing Qs.

Semi-structured text elicitation interview – staff informants (f2f and online)

Pre-interview

[CHL explainer – reviewed below – and text elicitation invitation incl. what I mean by "texts" sent]
Ask about onboarding package of institutionally recognised important documents from HR when first appointed? When children join Suffolk Libs? Any missing texts/textual silences? How might texts be activated in new ways, in the interests of children? [see Nerida Spina's comments on Sophie Hickey's email signatures paper)

IE HB Ch 18

1. The micro-picture interview is conducted with experts and administrators to discover the issues influencing local practice and ascertain what the informant sees as the scope and causes of the problem under investigation. Some interviews conducted after data collection are used to help interpret what was seen, heard, and read in texts.
2. The work practice interview is conducted with practitioners to obtain a detailed description of how they engage in specific processes such as conducting intakes, carrying out investigations, writing evaluative reports, circulating documentation, providing counseling, responding to the worries of clients, and appearing in court. In these interviews, the interviewer simply asks the practitioners to describe how they do their work: "If I had to do your job tomorrow, what would I do, step by step".
3. The text-based interview is conducted with a practitioner or supervisor to discover how a particular text is produced and used, including who created it, who reads and acts on it, what competes an adequate report, what its purpose is, and what extra-local influences shape it.

= ITTD!

* PROCESS: WHAT HAPPENS NEXT???*

"SL is looking to redefine how the public see Libs."
↓
children?

Transcribe
Record, Consent, Demographics ↗ link in Chat

Interview

Opening

Welcome and thank you for joining this research project.
Health literacy is the practice of accessing and understanding health-related information. Critical health literacy is the practice of doing something about this information – taking informed action on it.
An example of health literacy would be choosing to wear a mask to protect yourself and others against a virus that evidence has shown is airborne. Health-literate settings promote mask-wearing.
Critical health literacy goes beyond just wearing a mask. It involves taking action around mask-wearing – for example, campaigning for wider availability of transparent masks to facilitate lip-reading, choosing to wear a mask featuring a slogan or logo that conveys a commitment to advocacy or activism, or taking part in a community litter-pick to highlight the harmful effects of discarded disposable masks on the environment. Critically health-literate settings are conducive to visitors engaging in informed action to bring about healthy changes.
Today we'll spend about 45 minutes together talking about why critical health literacy matters to children, what opportunities children have for practising critical health literacy in Suffolk Libraries, and how those opportunities could be made better.
I'm going to record our session so that I don't have to write everything down. I might still make a few notes though. Afterwards, I'll keep the audio-visual/audio-recording and copies of your chosen texts safely stored under a generic version of your job title (e.g., 'Manager, Beccles Library' would be pseudonymised to 'Local Branch Manager'). I will not share the information you provide today beyond my research team unless you tell me anything that suggests that you are at risk of harm. You're free to leave the project any time up until one month after today, and you don't have to tell me why.
Any questions before we begin? Feel free to ask questions at any time during the session, too.
In a moment I'm going to turn on the recording – is that OK?
OK, I'm turning the recording on now.
Please state your job title, that it's OK for me to record, and then share a Suffolk Libraries resource that not many might know about.
For example, my name is Cath, I'm happy to be recorded, and I'm intrigued by the Move It! sports equipment you have available to loan.

Informant background

Background questions: role, experience, interest in this study
'A day in the life...'/shadowing/teach me about your work – ITTD! ['Our primary structuring device was to run through a day with them', Smith, 1987, p. 187]

CHL

Examples?

- Awareness/Knowledge: how does the setting promote awareness of the SDOH and health inequities?
- Participation/Compass: are children involved in decision-making re. services that affect them? ref. Universal Library Offers: Children's Promise
- Compass: "Core business"/mission statement
- Open access/Tools: child-accessible?
- Action (or future intentions to act): is advocacy for structural changes for health possible/encouraged/enacted in the setting?

Is it difficult to uphold the Offers in this setting?

Involvement in Warm Handovers?

Text elicitation

Which texts have you brought along today related to critical health literacy in your setting?
Why did you choose these texts? How do they relate to critical health literacy?
What is your knowledge of the context in which this text is produced, used, disseminated?
What is the text's function in your work? What precedes and comes after its use? Where does it fit in the process?
Can you give me any examples of the text in action?
Are there any texts that you would have liked to bring, but couldn't? — MISSING DOC

Do children have a say in these texts / how things run?

Member-checking and debrief

Is there anything that you feel my research has missed/that you didn't get a chance to discuss fully?
Is there anyone else that it would be useful for me to talk to? (snowballing)
Would you be happy for me to contact you again? [for follow-up interviews]
Next steps
Thank you

What do you have for me?

Where/how are children's artefacts kept / actions recorded, what happens to them?

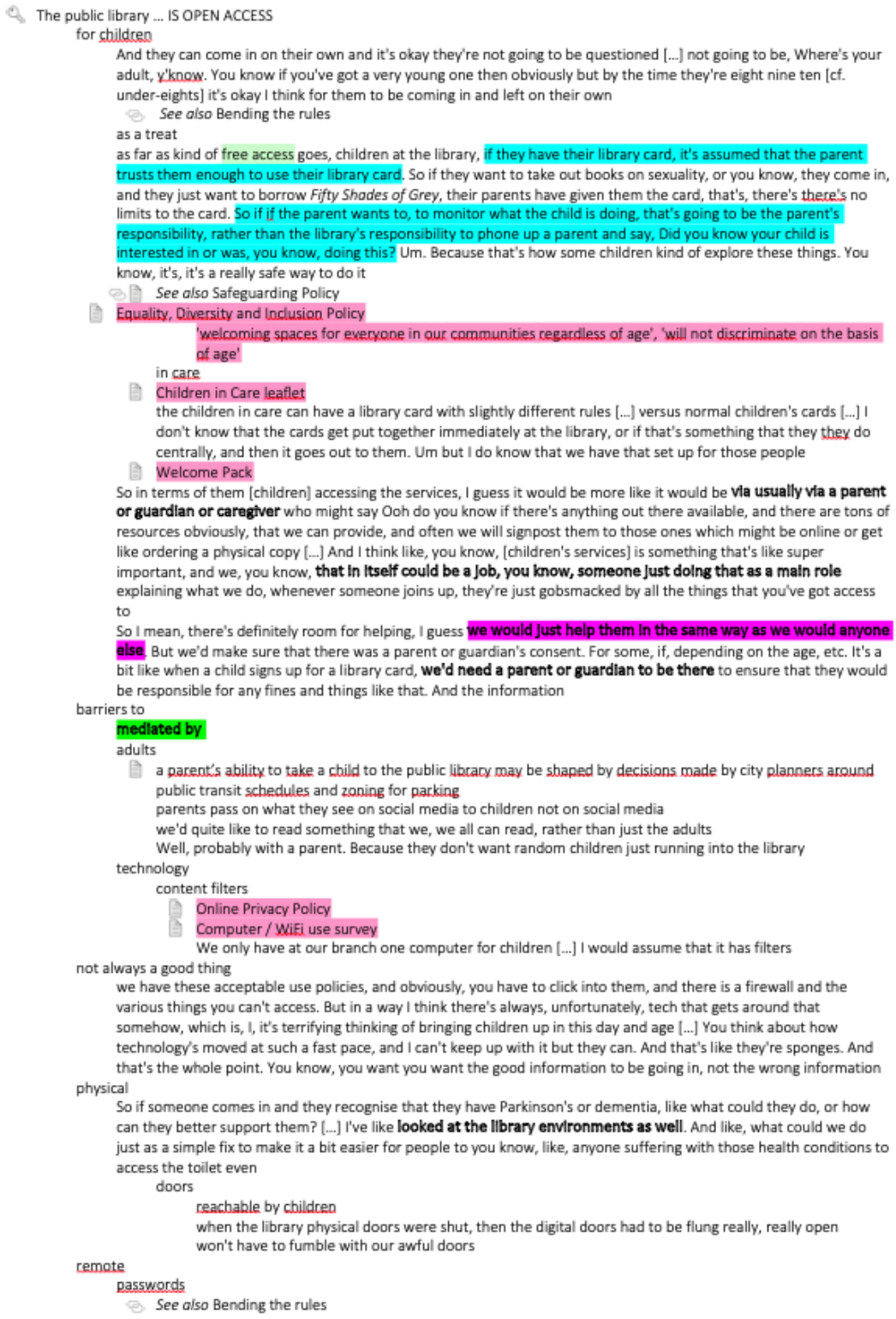
core offer/strategic pillars

look like? in this setting?
disconnects? barriers children face? scenarios?

1

Appendix 16: Extract from index-building in OneNote

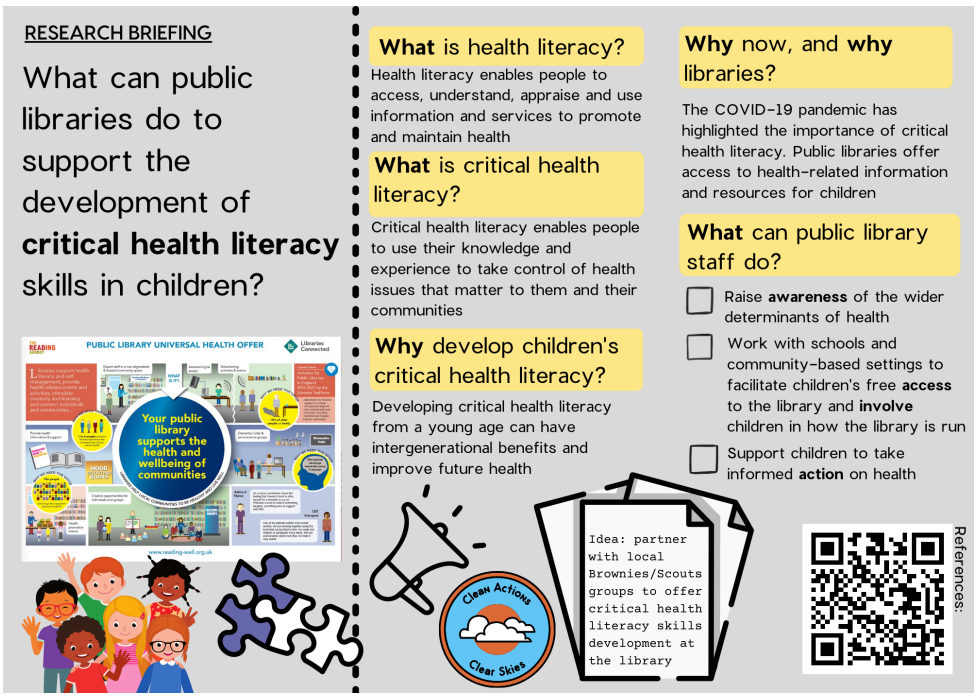
Extract from the index entry for the ‘Is open access’ antecedent, showing ‘keyword’ (key icon), ‘link’ (chain-link icon) and ‘text’ (paper icon) tags



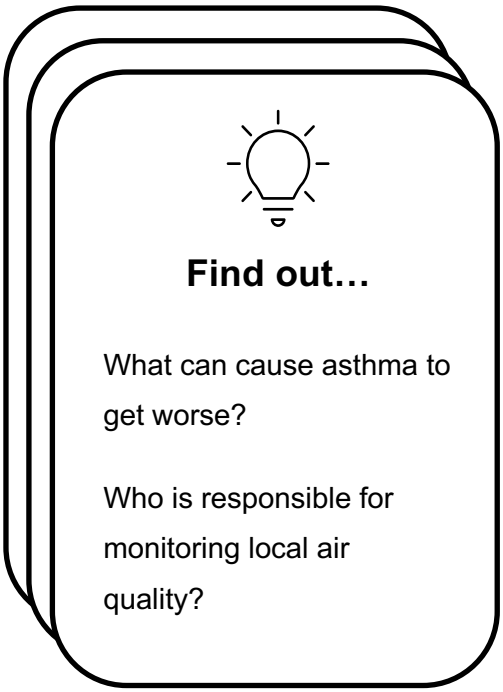
Appendix 17: Research briefings and draft critical health literacy toolkit for public libraries

Research briefing for children.

Research briefing for adults.



Draft critical health literacy kit for public libraries to use with children.
The cards correspond to a set of badges (represented by the icons). The topic of the cards is inspired by Something in the Air?: Calderdale Libraries case study (TIN120).



Appendix 18: Publications (peer-reviewed and in-review)

A18.1: Jenkins, C. L., Wills, J. and Sykes, S. (2023) Involving children in health literacy research, Children, 10 (1). DOI:10.3390/children10010023.

children

MDPI

Commentary

Involving Children in Health Literacy Research

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Abstract: Despite the volume and breadth of health literacy research related to children, children's involvement in that research is rare. Research with children is challenging, but the principles of involvement and engagement underpin all health promotion work, including health literacy. This commentary reflects on the process of setting up a Children's Advisory Group to consult on an institutional ethnography study of health literacy work from children's standpoint. The Children's Advisory Group contributed feedback on the study ethics and design and piloted methods for rapport- building and data collection, including livestreamed draw-and-describe and modified Interview to the Double. Consulting with the Children's Advisory Group highlighted the importance of listening to children and recognizing and valuing children's imaginative contributions to methods for involving children in health literacy research. Insights from this commentary can be used to foreground equity-focused approaches to future research and practice with children in the field of health literacy.

Keywords: health literacy; health equity; children; child health literacy; Children's Advisory Group; life course; public involvement; institutional ethnography

Introduction

check for updates

Citation: Jenkins, C.L.; Wills, J.; Sykes, S. Involving Children in Health Literacy Research. *Children* **2023**, *10*, 23. https://doi.org/10.3390/children10010023

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Health literacy, as a context-specific social practice [1], has been variously defined [2,3]. Children's health literacy has been defined in its own right, including what it means for children [4,5]. Children's health literacy is now increasingly understood as distinct from proximal adult and adolescent health literacy [6], with dimensions specific to the structures and relationships of children's social location and cognitive and social maturation [7]. The middle childhood stage that follows early childhood and precedes adolescence is a foundational period for independent decision-making and the formation of health attitudes, beliefs and behaviors contributing to health literacy [7–9].

This commentary understands children's health literacy as a social practice [1,10] spanning the middle childhood developmental stage [7,11] and functional, interactive, and critical levels [12]. It recognizes the differential demographic patterns, inequalities, epidemiology and health perspectives and dependency within power structures [13] that influence the opportunities available for children to develop health literacy ethically and in children's best interests [14,15]. It also discusses the neglected domain of children's critical health literacy [16–19].

Studying children's health literacy and how it can be developed is important, because children for whom health promotion messages are too far removed from their contex- tualized understandings of health may be more likely to struggle to apply and benefit from health literacy in their everyday lives [20]. Children's everyday lives place them in situations requiring critical decision-making about health spontaneously, 'in-the-moment in a hallway or after school on a playground, or alone without adult guidance' [21] (p. e194). When outsourcing their information needs to adults is not feasible, or is discouraged [22], children apply their embodied knowledge to challenge health information irreconcilable with their lived experience [20]. Consolidating this knowledge early in the life course is of benefit to the everyday health-related work that many children are already doing [23], or

may need to do in future [24]. However, there is a lack of empirical research on how health literacy can be developed in children that involves children in the research process.

This commentary starts from the provocation 'where is the child in child health literacy research?' [11], and its purpose is to provide practical strategies for actively centering the child in children's health literacy research. It reflects on the process of setting up a Children's Advisory Group to consult on the ethics and design of a doctoral study. The doctoral study explored the potential for public libraries to be supportive environments for children's critical health literacy development, and the work involved in this [25].

The methodology for the study on which this commentary is based was institutional ethnography, an equity-focused framework for inquiry into the social organization of people's work. Institutional ethnography (IE) draws on the standpoint of people in a particular social location to analyse how the knowledge available to them for their everyday work is socially organized in ways that extend beyond their purview. In IE, 'work' encompasses any purposeful activity that requires resources, time, and effort to get done [26]. The IE for the study starts from children's standpoint, and therefore from their knowledge. It recognises children's activities as 'workful' [27], serves as a reminder to keep the research anchored in the interests of that standpoint group, and takes an interests-based approach [14,28] that prioritises children's 'bodily experience, relevancies, and everyday knowledge' [29] (p. 2). IE is aligned with key features of a child health equity implementation framework, including in-depth inquiry into the social organization of children's contexts and relevant factors of children's experiences [24].

The lack of IE research that foregrounds children's interests is concerning, especially in the context of a corresponding lack of 'health literacy research *with* children' [30] (p. 594, emphasis in original). Learning from children's standpoint in an IE-informed approach to health literacy research therefore 'expands the range of interlocutors' [31] and makes space for children's voices to enter into the health literacy research conversation [32–34]. The IE concept of standpoint facilitates 'a child perspective' on the part of the researcher, who learns from children's experiences and is led by children's interests [35].

Children's standpoint is under-represented in IE research, despite the inclusion of children in illustrative examples early in the development of IE as a research framework [26]. There are more IEs 'about' children [36–41] than there are from children's standpoint, and IE studies that adopt the standpoint of children tend to focus on older children (adolescents) [42,43] or very young children [44,45], rather than middle childhood. Of the few examples that adopt standpoints from middle childhood, two focus on homework practices in families: one prioritizes eight-year-old children's rights to decline to participate in research [46], and the other explores the work of children aged ten to 16 in shared custody arrangements, including managing homework across different households [47].

Strategies for eliciting the work children are involved in, or refrain from, are nascent in IE [48]. Making available multiple options for how children can choose to provide information about the work they do in the everyday settings where they spend time increases researcher workload, but is necessary for learning the details of children's health-related work in-depth and the social organization of their work and the work of others.

Patient and Public Involvement and Engagement (PPIE) refers to research carried out 'with' or 'by' members of the public, rather than 'to', 'about' or 'for' them [49]. The lack of children's perspectives on the development of research into children's health literacy makes it imperative that children have a role in subsequent research to ensure that research reflects the lived realities of children's lives [23]. Best practice guidelines for integrating PPIE with children in UK health research are available [50] and have been reviewed and updated with input from Children's Advisory Groups.

Involving a Children's Advisory Group (CAG) in the design of health literacy research offers a route through which children can advise on the research and see their advisory work being taken seriously and making a difference to how the research proceeds [51]. However, CAG involvement in research related to children's health literacy is under-utilized. IE's use of standpoint is an inadequate substitution for PPIE, and although IE has been used to analyse

PPIE [52], examples of PPIE with children as part of an IE are limited. Prioritising the involvement of children is needed to advance PPIE in IE, and in studies of children's health literacy.

Consulting a Children's Advisory Group to Involve and Engage Children in Health Literacy Research

Ethics, Recruitment, and Structure of Consultations

Ethics approval for the study on which this commentary is based was secured from London South Bank University Ethics Committee (ETH2021-0003). Findings from the study are published separately [25]; this article focuses on the processes involved in setting up the CAG and how consulting with the CAG informed how the study was conducted. All child participants and their adults gave permission for children's contributions to be reproduced. In the absence of an IE-specific guideline, consulting with a CAG for the study was informed by PPIE literature [28,53–57] and grey literature on conducting ethical and inclusive online research with children using Zoom [58,59].

The degree of children's involvement in the CAG was deliberately aligned with the 'Consult' level of the modified International Association for Public Participation (IAP2) spectrum, which requires the researcher to commit to 'keep you informed, listen to and acknowledge your concerns and aspirations and provide feedback on how your input influenced the research' [60]. Consultation entails eliciting children's views to inform decision-making [61,62] and sits on a continuum that includes collaboration (e.g., participatory action research) and child-led shared decision-making (e.g., children as co-investigators/peer-researchers). The use of consultation in designing the study was pragmatic, to enable meaningful PPIE with children to the extent manageable under the constraints of COVID-19 while maintaining researcher control over the timescale of the project. The CAG was put in place to consult with children on the design of a proposed IE and to facilitate the recruitment of children to the final study. The intention in forming the CAG was to support and learn from children as capable and active practitioners of health literacy [16], as well as to build children's research literacy [63].

The CAG for the doctoral study comprised eight children aged seven to 11 years old (middle childhood) [6]. Each CAG member held the job title of Child Advisor (CA). Recruitment of CAs was through referrals by adults who knew children and showed social media posts about the study to them. PPIE with children at the Consult level in this multiphase study was not a one-off occurrence [61]: four consultations between 20–60 min were held with each CA or small-group twos or threes online during March–May 2021, followed by a debrief in November 2021. The CAG did not meet collectively, in order that each child or sibling small-group had time and space to make their substantive contribution.

The online nature of the CAG allowed the research to progress while social distancing measures were in place. Zoom was selected as a teleconferencing app that children were already familiar with from its use in homeschooling during COVID-19. The option to consult over telephone was also offered, to mitigate digital exclusion. Consultations were audio-recorded and transcribed in real time using Otter.ai transcription software, with live captioning visible on Zoom. Parents/caregivers of CAs were welcome to join the call, and CAs and their adults both provided informed consent prior to each consultation.

CAs chose their own pseudonyms (explained by the researcher to the CAG as "research codenames"). The pseudonyms reflected children's individual passions, e.g., outer space (White Hole) and YouTube influencers (KSI), and children expressed the intention to search for their codenames in open access outputs from the study. Table 1 summarizes the composition of the CAG.

Table 1. CAG demographics.

Child Advisor Pseudonym	Age	Gender

Luna Starshine	7	M
Jar Jar Binks	8	M
White Hole	8	M
ASDPENGUIN22	9	F
Ronaldo	9	M
KSI	10	M
Tigerlilly	10	F
Willowshot Ebony	11	F

The first consultation was used for introductions. Prospective CAs could find out more about getting involved in the CAG, inform the researcher of their pseudonym, and practise signing in to Zoom using the pseudonym as their virtual name-badge. The CAs provided feedback on the potential worth of the study for other children of the same age (i.e., that the study's focus on critical health literacy development in children was deemed important and relevant) [64], and indicated their preference to receive cashless incentives and to be kept up-to-date in between consultations by post to reduce screen-time. The scope of the CAG was discussed to manage CAs' expectations of what the CAG would be able to achieve within the timescale of the project, and to clarify their responsibilities and job descriptions as consultants. The concept of catalytic validity [64] guided the provision of opportunities for CAs to critically reflect on the determinants that constitute their own and others' health chances [65] and analyze possibilities for change without subsequent 'action paralysis' [66] in face of the difficulties in feasibly implementing such change from their social location.

The second consultation with CAs focused on ethics, specifically CAs' confidence in the appropriateness and safety of the research (framed as, 'would CAs be happy for their siblings/friends to participate in the later study?'), and edits to the recruitment and consent documentation.

The third consultation involved CAs in piloting two research tools: a rapport-building activity using draw-and-describe, and a data collection method using a modified Interview to the Double technique.

Listening to and Applying Children's Methodological Contributions

Draw-and-describe has previously been used in health research with children [67] and lends itself to producing insights into understandings of complex or multidimensional concepts (such as critical health literacy) [68]. While this method has been challenged [69,70] and should ideally be used alongside alternative ways for children to engage, it was useful for familiarizing CAs with talking about their understandings of critical health literacy and for learning from them how best to introduce critical health literacy as the research topic to children in the later study.

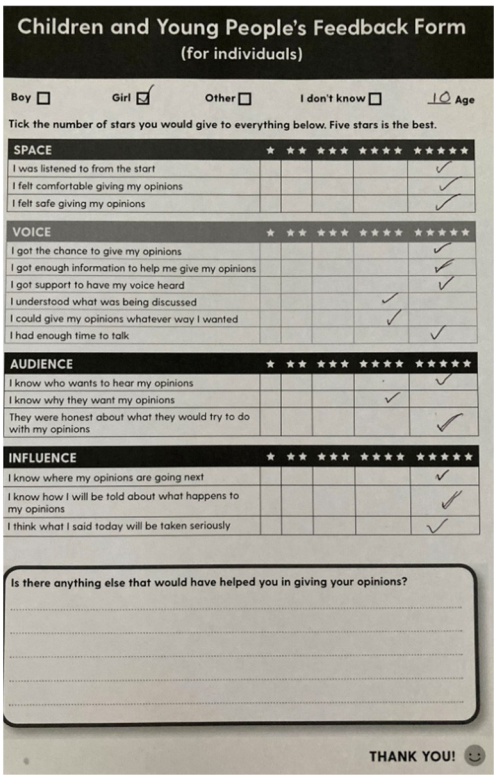
Interview to the Double (ITTD) combines in-depth interviewing ('tell me what you do', 'walk me through a day-in-your-life') with observation (where the researcher traces what the informant is observed as doing in practice onto what the informant has told them about what they do). It seeks to learn what work the informant does day-to-day, and how they know what to do in the first place, in sufficient detail that the researcher could replace them in their daily routine the next day (as a body-double or doppelgänger—the 'Double' of the technique's name). ITTD can 'reveal, question, challenge and offer perspectives that run counter to what we think we know' [33] (p. 6). It also renders accessible 'a child's perspective': the child's views on the experiences they identify as relevant (differentiated from, but supplementing, 'a child perspective', or the child standpoint as adopted by adults) [35].

ITTD is informed by practice theory [71] and has been used in studies of information literacy practices in the library and information science (LIS) field [72]. A method similar to ITTD appears in early fieldwork involving IE's founder [73], where it was used to understand the everyday practices of specialized workers without resorting to jargon or imprecise language that would obscure or displace those practices. It has also been used as part of work-based interviews in IE [74]. ITTD's integrated observation component makes it a pragmatic option during a pandemic, when opportunities for observation are limited.

While there is some precedent for using ITTD with children [75], and its use can help redress the power imbalance in an interview situation where the child is confronted with an unfamiliar adult [63], children are not routinely involved in designing interviews for health literacy research.

The final consultation focused on child-accessible public engagement strategies for disseminating the study's findings and included a formal debrief. All CAs received a personalized certificate thanking them for their work (that could be included in their school records of achievement, as requested in the initial consultation), and an incentive pack: a reusable tote bag containing materials that children could use to conduct their own health research projects.

Evaluation forms were provided to CAs following each consultation so that the researcher could take steps to rectify any issues ahead of the next consultation. The evaluation form template was based on the Lundy Model of Participation [76], updated to include items for evaluating children's experiences of remote research [77]. The forms served to hold the researcher accountable by creating conditions under which it was unacceptable for the researcher to elicit children's views and then ignore them. Figure 1 shows an evaluation form completed by a CA.


Children and Young People's Feedback Form
(for individuals)

Boy ☐ Girl ☑ Other ☐ I don't know ☐ 10 Age

Tick the number of stars you would give to everything below. Five stars is the best.

	★	★★	★★★	★★★★	★★★★★
SPACE					
I was listened to from the start					✓
I felt comfortable giving my opinions					✓
I felt safe giving my opinions					✓
VOICE					
I got the chance to give my opinions					✓
I got enough information to help me give my opinions					✓
I got support to have my voice heard					✓
I understood what was being discussed				✓	
I could give my opinions whatever way I wanted				✓	
I had enough time to talk					✓
AUDIENCE					
I know who wants to hear my opinions					✓
I know why they want my opinions				✓	
They were honest about what they would try to do with my opinions					✓
INFLUENCE					
I know where my opinions are going next					✓
I know how I will be told about what happens to my opinions					✓
I think what I said today will be taken seriously					✓

Is there anything else that would have helped you in giving your opinions?

THANK YOU!

Figure 1. Evaluation form completed by a Child Advisor.

Data gathered in consultations included the transcripts, children's text in Zoom chat, drawings, evaluation forms, and a reflective log filled in by the researcher immediately after each consultation and during the transcription process. Following the final consul- tation session, CAs were debriefed and their contributions were reviewed alongside the reflective log in order to identify insights.

Insights from Consulting a Children's Advisory Group

The lessons learnt from consulting with a distributed CAG are reported in this section with supporting extracts and media from the recorded consultations. Three insights are identified: the role of adults when researching health literacy with children requires a balance between providing assistance and learning from children's contributions; children's

preferred involvement in research is being part of a collective or group; and involving children can help develop research methods that are child-friendly.

Safeguarding Children's Involvement and Engagement in Health Literacy Research

There are numerous ethical considerations when conducting health literacy research with children, including the frequent use of schools as recruitment grounds and settings for research activities; in the school setting, children may find it difficult to decline to take part. Consultations were scheduled during school closures in the first wave of the COVID-19 pandemic in the UK, so schools' and teachers' influence was minimal. However, the role of accompanying adults (parents/caregivers) as gatekeepers and "translators" for children significantly shaped CAs' involvement.

The importance of process consent with children was emphasized in one CA's response to their previously signed consent form being screen-shared by the researcher for review:

> I'm pretty sure my mum did that. I don't remember doing it. (Jar Jar Binks)

CAs perceived the consent form as a barrier to the involvement of other children in the study. CAs questioned the five-year data retention stipulated on the consent form, and highlighted problems in the informed consent process as experienced by CAs themselves. The consent form template provided by the University Ethics Committee was extensively revised in response to CAs' feedback. These revisions enhanced the health literacy claims of the research by modelling health-literate practices in information provision and included the replacement of legal jargon and boilerplate text with edits made by CAs verbally during the Zoom sessions, or asynchronously after the session.

Figure 2 shows marked-up drafts of the consent sheet and part of the participant information sheet for the study, to which a CA lent their critical eye. The CA's comments were transcribed by the CA's accompanying adult.

Edits included the use of 'happy', 'confused/unsure' and 'not happy' emoji against each consent clause and a 'thought bubble' space on the form where children could expand on their reasons for selecting each emoji, or jot down any questions. However, these edits were transcribed by an adult, and were therefore presented at a remove from the child's original feedback.

Parental/caregiver involvement required careful management. On the one hand, adults were prone to fill silences if they felt that their child was "pondering" (taking too long to answer), or to interrupt to keep the research conversation "on track":

> Catherine said any questions! (White Hole, to parent)

> You're going to have your work cut out here. (Parent, to Catherine [the researcher])

On the other hand, parental/caregiver input into the CAG was essential for facilitating the return of consent documentation, providing correct postal address details, managing in-call mishaps (like a dropped ice-lolly), amplifying comments from CAs whispered in their ear, suggesting pre- and post-consultation reflections, and suggesting alternative ways for children to provide their opinions:

> For homeschooling, they've not been allowed to type stuff in chat [. . .] [to Tigerlilly] you might type opinions in chat mightn't you rather than saying them? (Parent)

> [Tigerlilly whispers in Parent's ear]

> Yeah, so it might be, so it'd be good if Catherine can make this feel like not school. (Parent)

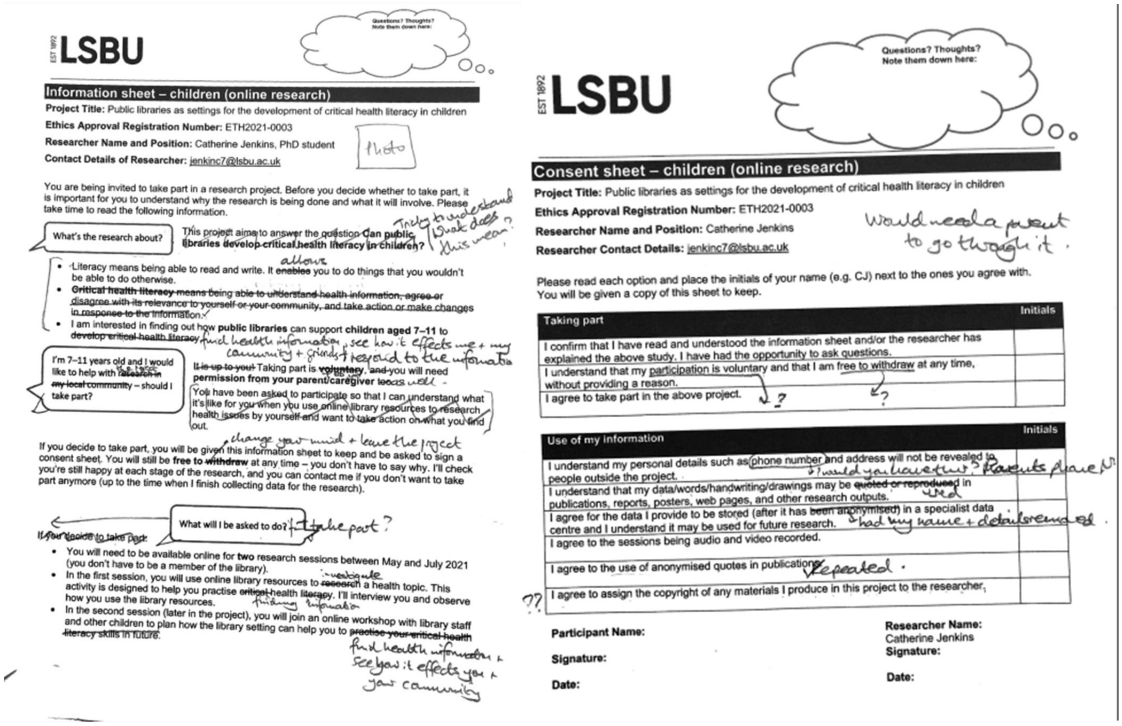


Figure 2. Edits by a Child Advisor dictated to, and transcribed by, their parent/caregiver.

The word 'critical', as used in the study's focus on critical health literacy, required parent/caregiver input before children were able to contribute examples of critical health literacy meaningful to them:

> Wait, was does critical mean again? (White Hole)
>
> [. . .]
>
> What's the word again? It's the word that that tells you questioning if it's real, or not. (White Hole)
>
> Okay, so she [Tigerlilly] thinks it sounds like it will be really useful, but they still don't quite absolutely understand what it will, what that what it would look like. (Parent)
>
> the critical bit. (Tigerlilly)

Children's engagement in health literacy research is contingent on adults' support. The presence of parents/caregivers both hindered and helped consultation with children.

Consulting as Part of a Collective Is Valued by Children

The 'G' for 'Group' in CAG is important. CAs communicated that although the one- to-one or small-group consultations enabled them to share their views, they missed the collective aspect of being part of a group:

> Only thing I would say is I wish we could be there together. (ASDPENGUIN22)
>
> I'd like to see the other people. (Jar Jar Binks)

The balance between enabling each CA sufficient space to speak (as in 1-to-1, pair, or small-group consultations), and the interplay of ideas in a larger group, requires careful consideration. While individual and small-group sessions enabled each CA to be heard, CAs expressed disappointment at not sharing their journey with other CAs and the researcher missed observing how convening the whole CAG together might have encouraged

CAs to interact with each other or pool their combined knowledge.

Crediting children's contributions as a group was a topic of discussion in the CAG sessions. CAs were interested in tangible evidence of how their contributions would be recognized in the research:

> Include like what we've thought of, stuff we've come up with. (KSI)

Children valued formal acknowledgement of their collective work of, as Tigerlilly described it in her edits to the recruitment documentation, 'Helping Catherine from a Child's Perspective'.

Methods That Work for Facilitating Children's Participation in the Health Literacy Research Process

Consulting with children led to the development of two imaginative research methods that appealed to children: livestreamed draw-and-describe, and Interview to the Alien.

The draw-and-describe exercise aimed to facilitate rapport-building and was piloted with the CAG as a two-part activity using a blank cartoon strip comprising three boxes. The first part of the activity asked CAs, in advance of the consultation, to draw a child with a mask (see Figure 3 for a completed Drawing 1). A COVID mask was not specified in the instruction, but all CAs chose to draw a COVID mask, as confirmed in their accompanying commentaries. In the consultation session, CAs were invited to complete the cartoon strip. Drawing 2 involved the children in creating an alien cartoon character who wanted to know why the child was wearing a mask for their and others' health. Drawing 3 located the alien in a public library setting (the case selected for the wider study) and asked CAs to draw the child showing the alien how to navigate this setting for 'Earthling' and alien health, including, e.g., how to ask library staff for help to display an awareness-raising poster, identify misinformation, or contact a local politician about masks contributing to litter problems locally.

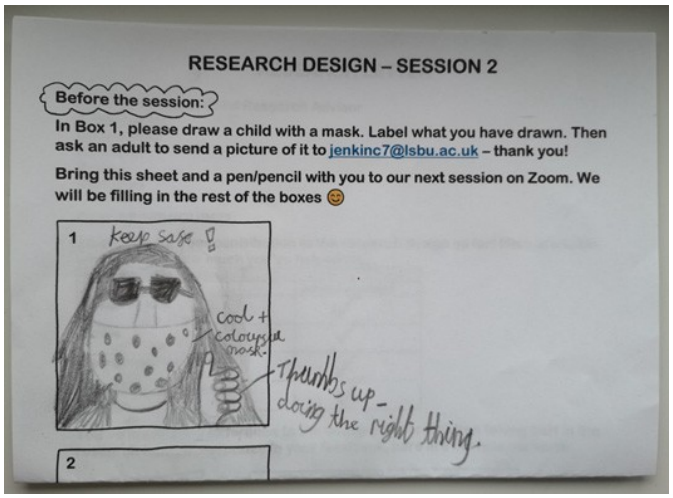


Figure 3. Example of a Child Advisor's pre-consultation 'Drawing 1'. The labels read: 'keep safe!/ cool + colourful mask'/'Thumbs up–doing the right thing'.

Consultations with the CAG linked this method to CAs' stated expertise and interest in livestreaming via video-based social media platforms like YouTube Kids or TikTok for Younger Users. Piloting this method with the CAG led to changes to the phrasing of the draw-and-describe instructions [78] to reframe it in terms familiar to children, such as 'an Instagram Story/Reel of your day', 'a livestream on YouTube', or 'a TikTok how-to video' (using the versions of these platforms for younger users). CAs suggested the instruction 'Pretend you're doing a livestream for [child's preferred platform] with a running commentary of what you're drawing. Position your camera to show the drawing taking shape' as a prompt for children to, e.g., explain their decision to make edits by erasing part of their drawing, or flag what ASDPENGUIN22 called a "spoiler alert", and Tigerlilly

'the big reveal', as their drawing developed. Framing the draw-and-describe activity in livestreaming terms helped to maintain a focus on children's embodied reflections in an online environment, and the drawing component of the study was a self-reported determining factor in the decision by children to participate in the later study.

The idea to incorporate the alien as an interlocutor in the draw-and-describe activity was suggested by CAs, who welcomed the "randomness" of the alien and thought it would appeal to other children: 'It's just completely random I love it' (Jar Jar Binks). Aliens ('Mork' and 'Og') have previously been used as stimuli in a health literacy intervention aimed at children [20]. The CAs separately agreed that the alien here should be children's own creation:

> cos then you can design it like, if they [adult researchers] designed it might be something like, it likes reading books. But you wanted yours to be, like, not doing that. (Tigerlilly)

The popularity of the alien in the livestreamed drawing exercise led to its being retained as a proxy for the researcher in the data collection tool. Consultations around the data collection tool developed from the researcher pitching to CAs a semi-structured interview technique: ITTD.

The CAG members, taking the 'Double' of the ITTD literally, were understandably skeptical about the researcher's ability to plausibly "get away with" replacing them in their daily routines. Better by far, CAs suggested, would be to ask children to educate the researcher as if they were educating an alien who knew nothing about how daily life works on planet Earth:

> It's like explaining to someone that's not educated. And I think that if there's an alien in there, it makes the story more interesting. (ASDPENGUIN22)

The 'Double' was accordingly switched to the 'Alien' in a modified version of the ITTD to create Interview to the Alien (ITTA). ITTA situates children as authoritative knowers in contrast to the alien, who knows very little and is reliant on children sharing their experiences. Its creation is indebted to the CAs' imaginative contributions.

Challenges in Equity-Focused Research with Children

Challenges in recruiting children to the CAG included its online nature. Despite efforts to involve children without access to a WiFi-enabled device by using alternative means of communication, such as telephone calls or by post, some children were still excluded (e.g., children from the Liveaboard Boater community without telephone credit or a fixed address). Challenges like this demonstrated the importance of referring to an equity-focused framework [24] when planning to convene a CAG, as well as the importance of ensuring that health literacy research with children does not inadvertently reproduce inequalities [79] and takes intersectionality into account in recruitment strategies. It is therefore key to offer prospective CAG members more than one option to participate in the research, and to integrate space for reflection and feedback within consultations that do not rely on evaluation forms (Figure 1). Taking an equity-focused approach is particularly relevant for research with children that is focused on critical health literacy [79].

Discussion

Changes made through consultation with the CAG helped ensure that the proposed research would be ethical (i.e., CAs would be happy for their siblings/friends to take part) and relevant to other children in the same age-range. Changes included verbal and written edits to the documentation used to recruit and consent child standpoint informants and help them understand their rights in the research process; ideas for disseminating the research so that other children would see it (a slide-deck for school assemblies and a YouTube Kids video); and formulation and refinement of tools for introducing children to the research topic of critical health literacy (a draw-and-describe exercise) and for use in data collection (ITTA, a modified combined interviewing and observation technique

inspired by ITTD). The CAG also contributed to methodological development in IE from children's standpoint.

There are some precedents for children's involvement in health literacy research, including the involvement of children who are unwell [80], children in good health [20], and Young Carer Health Champions [81] (Young Carers are children aged under 18 who provide unpaid care to another person of any age). During the initial waves of COVID-19, an international research collaboration used drawing elicitation as a rapid research method to understand the information available to children about the pandemic. The drawings collected from children in England depicted children's actions as protecting themselves, their families and wider society [82]. The study linked to this commentary also elicited drawings that captured children's critical health literacy knowledge [25] and involved children in work-based interviews that recognized children's work: as research advisors, and as health literacy practitioners.

However, PPIE work with children in health literacy research remains rare. Measures frequently do not include PPIE input beyond testing of instruments, e.g., the cross-national Health Behaviour in School-Aged Children (HBSC) survey (which collects data on the health and wellbeing, social environments and health behaviors of children aged 11 and over, and in which the Health Literacy for School-Aged Children–HLSAC instrument is an optional supplement) [83]. Dyadic studies conducted and published by adults to meet adult-led professional development objectives and research norms have tended to use the health literacy of proximal adults (e.g., parents/caregivers and teachers) as a proxy for children's own [84].

Guidance for translating consultations with children into outputs that can make a wider difference and attract the attention of the health literacy field is also scarce, as the available routes–such as co-authorship on a published paper–are not set up to facilitate children's involvement in them. While there are precedents for involving children as co-authors [56], it remains the case that publishing workflows and metadata fields feed into perpetuating research norms that complicate articulating and evidencing children's contributions in ways that conform with the contributor roles recognized by standards such as CRediT (Contributor Roles Taxonomy).

In consequence, there is a lack of nuanced understandings of children's health literacy, particularly their critical health literacy: how they access and appraise information, how they apply that information in practice, and what is most relevant and important to them. The CAG's contributions highlight the need for future research practice to address systemic barriers to children's involvement in health literacy research at every stage of the process, from ethics documentation and recruitment procedures through to dissemination. Consulting with the CAG has also demonstrated the value of involving children as advisors on how children's standpoint can be sought and understood in IE through methodological innovation with members of that standpoint group.

While the logistics of facilitating children's involvement in research mean 'there is always an adult present *somewhere*' [34] (p. 6), children's unfiltered contributions should be supported and acknowledged so that the health literacy field, and the ongoing development of IE, can continue to learn from their insights.

Limitations

The timing of the study that forms the focus of this commentary (during COVID-19) meant some CAs having more availability and resources than others to participate in consultations online. However, the CAs who were able to join consultation sessions represented significant information power [85], meaning that the information available from their first-hand and diverse experiences somewhat mitigated the small sample size [85–87] that also kept postal communications with the CAG manageable. Distributed CAGs should be consulted on whether to include plenary sessions that give children the opportunity to meet the others working alongside them. Furthermore, critical health literacy is a relational practice that can be enhanced by being conducted in a group, as findings from the wider study to which the CAG contributed have also concluded [25].

Demographic data were collected, but did not extend to a formal question on whether or not a CA had participated in health-related research before. In light of the inverse information law, this information would have been useful to guide future recruitment priorities for CAGs in health literacy research.

Conclusions

It is important to redress children's lack of involvement in health literacy research. Convening an online CAG, where children are involved in research at the consultation level, can contribute to this if the CAG meets as a collective and the role of accompanying adults is carefully managed so that the researcher can learn directly from children. Methods to engage children and support them in sharing their views are best developed in consultation with children themselves. Taking an equity-focused approach that reduces barriers to participation and values children's information power and experiences has implications for future ways of working, such as normalizing early CAG involvement in health literacy research proposals and drawing on children's standpoint to enrich adults' knowledge and understandings of children's health literacy.

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Article

Public Libraries as Supportive Environments for Children's Development of Critical Health Literacy

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Abstract: Critical health literacy enables individuals to use cognitive and social resources for informed action on the wider determinants of health. Promoting critical health literacy early in the life-course may contribute to improved health outcomes in the long term, but children's opportunities to develop critical health literacy are limited and tend to be school-based. This study applies a settings-based approach to analyse the potential of public libraries in England to be supportive environments for children's development of critical health literacy. The study adopted institutional ethnography as a framework to explore the public library as an everyday setting for children. A children's advisory group informed the study design. Thirteen children and 19 public library staff and community stakeholders were interviewed. The study results indicated that the public library was not seen by children, staff, or community stakeholders as a setting for health. Its policies and structure purport to develop health literacy, but the political nature of critical health literacy was seen as outside its remit. A supersetting approach in which children's everyday settings work together is proposed and a conceptual model of the public library role is presented.

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Introduction

Children's Critical Health Literacy

Children's access to and use of health information is influenced by their health literacy and the social contexts where they spend time, both with and without adults. This is because health literacy is a social practice [1,2] that has been shown to be a modifiable determinant of health [3] and an asset that can enable individuals to apply cognitive and social resources to support their own health and the health of their community from early in the life-course. Critical health literacy (critical HL) extends to planning, implementing, and evaluating interpersonal actions regarding the social determinants of health [4].

The life-course approach in health literacy research [5] has informed understanding of critical HL as developing alongside children's cognitive and social maturation [6]. Functional literacy skills are not, however, prerequisite to the development of critical HL [7]. By age 10, children can be active critical HL practitioners [8,9], and there is a case for investing in developing critical HL early in the life-course to mitigate current and future burdens on health services [10,11]. Providing opportunities for children to develop their critical HL in primary school may pre-empt health-related misconceptions becoming resistant to change [12]. Children are already key public health actors [13] and health information brokers for older family members [14–16]. Some are also young carers with caring responsibilities [17]. During the initial months of the COVID-19 pandemic, children depicted their actions as protecting themselves, their families, and wider society [18].

Critical HL in children younger than secondary school age is under-studied. There is no definition specific to children's needs [19], and the distinct circumstances whereby

children's opportunities to develop their health literacy 'can be promoted or hindered by social structures, relationships, and societal demands' [20] (p. 2).

The individual's social context has been found to be important for the development of all health literacy [21] in the ways in which information is acquired and shared. Creating supportive environments is one of the action areas of the Ottawa Charter for Health Promotion, because of evidence that the everyday settings where children spend time, learn, and play, can influence their health [22]. The identification of supportive environments where critical HL can be developed by children is therefore a priority for research.

A scoping review by the first author to identify existing literature on critical HL in children returned 18 studies, 16 of which were school-based (the remaining two were co-located with schools). The review concluded that a supportive environment for children's development of critical HL would have the following antecedents:

1. acknowledges the wider determinants of health that matter to children;
2. is open access and free at the point of use for children;
3. involves children in how it is run;
4. facilitates children's informed actions for health.

These four antecedents, drawn from literature on the development of critical HL, provide the focus for analysis for this study of the potential of public libraries as a setting for its development.

Looking beyond School-Based Critical Health Literacy

School is where most children spend time. School-based settings—classrooms, whole-school assemblies, playgrounds, canteens—are frequently used for health literacy interventions targeting this population [23], as documented in frameworks like HeLit-Schools [24]. While there is some evidence that integrating critical HL into school-based health education may contribute to improved health outcomes in the long term [25], there are also well-recognised barriers to schools being supportive environments for children's development of action-oriented critical HL. These barriers include schools' structural hierarchies and lack of time and space to fully embed critical HL across the curriculum [26–28]. The purpose of the present study, therefore, is to explore potential non-school-based settings for promoting children's critical HL.

Public libraries are one possibility. Public libraries are everyday settings with a core business tailored to the needs of the local communities they serve [29] and where children can access curated health information and signposting at no cost. Public libraries reach children like schools (and can also reach school-excluded children). In England, councils have a statutory duty under the Public Libraries and Museums Act 1964 to 'provide a comprehensive and efficient library service for all persons' who live, work, or study in the area [30] (there are no statutory requirements for schools to have their own libraries). Public library stock for children is recommended to be of sufficient range and quality to meet the social, developmental, educational, and leisure needs of all children and young people from birth to age 16, should promote information literacy, and should provide accurate and up-to-date information. Public libraries have a mandate for health promotion under the Universal Health Offer [31], which sets priorities for public libraries using a proportionate universalism approach: resourcing and delivering services to improve the lives of all, with proportionately greater resources targeted at the more disadvantaged in society to reduce the risk of inadvertently increasing health inequities [32]. The wider Universal Health Offer framework includes a pledge to support children's health and well-being and the Children's Promise [33], and case studies of universal offers in practice include public libraries working in partnership with the National Health Service (NHS), local public health departments, and universities [34]. These joint efforts constitute more than 'health promotion in a setting' [35]: they are part of a concerted settings-based approach. Public libraries require further study as potential supportive environments for children's development of critical HL.

The Setting

The study took place in a public library system in the East of England comprising over 40 individual public-access static and mobile branches. Some branches are co-located with other types of settings, e.g., a school, health clinic, or sports centre. Prison-based branches were excluded (because these are not accessible to children), and the system's Schools Library Service had ceased operations prior to the study. The system operates on an Industrial and Provident Society (IPS) model, which is required under legislation to be run for the benefit of the community [36]. COVID-19 risk assessments and additional training on remote research methods were completed prior to accessing the setting in its physical and online forms. The study received ethics approval from London South Bank University (ETH2021-0003).

In order to understand how the library is used, in-depth insights were needed into the experiences of the children, staff, and stakeholders in situ. The study therefore drew on methods from institutional ethnography (IE) to guide iterative data collection and analysis, including 'looking at documents, talking to people and watching their work' [37] (p. 349), to understand how people's work is socially organised (where 'work' is understood as any activity done with purpose that takes time and effort) [38]. IE is well suited to settings-based research, and its toolkit proved adaptable to the remote research conditions necessitated by the COVID-19 pandemic.

The Informants

The study deployed purposive and snowball sampling to recruit 13 child informants (with the consent of their parents/caregivers), 13 public library staff informants, and six community-stakeholder informants. It is best practice in IE to refer to participants as 'informants' because their knowledge and experiences actively inform the IE researcher's understanding of the setting [39]. Child informants were recruited through a poster campaign designed in consultation with a panel of child advisors who were not involved in the study as informants. The poster campaign was shared on social media (Facebook and Twitter) visible to parents/caregivers. Copies of the poster were also attached to an email sent to the local public health department for circulation. Recruitment priorities were guided by information power [40], meaning that informants' diverse and first-hand experiences relevant to the topic and processes being studied were prioritised over a theoretical saturation threshold [41]. Child informants were aged between seven and 11 years and in primary school education. These criteria were set in response to the demonstrated lack of health literacy research involving 'children under the age of ten or within a primary school context' [42] (p. 21). This age range falls within middle childhood, a foundational period of independent decision-making and the formation of health beliefs after which, it has been claimed, it may be 'too late' (at the onset of adolescence) to begin developing health literacy [43] (p. 632).

Of the 13 child informants who participated, seven were interviewed in their local library branch and were regular visitors there. The remaining six were interviewed on-line, of which three had access to a library membership card (their own, or that of their parent/caregiver). Seven child informants chose to be interviewed collectively in three sibling/friendship groups. Child informants selected their own pseudonyms, or "research code names".

Public library staff informants represented a mix of job roles (e.g., property manager, library and information advisor, stock librarian) and locations in the organisational chart, generally split between frontline work in the Service Delivery team and back-office work in the Content and Resource Development team. Community-stakeholder informants were recruited to provide extra-local perspectives on the setting's work and included a library design consultant, IPS trustee, business improvement manager (from the local council),

and staff from a local NHS hospital-based library.

Children's Involvement and Engagement

There are not many precedents in the literature of children's participation in health literacy research. For this reason, it was important to consult with children to ensure that the research focus was relevant to them, particularly in the context of the other demands on children's time during the early waves of COVID-19.

The study design, including its ethics, informed consent documentation, data collection, and plans for dissemination, were consulted on with a panel of eight child advisors (CAs). The CAs were in the same age range as the child informants and contributed to the research via videoconferencing and post. Of the CAs, two used a school library but not a public library, four were not members of the public library but used it occasionally via their parents'/caregivers' membership card, and two were card-carrying members of a public library.

The involvement of the CAs and the child informants followed the principles of the Lundy model of participation [44] from initial rapport-building through to final evaluations of children's experiences of participating in a remote research project [45]. The Lundy model guidelines helped create conditions under which it was unacceptable for the researcher to solicit children's views and then fail to take those views into account. All CAs and child informants received a certificate of participation and a tote bag containing materials to conduct their own research projects (a notepad and pens), a leaflet signposting children to public library-based health resources [46], and a middle-grade fiction book with a storyline that showed children's critical HL in action [47].

Data Collection and Analysis

In IE, texts are understood as governing or mediating people's work in the setting. Texts are defined multimodally and can include policies, drop-down menu options, photographs, social media posts, and any other media replicable across and beyond the setting. Texts are actioned by people, including texts unseen in their originals. Public library staff and community stakeholders were invited to share their knowledge and work related to children's critical HL in semi-structured text elicitation interviews. IE adopts a flexible approach to its topic guides for interviews and observations. Questions were led by the texts that staff and community-stakeholder informants chose to bring along to their interview or to which they referred during their interview.

The interviews with the child informants used child-generated drawings and a modified 'interview to the double' (ITTD) technique [48,49] to elicit in-depth explanations of what work children do in the public library when they want to find out about health or engage in health advocacy. The aim of ITTD is that the informant conveys 'a day in their life' account of their experiences in the setting to the interviewer in detail of sufficient specificity that the interviewer could plausibly replace them at work the next day as their body double or doppelgänger.

The ITTD technique formed part of a critical HL activity that asked children to draw and describe as if they were presenting a livestream on YouTube Kids or TikTok for Younger Users how a public library setting on Earth could support an alien to take informed action for alien and human health. The activity encouraged children to follow their curiosity and wander around the public library branch or, if online, the library web pages. The substitution of an alien for the double, to create an 'interview to the alien' (ITTA), was suggested by the CAs as a playful way to redress the power imbalance between the adult researcher (for which the alien is a proxy) and child informants. Child informants were invited to create their own alien. Aliens have previously been used in critical HL research with children [8], and can bring value by situating children as knowledgeable, in contrast to the alien, who knows very little and is reliant on children sharing their experiences.

Throughout data collection and analysis, leads for inquiry were pursued on an ongoing basis in response to the researcher's growing knowledge of the social context of the setting and people's activities there. Multimodal data (texts collected during site visits, e.g., researcher-generated photographs of signage; texts elicited from staff and

community- stakeholder informants; and interview transcripts captured by Otter.ai and manually checked by the researcher) were uploaded to NVivo 12. Using NVivo helped structure the analysis, firstly by de-familiarising the exported data and secondly by facilitating keyword- and tag-based querying across the dataset as a whole. Neither coding nor thematic analysis was used, because IE avoids reproducing abstract concepts that might obscure the work that people do [50]. Instead, the four antecedents to a supportive public library setting for children's critical HL, as identified from the literature, provided the theoretical framing and guided the analysis by sensitising the researcher to possible lines of inquiry to pursue.

In IE, indexing is used to organise data. The antecedents provided the first entries in this index and were expanded and cross-referenced with further entries and sub-entries from the data. Once organised into an index, the data were analysed using an abductive approach to pinpoint relevant empirical evidence that was 'surprising' or 'puzzling' when viewed through the analytic lens of the antecedents and in the context of the setting. Pursuing the lines of inquiry that opened up from these led to the insights that structure the Results section.

Results

The results are reported under the insights about this setting that they provide evidence for. These insights are selected from the macro-, meso-, and micro-levels of the setting.

The Public Library Is Not Perceived as a Setting for Health: "It's More Signposting [. . .] without Going That Step Further"

Child informants tended to view health as incidental to the public library setting, not core to it. From their perspective, the library as a setting for health was limited to provision of contemporary public health measures, such as the COVID-19 test kits available at the public library entrance:

> Well, they've got [COVID-19] testing where you just do the nose. They've got that. (Child informant, code name: Ice Cream)

Despite public libraries' role in the provision of consumer health information being a live issue in the UK and farther afield [51,52], staff informants similarly did not connect their work, or their workplace, with children's health:

> It's not common for a child to ask about health. (Library and information advisor, Service Delivery)

> I'm sorry [the interview] wasn't necessarily super health-based. I don't, I don't know that we offer that many specifically health-based things here. (Assistant library manager, Service Delivery)

Children were viewed by staff as reluctant to draw attention to their health-related concerns in this setting, even while the library was upheld by staff as a 'safe place' for children wary of scrutiny:

> They [children] don't want to do anything [that] may potentially cause problems in terms of social services or there's all these sorts of worries that a lot of young carers and things have as well [. . .] Takes them maybe a long time, but let[s] them realise that this is a safe place that they can come to. (Library manager, Service Delivery)

Health-related publications specifically for children that were available in the library at the time of the study included one [53] that featured on the Reading Agency's COVID-19 edition of its 'Reading Well for Children' booklist [54]. The book that was most frequently referred to and sought out by children in this study, however, was not on either of the 'Reading Well' booklists [55].

There are factors contributing to the public library setting not being seen as a setting for

health. One is the 'health by stealth' approach to health promotion in the public library setting, which "tends to happen around special days" (library and information advisor, Service Delivery) booked on a sector calendar. On other days, it is subtle by design:

> We don't actively badge it as Children's Promise or Reading Well [health-related signposting] for children [. . .] a customer wouldn't know, necessarily, that they were being steered towards particular books [. . .] It's all very 'stealth'. (Executive library manager, Service Delivery)

Another factor is the inconsistent representation of public libraries' health-related remit in texts referred to by staff for benchmarking service provision: the Universal Health Offer [31] and the Children's Promise [33].

Different versions of the Universal Health Offer co-exist on the website of Libraries Connected, the advocacy organisation for the sector. The multiple versions reflect re-launches of the framework over time, most recently for the recovery of public library services in the context of the 'new normal' of living with COVID-19. Against this backdrop, the Universal Health Offer lands in the public library setting as vast in scope:

> It is quite hard to, like, where do you choose, like, *which* health, you know, it's not like one part, I often think, Oh there's so many different conditions that, y'know, we should give more attention to. (Information for Living librarian, Content and Resource Development)

> If we pull together all our knowledge and resources, everything we could offer, staff could then promote to children [. . .] it'd be good to maybe actually have a, have a little umbrella module developed, which is what can we do to offer support to children. (Information for Living librarian, Content and Resource Development)

The Children's Promise provides guidance for staff on operationalising the Universal Health Offer to ensure children 'benefit from targeted library service activities that address disadvantage and improve their health and wellbeing' [33] (p. 1). The text of the Promise borrows from life-course discourse in public health by mapping out a 'library journey' that parallels children's developmental stages, but makes no provision for making children aware that they are on this journey: the text is not visible from where children stand in the public library context. The current Children's Promise makes no promises of health literacy support for children.

Staff informants described work to develop children's awareness of the determinants of health as hindered by the lack of published resources available to support such work:

> There just isn't the, the stuff there [. . .] I do wish there was, um, a child-friendly place we could direct them to [. . .] part of our role is making sure people know where to find the right information. And when the information isn't there to *be* found, at the level it needs to be at, it's difficult. (Stock librarian, Content and Resource Development)

The concept of health literacy was taken by staff informants to mean functional health literacy and used synonymously with signposting: guiding people towards information, but 'without going that step further' towards taking action on the determinants of health that critical HL entails:

> I think to a degree, it [health literacy] is sort of in the job description. But I think it's more as I say it's signposting. And it's ensuring that you know where the information is to support that child, that parent. Um, without going that step further. (Library manager, Service Delivery)

Schools Are Key Partners for Children's Access to the Public Library System: "Get Them in the Door and That's Usually through Schools"

Staff informants frequently referred to relationships with local schools as providing routes through which children were introduced to the public library setting:

> Before COVID, we would have regular class visits in, so we worked very closely with one of the primary schools. (Library manager, Service Delivery)

Schools are referrers of children into public library settings, and 'schools, school library services and school librarians' are named first in the list of partners for children's 'library journey' in the Children's Promise [32] (p. 1). Schools funnel children through the physical and digital public library doors:

> Just initially get them in the door. And that's usually through schools. (Library manager, Service Delivery)

Children 'becoming part of the library culture' (stock librarian, Content and Resource Development) is enshrined in the Children's Promise: '[children] should be actively involved in decisions about library service developments' [33] (p. 1). The redesign at one branch of the children's area of the library in partnership with a library-design firm contrasts children's opportunities to participate in this setting with school-based opportunities:

> We operate in public libraries, and also in schools [. . .] schools might have actually sat down and consulted with their School Council, or, y'know, Year Six, or whatever it happens to be, and had some input from the children themselves. (Stakeholder informant, library-design consultant)

Children's involvement in health-related work tended to be outsourced by the public library system:

> Lots of the work that we do is partnership-based [. . .] if it's not appropriate for a member of library staff to kind of do something around mental health and well-being, can we get an expert partner in [. . .] we can provide some kind of access to expertise in the community [. . .] so we could look at bringing in, um, yeah, bringing in the expertise [. . .] we could bring in other charities, other partners. (Well-being manager, Service Delivery)

Health literacy work targeting children entailed bringing in external expertise (as in the staff training provided by the NHS library team).

The Public Library System Seeks to Differentiate Its Offer from That of Schools: "We Don't Work Like That"

At the same time as working with schools, the public library system seeks to distance itself from school-based ways of working. Learning in the public library aims to be 'distinct from the school offer' [56] (p. 10). The self-assessment checklist for auditing the Children's Promise lists 'learning spaces in the children's area where they can learn individually and or in formal/informal groups' [57] (p. 14). Children's library-based learning opportunities, as distinct from school-based ones, were discussed by staff as libraries' unique selling point. As one staff informant emphasised, libraries "don't work like" schools:

> So we're not actively, y'know how school is—You must read this, and you need to do this [. . .] We don't work like that. (Executive library manager, Service Delivery)

> Last year [2020], there was, where it went all online, there was a massive dip in take-up, because we found that children like coming in, they like coming in and talking to a member of staff [. . .] they like having that engagement, and doing it online just took all of the, the joy out of it. And I wonder if it also made it a bit like schoolwork. You've got to read this book and then you've got to go online

> and you've got to fill out the thing. Whereas if you come in and talk to somebody, you've got that interaction, you're going to choose some other books, you might bump into your friends, perhaps it'll turn into a spontaneous playdate [. . .] it's that added value. (Executive library manager, Service Delivery)

The relationship between the public library system and schools was less about one offering an "alternative" to the other than it was about how both are interdependent.

Age Limits Children's Access to and Use of the Public Library System: "They Don't Want Random Children Just Running into the Library"

School-based settings matter for whether public libraries can be supportive environments for children's critical HL, because both settings are required to coordinate with each other as part of a supersetting approach. As a factor that limits children's access (one of the antecedents) to settings outside schools, age can also be traced back to schools' influence, because public libraries' age-based access policies take their lead from schools.

Staff informants stated that work was organised on the assumption that older children's needs were already covered by schools: "Yes, there's less [public library services] for seven to 11-year-olds. But that's because they're in school" (library and information advisor, Service Delivery). Specific support for children's critical appraisal of health-related information, a dimension of critical HL, was limited to a setting-wide subscription to an online encyclopaedia with age-based login access that provided filtered information on health topics.

Tracing funding pipelines showed that making health-related services available for seven to 11-year-olds requires workarounds to redirect funding actually ring-fenced for adults, families, or younger siblings:

> Because I'm adult mental health-funded, there's only so much like young people, children stuff that I can sort of get away with [. . .] there are some ways we can get around it. So we've had some funding around families and carers. Um, we have our perinatal service [. . .] And many of those parents also have more than one child. So there are ways that that kind of supporting children and young families kind of trickles through what kind of core funding allows us to do. (Well-being manager, Service Delivery)

Age matters for children's access to and use of this setting. The Children's Promise text maps children's life-course along a timeline of transitions from one school-based setting to another. Access to the setting and its resources is experienced by children differently, depending on where along the timeline children are located by staff, whether staff define children as customers, and whether staff engage in safeguarding work.

Children showed awareness in interviews that their access to the public library setting improved if they were accompanied by an adult: "Because they don't want random children just running into the library' (child informant, code name Ginny Weasley). Children's access to the public library was subject to gatekeeping and safeguarding by adults. Monitoring children's access was built in to the physical setting design:

> We've changed this [children's area] all round physically so that we can see what's going on. It was a very different space when I came. There were a lot of blind spots. And that's something, that is for, for my safety but also for the users' safety as well [. . .] There's still a couple of blind spots but our head of finance has given me the OK to buy some of these corner mirrors [. . .] if we're comfortable, then we are going to be relaxed and welcoming to chil—the boys and girls that, y'know, may potentially need some support. (Library manager, Service Delivery)

Staff were, however, trusted by senior management to use their professional judgement in regard to age-restricted access:

> And they can come in on their own and it's okay—they're not going to be questioned [. . .] Where's your adult, y'know [. . .] if you've got a very young one, then obviously, but by the time they're eight, nine, ten, it's okay I think for them

to be coming in and left on their own. (Library manager, Service Delivery)

Staff had licence to use their discretion on whether to put age-based policies into practice.

Legislation Regulates the Appropriateness of Public Library Services: "We Can't Be Seen to Be Involved in Anything That Might Become Political"

The extent to which the public library setting could support children to address the wider determinants of health was constrained by political considerations and adults' ideas of what constituted appropriate library-based activities.

Child informants' suggestions on how the setting could support them to take action on health were framed in terms of what would be 'allowed' in the setting:

> They could help you maybe like, help you get it [a health-related call to action], get it ready, so that you can like show it, or something. Or help you make the poster if you were doing a campaign or something [. . .] maybe stuff up on the wall or stuff on the tables or in books that tell you what is happening right now. At this moment. And what. If you're allowed in the library. What you can do in the library and stuff. (Child informant, code name Ginny Weasley)

Child informants' other suggestions included having "a little area" (child informant, code name Nicolai) or "critical corner", where resources and inspiration for action could be accessed in one place, rather than being "a bit jumbled among the non-fiction" (child informant, code name Nicolai).

By-laws regulating the use of the public library under the 1964 Act [30] set out appropriate standards of behaviour for library users and the actions to be taken if such standards are contravened. By-laws limited what staff informants reported they were able to do in this setting to support children's awareness of and action on the determinants of health:

> In terms of activist and activism and being involved in that, we have to be quite careful as an organisation, um, we can't be seen to be involved in anything that might become political. So our by-laws and things restrict us from having petitions and [. . .] campaigns and those kinds of things in our spaces [. . .] we have to balance, we have to be there for everybody. And we have to be politically neutral, and we have to be unbiased [. . .] yeah, it's a bit tricky that one [. . .] particularly as, y'know, we move into election periods, and um we have [. . .] we have, y'know, to be quite careful in what we do and don't have in in the library space. (Executive library manager, Service Delivery)

By-laws manifested operationally as concerns about the appropriateness of the public library as a setting for children's critical HL development:

> We're in such a unique place, I think it's important to remember that first and foremost, we are a library service. And there's only so much that we can do that's appropriate [. . .] it's quite a delicate balance between what we can do and what's appropriate for us to do [. . .] But what we can do is make sure that the community has access to the best, most up-to-date resources and books and people to talk to. (Well-being manager, Service Delivery)

However, strict adherence to by-laws was, like the enforcement of age-based restrictions, at individual staff discretion:

> It's down to common sense what we would enact and use [. . .] Mostly, we'll only kind of apply a few of [the by-laws], as and when they're needed. (Executive library manager, Service Delivery)

> We would find MPs' addresses, we would do all that kind of stuff in the same way as we would enable anyone wanting to do anything that needed assistance doing it. (Stock librarian, Content and Resource Development)

Operating unbounded by the by-laws was possible at the micro-level of individual branches.

Discussion

The results of the study are twofold. Firstly, it is only at the micro-level of the public library system (individual library branches) that all four antecedents to a supportive environment for critical HL (see Figure 1) were evidenced in practice. Secondly, a public library-based approach to children's development of critical HL is not enough on its own: a settings-based approach at the public library must form part of a wider supersetting approach, i.e., complemented by (not alternative to) other settings, including schools.

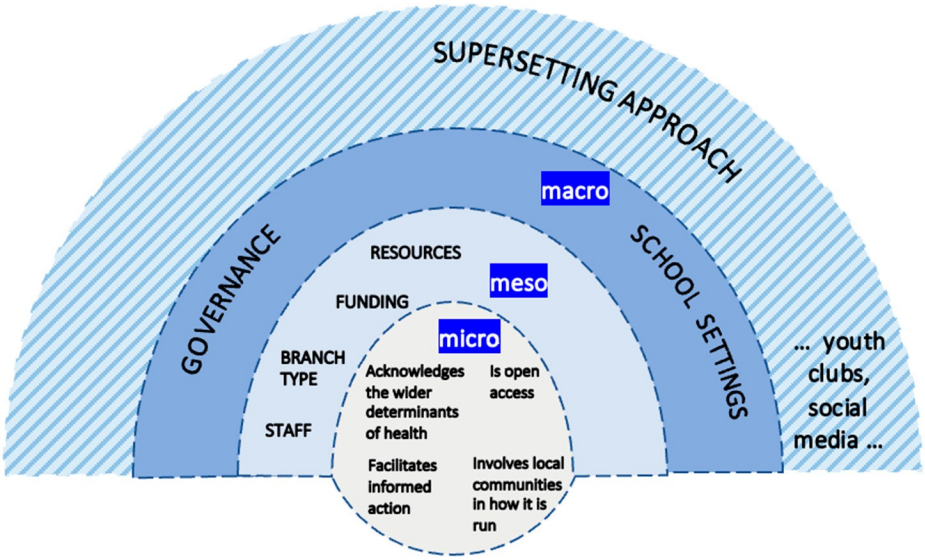

Figure 1. Conceptual model of the public library system as a supportive environment for children's development of critical health literacy.

The supersetting approach, or "settings-based approach 2.0" [58], is a multi-settings approach to health that recommends 'coordinated activities [. . .] carried out in a range of different settings within a local community with the aim of attaining synergistic and sustainable effects' [35] (pp. 30–31). The model shown in Figure 1 conceptualises the public library system as part of a supersetting approach that involves the participation of children and other settings in partnership towards a common goal of multilevel action on the wider determinants of health. The supersetting approach recognises that health is created across settings acting in concert with one another. For children's development of critical HL, a supersetting approach could look like a public library system working alongside schools and other settings, such as youth clubs.

At the macro-level, the social context in which the public library system operates influences the extent to which it can offer a supportive environment for children's development of critical HL. This wider context includes governance of the sector (e.g., by-laws) and other settings, especially schools. Within the library, meso-level factors, such as individual library staff expertise and attitudes, individual branch infrastructure and layout, target group-specific funding, and stock and resources, all influence the support available for children's development of critical HL.

The micro-level is more conducive (for all four antecedents) to a supportive environment for children's critical HL. It is at the micro-level that a library may organise groups that enable children to become locally involved. This is shown in Figure 1, which represents the public library as part of a supersetting approach.

The development of critical HL in children is an under-researched area, and it is known to be difficult to develop [43]. The few studies available tend to be school-based and limit critical HL to critical appraisal skills, with less emphasis on informed action for societal and population health [59]. The COVID-19 pandemic has highlighted the importance of

children's critical HL in their roles as public health actors outside school-based contexts [18]. The importance of this study, therefore, is that it identifies settings other than schools for children's development of critical HL.

The conceptual model contributes to the literature on the settings-based approach by highlighting the need to pay more attention to the wider (macro-level) context in which settings operate and the potential of group activities, organised at the micro-level of individual library branches, to offer local workarounds. The settings-based approach to health promotion aims to embed health into the core business of a setting, such that it becomes organisationally normalised and 'the way things are done around here'. Previous research has pointed out that a successful settings-based approach is difficult to evidence, because health embedded into core business recedes into infrastructure and becomes taken for granted [60]. What the conceptual model contributes is a cross-section of a supersetting approach involving the public library system that can be used to trace how macro-level political and extra-local dynamics interact with bottom-up interests to move the public library 'beyond a relatively limited "information provision" model' [29] (p. 899) and towards a supportive environment for action-oriented critical HL. The public library system is positioned along a lifespan/setting continuum [61] that—in the model—becomes a life-course approach combined with a supersetting approach. A combination of approaches is required for the potential of the public library system as a supportive environment for early life-course critical HL development to be reached.

The study has implications for how the public library system as a setting for health is understood, and consequently priorities for future research and practice. Whilst settings are accepted as part of the global approach to promoting health, there has been little development beyond education and health sectors. A recent handbook [62] includes examples of non-traditional and emerging settings for health, such as airports [63]. Digital environments and social media are increasingly recognised as settings for health [64,65]. As hybrid (physical and digital) settings, public libraries are well placed to contribute to research and practice in this area.

Follow-up studies indicated by the results include further consideration of the settings-based approach in health literacy research and greater involvement of children in critical HL studies in ways that take into account children's social contexts and learning from multidisciplinary insights into participatory research, e.g., from library and information science [66]. The literature on the settings-based approach to health promotion and health literacy must continue to adapt to and absorb twenty-first-century settings into its research priorities [62], and further research building on public libraries' potential as everyday settings for health [29] and health literacy [67] should be conducted.

Limitations

This study was conducted during COVID-19 as part of a doctoral research project and was constrained by children's availability for interviews at a time when parents/caregivers were under additional pressure, either from homeschooling or managing quarantine periods following travel abroad.

Conclusions

Public library systems are a statutory requirement in England, and are obligated to provide services supportive of the health of local communities. They are therefore key everyday settings to which most children have access, and their inclusion in a supersetting approach with schools could offer one solution to the problem of embedding critical HL in school curricula. Joining public library systems and schools together so that the two can work in synergy with each other could help overcome the structural barriers to action-oriented critical HL present in both when each is viewed in isolation.

Critical HL is a social practice developed in response to the resources at hand and embodied knowledge [2]. Children should be supported to draw upon and relate critical HL learning to their pre-existing, contextualised understandings. Neglecting to do this may

risk exacerbating health inequities, because children who struggle to reconcile public health messaging with their everyday social contexts may also struggle to put such messaging into practice [8]. Overemphasising one setting to which children have access (schools) over other everyday settings curtails possibilities for how those settings might work in concert with each other to ensure a joined-up approach to developing critical HL earlier in the life-course.

This study has inquired into what makes a setting—as the Ottawa Charter [22] understands the concept—a supportive environment for critical HL development. The study concludes that the same 'cautious optimism' applied to the connection of school-based health education to critical HL in the long term [25] (p. 13) can also be applied to a supersetting approach that combines schools with public library systems as supportive environments where children can create, critique, and take control of their health and that of others.

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CHAPTER 45

A Student Perspective on Learning and Doing Settings-Based Health Promotion in the era of TikTok

Catherine L. Jenkins[1]

Abstract

This chapter reflects on learning health promotion in the UK from a student perspective. Written during the COVID-19 pandemic, when health promotion education and practice operationalised online settings to comply with social distancing measures, it considers the roles of digital health literacies in promoting health. It also discusses how students of health promotion are introduced to the field and the impact these initial encounters have on framing students' orientation to and thinking around health promotion, particularly settings-based health promotion.

Keywords:

Digital literacy; Hashtags; Health literacy; Infodemic; Social determinants; Social media

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Setting the Scene: Twenty-First Century Health Promotion in the UK

On 28 February 2020, under the hashtag #HealthForAll, the World Health Organization (WHO) launched its verified account on the video-sharing app TikTok to combat COVID-19 misinformation.

COVID-19 exacerbated the existing digital divide in the UK (Good Things Foundation 2020). Witnessing the impacts of this twenty-first-century determinant of health in real-time, as the pandemic played out, has been instrumental to my learning and development as a student and early-career practitioner of health promotion and to my awareness of the work required if #HealthForAll – rather than just #ForYou, the TikTok users' homepage tag (TikTok Cultures Research 2020) – is to be realised 'IRL' (in real life).

My approach to the study of health promotion is shaped by a background in information science and two years' work experience as Health Literacy Project Manager within a National Health Service (NHS) library. Health literacy is defined by the WHO as the social resources that enable individuals and communities to access, understand, and use information to make informed decisions about health (Nutbeam 1998). More than being able to read and understand a patient information leaflet, health literacy is an asset which can support people to improve the self-management of their health and navigate the settings of everyday life (including online settings). It is a distinct but compatible piece in the wider puzzle of health promotion (Nutbeam et al. 2018). Without health literacy, health promotion and #HealthForAll 'cannot be meaningfully achieved' (Nash et al. 2018, p. 1).

Low health literacy increases health inequities, leads to poorer health outcomes, and costs the NHS time and money (Berry 2016). It is a significant problem in England: 61% of adults aged 16–65 struggle to understand health information when numbers are involved (Rowlands et al. 2015). The Health Literacy Project Manager role was created in November 2018 with the purpose of reducing the gap between health-related information complexity and the health literacy levels of the populations served by the NHS trust where I work. This remit includes the London borough of Waltham Forest where, at 76%, the prevalence of low health literacy exceeds the England average (GeoData Institute 2016).

The Health Literacy Project Manager role is aligned with and contributes to national efforts by Health Education England (HEE) and the Royal Society for Public Health (RSPH) to improve individual and systemic health literacy holistically (NHS England n.d.). Social prescribing is one way to develop health literacy and help people to take control of their health (National Academy for Social Prescribing 2019), and I work closely with local public health teams to signpost to accessible, high-quality health information via social prescribing in partnership with public libraries, some of which are co-located with healthcare settings. I am currently drawing upon this experience to inform doctoral research into health literacy-promoting settings.

The health promotion work I undertake with public libraries takes a proportionate universalism approach to addressing the inverse information law (Rowlands and Nutbeam 2013) – whereby those members of society most in need of information, are also those least able to access such information – at each stage of the life-course. Activities range from early literacy programmes and death cafés to Making Every Contact Count (MECC) conversations and reminiscence sessions for people living with dementia.

UK public libraries are supported in these activities by the Universal Health Offer (Libraries Connected 2018), which sets out how public libraries can develop their users' health literacy and self-management through the provision of health information and the hosting of health promotion events. As part of this, evidence-based collections of books for mental and physical health curated by The Reading Agency under the 'Reading Well: Books on Prescription' scheme are available to borrow from UK public libraries for free in print (with selected titles also available in audio and eBook formats) via two pathways: self-directed social prescribing, or through general practitioner (GP) referral. As of April 2021, there are five book collections available:

- Reading Well for children (updated post-March 2020 to include corona-specific resources)
- Reading Well for young people (marketed as Shelf Help)
- Reading Well for mental health
- Reading Well for long-term conditions
- Reading Well for dementia (including reminiscence resources and children's books that people living with dementia or their carers can read with younger relatives/friends).

The titles in the child- and adolescent-specific collections are regularly reviewed by a panel of child and adolescent health professionals, including GPs, psychiatrists, Child and Adolescent Mental Health (CAMHS) workers, public and school librarians and young experts by experience. I contributed to the selection process for the 'Reading Well for children' booklist, launched in February 2020. Many UK public library buildings closed physically shortly after the launch to mitigate the spread of COVID-19. The loss of the free WiFi provided by public libraries impacted outreach to digitally-excluded communities and necessitated a pivot in my learning and practice towards the literacies needed for pandemic-era health promotion: digital literacy, misinformation and disinformation literacy, and social media literacy.

The Pre-Literate Phase: An Interdisciplinary Journey Towards Professional Literacy in the Language of Health Promotion

My health promotion journey has followed an interdisciplinary trajectory: prior to developing professional literacy in the language of health promotion, I worked on an open access research publishing programme involving Wellcome Trust-funded medical humanities outputs. When I joined the NHS, I transferred my understanding of research management and dissemination to the health literacy role and from the outset viewed my partnership projects with public libraries – whether conducted in-person (floor-walking and drop-in 'information prescription'

sessions), or online through takeovers of public library social media accounts – as providing frontline public health services to meet the needs of under-served populations. Public libraries' accessibility and reach make them 'unique settings' (Whitelaw et al. 2017, p. 897) accessible to all, including non-members of the library, for health-related learning, work and play (WHO 1986).

The focus on promoting health literacy on-the-ground through public libraries nurtured my interest in the academic research underpinning my career development. The result of being research-curious was two-fold: I began a PhD focusing on settings-based health literacy and joined the 2021 cohort preparing for UK Public Health Register (UKPHR) validation as an early-career health promotion practitioner. Both experiences have provided opportunities to reflect on how newcomers to health promotion are introduced to it through the canon of published studies most likely to appear on reading-lists in introductory textbooks: the key texts and models which carry conceptual currency in the field, referred to in short-hand by those in-the-know ('the Marmot Review', 'the Dahlgren-Whitehead rainbow'). The scholarly record influences the emphases that aspiring health promotion professionals are taught to place on aspects of their work and the process by which certain aspects come to be recognized by health promotion's academic influencers as properly pertaining to health promotion, or as researchable within it. Where TikTok deploys creator notifications (to inform creators when they produce videos featuring effects that could trigger photosensitive epilepsy, for example), health promotion deploys creator constrictions: my attempts to slot health literacy into the larger health promotion jigsaw are circumscribed by prevailing prescriptions of what is, and is not, defined as health promotion within the disciplinary discourse.

COVID-19 injected new language into this discourse (Sørensen et al. 2021). Pre-pandemic, I had rated my personal 'health promotion literacy' based on how well I understood and could demonstrate application of the UKPHR Standards (Health Education England, 2021) for professional registration. The aspiration to become "literate" in health promotion led me to consider what this type of literacy might enable me to do, like identifying health-related fake news and sharing this skillset with others. As someone with neither 'health promotion' nor 'public health' in their job title, I had previously despaired over preparing the evidence required for my professional portfolio; re-casting my experiences through a literacy lens helped me to see how I might match my knowledge to individual UKPHR Standards in new ways.

My concerns that I was 'a bad health promoter' – even an imposter health promoter – led to strategies to develop myself as a literate learner of health promotion by putting into practice Freebody and Luke's (1990) 'four resources' model and adapting it to my purposes of code-breaking, making meaning from, participating in, and analysing health promotion's texts and tenets. Applying this model taught me to critically 'read' health promotion as an institution, just as *How to read a paper: the basics of evidence-based medicine* (Greenhalgh 2014) taught me how to critically appraise research and David Spiegelhalter's Tweetorials on risk taught me how to interpret data on vaccination safety (@d_spiegel 2021). Developing critical health promotion literacy has brought me a step closer to fluency in the field. But there remains a need

for health promotion itself to become more health-literate and digitally-literate, and more conducive to being understood as important for population health today by the audiences it seeks to serve.

Theory into Practice: Adapting to Online Settings

Settings 'represent the organizational base of the infrastructure required for health promotion' (WHO 1997, p. 6). The long-standing association between health promotion and settings is reflected in health promotion's milestone policies, which by convention are titled based on the conference locations where they were ratified (see WHO, 1991; 1997; 2016). Originally documented in the Ottawa Charter (WHO 1986), settings-based health promotion or 'the settings approach' underpins my work and research. Instead of relegating settings to the background – as in, 'health promotion in settings' (Dooris 2006, p. 59) – the settings approach promotes settings to the starring role of interventions, focusing on how settings can actively create and contribute to health rather than 'simply ensure we don't experience poor health within them' (Hodgins 2008, p. 17). Ilona Kickbusch pairs a settings approach 'done right' with action on the social determinants of health:

> If a settings approach is done properly, then it does address the determinants of health – it changes people's working environments, it changes the way work is organised, it empowers them as patients or as school children […] The big issues always reflect themselves in people's everyday lives and unless you provide a political space for empowerment – which is essentially what the settings do – you're not really doing health promotion.
>
> (Kickbusch, interviewed in Dooris 2013, p. 45)

Today, the settings approach has not kept pace with the new social determinants of health arising from the pandemic and the consequent hybridization of settings beyond the official list of WHO-endorsed healthy settings (WHO n.d.). The absence of online settings from the WHO list has also impeded progress in settings-based interventions to develop health literacy, which historically have not strayed far from the same settings (cities; communities and neighborhoods; education; healthcare; prisons; workplaces). An updated settings approach for pandemic-era health promotion is urgently needed (IUHPE Global Working Group on Healthy Settings, 2021).

Newman et al.'s (2015) rapid review of settings for raising awareness of health inequities provides a blueprint for such an update: while building on the WHO's list, the review provides evidence for the health-promoting potential of additional settings, including online, faith-based, sports, nightlife, green, and temporary or pop-up ones. Even before the first UK wave of COVID-19 in early 2020 routinised online home-schooling for children of non-essential workers, Newman et al. (2015) ranked online settings second in terms of frequency in the literature reviewed (below physically-accessed education settings, and above healthcare settings).

Approaching the settings approach from alternative angles, as Newman et al. (2015) do via opening hours, ecological footprint and permanence, is important for ensuring the roster of settings for health promotion and health literacy development remains relevant. Combining Newman et al.'s (2015) findings with wider reading (Whitelaw et al. 2017) highlighted for me the potential of public libraries to be included as new entrants to the WHO list. In the UK, public library settings continued to offer in-person support alongside online services throughout lockdown (for example, providing 3D-printing facilities for manufacturing Personal Protective Equipment (PPE), distributing food parcels for children during school closures, and reaching out to digitally-excluded local residents through wellbeing telephone calls).

The shift to online settings in my work with public libraries entailed re-tooling and re-training, from learning how to use Zoom to how to create memes and gifs championing health promotion (@VaccineSafetyNet 2021). My education also moved online: I continued compiling my evidence portfolio for UKPHR remotely and attended live and asynchronous health promotion lectures from home, using backchannels like Zoom's chat function and WhatsApp to make connections with other practitioners and students in the absence of opportunities for in-person networking.

Social distancing became so normalized in my life that watching television series and films made or set prior to 2020 and which featured large crowd-scenes and up-close interpersonal contact became surreally stressful. This was especially the case with the television series *It's A Sin* (Channel 4 2021), about the onset of AIDS in the UK. A scene where one character requests another to bring back any pamphlets or zines they can find relating to AIDS from a trip to New York, because of a lack of information available in the local public library, resonated with my memories of the early days of COVID-19 (when it was a news story reported from outside my filter bubble, and epidemiological terms had not yet become hashtags). Frerichs's (2016) epidemiology primer and exposé of a United Nations-backed disinformation campaign around the source of a cholera outbreak also made for a discomfiting re-reading experience in my new context.

The interruption by COVID-19 of established ways of doing health promotion and research afforded me space to re-think learning models and epistemological and ontological commitments I had previously lived by. This reset extended to how best to translate the settings-based research I had planned back in 2019 to an online and remote context. The result approached a form of meta-research, as health promotion online became both the means of access to learning and the learning goal itself.

Information Overload: Balancing Informed Practice with the Infodemic

The term 'infodemic' pre-dates the coronavirus pandemic: it was coined to describe the proliferation of unsubstantiated information intensifying public anxiety during the SARS epidemic of 2003 (OED Online 2021). With the shift of health promotion teaching to online settings, I was inundated with learning opportunities related to tackling the infodemic: London South Bank University (LSBU) ran a series of public health

masterclasses, the International Union for Health Promotion and Education (IUHPE) convened webinars, the WHO initiated a regular Infodemic Management News Flash briefing containing a plethora of links to yet more webinars, and my health-related podcast queue began to look as intimidating as the 'to-read' list in my reference management software. Sifting through the available educational sessions on offer took time away from my health literacy role and research as I attempted to balance the consumption of new information with the consolidation of what I already knew, or needed to revisit: should I attend a webinar on the sophisticated scams designed to look like NHS vaccination invitations? Should I listen to an episode of Public Health Disrupted (UCL Health of the Public 2021) on how stand-up comedy could be integrated into health promotion? How could I manage – and, when hosting training myself, *compete with* – this information overload?

I am a regular user of social media for Continuing Professional Development (CPD) and horizon-scanning of trends and topics in health promotion and health literacy. Part of this usage includes practising social media literacy to ensure that I am in charge of my social media consumption – and not the other way round! – through initiatives like #PledgetoPause (taking time to reflect and fact-check before sharing information). The potential of health promotion for harnessing and taking control of the infodemic as a dataset from which to gather insights is demonstrated by Southerton's (2020) analysis of TikTok as a health promotion tool: TikTok's popular trend of lip-syncing can indeed save lives, Southerton argues, if health promotion professionals are the ones creating the trending videos.

Approaching health promotion obliquely, or with a disruptive mindset – not stand-up comedy in my case, but leveraging social media and maintaining a presence on the platforms where the audiences I would like to reach spend time – proved useful for helping me to overcome the ethical and practical challenges of doing research in a pandemic and including children and young people in ways that recognized their rights and met Patient and Public Involvement and Engagement (PPIE) best practices. In the same way that the 'Ethical and Legal Values in Public Health' lecture in LSBU's series of public health masterclasses I attended was able to incorporate live reactions to vaccine hesitancy debates unfolding synchronously offline, I was able to discuss with young research participants over Zoom the topics that mattered most to them right now, and to which they could make a difference by their own actions (for example, mask-wearing). Provision of refurbished digital devices with pre-loaded data to digitally-excluded households was essential for training these children as digital health champions who could then cascade their learning to older family members and friends (IHLA, 2021). With the help of youth-created memes like @VaccineSafetyNet's curated GIPHY collection, shareable animated explainers (The Spinoff, 2021), fact-checker social media accounts like Twitter's @ViralFacts and influencers like the (medically-trained) Dr Ranj (@drranj), perhaps health promotion can do what an April 2021 TikTok on the need for two doses of a coronavirus vaccine (@hotvickkrishna 2021) did: cut through the noise, and go #viral.

Looking Forward: Health Promo(tion) online and IRL

COVID-19 led to the disappearance of a once-common student job, conducted across offline and online settings: nightclub promoter. How can health promotion become as ubiquitous in our social media feeds and on our streets as nightclub promoters once were (and, when nightlife returns post-pandemic, may be again)? Discussions at a webinar to mark 70 years since the foundation of IUHPE (IUHPE 2021) provided food for thought on what the next 70 years of health promotion should look like, and what needs to happen to ensure that health promotion practice is itself health-promoting. As an example of the disconnect between the #HealthForAll goal and health promotion in reality, the pre-set fields of my university's ethics application form did not list any ethics guideline specific to health promotion as an option, with the result that I ended up selecting the Social Research Association: Ethical Guidelines. The lack of a unified ethical framework for health promotion that is sufficiently recognized to be included on university ethics forms is an essential component towards the realisation of a health promotion practice that is authentically aligned (#nofilter) with health promotion values.

It might be expected that the teaching and learning of health promotion during a public health emergency would automatically be conferred with importance and taken seriously. But health promotion's fragmented representation as a discipline and profession in its own right (IUHPE 2021) has meant that too often in the present pandemic, the voice of health promotion has been effectively drowned out by algorithms that reward conspiracy theories over reliable health information (even after partnerships between social media companies and health organisations, like the one between TikTok and WHO). Re-writing these algorithms to establish social media as a health-promoting setting, buttressed by robust strategies for digital inclusion, offers an opportunity to advance the health promotion agenda.

To attain the solidarity, equity and transformation in health called for by IUHPE (IUHPE 2021), it is necessary to promote health promotion to students as a career that practises what it preaches in terms of transparency and the translation of learning into informed action (Guo et al. 2020). LSBU's 2020–21 lunchtime talks by health promotion professionals from a variety of backgrounds and at different stages of their health promotion career life-course provided a model for transforming health promotion to #HealthPromotion – a community-generated hashtag for a shared endeavor that is well-prepared for what marketing calls a 'phygital' future of physical and digital engagement with health.

Table 1, after References, presents reflections on the six triggering questions suggested by the Editors.

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Table 1 – Author's reflections on the six triggering questions suggested by the Editors

Questions	Take-Home Messages
What is our vision about HP?	Health promotion should promote the health interests of individuals and communities. In combination with (increasingly digital) health literacy, health promotion should support people to determine the health determinants relevant to them and advocate for the co-creation of #HealthForAll in all policies and places.
What is the institutional and political context of your experience (participants, professions and courses involved,	My experience as a student of health promotion spans professions (librarianship, public health), disciplines (health literacy, information science, open science) and participants (public library and medical library, staff, school staff, children and young people, expert patients, people living with dementia and their carers, homeless service-users, Recovery College graduates). I have

duration and frequency of activities)?	been embedded in a library and knowledge services team within the National Health Service (NHS) as Health Literacy Project Manager from November 2018 to the time of writing (April 2021). I started a three-year PhD in children's health literacy, informed by health promotion research and practice, in October 2019. I am currently participating in the 2021 cohort working towards professional registration with the UK Public Health Register (UKPHR) as an early-career health promotion practitioner.
Which theories and methodologies are used in the teaching-learning process?	The theories and methodologies that I have been exposed to through lectures, and which continue to frame my thinking in relation to health promotion, include the social determinants of health; the proportionate universalism approach; and the settings approach. As part of my PhD, I am applying institutional ethnography as a mode of inquiry for studying healthy settings.
What kind of forms of assessment are applied, results achieved, and challenges faced?	Health promotion lectures and masterclasses delivered over Zoom incorporate regular checks for understanding via interactive and participatory elements, including submitting comments and answers to questions in the chat-box; voting in online polls; and small-group discussion using the Breakout Rooms function. Continuing Professional Development (CPD) is challenging in a time of social distancing and reduced face-to-face support: the UKPHR validation scheme is being delivered remotely, and it is difficult to replicate online the serendipity of in-person networking that the pre-pandemic version of the scheme was able to facilitate.
Which principles, pillars, competencies or approaches to Health Promotion do you base your plan of teaching and learning?	My learning draws on several of the core competencies for health promotion, as outlined by the CompHP framework: a multidisciplinary knowledge base (including the significance of multiple literacies, e.g., digital literacy as well as health literacy), a commitment to enabling change and supporting self-advocacy (underpinned by critical pedagogies), partnerships with novel settings for health (e.g., public libraries), and the importance of embedding evaluation and research into practice.
What others could learn with your experience? What is localized and what is "generalizable"?	My work on the health promotion remit of public libraries is UK-specific, but public libraries internationally are involved in health promotion work (e.g., staff at Philadelphia's McPherson Square Library are trained to administer emergency naloxone to treat heroin overdoses, and Australian libraries employ Library Social Workers). Enabling engagement with populations on social media is more generalizable: e.g., the @viralfacts Twitter account, although focused on Africa, offers lessons in best practices for a national approach to challenging health misinformation in other countries. There is much to be learned from comparing the ways in which community-based settings, operating in different physical and online contexts, are supporting digitally-excluded populations to access health information and services during the pandemic.

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Uncorrected proof:

Settings for the development of health literacy: a conceptual review

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Abstract: Advances in conceptualizing settings in health promotion include understanding settings as complex and interlinked systems with a core commitment to health and related outcomes such as health literacy. Traditional settings for the development of health literacy include health care environments and schools. There is a need to identify and conceptualize non-traditional and emerging settings of twenty-first-century everyday life. The aim of this conceptual review is to inform a conceptual model of a "non-traditional" setting for the development of health literacy. The model uses the example of the public library to propose four equity-focused antecedents required in a setting for the development of health literacy: the setting acknowledges the wider determinants of health, is open access, involves local communities in how it is run, and facilitates informed action for health. The review concludes that a settings approach to the development of health literacy can be conceptualized as part of a coordinated 'supersetting approach', where multiple settings work in synergy with each other.

Introduction

The World Health Organization has long recognized that settings can be health-promoting or health-threatening: '[i]f health is everywhere, every place or setting in society can support or endanger health' (Kickbusch and Gleicher, 2013) (p. 65). The Ottawa Charter for Health Promotion (World Health Organization, 1986) views health as 'created and lived by people within the settings of their everyday life; where they learn, work, play and love' (World Health Organization, 1986) throughout the life course (Dooris *et al.*, 2022a). 'Settings for health' is used in this review as defined in the latest edition of the Health Promotion Glossary of Terms (World Health Organization, 2021b, p. 30) (p. 30):

> The place or social context where people engage in daily activities, in which environmental, organizational and personal factors interact to affect health and well-being.

Health literacy is a domain of health promotion and enables people to access, understand, appraise, remember, and use information about health (World Health Organization, 2022a). Health literacy can be developed through interaction with, and is influenced by, settings such as health care environments (World Health Organization, 2022a) and schools (Okan *et al.*, 2021) but there is increasing recognition that it can also be developed in "new" and emerging settings for health, such as online settings (social media and virtual reality) and hybrid settings (settings with physical and online manifestations; augmented reality) (Baybutt *et al.*, 2022; Jenkins, 2022; Levin-Zamir *et al.*, 2022; TikTok Cultures Research, 2020; Tolentino *et al.*, 2022).

One of the Ottawa Charter's action areas focuses on creating 'supportive environments' for health, but the Charter has not formally kept pace with the expansion of everyday settings for health (Nutbeam, 2008b) to include e.g. online settings (Dooris, 2013), or 'where people google' (Kickbusch, 2022). More recently, the World Health Organization has referred to 'enabling environments', which 'support people to access, understand, appraise, remember and use information about health' (i.e., develop health literacy), 'for the health and well-being of themselves and those around them, within the circumstances and demands of their daily lives' (World Health Organization, 2022b, p. x). A rapid review of settings for raising awareness of health inequities (Newman *et al.*, 2015) has suggested several types of non-traditional settings for health: online, faith-based, night-time economy,

green (‘eco’) and temporary pop-ups. Reviewing the settings approach from alternative angles and categorisation, e.g., by opening hours, ecological footprint, and permanence, can revitalize the evidence base and ensure that it retains relevance.

The supersetting approach, or “settings approach 2.0” (Bloch *et al.*, 2014), is one such revitalization. It is a multisetting approach to health that emphasizes ‘the need for coordinated activities to be carried out in a range of different settings within a local community with the aim of attaining synergistic and sustainable effects’ (Dooris *et al.*, 2022a) (pp. 30–31). This paper outlines a conceptual review of settings in the context of the settings approach in health promotion. The conceptual review informs a conceptual model of an example “new” setting, the public library, as a community-based setting for health and health literacy when part of a wider supersetting approach. The public library is selected as an illustrative example with four antecedents conducive to health literacy development. The antecedents are reported in more detail elsewhere (Jenkins *et al.*, 2022); this review focuses specifically on the relevance of the settings concept to health literacy.

Community-based and informal education settings broadly accessible to people include ‘extended classrooms’ such as ‘parks, shopping centers, community centers, or libraries’ (Paakkari and Paakkari, 2012) (p. 146). The public library is the example case used in this paper, for several reasons. Within the field of public health, public libraries constitute a comparatively unique but under-utilized community partner, particularly in rural areas (Lenstra and McGehee, 2022; Philbin *et al.*, 2019; Whitelaw *et al.*, 2017). Public libraries’ reach is inclusive of otherwise marginalized communities, such as school-excluded children and the homeless. Conceptualizations of public libraries as responsive and active community hubs for health-related activities and information-seeking highlight their provision of flexible physical and virtual space, informal learning opportunities, and curation of free access to local and global health information services (Leung *et al.*, 2016; St. Jean *et al.*, 2021). Library-based resources include the staff, some of whom will be trained information professionals with an understanding of health communication, infodemiology, and the determinants of health relevant to the communities they serve (Kyabaggu *et al.*, 2022). Many public libraries have a consumer health librarianship function (Luo and Park, 2013) and ‘routinely assist patrons with unmet health and social needs’ (Whiteman *et al.*, 2018) (p. 1).

Despite evidence internationally in support of the potential role of the public library in public health and, to some extent, health literacy (ALLIANCE, 2021b; Leung *et al.*, 2016; Naccarella and Horwood, 2020), this setting constitutes a missed opportunity: it is not considered a "traditional" setting for health (World Health Organization, n.d.). The current conceptual review therefore uses the public library as an example to explore the potential of non-traditional or emerging settings for health and health literacy.

Methods

The importance of settings as a concept for the promotion of health is longstanding and there is a significant body of literature that explores the concept (Whitelaw *et al.*, 2001) and its practice (Dooris *et al.*, 2022a), and yet its theoretical basis is contested (Dooris *et al.*, 2014, 2022b). A conceptual review examines the discursive scaffolding of a concept and contributes more nuanced understandings of the connections between that concept and empirical evidence (Ayala, 2018). Revisiting the literature via a conceptual review can foster 'revitalization of existing theory', or even 'novel conceptual insights' (Hulland, 2020) (p. 28).

A conceptual review of the settings-based approach was conducted using a systematic process of searching across databases and grey literature, and reading the retrieved literature critically to map and clarify this concept in its historical and social context (Ayala, 2018). While the review was conducted systematically, it differs significantly from a systematic review. One such difference is the way in which a conceptual review is reported: there is no extension to PRISMA available for the conceptual review type, and therefore conceptual review reporting tends to be discursive in nature. The process incorporated five stages: establishing the parameters of the concept under review, integrating and synthesising the evidence base (both conceptual and empirical), resolving inconsistencies and tensions, highlighting gaps in the existing literature, and outlining an agenda for future research (Hulland, 2020).

The first stage involved defining the settings-based approach in health promotion and distinguishing it from related concepts by formulating and applying eligibility criteria to separate out instances of conceptual conflation and terminological confusion. The second stage used citation analysis of canonical or pertinent sources (Bloch *et al.*, 2014; Dooris, 2013; Dooris *et al.*, 2022a, 2022b; Wenzel, 1997;

Whitelaw *et al.*, 2001) to comprehensively trace the development of the settings concept and its theorization. Inconsistencies and ambiguities, e.g., between definitions and operationalizations of the concept, were resolved systematically by grouping the amassed evidence into research 'streams' that could be examined side-by-side (Hulland, 2020). This examination led to the next stage: gap or "tensions" analysis, focused specifically on where an absence of evidence or the presence of tensions limited the ability of the settings-based approach to evolve and respond to twenty-first-century determinants of health. The conceptual tensions identified are reported in the Results.

Results

The results of the conceptual review are presented as themes that each reveal a tension in the narratives around settings and ways in which the concept has been clarified or developed, such as using complexity theory to represent settings as systems. Overlapping concepts identified from the literature are used to organize the results based on how the public library setting is understood: as a 'setting for health', a 'system', a 'health-literate organization', or part of a supersetting approach. The results inform a conceptual model of the public library as part of a supersetting approach.

Settings for health and health literacy

The conceptual review provides insight into what is known about 'settings'. In health promotion policy and literature, 'setting' is used in two ways: health promotion *in* a setting (where the setting serves as the location for individually-oriented lifestyle interventions), and settings-based health promotion (where the setting *is* the health promotion intervention) (Dooris *et al.*, 2014, 2022a). In the 2021 update to the Health Promotion Glossary of Terms (World Health Organization, 2021b), under a new entry for 'environmental determinants of health', settings for health are referred to as providing the 'structure for practical action' (p. 15). Action also appears under the 'settings for health' entry itself, where the indicator that 'people actively use and shape the environment' differentiates settings for health from 'a setting as the basis for delivery of a specific service or programme' (p. 30).

The emphasis on "traditional" settings for health – 'healthy cities; health promoting schools; healthy workplaces; healthy islands; health promoting hospitals; health

promoting prisons and health promoting universities' (World Health Organization, 2021b, p. 30) (p. 30) – can circumscribe applications of the settings-based approach. This selectivity is beginning to change with the induction of non-traditional settings, such as healthy stadia and airports, into the evidence base, 'some through formalized initiatives led by the WHO and other bodies, others emerging through pilot studies and projects' (Dooris *et al.*, 2022b, p. 12) (p. 12); the public library is an ongoing example of the latter route (Jenkins *et al.*, 2022; Naccarella and Horwood, 2020; Whitelaw *et al.*, 2017).

Settings as systems

The settings-based approach understands settings as complex systems with inputs, throughputs, outputs, and impacts (Dooris *et al.*, 2014) in relation to a wider environment (including other settings). This complexity requires drawing on 'multiple theories from multiple disciplines, rather than one overarching theory' (Dooris *et al.*, 2014) (p. 15) to consolidate knowledge of how settings-as-systems work. In the UK and other countries, the public library is organized and referred to as a 'system' of distributed local branches.

Socioecological models identified in the conceptual review span theoretical stances and include a model of a non-traditional setting (a sports club) that shows the reciprocal interaction between setting- and individual-based factors for health at macro-, meso-, and micro-levels (Kokko, 2014), and a model integrating a socioecological framework with health literacy at functional, interactive, and critical levels of enablement (Dawkins-Moultin *et al.*, 2016). Both make use of the visualisation of health determinants as a 'rainbow' of proximal and distal influences (Dahlgren and Whitehead, 2021).

A further model identified in the review refers to an 'equity-focused settings approach', or 'settings praxis' (Shareck *et al.*, 2013) that attends to health determinants, addresses the needs of marginalized groups, catalyses change in a setting's structure, and involves stakeholders. The model engages with complexity theory to view settings as complex, decentralised systems that are organic, non-linear and emergent. It takes the form of a conceptual framework with six guiding principles: a holistic (whole-system) orientation; 'start where people are'; place-based and joined-up practices; in-depth sociopolitical analysis; an asset-based approach; and a capabilities approach to health. Collectively, these principles

position settings-as-systems in which health literacy, in systems terminology, is an active throughput.

Work on healthy universities (Dooris *et al.*, 2014) suggests that investigations into settings should identify the extent to which the setting promotes health through its policies and expressed purpose (core business). However, a successful settings-based approach, viewed from a systems perspective, is one of homeostasis: an ideal state of healthful, dynamic equilibrium whereby health becomes "business as usual" so seamlessly that it is difficult to evidence and separate out the settings-based approach as a factor (Dooris, 2006b). Using the settings-based approach to guide identification of the antecedents that need to be in place to constitute a supportive and enabling environment for health and health literacy therefore requires overcoming the challenge of documenting a successful settings-based approach within the system (i.e., when health literacy becomes systemic) (Dooris, 2006b). It is not within the remit of this review to resolve the challenge of evidencing a successful settings-based approach, only to conceptualize, based on evidence, what such an approach might entail.

Health-literate organizations

Another concept in the literature is health-literate organizations (HLOs), which by design support people to 'systematically orient their daily routines towards HL [health literacy]' (Nowak *et al.*, 2019) (p. 464). HLOs 'equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others' (Brach and Harris, 2021) (p. 1084).

The HLO concept has several related terms, including organizational health literacy, health literacy-friendly organizations (Koh *et al.*, 2013; Meggetto *et al.*, 2017; Okan *et al.*, 2021), and 'organizational health literacy responsiveness' (World Health Organization, 2022b). Organizational health literacy 'comprises a settings-based approach aiming at changing organizational conditions to enhance health literacy of relevant stakeholders' (Kirchhoff *et al.*, 2022) (p. 1). It is underpinned by a set of auditable attributes of a "health-literate" organization (Brach *et al.*, 2012; Koh *et al.*, 2013). There is potential for health-promoting settings and health-literate organizations to:

> work side by side (if not together), complementing each other […] Settings that have adopted a health promotion approach can easily become health literate settings and vice versa, because structures and processes have already been reoriented and important changes (including awareness) have already been implemented (Gugglberger, 2019) (pp. 888–889)

Organizational health literacy responsiveness is defined as:

> the extent to which health workers, services, systems, organizations and policy-makers (across government sectors and through cross-sectoral public policies) recognize and accommodate diverse traditions and health literacy strengths, needs and preferences to create enabling environments that optimize equitable access to and engagement with health information and services, and support for the health and well-being of individuals, families, groups and communities (World Health Organization, 2022b) (p. x)

To date, the HLO concept has been mainly used with health care environments (Brach *et al.*, 2012), and recently schools (Kirchhoff *et al.*, 2022). To approach the public library as a HLO, or facilitate the process by which it can become one, requires a reorientation in the literature towards non-traditional or emerging settings without (yet) an accepted 'health-promoting' or 'health-literate' prefix, nor their own set of HLO principles. Part of such a reorientation would need to consider the antecedents for a setting to be considered an active, enabling, and responsive HLO.

The example case of the public library as part of a supersetting approach

The settings-based approach is 'explicitly determinants-focused' (Dooris, 2013) (p. 46). When implemented in line with this commitment, the approach changes the way people's environments are organized (Dooris, 2013) and involves people in this change. It shares the Ottawa Charter's set of tenets that health promotion practice be enabling, participatory, holistic, intersectoral, equitable, sustainable, and use multiple strategies for health in combination (World Health Organization, 2001). Based on these tenets, and the framework for settings praxis identified in the conceptual review (Shareck *et al.*, 2013), a determinants- and equity-focused settings approach is proposed and presented in a conceptual model that aims to engage with the complexity of health promotion interventions.

Conceptual models provide a reference-point for theorizing settings-based approaches and a reminder to attend to the interconnection between macro-, meso-, and micro-levels of a setting that inform a socioecological, whole-system perspective (Dooris *et al.*, 2014). The conceptual model here posits four antecedents that would need to be in place in, for example, a public library as a supportive and enabling environment that optimizes individuals' equitable access to and engagement with relevant health information and services (Jenkins *et al.*, 2022; World Health Organization, 2022a). The identified antecedents are as follows:

A public library…

1. Acknowledges the wider determinants of health
2. Is open access
3. Involves local communities in how it is run
4. Facilitates informed action

Figure 1 shows the conceptual model.

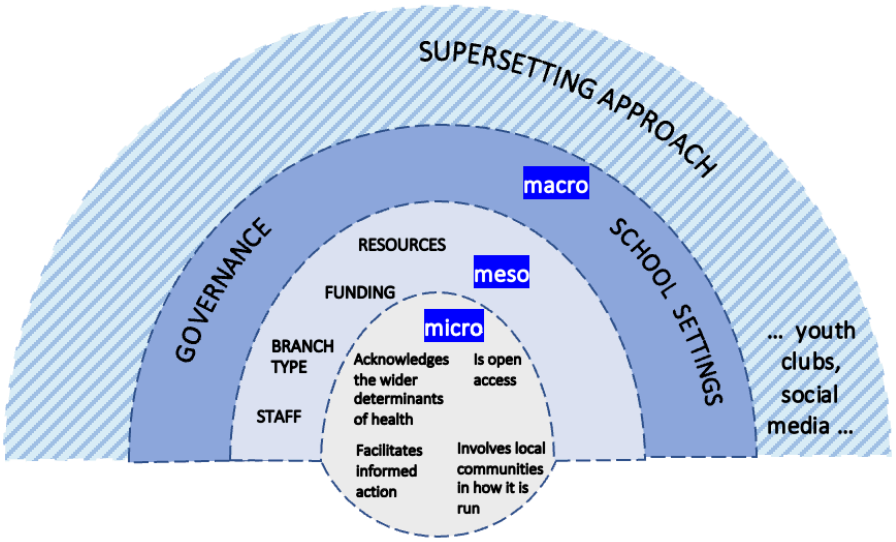

Figure 1 Conceptual model of the public library as part of a supersetting approach for health literacy development.

The model makes use of the visual shorthand of a 'rainbow', common to other models from the conceptual review (Dahlgren and Whitehead, 2021), to represent the socioecological structure and operational levels of the public library. The library is shown as open to the wider environment (inputs from this environment include

staff, funding, library branch facilities and resources; governance, policy, and school settings that influence library priorities; and additional potential partner settings for health). This is relevant to the tension between health promotion *in* a setting and a comprehensive settings approach: the partner settings depicted here are intended to support a comprehensive approach. Further example settings could include sports clubs and healthy universities, based on their steady emergence in the settings literature as non-traditional settings for health and health literacy (Baybutt *et al.*, 2022; Geidne *et al.*, 2019; Johnson *et al.*, 2020; Kokko, 2014; Levin-Zamir *et al.*, 2022; Newton *et al.*, 2016; Paakkari *et al.*, 2017).

All four antecedents are holistic (i.e., they span the system) and work intersectorally (with porous boundaries to facilitate partnership work with other settings). In the example of the public library, all four antecedents are in place and position the library as part of a wider network of settings (or systems, or HLOs). The model demonstrates the 'connectedness' (Bloch *et al.*, 2014) (p. 10) of this setting vertically (macro–micro) and horizontally (intersectoral collaboration across settings). The public library is strengthened through the participation of individuals interacting with it and other everyday settings over the life course (Whitehead, 2011): a supersetting approach.

The supersetting approach is a socioecological approach that builds on local knowledge and resources, is context-sensitive, and emphasizes participation (Magnus *et al.*, 2016). It is intended 'to mobilise local communities for public health action through coordinated and integrated engagement of multiple stakeholders in multiple community settings' (Jourdan *et al.*, 2016) (p. 2). It welcomes complexity (Grabowski *et al.*, 2017) and recognizes the need to combine bottom-up, micro-level actions for health with (managed) top-down, macro-level influences (Magnus *et al.*, 2016) (p. 61).

The supersetting approach, as an intervention strategy for comprehensive community interventions, works through coordinated engagement of multiple stakeholders in multiple settings to mobilise local resources and support collective community action (Magnus *et al.*, 2016). It has five core principles: integration (coordinated action across specific settings); participation (people are motivated to take ownership of processes of developing and implementing activities); empowerment (there are opportunities for equity-focused action on authentic,

relevant issues); context-sensitivity (people's everyday life challenges are respected and considered when developing and implementing activities); and knowledge generation and sharing (knowledge produced from coordinated activities is used to inform future activities) (Bloch *et al.*, 2014; Grabowski *et al.*, 2017; Magnus *et al.*, 2016).

Advances in the supersetting approach are linked to Scandinavian public health research. The demonstration project SoL (from the Danish *Sundhed og Lokalsamfund*, 'Health and Local Community') marks the entry of the supersetting approach into the literature (Bloch *et al.*, 2014) and is the focus of several related papers. Citation analysis demonstrates that the public library is part of the historical development of the supersetting approach: *biblioteket* (library) appears as a label in a figure of the supersetting approach based on the 2014 original (von Heimburg and Hofstad, 2019). By 2021, the presence of the library (joined also by 'museum' and 'sports club') in the illustrative figure of the supersetting approach has passed into the English-language supersetting literature (Tørslev *et al.*, 2021), separately from the Danish project SoL.

The supersetting approach can be linked with the settings concept of 'projectism' (Whitelaw *et al.*, 2001), i.e. when 'the theoretical framework guiding the work may be rooted in systems thinking and organizational development', but practice is 'constrained to smaller-scale project-focused work around particular issues' (Dooris, 2004) (p. 56). Projectism is not incompatible with a comprehensive settings approach if the project – e.g. library-based health initiatives organized with partners – model 'an inclusive and participative ethic' and 'dynamic orientation' (Whitelaw *et al.*, 2017) (p. 893) commensurate with the supersetting approach.

Discussion

The conceptual review highlights how so-called non-traditional settings might support and enable the "project" of health literacy if this project is a collective endeavour, undertaken with support from other settings. It contributes a conceptual model of the public library (an example of a non-traditional setting) operating as part of a supersetting approach. The model theorizes the antecedents that need to be in place for the public library to be an enabling environment for health and health literacy in partnership with other settings, and points towards further areas for investigation.

To progress from health promotion *in* settings to active 'settings for health', the conceptual review proposes a coordinated supersetting approach. The supersetting approach is increasingly discussed in the literature (Mikkelsen *et al.*, 2018; Toft *et al.*, 2018), but the most up-to-date handbook available for settings-based health promotion has few sustained discussions of it; the most substantive discussion refers to schools:

> Actions in a school will be more effective when school activities are embedded in the local community, which will provide synergistic effects. This has been elaborated in the 'supersetting' approach […] that summarizes sustainable approaches to optimized health, well-being and quality of life, and involves mobilizing the local community (St. Leger *et al.*, 2022) (p. 109)

Many of the settings listed by the World Health Organization as settings for health do not have all the modelled antecedents consistently in place, including Health Promoting Schools (HPS). HPS are frequently represented in the literature as promoting health (World Health Organization, n.d.) and health literacy (World Health Organization, 2016) early in the life course, but are limited in the support they can provide for facilitating 'practical action' on health (World Health Organization, 2021b): children are not routinely encouraged to actively shape the school environment much beyond e.g. school council activities (Ioannou *et al.*, 2012; Jensen, 2004). The conceptual model therefore includes schools, based on previous research into the settings that significantly influence library-based health promotion (Jenkins *et al.*, 2022), but supplements this traditional setting with other settings that have different strengths and weaknesses in relation to the antecedents and penetrate people's lives at different stages of the life course.

Considering that health literacy is a setting-specific social practice (World Health Organization, 2022a), focusing on health literacy as a complex throughput in settings, and integrating settings into a supersetting approach that spans the life course (Whitehead, 2011), may advance population health literacy development and ensure that the settings concept continues to be relevant and responsive to future determinants of health.

Conclusion

This review has synthesized research and grey literature on settings from the 1980s to date. The results delineate how, despite the longstanding importance of settings for health and the settings approach in the development of health promotion and World Health Organization strategy, theorizing about settings remains under-developed (Wills *et al.*, 2019). The review highlights some key conceptual challenges, including overlapping terms in the settings literature and theories from distinct disciplinary traditions (e.g., a systems perspective and health literacy responsiveness). The model developed from the conceptual review is helpful in providing a starter overview of antecedents to look for and in suggesting partnership opportunities between settings that collectively achieve the full complement of antecedents.

Understandings of the antecedents required so that settings can develop into settings for health and health literacy are advanced by a systems perspective and a supersetting approach that brings together multiple (traditional and non-traditional) settings to create and sustain supportive environments for health. This review has used the example of the public library to show the potential for a non-traditional setting for health, when part of a supersetting approach, to promote health and develop health literacy as ‘a whole-of-society endeavour—at the individual, community, and national level’ that works ‘across sectors, not just health’ (The Lancet, 2022). The direction of travel in a recent editorial in response to a World Health Organization report on health literacy development for the prevention and control of noncommunicable diseases (World Health Organization, 2022a, 2022b), calling for ‘an integrative approach to develop health literacy interventions that involve a range of community-based organisations—not just medical centres—including schools, churches, sports groups, and workplaces’(The Lancet, 2022), is encouraging. But, in neither citing nor naming the supersetting approach that could potentially integrate such traditional and non-traditional settings, both the report and the editorial demonstrate the need to continue to review and refine the concept of settings.

Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Author Contributions

Conceptualization, C.L.J., S.S. and J.W.; writing—original draft preparation, C.L.J.; writing—review and editing, C.L.J., S.S. and J.W.; supervision, S.S. and J.W. All authors have read and agreed to the published version of the manuscript.

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Abstract

Health literacy is addressed in England primarily through partnership-working led by Health Education England and the National Health Service through a National Health and Digital Literacy Partnership. This work is informed by borough-level data on the prevalence of low health literacy in adults. The promotion of children's health literacy has recently begun to be explored using settings-based approaches.

Libraries as settings span community, education and health sectors in England. Their core business can include supporting local communities' development of health literacy and digital health literacy for functional, interactive, and critical purposes throughout the life-course. This chapter discusses the potential of libraries to play a role in a community-based approach to promoting children's health literacy. It includes a case-study of a toolkit developed by public library, school library and hospital library settings working together that is designed to integrate opportunities for children to practise health literacy in the everyday settings where children spend time.

Keywords:

libraries; life-course approach; settings-based approach; supersetting approach

1 Introduction: Health literacy in England

Health literacy is recognized as an important asset for tackling health inequities in England (Berry, 2016; NIHR Evidence, 2022). Guidance is available on practical strategies for local areas to consider towards strengthening health literacy in communities, including 'childhood health literacy' (Public Health England and UCL Institute of Health Equity, 2015). Health literacy has become even more important after the onset of COVID-19 and the consequent need to support populations to use health information to champion their own health and care (Paakkari and Okan, 2020) and prepare for future global health crises (Abel and McQueen, 2021).

There is no national survey of health literacy in England comparable to the European health literacy survey of populations aged 15 and over, HLS-EU (Sørensen *et al.*, 2015), in which England is not represented. Priorities in England are instead based on a national dataset, funded by Health Education England (HEE) and hosted online by the University of Southampton (GeoData Institute, 2016), which estimates low health literacy prevalence at borough-level (local authority and council areas). The dataset is based on census data and data from the Department for Education's Skills for Life survey, collected in 2010–2011 and measuring

literacy and numeracy in populations aged 16–65 (Rowlands *et al.*, 2015). The underpinning statistical models produce population projections from local demographics, educational and social status, deprivation and self-reported English language proficiency. This means that health literacy in England is conceptualized and measured nationally in predominantly functional terms, e.g., the ability to read medication instructions and calculate the correct dose based on those instructions. Some public health teams in England have extended the granularity of the data or conducted local surveys to provide updates, but at the time of writing, there are no plans to repeat the Skills for Life survey that forms the basis of the analysis.

HEE leads on work packages designed to improve the health literacy of the National Health Service (NHS) workforce, the public health workforce, and members of the public. The common thread throughout these work packages is the involvement of libraries.

The NHS includes roles in its workforce that have a substantive focus on health literacy. These roles, under job titles such as Health Literacy Project Manager and Health Literacy Officer, are often located within NHS library teams. HEE supports NHS library staff through a national train-the-trainer program to cascade Health Literacy Awareness training, accredited by the Royal Society for Public Health, to clinical and non-clinical teams. For public health practitioners, the training offer includes a Health Literate Organization program. Health literacy for members of the public is delivered through a National Health and Digital Literacy Partnership with the Chartered Institute of Library and Information Professionals, Libraries Connected (an

advocacy organization for public libraries), and Arts Council England (Carlyle *et al.*, 2022), and includes the cascade of Health Literacy Awareness training to prison librarians (Robertson and Naughton, 2022).

Other recent HEE work packages focus on pilot sites for health and digital literacy interventions aimed at populations aged 16 years and over (Health Education England, 2022); provision of shared decision-making resources in 'Easy Read' formats (written in clear fonts and featuring images to help make health information easier to understand) (NIHR Evidence, 2022); and an eLearning module for adults which includes a case study video set in a public library to demonstrate health literacy in action beyond health and social care settings (Carlyle *et al.*, 2022; elfh, 2022). One of the HEE pilot sites, Haverhill, has translated this into practice by recruiting a public library-based Health and Digital Literacy Coordinator (Suffolk Libraries, 2022). HEE also supports a national health literacy community of practice for NHS Library and Knowledge Services staff (South LKS, 2021).

2 Children's health literacy in England through the lens of a 'lifespan/setting continuum'

Children's health literacy levels in England, and how children's health literacy can be developed, is largely unstudied. England is a participant in the cross-national Health Behaviour in School-Aged Children (HBSC) survey, which collects data on the health and wellbeing, social environments and health behaviours of children aged 11 and over and in which the Health Literacy for School-Aged

Children (HLSAC) instrument is an optional supplement. Recent applications of this instrument, however, have focused on adolescent health literacy in a sample of 15-year-olds (Paakkari *et al.*, 2020). Health literacy is not included as a separate subject, nor integrated in, the national curriculum for primary or secondary schools in England, unlike in e.g. Australia (Alfrey and Brown, 2013).

There are some precedents in England for children's involvement in health literacy research, including the involvement of sick children (Bray *et al.*, 2019), children who are not sick (Fairbrother *et al.*, 2020), and Young Carer Health Champions (Medforth, 2022) (Young Carers are children aged under 18 who provide unpaid care to another person of any age). During the initial waves of COVID-19, a research project invited children to submit drawings (Bray *et al.*, 2021a). The drawings elicited from children in England depicted children's actions as protecting themselves, their families and wider society. But patient and public involvement and engagement (PPIE) work with children in health literacy research remains rare in England.

The 'lifespan/setting continuum' (Whitehead, 2011) combines a life-course approach to public health with a settings-based approach. Health literacy interventions aimed at children tend to be school-based or based in pediatric settings (Dollard, 2019). Community-based opportunities where children can develop health literacy in the everyday settings where they spend time outside of school, e.g. in youth clubs or sports clubs, are not yet widely available in England. There is the potential for community-based and school settings to work together in a supersetting approach to children's health literacy promotion.

3 The role of community-based public libraries in a supersetting approach to intersectoral partnerships for children's health literacy

The supersetting approach, or 'settings approach 2.0' (Bloch *et al.*, 2014), is a multi-settings approach to health that emphasizes 'the need for coordinated activities to be carried out in a range of different settings within a local community with the aim of attaining synergistic and sustainable effects' (Dooris *et al.*, 2022a, pp. 30–31). The supersetting approach recognizes that health, and health literacy, are created across settings – not confined to a single setting.

School is where most children in England spend most of their time. School-based settings (classrooms, whole-school assemblies, playgrounds, canteens) are often the default setting for health literacy interventions targeting this population (World Health Organization, 2016). But there are also well-recognized barriers to schools being supportive environments for children's development of health literacy (St Leger, 2001). These barriers include schools' structural hierarchies, teacher preparedness, and lack of time and space to fully embed health literacy across the curriculum in ways that engage children (Fairbrother *et al.*, 2020).

Public libraries offer a community-based setting complementary to school-based health literacy work. Public libraries are everyday settings (Whitelaw *et al.*, 2017) with a core business tailored to the needs of the local communities they serve (Smart, 2022), including children. Public libraries' reach is similar in scale to that of schools (and extends to school-excluded children and non-members of the library).

Public libraries make available curated health information, signposting, professional staff expertise and resources for social prescribing to children for free. Children can, in the terms of the Ottawa Charter for Health Promotion, ‘learn, work, play’ (World Health Organization, 1986) in relation to health, all in a single library visit.

In England, councils have a statutory duty under the Public Libraries and Museums Act 1964 to ‘provide a comprehensive and efficient library service for all persons’ who live, work or study in the area (*Public Libraries and Museums Act 1964*). Young Offender Institutions (YOIs), the part of the prison estate in England where children and young people in custody are accommodated, also have a mandatory requirement for library provision *(The Young Offender Institution Rules 2000*). There are no statutory requirements for schools to have their own libraries.

Although public libraries are not included on the WHO Healthy Settings webpage of suggested health-promoting settings (World Health Organization, n.d.), they are listed in the International Union for Health Promotion and Education Global Working Group on Healthy Settings directory (IUHPE GWG on Healthy Settings, 2022). Conceptualisations of the public library applicable to a settings-based approach include Naccarella and Horwood (2020), on Australian public libraries as health-literate, multipurpose workspaces for improving health literacy; and Hicks (2021), who argues for future research into public libraries, among other settings, as ‘sponsors’ that moderate access to health information and health literacy.

There is more than one name for “public libraries”: they are resilience centers (Klinenberg, 2018); Idea Stores;

community data hubs for interrogating and developing local (sometimes Lego-based) data visualizations (Stihler and Open Knowledge Foundation, 2019); even emergency naloxone dispensaries (Lowenstein *et al.*, 2019; Whiteman *et al.*, 2018). In England, they can be designated Libraries of Sanctuary (specialized in supporting people to navigate the asylum system), community fridges and gardens, and safe spaces for survivors/victims of domestic abuse and female genital mutilation to seek refuge and support.

Public libraries also span a spectrum of governance models: community-run (often by volunteers), council-run, run by a non-profit trust, run as an Industrial and Provident Society (IPS) (for the benefit of the community) – or combinations of these – are just a selection (Anstice, 2020). Public libraries can be pop-ups (at outdoor festivals or in launderettes), digital hybrids, mobile (serving housebound or rural communities), and co-located with other settings. An example of the latter type is Mildenhall Library, which is part of the Mildenhall Hub in Suffolk and shares space with a Citizens Advice bureau, a job center, a health and social services center for children aged 0–19 and their families, a preschool, a school, a leisure center, a NHS clinic, and local council services.

Models of the public library setting in the literature include the 'transformative and community-based library' (TCBL) (Riedler and Eryaman, 2010), which sees the public library as a site of social action: somewhere children can potentially 'define meaning based on their experiential base' (Riedler and Eryaman, 2010, p. 97) and own health knowledge, and take action accordingly. Public libraries are thus positioned to support learning (and the unlearning of

outdated information) over the life-course (Hall, 2010). They are not limited to lending books; they also lend equipment (baby slings, cookware, digital devices, tools, toys) and provide many more services as community hubs that intersect with children's health-related needs. Some of these services are summarized in Fig. 3.1.

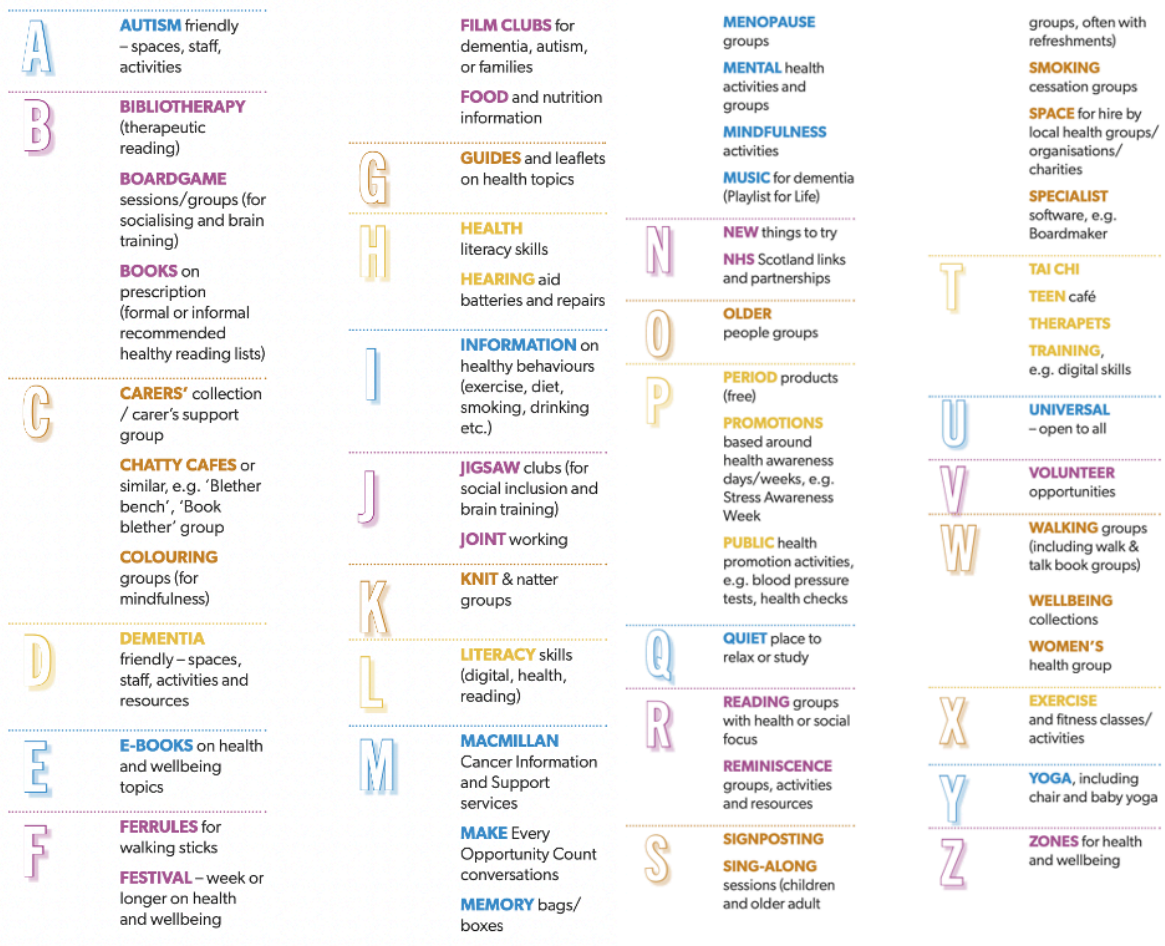

Fig 3.1: An A–Z of health-related services provided by a public library system, from Tyler (2020). Used with permission from Scottish Library and Information Council.

Public libraries deliver health promotion under the Universal Health Offer (Libraries Connected, 2018; The

Reading Agency, 2017), a sector strategy framework which sets priorities for public library services. These priorities are aligned with proportionate universalism: resourcing and delivering services to improve the lives of all, with proportionately greater resources targeted at the more disadvantaged in society to reduce the risk of inadvertently increasing health inequities (Public Health Scotland, 2014). The Offer supports public libraries working in partnership with the NHS, local public health departments and universities, guided by a toolkit to promote public engagement in health research (Libraries Connected and Carnegie UK, 2022).

The wider Universal Offers framework includes a children's strand with a pledge to support children's health and wellbeing, The Children's Promise (Association of Senior Children's and Education Librarians, 2016). An associated organizational audit tool for public libraries aims to ensure that the Promise is being kept (Association of Senior Children's and Education Librarians, 2021). The Promise maps out 'library journeys' parallel to children's developmental stages and children's transitions from kindergarten to primary school and onto secondary school education, similar to the lifespan/setting continuum model (Whitehead, 2011). An example in which children are active participants is 'Something in the Air?' at Calderdale Libraries in West Yorkshire, which helped promote children's environmental health literacy and critical health literacy. Local primary school children experimented with air quality monitors on loan from libraries and gave a presentation about local air quality to their Member of Parliament. Outcomes of the children's advocacy efforts included

securing funding to improve air quality (Engaging Libraries Toolkit, 2022).

Additional examples are Change4Life's library toolkit, a public library-based public health intervention for children which embeds healthy eating education in a treasure hunt through the library's stock of recipe books (Change4Life, 2019); 'Reading Well for children', a social prescribing resource and referral pathway in partnership with primary care which recommends picture books, middle-grade books and comic books on a range of mental and physical health topics shortlisted by health professionals, librarians, educators, and children themselves (The Reading Agency, 2020); and projects selected for Engaging Libraries Phases 1 and 2, including during England's COVID-19 lockdown periods (Ainsley, 2022; Carnegie UK Trust, 2020; Heydecker, 2019).

These examples constitute more than health literacy promotion '*in* a setting' (Dooris *et al.*, 2022a): they are part of a concerted supersetting approach whereby public libraries are working alongside other settings, including schools, to holistically integrate support for children's health literacy into their core business as community-based information settings.

4 Case-study: a collaborative approach to developing and supporting health literacy for children across libraries based in community, health and school settings

The potential of libraries to be supportive environments for children's health literacy development has been leveraged in the coproduction of an online toolkit, the Health

Literacy Schools Toolkit, by Library and Knowledge Services in London, South East and South West England (South LKS, 2022). Although the school setting is highlighted in its title, the toolkit draws on expertise across community-based and health-based library settings, and its use is not limited to a school context. It can also serve as a resource for parents/caregivers, health visitors, and children's nurses, as well as others who work with children.

The development of the toolkit was supported by HEE and is hosted as a LibGuide, a cloud-based platform which facilitates resource sharing and knowledge exchange and is accessible by members of the public. Staff from NHS libraries in South East and South West England administer the toolkit and ensure that it is up-to-date and responsive to current events, e.g., changes in statutory guidance on health education, or the inclusion of health-related fake news as a topic area. The multimedia toolkit format is well-suited to this type of collaborative, living project (Mattern, 2021). The toolkit includes links to peer-reviewed evidence and grey literature to support lesson planning, recommended e-learning modules and apps, embedded videos, and informative social media posts that can be shared to demonstrate best practice.

Modelling the lifespan/setting continuum (Whitehead, 2011), the toolkit categorizes recommended resources by Key Stage (blocks of years used in England to structure children's progress through the national curriculum). Resources cover Key Stages 1–5, equivalent to ages 5–18. The upper age bracket of 16+ is additionally served by a separate LibGuide with health literacy resources specific to that age group (Royal Berkshire NHS Foundation Trust,

2022). Further work led by Royal Berkshire NHS library staff includes the development of a health literacy challenge badge as part of the Girlguiding UK extracurricular program, which encourages children to complete a series of skills-building exercises for which badges can be earned and proudly displayed (Girlguiding, 2022). Girlguiding UK is also a partner in #iwill, a UK-wide movement that supports children and young people to normalize everyday collective action on the health and social issues that matter to them through campaigning, volunteering and fundraising – all of which could be considered as children's critical health literacy in practice.

5 Recommendations for next steps in England and further afield

Public health challenges rarely stop at country borders (Carlyle *et al.*, 2022). Libraries, while varied by type and funding model, can to some extent offer a shared commitment to the promotion of health literacy internationally (IFLA, 2020). As hybrid settings, their digital manifestations are particularly well-placed to support communities with navigating the infodemic of health-related disinformation and misinformation online that has accompanied the COVID-19 pandemic (Kyabaggu *et al.*, 2022). In England, as elsewhere, children and young people are increasingly spending time on social media (Tolentino *et al.*, 2022). Two main recommendations thus emerge.

Firstly, health literacy efforts in England must continue to work in partnership with the other governments in the UK under which health and public library services are devolved. Doing so could help foster a joined-up approach, as

exemplified in the case of England and Scotland (Carlyle *et al.*, 2022).

Secondly, policy and research must recognize digital settings for promoting health literacy, given the acceleration of remote working under COVID-19. Work in this area has already begun (Levin-Zamir *et al.*, 2022), but could benefit from the inclusion of children as PPIE contributors and public libraries as both early-adopters of online platforms such as TikTok for library advocacy and library-based health promotion (Jenkins, 2022; Mashiyane, 2022) and the means through which children affected by the digital divide in the UK can access the internet when they do not have WiFi at home (Good Things Foundation, 2020). Inter-library loans are a well-established service offered by libraries globally to share resources; inter-library networks for promoting children's health literacy, building on the existing community of practice for NHS Library and Knowledge Services staff hosted online (South LKS, 2021), could also transcend national boundaries.

6 Conclusion

This chapter has reviewed the current policy landscape for children's health literacy in England. It has drawn attention to libraries as a common denominator underpinning strategy in this area and summarized ongoing and potential work packages that leverage community-based libraries, and libraries based in other settings, as part of a synergistic supersetting approach to health literacy promotion early in the life-course.

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