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A discursive psychological examination of educators' experiences of children with disabilities accessing the Internet: a role for digital resilience

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ABSTRACT

Educators have an increasingly important role in supporting children with disabilities to connect with and through the Internet. Children with disabilities encounter more risks in connected environments than their peers. These risk experiences are likely to escalate guicker and have more serious impacts for children with disabilities. Yet this group receive less support from educators in their connected lives. Taking this juxtaposition as our starting point, we used purposive sampling to recruit a range of educators who support children with disabilities aged 8–16 years. We used online semi-structured interviews to collect data from 30 educational professionals over a 5-month period (May-September 2021). Our thematic discourse analysis identified three main themes depicting how educators experience and make sense of the connected lives of children with disabilities: fortresses and frontiers, patrolling the borders and getting comfortable with the uncomfortable. Our analysis illustrates how educators make use of widely available binary talk related to 'online' risks to create simplified versions of safe (fortress) and unsafe (frontier) spaces. This meant educators frequently positioned their role as restricting access to unsafe spaces. Alternative mobilisations enabled educators to reconstruct short-term online risk experiences as experiential learning opportunities in the lifelong pursuit of supporting children with disabilities to build and show digital resilience. We conclude by illustrating how educators should embrace the increasingly connected lives of children with disabilities through a digital resilience lens, becoming exploration guides not simply restrictive protectors.

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Children with disabilities; educators; digital resilience; qualitative research; thematic discourse analysis

Introduction

Children are increasingly using the Internet to learn, play, socialise and participate (UNI-CEF, 2019). Internet accessible or connective technologies can be a great enabler for

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children with disabilities, offering avenues for children with disabilities to learn, play and socialise in ways not always possible outside digital environments (Lundy et al., 2019). Using the Internet is a complex endeavour, with a key component being experiential learning (Dutton & Shepherd, 2006). For children with disabilities to develop and deploy key digital competences such as digital citizenship, digital literacies, and digital resilience, providing supported learning opportunities are vital. However, research indicates these opportunities can be stilted by adults due to the perceived impact of online risk experiences (de Groot et al., 2022).

Across the globe there are nearly 240 million children with disabilities (UNICEF, 2022). They are a highly diverse group, with many experiencing multiple difficulties. We use the label 'children with disabilities' in this article as defined by the United Nations Convention on the Rights of Persons with Disabilities (United Nations General Assembly, 2006).

Appreciative of this heterogeneity, children with disabilities are often supported by a wide range of professionals who represent a variety of specialisms. This group are all in many ways educators or social pedagogues (Storø, 2013), people who support the formal and informal learning, well-being, and growth of children with disabilities. Given that digital interactions are increasingly expected of all citizens, educators have an increasing responsibility to support children with disabilities in their connected lives. This is especially important as research indicates children with disabilities encounter more risks and have these risk experiences escalate quicker than their peers (El Asam & Katz, 2018; Wrzesińska et al., 2021). However, despite having more contact with a wider range of educators and needing more support to use the Internet than their peers, research indicates that children with disabilities are likely to receive less (de Groot et al., 2022; Livingstone, 2013; Lundy et al., 2019).

Conceptualisations of connective technology use by children with disabilities needs to be urgently problematised. From a life course perspective, digital exclusion is a greater risk for children with disabilities than online risk experiences (Chadwick et al., 2019). Evidence indicates that children with disabilities are more likely to experience sociodemographic and socioeconomic disadvantages across the life course (Lundy et al., 2019). These factors are consistently linked to digital exclusion (Helsper, 2012), and frequently associated with a range of negative health outcomes (Honeyman et al., 2020). Hence, it is a pressing and global educational issue that adults need to move beyond allowing their discomfort to dictate how children with disabilities experience their rights in our connected worlds.

We use a discursive approach to examine how educators understand their experiences of children with disabilities using connective technologies. We seek to reposition online risk experiences within a life course perspective to enable educators to better support the connective lives of children with disabilities.

Children with disabilities: a critical perspective

A discursive psychological perspective examines how talk operates as social action. This perspective examines the interplay between individuals, communal practices, and institutional structures (Wiggins & Potter, 2007). From this perspective, when talking about connective technology use by children with disabilities, educators explain their

experiences, and define the nature of, and position themselves, in relation to available socially sanctioned ways of sense-making. As Foucault (1972) illustrates through the concept of an episteme, the talk of the time rules-in and by that definition rules-out certain ways of talking and versions of reality.

Talk related to technological advancement is frequently reasoned about through 'moral panic' discourse (Orben, 2020). Moral panics are public mass movements based on exaggerated perceptions that exceed the threat facing society (Cohen, 1970). When related to technology discourse, talk follows repetitive patterns, ruling out ways of sense making about technologies (Foucault, 1972).

Thus, when making sense of technological advances, educators must navigate moral panic discourse, models of childhood which promote protectionism, agency, and participation (Valentine, 2011). They do this whilst simultaneously operating in a risk society (Beck, 1992). In a risk society, the ability to identify risk implies that the same risks can be managed and therefore preventable (Beck, 1992). Hence, when risks are not controlled, accountability and discourses of professional failures emerge (Ferguson, 2003).

Unsurprisingly, when considering the connected lives of children with disabilities, educators may frequently adopt restrictive mediation approaches to safeguarding to protect this group from risk experiences (Gómez-Puerta & Chiner, 2020; Shin & Lwin, 2017). However, as Billig (1997) notes, epistemes which appear as inevitable realities contain contrary tropes to reinterpret dominant realities.

For instance, a restrictive mediation approach is designed to eradicate risk experiences, yet the effectiveness of this approach decreases as children age (Valkenburg et al., 2013). Educators frequently seek experiential learning opportunities, seeing this as an effective learning strategy (Lazonder & Harmsen, 2016). However, when learning how to navigate online risks, children already labelled as 'vulnerable' often face restrictive mediation practices, diminishing experiential learning opportunities (Hammond & Cooper, 2015). In short, we risk giving less supported learning opportunities to children with disabilities, the very group who need them the most.

Digital resilience and reconceptualising online risk experiences

Given that using connective technologies is vital for everyday life and risks happen, the concept of digital resilience is attracting increasing attention. Digital resilience is defined as:

... a dynamic process whereby individuals and/or groups learn how to recognise, manage, and recover from online risks within and across individual, home, community, and societal levels ... (Hammond, Polizzi, et al., 2022, p. 29).

Digital resilience is cited as playing a key role in promoting positive, whilst buffering negative, influences of digital environments on children's mental health and increasing evidence highlights that online risk experiences are necessary for building it (Hammond, Polizzi, et al., 2022; Vissenberg et al., 2022). However, this idea can often be disregarded as the affordances of connectivity are often understood via a false dichotomy.

Children's online engagement is experienced in a risk society via binary language. Either as safe (if it can be controlled/mediated) or unsafe (if it cannot). The proposition that internet connectivity is ultimately more continuous than dichotomous, and dynamically influenced by a range of factors remains challenging. Thus, the proposition that online risks simultaneously provide opportunities for children with disabilities to thrive is not readily accepted.

The concept of digital resilience offers educators differing ways to understand the possibilities of their roles in supporting children with disabilities using connected technologies (Hammond et al., 2023). Hence, problematising, and re-examining current conceptualisations of this phenomena is important as educators have an increasingly important role in children's socialisation online (Organisation for Economic Co-operation and Development (OCED), 2021).

There are a limited number of studies examining how educators experience the connected lives of children with disabilities, with the majority focusing on learning methods, accessibility, and the professional development of educators (Cinquin et al., 2019; Guillén-Gámez et al., 2022). We begin to address this gap by examining how educators experience supporting (or not) children with disabilities using connective technologies.

Materials and methods

Design and participants

We adopt a critical social psychological perspective informed by discursive approaches (Gergen, 1999; Potter, 1996b; Potter & Wetherell, 1987). By not privileging one account over another, the unpacking of how language creates knowledge as privileged will be used to illustrate how participants interpret their experiences via and through language (Berger & Luckmann, 1967). Through the close examination of talk, we aim to problematise privileged understandings of how the connected lives of children with disabilities come to be experienced by educators.

We draw on data from a project focusing on how successfully the educationalists provide support to children with disabilities aged 8-16 years old accessing the internet and how this was seen by children with disabilities and their parents/carers (Hammond, Minott, et al., 2022). Building on this work, the current paper focuses upon how talk was used by participants to interpret their experiences of supporting (or not) the connected lives of children with disabilities.

Educators were eligible if they worked with children aged 8-16 years of age who had either: an Education, Health and Care (EHC) plan, experience(s) of receiving support for mental health problems, and/or needs that could not be met without additional expertise, over and above what is typically expected in mainstream United Kingdom (UK) schools.

The data corpus utilised by the current paper comprises of data from 30 online interviews with participants (21 female and 9 males, M age = 43.1 years, age range 27-62 years) from the UK. All interviews took place between May and September 2021. More information on our sample is provided in Table 1.

Study methods and results are reported according to the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007). See Appendix 1 for COREQ checklist.

Ethical considerations

We worked to mitigate risks of confidentiality breaches, privacy and collusion whilst upholding safeguarding procedures. Participants were encouraged to carefully consider

Table 1. Participant demographics.

Pseudonym	Age	Gender	Ethnicity	Role
Richard	49	Male	White-British	Deputy Head-Secondary Independent
Terence	40	Male	White-British	Secondary School Teacher Secondary Independent
Mike	34	Male	White-British	Residential Social Care Manager
Noah	53	Female	White-British	Psychotherapist
Daniel	47	Male	White-British	Primary School Teacher
Abigail	37	Female	White-British	Primary School Teacher
Sally	62	Female	White-British	SEND Teaching and Safeguarding Lead Secondary
Maria	55	Female	White-British	Secondary School Teacher
Annie	40	Female	White-British	Behavioural Support Officer Secondary
Connie	46	Female	White-British	Primary School Teacher
June	41	Female	White-British	SENCO Secondary
Penelope	28	Female	White-British	Senior Youth Mental Health Worker
Alison	27	Female	White-British	Mental Health Worker
Liz	33	Female	White-British	Deputy Head Teacher & Safeguarding Lead
Dylan	40	Male	White Asian	Assistant Educational Psychologist
Sarah	53	Female	Other	SEND Consultant
Jack	38	Male	White-British	Secondary School Teacher
Dominic	45	Male	White-British	Youth Worker
Emma	32	Female	White-British	Assistant Psychologist
Ophelia	29	Female	White-British	Speech & Language Therapist
Adam	48	Male	Black or Black British Caribbean	Senior Advisory Teacher for Care Experienced Children
Jean	38	Female	White Irish	Social Work Team Manager
Millie	50	Female	Black or Black British African	Social Worker
Sophie	39	Female	Other South African British	Assistant Head Teacher & Safeguard Lead Autism School
Nadia	55	Female	White-British	Assistant Head Teacher Autism School
Adio	33	Male	Other White Background	Special Needs Teacher, Secondary School
Alicia	51	Female	Asian or Asian British Indian	Inclusion Manager & Designated Safeguard Lead, Secondary
Nina	54	Female	Black or Black British African	Consultant Psychiatrist
Anette	48	Female	Black or Black British Caribbean	Child, Adolescent and Family Counsellor
Patriciaia	50	Female	White-British	Speech & Language Therapist

*Key.

Level 1 = Primary school. Level 2 = Secondary school up to 16 years of age. Level 3 = Higher/further (A levels). Level 4 = Undergraduate degree. Level 5 = Post-graduate degree.

the space in which interviews took place. This was important because expressing personal opinions in professional settings and/or interviews in their home environments may have been uncomfortable both in terms of intrusion but also collapsing of physical boundaries between work and home. Given the potential sensitivity of the topic, and the variety of recruitment strategies used which initially relied upon research team members' existing networks, we constantly reflected on if undertaking interviews with those known prior to the research encounter was suitable, and arrangements were made on a case-by-case basis accordingly.

Ethical approval was provided by the School of Education and Lifelong Learning Research Ethics Committee at the University of East Anglia. No safeguarding issues arose during the project.

Sampling and recruitment

We used purposive sampling and recruited across dimensions of diversity. We sought to include a wide range of different organisational positions and professional contexts.



Sample heterogeneity was sought in terms of age, gender, and ethnicity. To assist diversity, participants were recruited through various ways including via existing networks, snowballing, newsletters, purposive social media strategies which made use of hashtags, and blogs. Participants were either emailed recruitment packs (containing participant information sheets and consent forms) directly, passed this information by those within their network or contacted the lead author via responding to social media posts.

Data collection

Semi-structed online interviews were conducted via Microsoft Teams. At the beginning of the interview, the researcher explained the rules and checked understanding before activating recording, taking consent, and obtaining participant demographics. Participants were asked questions relating to their experiences of the connected lives of children with disabilities within their roles. After the interview, participants were invited to ask any questions, debriefed, and thanked for their time. Interviews were 35-55 minutes long.

Interview questions (see Appendix 2) were piloted prior to data collection. Participants were offered the chance to review their transcripts with 12/30 opting to do this with no changes requested. Of 30 interviews, SH, an applied psychologist qualified to PhD level and MM a teacher educator researcher, qualified to PhD level at the time of data collection conducted nine interviews each, FB, a medical researcher qualified to post-graduate level at the time of data collection conducted seven interviews, and JB, a teaching assistant and researcher qualified to post-graduate level at the time of data collection conducted five interviews.

Analytical procedure

Data were anonymised at the point of transcription and transcribed using playscript representations of talk. Files were then imported into Nvivo to assist coding. Drawing on Braun and Clarke (2012) and Potter and Wetherell (1987), we conducted a thematic discourse analysis within a social constructionist epistemology. Taking an emic approach, we were primarily interested in understanding experiences from the participants' perspectives through the internal language and meanings of the cultural group (Olive, 2014). In our analysis, this took the form of a two-stage approach.

Firstly, we began with an initial reading and open coding of 20% of the interview transcripts. From this we met to develop an inductive coding framework in which we began to cluster initial codes. [removed for peer-review] then tested this framework with another 20% of the data utilising an iterative process including frequent meetings and conversations to develop and refine the developing framework and selected of main themes whilst discussing and apply existing theory/literature (Braun & Clarke, 2012). Secondly, we then compared and contrasted themes and sub-themes focusing on educators' discursive practices and performances. Extracts of relevant exchanges were then revisited, re-listened to and re-transcribed using Jeffersonian transcription methods (Jefferson, 1984).

Transcription in a Jeffersonian style makes use of various of symbols to represent talk. In so doing, features of talk which speakers deem relevant in interaction, often left out of qualitative research are re-introduced (Wiggins & Potter, 2007). Given the paper's aim, this was deemed necessary to provide a rigorous representation of participants' situated talk. For those unfamiliar with the Jefferson transcription system, see Table 2 for explanation.

Results

Our analysis constructed three major themes: fortresses and frontiers, patrolling the borders, getting comfortable with the uncomfortable. Extracts illustrate each theme with discussions of their implications for policy and practice before conclusions are presented.

Theme 1: fortresses and frontiers

Participants expressed generalised worry about the connected lives of children with disabilities. The theme fortresses and frontiers contained discursive practices worked up in accounts via spatial metaphors. These metaphors created positions for educators to operate in a risk society by enabling controllable features of connectivity such as a 'webpage' to be experienced as enclosed, manageable, and therefore safe (i.e., fortress spaces). Whereas when constructing experiences via frontiers, talk was used to position the connected lives of children with disabilities as taking place in an uncharted wilderness in which their own fortress position was safe but beset by outside threats from, and within, the frontier.

Table 2. The Jefferson transcription system.

Symbol	Meaning of symbol				
[]	Square brackets mark the start and end of overlapping speech. They are aligned to mark the precise position of overlap.				
$\uparrow \downarrow$	Vertical arrows precede marked pitch movement, over and above normal rhythms of speech. They are used for notable changes in pitch beyond those represented by stops, commas and question marks.				
Under <u>lin</u> ing	Indicates emphasis; the extent of underlining within individual words locates emphasis and also indicates how heavy it is.				
CAPITALS	Mark speech that is hearable louder than surrounding speech. This is beyond the increase in volume that comes as a by-product of emphasis.				
°†I know it,°	'Degree' signs enclose quieter speech.				
that's r*ight.	Asterisks precede a 'squeaky' vocal delivery.				
(.)	A micropause, hearable but too short to measure.				
(0.4)	Numbers in round brackets measure pauses in seconds (in this case, 4 tenths of a second). If they are not part of a particular speaker's talk they should be on a new line. If in doubt use a new line.				
she wa::nted	Colons show lengthening of a word the more colons, the more elongation				
Yeh,	'Continuation' marker, speaker has not finished; marked by fall-rise or weak rising intonation.				
y'know?	Question marks signal stronger, 'questioning' intonation, irrespective of grammar.				
Yeh.	Full stops mark falling, stopping intonation ('final contour'), irrespective of grammar, and not necessarily followed by a pause.				
bu-u-	Hyphens mark a cut-off of the preceding sound.				
>he said<	'greater than' and 'lesser than' signs enclose speech with is faster than usual and are used the other way round for slower talk.				
solid. = We had	'Equals' signs mark continuous talk between speakers, with no interval.				
heh heh	Voiced laughter. Can have other symbols added, such as underlining, pitch movement, extra aspiration, etc.				
sto(h)p i(h)t	Laughter within speech is signalled by h's in round brackets.				
((shrill))	Double brackets mark comments from the transcriber, e.g., about features of context or delivery.				

Source: Derived from the system developed mainly by Jefferson (1984).

Extract 1:

Researcher: So (.) u::m (1.0) what does that mean for you? (.)

Sarah: ↑It's a MINE::FIELD (.) <It's a community that's (.) devoid of any norms>↑↑ (2.4)

Researcher: Yea::[h?

Sarah: [It's] a community that has no rules or boundar:ies and (.) unfortunately

our (.) †vulnerable children ar:::e not exposed to the <online societal norms> (2.3) because u:m none exist <unlike face-to- face society> the online

society has no (.) n::o boundaries.

(Sarah, SEND Consultant)

In extract 1, Sarah's talk utilises several rhetorical devices to construct the connectivity of children with disabilities as taking place within a frontier. In working up this frontier as an infinite space with 'n::o boundaries', Sarah's talk also indicates its apparent lawlessness. This is achieved via positing frontiers in comparison to 'face-to-face' fortresses in which boundaries exist via social norms. In this frontier space, dangers are also hidden, with this worked up through the 'MINE::FIELD' metaphor.

Talk recruiting metaphors work via constructing abstract information and using more concrete terms to increase their simplicity (Thibodeau & Boroditsky, 2011). War metaphors, such as '†It's a MINE::FIELD' are notable for the emotional valance they construct (Flusberg et al., 2018). Here, the 'MINE::FIELD' metaphor works to convey the problematic nature of children with disabilities accessing the Internet in several ways. Firstly, threats are in the frontier space (i.e., the minefield), as opposed to somewhere safe like a fortress. Secondly, threats are not always visible. Thirdly, these threats can be 'stepped on', at any time with long-term debilitating consequences.

Importantly, as Billig (1997) illustrates dominant discourse contains contrary tropes to reinterpret taken for granted versions of reality. The part of the metaphor which is left unsaid and hence hypothetically not privileged, is the potential role for educators to help minefield navigation. Drawing on the concept of digital resilience (Hammond & Cooper, 2015; Hammond, Polizzi, et al., 2022; Sun et al., 2022; Vissenberg et al., 2022) and the minefield metaphor deployed by Sarah, educators' role could be to help children with disabilities learn what mines look like, how they might react when they see one, how to react if they step on one, how to recover from this and how to implement mine-clearance procedures in future. This is something discussed further in the *getting comfortable with the uncomfortable* theme.

Building on the idea of frontiers being where risks are unmanageable, extract 2 illustrates how participants identified specific yet generalised risks from within their fortress, but positioned these as occurring 'out there':

Extract 2:

Nina: (.) the deception is hi\tag{c}gh out there (1.3) peo::ple who are being abused (0.5) who are being de::frauded of money (.) who are being lu:red somewhere because they've they've trusted <some::one> they don*'t know people? (.) like (.) like \tau\tag{serial killers or (.) 'owhatever it is'}

(Nina, Consultant Psychiatrist)

Here, the generalised idea of 'deception' is further worked up by Nina through what Potter (1996b) refers to as reification. Reification is a process of turning something abstract, in this case the threat of deception, into something material 'being de::frauded of money'. Nina's talk also features a generalised yet clear villain or folk devil (Cohen, 1970). In this extract the folk devil '\tauserial killers' further supports the construction of Nina's experience of threats in the frontier as real, yet generalised. This point is further developed in extract 3:

Extract 3:

Researcher: >Can you say mo::re about (1.0) [that?]<

Adam: [We:::l]l something that happens a lot is grooming (1.0) °it could be an abus:::ive adult in power° (.) (2.7) th:::ey could be used for drug trafficking (1.1) there's quite a fe:::w examples of happening

(Adam, Senior Advisory Teacher for Care-Experienced Children)

Here Adam's talk identifies a list of potential folk devils operating in the frontier space. This enables the risk identification features of Beck's (1992) risk society to be managed and illustrates Adam as operating at this interface. Adam's talk also uses three-part lists, seen by Atkinson (1984) as a way to allow a speaker to construct an air of unity and completeness to discourse to allow it to remain unchallenged. Adam's repetition of the same word 'could' and different words with similar general meaning ('a lot', 'quite a fe:::w examples', '<these things> happening') contributes towards making the ideas contained within his talk perform as common sense (Jones & Pecci, 2003). In so doing, Adam's talk points to a privileged version of reality, frontiers are dangerous, these dangers 'could' happen and are frequent.

However, in line with research indicating that expected and realised experiences of online risks are very different (Livingstone, 2013), educators' talk also demonstrated ways in which they tried to make sense of their own experiences in comparison to dominant technological panic discourses that seem incongruent to their lived experiences:

Extract 4:

Terence: It's ofrigh::teningo

Researcher: $\uparrow \uparrow U ::: m =$

Terence: = <the things that you hear about> (2.1) not things (.) that have necessarily

affected us or that affect \u2204our <children but the general picture> (.) the national

picture and the local pic:ture and (.) the way that children are targ::eted

(Terence, Independent Secondary School Teacher)

Despite acknowledging that this risk is unlikely to affect them, Terence's talk illustrates the power of dominant understandings of children with disabilities as 'targ::eted ' by undefined attacks. Again, the use of spatial talk positions this threat as understood within the frontier. This talk works up ways to overcome the problem of invisibility and intangibility of threats positioned within the realm of the frontier that represents the Internet. They encompass the whole of society, but by moving closer with each iteration, from 'the general picture' to 'the national picture' to 'the local pic:ture', Terence's talk constructs

risk as close to fortresses, validating the emotionality expressed in his talk. Children with disabilities living connected lives becomes understood as 'ofrigh::teningo' via this sensemaking, informed by dominant assemblies of talk which position threats as real and close despite not being experienced directly.

In line with the work of Mascheroni et al. (2014) who explored discourse used by children to interpret online risks, we see how, like the children in their study, participants framed their experiences via narratives that prioritise fear. This was apparent, even when they had not directly experienced risks themselves. In the context of this paper, educators used spatial metaphors that constructed fortresses and frontiers, setting up a border where these two met that needed to be patrolled.

Theme 2: patrolling the borders

Educators' talk portrayed how their institutions, whilst on the one hand providing connective equipment, also adopted restrictive approaches that focused on decreasing access rather than creating supportive environments to embrace opportunities. Consequently, educators experienced their role in supporting children with disabilities as one of *fortress* border patrol as opposed to leading expeditions to explore frontiers.

Extract 5:

Richard: W::e take quite a hard line (3.1) they're not allowed an::y devices at all=

Researcher: =S:::oo(.)

Richard: S::o the prep that is set by our teachers is dev::ice free on purpose (.) <with a view to that>

(Richard, Deputy headteacher, independent school)

Richard's talk works up an account of how his colleagues work together to ensure Internet access is limited and not encouraged by the institution. This requires all team members to deploy the same strategy. In this account, the border becomes 'safe' because they keep children with disabilities away from it. In so doing, Richard's talk deploys what Potter (1996b) refers to as stake inoculation 'W::e take quite a hard line'. When speakers are faced with a dilemma of stake, the dilemma being that any account can be undermined as a product of the speaker's self-interest, stake inoculations work to negate this possibility by explicitly stating the speaker's awareness of this potential criticism (Potter, 1996b). Hence, in extract 5, Richard's talk functions to present an account of patrolling the border made safer via keeping children with disabilities away from the frontier.

A different experience of *patrolling the border* is illustrated in extract 6:

Extract 6:

June: It's about limit:::ing (1.) [their u::se]

[the::ier?] Researcher:

(.) it's not s:::o mu:ch them using it <I think it's about limiting the use> (.) and June:

helping th::em to (.) to understand (.) \tag{what is okay and what isn't okay (1.0)

Researcher: Arh (0.5) ° s:::0°

June:

From a::n >education point of view< that's what we (.) we try to help th:em with it (.) a::nd limiting use> (1.9) I would ch::ange (.) the fact that they have access to their personal Internet in school

(June, SENCO, Secondary School)

Here June's talk attempts to work up an account in which exploration of frontiers is not the risk as such, it is about limiting the time children with disabilities are in frontiers: 'it's not s:::o mu:ch them using it' 'it's about limiting the use>'. In this way the risk identified, perceived overuse, resides within the individual and therefore can be managed within a risk society (Beck, 1992). This is something further developed as residing within individuals as June's talk states she seeks to help children with disabilities 'to understand (.) †what is okay and what isn't okay (1.0)'.

This positions children with disabilities within a deficit compared to educators and simultaneously positions the adult, June, as required to help this group overcome this deficit. June then draws on a membership categorisation (Baker, 1997), carrying with it knowledge entitlements and norms 'From a::n > education point of view' to build up a professionalised position towards this practice. In this instance, evoking the role of educators to assist children with disabilities to learn how to recognise and manage and recover from risk experiences, linking to ideas of digital resilience functioning at a community level (Hammond, Polizzi, et al., 2022).

Recruiting category memberships is useful for foregrounding cultural truths. In extract 6, June's speech act performs to co-operate with the notion that educators are responsible for protecting children with disabilities from themselves. However, in agreement with the literature review of Seale and Chadwick (2017), it also illustrates a personal position that disagrees with this stance and seeks distance from it by expressing a desire to restrict seemingly unsupervised 'their personal internet' exploration of the frontier.

Despite the dominance of spatial metaphors setting up a false dichotomy which positioned *fortresses and frontiers* as safe/unsafe respectively, leading to the need to *patrol the borders*, a contrary mobilisation was worked up by some educators:

Extract 7:

Nadia:

↑W:::e see our worlds↓ as online and offline (.) <whereas> (.) I don't think (.) this generation (1.0) do see it that wa::y (2.7) I think we've got t:o move away from the categorising of it because I think that's problematic (1.2)

Researcher: "I see" =

Nadia:

=what we need to do is (.) learn about how we can ↑better equip them to be much more (.) much more aware of the framework within whi::ch they're operating in (.) and I think that agen*cy that con:trol, that recognition, is probably where >we're just lacking< at the moment

(Nadia, Assistant Headteacher, Autism School)

Here we begin to see how this mobilisation recruits discursive resources from wider societal rhetoric. Here, ideas about how adults 'see our worlds\' via binaries, is set up in comparison to how children with disabilities do not 'see it that wa::y'. The cultural

truth foregrounded here being that, as a function of generation, adults recruit binaries which are meaningless to 'this generation' of children with disabilities. Nadia then begins to recruit spatial terminology which positions adults as needing to 'move away from the categorising of it because I think that's problematic (1.2)'. Nadia's talk then proposes ways to help adults. This proposition, Nadia's choice of words and their composition, illustrate the sensitivity to discourses of failures in this space by accomplishing what Potter (1996b) describes as reification accomplished in talk by defensive work.

Nadia's talk confesses a professionalised failure in relation to how educators are supporting (or not) children with disabilities. Something which, by virtue of the following talk, can be seen as incongruent in a risk society in which identified risks need to be managed (Beck, 1992). The current failure, having been identified and positioned in an imagined distant future 'we've got t:o move away' is then repositioned in talk in a way that illustrates closeness. This is done via recruiting terminology which constructs proximity to resolving this failure '>we're just lacking<'. In so doing, the temporary nature of this current failing is also worked up 'at the moment'.

Theme 3: getting comfortable with the uncomfortable

Despite the dominance of discourse setting up children with disabilities' connected lives as a risk best managed through staying inside fortresses and by patrolling the borders, contrary mobilisations were recruited.

Extract 8:

Abigail: For us (0.7) for us teachers it's hard (1.8) but w::e need to (.) <we need

to understand> that children's worlds are going more online and so (.) \\int it's

really our job to educate an:::d teach (1.0)

Researcher: Umm:: and [so]

Abigail: [we] can restrict it (.) but we can't stop it <it's the way of the world

now> and our kids ↑↑need to be there too

(Abigail, Primary School Teacher)

Abigail's talk recruits numerous subtle discursive devices to work up her position via a combination of stake inoculation and categorisation claiming (Drew & Heritage, 1992; Potter, 1996b). Speakers recruit member categorisations as a resource to claim specific forms of activities and behaviours as a function of group membership (Drew & Heritage, 1992). Abigail's defensive talk indicates the difficulty of the task for her profession '... for us teachers it's hard ... '. This works to inoculate her profession from undesirable positions of incompetence. The task is where the difficulties lie, not educators' lack of competence. She has identified the problem and how to solve it.

Within Abigail's talk, educator accountability within the connected lives of children with disabilities begins to be outlined: '\tau\int it's really our job to educate an:::d teach (1.0)'. Drawing on Garfinkel (1967), this talk works up professional accountability via rationality: '<it's the way of the world now>'. Though instructive, talk uses binaries and remains generalised.

Abigail's sense-making posits that educators have professionalised accountability opposed to a choice about supporting the connected lives of children with disabilities. This is worked up via recruiting mobilisations of embracing powerlessness (Hammond & Cooper, 2015). Abigail's talk recruits ideological common-sense drawing on knowledge regarding the saturated nature of connective technologies and children with disabilities' connectivity. This is still understood via online/offline binaries, rather than continuum-based understandings of connectivity (Hammond, Minott, et al., 2022). However, Abigail's sense-making of her experiences is free from tropes about restricting frontier access by patrolling the borders via inevitability: "... [we] can restrict it (.) but we can't stop it..'. Her talk still operates within a risk society, but with subtle difference (Beck, 1992). Abigail's talk positions internet access as a 'need' for children with disabilities, not optional, something implied by previous themes discussed. It also posits that other 'kids' are already 'there' (i.e., online). Hence, drawing on ideas of digital exclusion (Chadwick et al., 2019; Helsper, 2012; Lundy et al., 2019), Abigail's talk positions '... our kids..' (i.e., children with disabilities) as needing to 'be there too'.

In extract 9, Maria's talk shares similar features to Abigail's, and these parallel Hammond and Cooper (2015)'s work on embracing powerlessness to engage via connective inevitability.

Extract 9:

Maria: I feel like (.) we need to give th::em more agency in their use of the Internet and ↑↑more understanding <about both the harms and the opportunities> I recognise that there are >harms< (0.9) but (.) I equally think there's <so little we can do about that> (.) that we need to do much mo:::re proactively (.) to equip young people

(Maria, Secondary School Teacher)

However, contrary to extract 8, inevitability is positioned in relation to children with disabilities experiencing '>harms<' instead of an inability to halt access. Yet, like Abigail's talk there is a 'need' expressed via generic talk: 'we need to give th::em more agency'. Expressions of generality function to enable speakers to position themselves in ways which evade controversy (Bhatia, 2006). Hence, in the context of extracts 8 and 9, talk functions to enable speakers to mobilise alternative positions without appearing reckless. The number of discursive devices used in these extracts indicates speakers' sensitivities to dominant versions of reality.

Our data corpus featured numerous accounts indicating the availability and impacts of Internet Safety Education (ISE), primarily as a mechanism to assist fortress border patrol as opposed to frontier exploration (something we discuss at length in Hammond, Minott, et al. (2022)). In this theme, our analysis illustrated accounts where taken for granted versions of realities were less sensitively re-worked than in extracts 8 and 9. As extract 10 illustrates. Coronavirus induced school closures shifted dominant discourses:

Extract 10:

Researcher: S::o (.) >you're saying <lockdown made that better for (1.) you?

Connie: Well (.) because w::e went online for teaching (1.0) issues came up (0.4) risks became (.) well learning points <it all become> very very well real an::d our kids need that'

(Connie, Primary School Teacher)



Connie's talk describes her experiences of delivering ISE before and after school closures. Talk still features binaries and notions of frontiers 'w::e went online for teaching'. Yet, via embracing powerlessness to avoid the situation prompted by the pandemic, Connie's talk reframes time in the frontier via professionalised talk and interprets these experiences: 'risks became (.) well learning points'.

Discussion

Our analysis illustrated how educators constructed particular versions of reality and the consequences of these realities. Theme 1, frontiers and fortresses, underlines how educators used widely available binaries to create simplified and concrete versions of the connectivity of children with disabilities. Theme 2: patrolling the border illustrated how educators can position their role as restricting children's access to frontier spaces to reduce risk experiences. The final theme, 'getting comfortable with the uncomfortable', demonstrated how educators can renegotiate this positioning to provide opportunities for experiential learning.

In line with previous research, we demonstrate that educators may amplify digital exclusion for children with disabilities (Alper & Goggin, 2017; Gómez-Puerta & Chiner, 2020; Mascheroni et al., 2022). Our analysis advances understandings by illustrating how dominant discourses used by educators when attempting to make sense of the increasing connectivity of children with disabilities shapes, and in some cases mandates, digital exclusion. In agreement with Alper and Goggin (2017), we argue that the connectivity of children with disabilities needs to be reconceptualised. Connectivity is a vital space for experiential learning and needs to be viewed through a life course lens. Such a position enables risky online experiences to be seen in a more balanced manner (e.g., shortterm risk of autistic youth participating in online autism communities versus the positives, i.e., social capital, more control over how they engage, etc.) cultivated via participation (Hassrick et al., 2021).

Limitations

From discursive psychological perspective, it is important to acknowledge the collection of data via online semi-structured interviews. Critiques of interview methods within discursively informed approaches is not new (Potter, 1996a), but warrants further unpacking. Talk was recorded through online interviews, they were, therefore 'staged' interaction. They also took part via the medium within which the study was interested. This is not 'naturally-occurring' talk. It would not pass The Dead Social Scientist Test since conversations would not have happened in the context had the researcher not been there (Potter, 1996a). However, whilst it may not be discourse analysis in its purest form, that was not our intention due to ethical and practical difficulties in obtaining naturally occurring data, a common issue with naturally-occurring talk (Wiggins & Potter, 2007), and on our topic and group of interest. We undertook a thematic discourse analysis to remove analytical restriction without sacrificing rigour or richness (Braun & Clarke, 2012; Tavory & Timmermans, 2014). We provide one narrative; others are available and future research in an ethnomethodological tradition should be sought. We also use the label 'children with disabilities' heterogeneously in this paper, our analysis does not attempt to examine how educators' talk distinguishes (or not) children's differing disabilities or their impacts.

Despite this, by adopting a discursive psychological perspective, we were able to closely examine how educators made sense of their experiences. This provided scope for alternative ways of interpreting experiences to be examined, informing strategies to equip policy makers and frontline practitioners with ways to re-conceptualise the connective lives of children with disabilities in formal and informal educational settings. This is significant as educators are being seen as playing an increasingly important role in children's socialisation with and via the Internet (OCED, 2021).

Future directions

Policy makers and educators should consider the connected lives of children with disabilities within a life course perspective. In doing do, contrary mobilisations are opened. Technological engagement is increasingly required by all citizens of societies and, as Dutton and Shepherd (2006) highlight, the Internet is a technology best learnt via experience. Schools need to provide places for children with disabilities to experiment, fail, and be supported by educators to learn and grow. Scenario-based role-playing games (e.g., Doom the Gloom (LEGO, 2021)) offer spaces in which mistakes can be made and learnt from with minimal consequences. The acceptability and effectiveness of such games warrant further examination.

Importantly, online risks do not, by default, result in harm (Livingstone, 2013). On the contrary, there is increasing evidence that digital resilience can only be built and shown as a result of risky online experiences (Sun et al., 2022; Vissenberg et al., 2022), with community actors such as educators playing an important role. The importance of this role also warrants a closer examination of how educators' talk distinguishes (or not) children's differing disabilities and/or severities. As does how differing severities or forms of disabilities (e.g., neurodiversity, physical or sensory disabilities) impact (or not) risks encountered and how educators experience these.

If we continue to disregard the connected lives of children with disabilities, we risk providing less supported learning opportunities to those who need them the most. Research might want to adopt a realist analytical framework to review existing practices and create theoretically informed Programme Theories from which testable complex interventions (such as evidence-based training and guidance) informed by rigorous theorisation can take place. There is also the need to robustly develop validated psychometric scales which are accessible to the target population and enable the ongoing assessment of the impact of pedagogical innovation and interventions. This can promote moving beyond universal approaches to ISE and allow better differentiation, with social-ecological understandings of digital resilience providing rigour through which to explore this possibility (Hammond, Polizzi, et al., 2022).

Conclusion

Evidence indicates that children with disabilities are more vulnerable to experiencing online risks, with these risks likely to escalate more quickly and more seriously than their peers. Contrary to most other areas of education, children with disabilities receive



less support in their connected lives than their peers. We know children with disabilities respond best to concrete learning and that connective skills are optimally learnt in practice (Dutton & Shepherd, 2006). By moving beyond binary conceptualisations of connectivity, educators should renegotiate risk experiences as opportunities for experiential learning. Educators should become exploration guides as opposed to simply restrictive protectors. Digital resilience may be a concept that enables short-term risk experiences to be seen as part of a lifelong process.

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Data availability statement

Data not currently publicly available due to ongoing academic work, however will be available at reasonable request from SH.

References

Alper, M., & Goggin, G. (2017). Digital technology and rights in the lives of children with disabilities. New Media & Society, 19(5), 726-740. https://doi.org/10.1177/1461444816686323 Atkinson, J. M. (1984). Our masters' voices: The language and body language of politics. Methuen. Baker, C. D. (1997). Membership categorization and interview accounts. In D. Silverman (Ed.), Qualitative research: Theory, method and practice (pp. 130-143). SAGE. Beck, U. (1992). Risk society: Towards a new modernity. London: SAGE.



Berger, P., & Luckmann, T. (1967). The social construction of reality: A treatise in the sociology of knowledge. Springer.

Bhatia, A. (2006). Critical discourse analysis of political press conferences. Discourse & Society, 17 (2), 173–203. https://doi.org/10.1177/0957926506058057

Billig, M. (1997). Discursive, rhetorical and ideological messages. In C. McGarty, & A. Haslam (Eds.), The message of social psychology (pp. 36–53). Blackwell.

Braun, V., & Clarke, V. (2012). Thematic analysis. American Psychological Association.

Chadwick, D., Chapman, M., & Caton, S. (2019). Digital inclusion for people with an intellectual disability. In A. Attrill-Smith, C. Fullwood, M. Keep, & D. J. Kuss (Eds.), Oxford handbook of cyberpsychology (pp. 261–284). Oxford University Press.

Cinquin, P. A., Guitton, P., & Sauzéon, H. (2019). Online e-learning and cognitive disabilities: A systematic review. Computers & Education, 130(4), 152-167. https://doi.org/10.1016/j. compedu.2018.12.004

Cohen, S. (1970). Folk devils and moral panics: The creation of mods and rockers. Routledge.

de Groot, R., Kaal, H. L., & Stol, W. P. (2022). The online lives of adolescents with mild or borderline intellectual disabilities in The Netherlands: Care staff knowledge and perceptions. Journal of Intellectual & Developmental Disability, 47(4), 1-10. https://doi.org/10.3109/13668250.2022.2149066.

Drew, P., & Heritage, J. (1992). Talk at work: Interaction in institutional settings. Cambridge University Press.

Dutton, W. H., & Shepherd, A. (2006). Trust in the internet as an experience technology. *Information*, Communication & Society, 9(4), 433-451. https://doi.org/10.1080/13691180600858606

El Asam, A., & Katz, A. (2018). Vulnerable young people and their experience of online risks. Human-Computer Interaction, 33(4), 281-304. https://doi.org/10.1080/07370024.2018.1437544

Ferguson, H. (2003). Protecting children in new times: Child protection and the risk society. Child & Family Social Work, 2(4), 221–234. https://doi.org/10.1046/j.1365-2206.1997.00064.x

Flusberg, S. J., Matlock, T., & Thibodeau, P. H. (2018). War metaphors in public discourse. Metaphor and Symbol, 33(1), 1–18. https://doi.org/10.1080/10926488.2018.1407992

Foucault, M. (1972). The archaeology of knowledge. Tavistock.

Garfinkel, H. (1967). Studies in ethnomethodology. SAGE.

Gergen, K. (1999). An invitation to social construction. SAGE.

Gómez-Puerta, M., & Chiner, E. (2020). Teachers' perceptions on online behaviour of students with intellectual disability, risk mediation and training. European Journal of Special Needs Education, 35(4), 437–450. https://doi.org/10.1080/08856257.2019.1703602

Guillén-Gámez, F. D., Linde-Valenzuela, T., Ramos, M., & Mayorga-Fernandez, M. J. (2022). Identifying predictors of digital competence of educators and their impact on online guidance. Research and Practice in Technology Enhanced Learning, 17(1), 20. https://doi.org/10.1186/ s41039-022-00197-9

Hammond, S. P., & Cooper, N. J. (2015). Embracing powerlessness in pursuit of digital resilience: managing cyber-literacy in professional talk. Youth & Society, 47(6), 769-788. https://doi.org/ 10.1177/0044118X14523477

Hammond, S. P., D'arcy, J., & Polizzi, G. (2023). Connection brokers: How educators work within and between social networks to cultivate community digital resilience to support children with disabilities using the Internet. New Media and Society. Accepted Manuscript.

Hammond, S. P., Minott, M., D'Arcy, J., Boswell, F., Krasniqi, E., & Birkenhead, J. (2022). Changing conversations: Empowering vulnerable children in a connected world (Vulnerable children online). Internet Matters. https://www.internetmatters.org/wp-content/uploads/2022/04/ Internet-Matters-Changing-Conversations-Report.pdf

Hammond, S. P., Polizzi, G., & Bartholomew, K. J. (2022). Using a socio-ecological framework to understand how 8-12-year-olds living in the United Kingdom build and show digital resilience: A multi-perspective and multimethod qualitative study. Education and Information *Technologies.* https://doi.org/10.1007/s10639-022-11240-z

Hassrick, E. P., Holmes, L. G., Sosnowy, C., Walton, J., & Carley, K. (2021). Benefits and risks: A systematic review of information and communication technology use by autistic people. Autism in Adulthood, 3(1), 72-84. https://doi.org/10.1089/aut.2020.0048



- Helsper, E. J. (2012). A corresponding fields model for the links between social and digital exclusion. Communication Theory, 22(4), 403-426. https://doi.org/10.1111/j.1468-2885.2012.01416.x
- Honeyman, M., Maguire, D., Evans, H., & Davies, A. (2020). Digital technology and health inequalities: A scoping review. Public Health Wales. https://phw.nhs.wales/publications/publications1/ digital-technology-and-health-inequalities-a-scoping-review/
- Jefferson, G. (1984). Transcript notation. In J. M. Atkinson, & J. Heritage (Eds.), Structures of social action: Studies in conversation analysis (pp. 9-16). Cambridge University Press.
- Jones, J., & Pecci, J. S. (2003). Language and politics. In L. Thomas, & J. Thornborrow (Eds.), Language, society and power: An introduction (pp. 64-89). Routledge.
- Lazonder, A. W., & Harmsen, R. (2016). Meta-analysis of inquiry-based learning: effects of guidance. Review of Educational Research, 86(3), 681–718. https://doi.org/10.3102/ 0034654315627366
- LEGO. (2021). Doom the Gloom. The LEGO Group. https://www.lego.com/en-gb/kids/campaigns/ doom-the-gloom
- Livingstone, S. (2013). Online risk, harm and vulnerability: Reflections on the evidence base for child internet safety policy. ZER: Journal of Communication Studies, 18(35), 13-28.
- Lundy, L., Byrbe, B., Templeton, M., & Lansdown, G. (2019). "Two clicks forward, and one click back" Report on children with disabilities in the digital environment." https://rm.coe.int/twoclicks-forward-and-one-click-back-report-on-children-with-disabili/168098bd0f
- Mascheroni, G., Cino, D., Mikuška, J., & Smahel, D. (2022). Explaining inequalities in vulnerable children's digital skills: The effect of individual and social discrimination. New Media & Society, 24(2), 437–457. https://doi.org/10.1177/14614448211063184
- Mascheroni, G., Jorge, A., & Farrugia, L. (2014). Media representations and children's discourses on online risks: Findings from qualitative research in nine European countries. Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 8(2), 2. https://doi.org/10. 5817/CP2014-2-2
- Olive, J. L. (2014). Reflecting on the tensions between emic and etic perspectives in life history research: Lessons learned. Forum Qualitative Sozialforschung/Forum: Qualitative Social Research, 15(2), 6. https://www.qualitative-research.net/index.php/fqs/article/view/2072/3656
- Orben, A. (2020). The Sisyphean cycle of technology panics. Perspectives on Psychological Science, 15(5), 1143–1157. https://doi.org/10.1177/1745691620919372
- Organisation for Economic Co-operation and Development. (2021). Recommendation of the Council on Children in the Digital Environment. https://legalinstruments.oecd.org/en/ instruments/OECD-LEGAL-0389%20
- Potter, J. (1996a). Discourse analysis and constructionist approaches: Theoretical background. In J. T. E. Richardson (Ed.), Handbook of qualitative research methods for psychology and the social sciences (pp. 125-140). BPS Books.
- Potter, J. (1996b). Representing reality; discourse, rhetoric and social construction. SAGE.
- Potter, J., & Wetherell, M. (1987). Discourse and social psychology: Beyond attitudes and behaviour. SAGE.
- Seale, J., & Chadwick, D. (2017). How does risk mediate the ability of adolescents and adults with intellectual and developmental disabilities to live a normal life by using the Internet? Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 11(1), 2. https://doi.org/10. 5817/CP2017-1-2
- Shin, W., & Lwin, M. O. (2017). How does "talking about the internet with others" affect teenagers' experience of online risks? The role of active mediation by parents, peers, and school teachers. New Media & Society, 19(7), 1109-1126. https://doi.org/10.1177/1461444815626612
- Storø, J. (2013). Practical social pedagogy theories, values and tools for working with children and young people. Bristol University Press.
- Sun, H., Yuan, C., Qian, Q., He, S., & Luo, Q. (2022). Digital resilience among individuals in school education settings: A concept analysis based on a scoping review [systematic review]. Frontiers in Psychiatry, 13. https://doi.org/10.3389/fpsyt.2022.858515
- Tavory, I., & Timmermans, S. (2014). Abductive analysis: Theorizing qualitative research. University of Chicago Press.



Thibodeau, P. H., & Boroditsky, L. (2011). Metaphors we think with: The role of metaphor in reasoning. PLOS ONE, 6(2), e16782. https://doi.org/10.1371/journal.pone.0016782

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. International Journal for Quality in Health Care, 19(6), 349-357. https://doi.org/10.1093/intqhc/mzm042

UNICEF. (2019). Growing up in a connected world. UNICEF Office of Research-Innocenti, https:// www.unicef-irc.org/publications/1060-growing-up-in-a-connected-world.html

UNICEF. (2022). Seen, counted, included: Using data to shed light on the well-being of children with disabilities. https://data.unicef.org/resources/children-with-disabilities-report-2021/

United Nations General Assembly. (2006). Convention on the rights of persons with disabilities: resolution / adopted by the General Assembly. https://www.un.org/development/desa/disabilities/ convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-personswith-disabilities-2.html

Valentine, K. (2011). Accounting for agency. Children & Society, 25(5), 347-358. https://doi.org/ 10.1111/j.1099-0860.2009.00279.x

Valkenburg, P. M., Piotrowski, J. T., Hermanns, J., & de Leeuw, R. (2013). Developing and validating the perceived parental media mediation scale: A self-determination perspective. Human Communication Research, 39(4), 445-469. https://doi.org/10.1111/hcre.12010

Vissenberg, J., d'Haenens, L., & Livingstone, S. (2022). Digital literacy and online resilience as facilitators of young people's well-being? European Psychologist, 27(2), 76-85. https://doi.org/ 10.1027/1016-9040/a000478

Wiggins, S., & Potter, J. (2007). Discursive psychology. In C. Willig, & W. Stainton Rogers (Eds.), Handbook of qualitative research methods in psychology (pp. 72-89). SAGE.

Wrzesińska, A., Knol-Michałowska, K., Stecz, P., Kopytowska, M., & Binder-Olibrowska, K. (2021). Internet risky behaviours among youth with visual impairment. PeerJ, https://doi.org/ 10.7717/peerj.12376

Appendix 1. COREQ (COnsolidated criteria for REporting Qualitative research) Checklist.

	Item		Reported on
Topic	no.	Guide questions/description	page no.
Domain 1: Research team a	nd refl	exivity	
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	8
Credentials	2	What were the researcher's credentials? E.g., PhD, MD	8–9
Occupation	3	What was their occupation at the time of the study?	8–9
Gender	4	Was the researcher male or female?	8–9
Experience and training Relationship with participants	5	What experience or training did the researcher have?	8–9
Relationship established	6	Was a relationship established prior to study commencement?	8
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g., personal goals, reasons for doing the research	8–9
Interviewer characteristics	8	What characteristics were reported about the inter viewer/ facilitator? e.g., Bias, assumptions, reasons and interests in the research topic	9
Domain 2: Study design		·	
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g., grounded theory, discourse analysis, ethnography, phenomenology, content analysis	5
Participant selection			
Sampling	10	How were participants selected? e.g., purposive, convenience, consecutive, snowball	8
Method of approach	11	•	8

(Continued)

Continued. Item Reported on Topic Guide questions/description nο page no. How were participants approached? e.g., face-to-face, telephone, mail, email Sample size 12 How many participants were in the study? 8 Non-participation How many people refused to participate or dropped out? NA 13 Reasons? Setting Setting of data collection 14 Where was the data collected? e.g., home, clinic, workplace 7–8 Presence of non-15 Was anyone else present besides the participants and 7–8 participants What are the important characteristics of the sample? e.g., Description of sample 16 6-7 demographic data, date Data collection Interview guide 17 Were questions, prompts, guides provided by the authors? Was it pilot tested? Repeat interviews 18 Were repeat inter views carried out? If yes, how many? No Audio/visual recording 19 Did the research use audio or visual recording to collect the Field notes 20 Were field notes made during and/or after the interview or No focus group? Duration 21 What was the duration of the inter views or focus group? 8 Data saturation 22 Was data saturation discussed? No Transcripts returned 23 Were transcripts returned to participants for comment and/or correction? Domain 3: analysis and findings Data analysis Number of data coders 24 How many data coders coded the data? 8-9 Description of the coding Did authors provide a description of the coding tree? 25 No Derivation of themes 26 Were themes identified in advance or derived from the data? 8-9 27 Software What software, if applicable, was used to manage the data? a Did participants provide feedback on the findings? Participant checking 28 No Reporting Quotations presented 29 Were participant quotations presented to illustrate the Yes themes/findings? Was each quotation identified? e.g., participant number 30 Was there consistency between the data presented and the Data and findings Yes consistent findings? Clarity of major themes 31 Were major themes clearly presented in the findings? Yes Clarity of minor themes 32 Is there a description of diverse cases or discussion of minor Yes

Appendix 2. Indicative interview schedule for interviews with educator participants

Introductions and collecting basic details

- Explain the rules of the interview
- · Check consent understanding, turn on Dictaphone and take verbal consent
- Obtain demographics (age, gender, role, etc.)
- Can you tell be about how you feel about young people with vulnerabilities and internet technologies?
- What are your experiences of supporting young people with vulnerabilities in their online lives?
- Can you tell me about a time when you have talked to a young person with vulnerabilities about their online lives?
 - a. How was this for you? Why did you do/not do this? What helped/hindered these conversations?



- Can you tell me about your experiences of supporting (or not) young person with vulnerabilities who has come across something online that has upset them? (How did it make you feel, could you tell me a little more about that?)
- What do you see as your role in supporting young person with vulnerabilities in their online lives?
 - a. Has this changed since you started in this role (if so how and if not why not?)
- · Are there any bits of using digital technologies and the internet which, in your experience make young person with vulnerabilities worry?
 - a. How have you reacted to this?
- If there was something you could change about young person with vulnerabilities being online what would it be?
- If you had one message for 'e-safety' experts, what would it be?

Data collection close out

- Reiterate the boundaries
- What happens next
- Thank you and goodbyes