



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

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

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 quicker 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.

Keywords: children with disabilities, educators, digital resilience, qualitative research, thematic discourse analysis

## Introduction

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

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2  
3 and have these risk experiences escalate quicker than their peers (El Asam & Katz, 2018;  
4  
5 Wrzesińska et al., 2021). However, despite having more contact with a wider range of  
6  
7 educators and needing more support to use the Internet than their peers, research indicates  
8  
9 that children with disabilities are likely to receive less (de Groot et al., 2022; Livingstone,  
10  
11 2013; Lundy et al., 2019).  
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16

17 Conceptualizations of connective technology use by children with disabilities needs to be  
18  
19 urgently problematized. From a life course perspective, digital exclusion is a greater risk  
20  
21 for children with disabilities than online risk experiences (Chadwick et al., 2019).  
22  
23 Evidence indicates that children with disabilities are more likely to experience  
24  
25 sociodemographic and socioeconomic disadvantages across the life course (Lundy et al.,  
26  
27 2019). These factors are consistently linked to digital exclusion (Helsper, 2012), and  
28  
29 frequently associated with a range of negative health outcomes (Honeyman et al., 2020).  
30  
31 Hence, it is a pressing and global educational issue that adults need to move beyond  
32  
33 allowing their discomfort to dictate how children with disabilities experience their rights  
34  
35 in our connected worlds.  
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42 We use a discursive approach to examine how educators understand their experiences of  
43  
44 children with disabilities using connective technologies. We seek to reposition online risk  
45  
46 experiences within a life course perspective to enable educators to better support the  
47  
48 connective lives of children with disabilities.  
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### 53 **Children with disabilities: a critical perspective**

54 A discursive psychological perspective examines how talk operates as social action. This  
55  
56 perspective examines the interplay between individuals, communal practices, and  
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3 institutional structures (Wiggins & Potter, 2007). From this perspective, when talking  
4  
5 about connective technology use by children with disabilities, educators explain their  
6  
7 experiences, and define the nature of, and position themselves, in relation to available  
8  
9 socially sanctioned ways of sense-making. As Foucault (1972) illustrates through the  
10  
11 concept of an episteme, the ‘talk of the time’ “rules-in” and by that definition “rules-out”  
12  
13 certain ways of talking and versions of reality.  
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19 Talk related to technological advancement is frequently reasoned about through ‘moral  
20  
21 panic’ discourse (Orben, 2020). Moral panics are public mass movements based on  
22  
23 exaggerated perceptions that exceed the threat facing society (Cohen, 1970). When  
24  
25 related to technology discourse, talk follows repetitive patterns, ruling out ways of sense  
26  
27 making about technologies (Foucault, 1972).  
28  
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32  
33 Thus, when making sense of technological advances, educators must navigate moral  
34  
35 panic discourse, models of childhood which promote protectionism, agency, and  
36  
37 participation (Valentine, 2011). They do this whilst simultaneously operating in a risk  
38  
39 society (Beck, 1992). In a risk society, the ability to identify risk implies that the same  
40  
41 risks can be managed and therefore preventable (Beck, 1992). Hence, when risks are not  
42  
43 controlled, accountability and discourses of professional failures emerge (Ferguson,  
44  
45 2003).  
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51  
52 Unsurprisingly, when considering the connected lives of children with disabilities,  
53  
54 educators may frequently adopt restrictive mediation approaches to safeguarding to  
55  
56 protect this group from risk experiences (Gómez-Puerta & Chiner, 2020; Shin & Lwin,  
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3 2017). However, as Billig (1997) notes, epistemes which appear as inevitable realities  
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5 contain contrary tropes to reinterpret dominant realities.  
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10 For instance, a restrictive mediation approach is designed to eradicate risk experiences,  
11  
12 yet the effectiveness of this approach decreases as children age (Valkenburg et al., 2013).  
13  
14 Educators frequently seek experiential learning opportunities, seeing this as an effective  
15  
16 learning strategy (Lazonder & Harmsen, 2016). However, when learning how to navigate  
17  
18 online risks, children already labelled as ‘vulnerable’ often face restrictive mediation  
19  
20 practices, diminishing experiential learning opportunities (Author’s, A). In short, we risk  
21  
22 giving less supported learning opportunities to children with disabilities, the very group  
23  
24 who need them the most.  
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### 30 ***Digital resilience and reconceptualising online risk experiences***

31  
32 Given that using connective technologies is vital for everyday life and risks happen, the  
33  
34 concept of digital resilience is attracting increasing attention. Digital resilience is defined  
35  
36 as:  
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39

40 “...a dynamic process whereby individuals and/or groups learn how to recognise,  
41  
42 manage, and recover from online risks within and across individual, home,  
43  
44 community, and societal levels...” (Author’s., B: p. 29).  
45

46 Digital resilience is cited as playing a key role in promoting positive, whilst buffering  
47  
48 negative, influences of digital environments on children’s mental health and increasing  
49  
50 evidence highlights that online risk experiences are necessary for building it (Author’s.,  
51  
52 B; Vissenberg et al., 2022). However, this idea can often be disregarded as the affordances  
53  
54 of connectivity are often understood via a false dichotomy.  
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3 Children's online engagement is experienced in a risk society via binary language. Either  
4  
5 as safe (if it can be controlled/mediated) or unsafe (if it cannot). The proposition that  
6  
7 internet connectivity is ultimately more continuous than dichotomous, and dynamically  
8  
9 influenced by a range of factors remains challenging. Thus, the proposition that online  
10  
11 risks simultaneously provide opportunities for children with disabilities to thrive is not  
12  
13 readily accepted.  
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19 The concept of digital resilience offers educators differing ways to understand the  
20  
21 possibilities of their roles in supporting children with disabilities using connected  
22  
23 technologies. Hence, problematizing, and re-examining current conceptualizations of this  
24  
25 phenomena is important as educators have an increasingly important role in children's  
26  
27 socialization online (Organisation for Economic Co-operation and Development  
28  
29 (OCED), 2021).  
30  
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35  
36 There are a limited number of studies examining how educators experience the connected  
37  
38 lives of children with disabilities, with the majority focusing on learning methods,  
39  
40 accessibility, and the professional development of educators (Cinquin et al., 2019;  
41  
42 Guillén-Gámez et al., 2022). We begin to address this gap by examining how educators  
43  
44 experience supporting (or not) children with disabilities using connective technologies.  
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## 50 **Materials and methods**

### 51 *Design and participants*

52  
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55  
56 We adopt a critical social psychological perspective informed by discursive approaches  
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58 (Gergen, 1999; Potter, 1996b; Potter & Wetherell, 1987). By not privileging one account  
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3 over another, the unpacking of how language creates knowledge as privileged will be  
4 used to illustrate how participants interpret their experiences via and through language  
5 (Berger & Luckmann, 1967). Through the close examination of talk, we aim to  
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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 problematize 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 (Author's C). 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-September 2021. More information on our sample is provided in Table 1.

INSERT TABLE 1

Study methods and results are reported according to the Consolidated Criteria for



1  
2  
3 Reporting Qualitative Research (COREQ) (Tong et al., 2007). See Appendix 1 for  
4  
5 COREQ checklist.  
6  
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## 10 **Ethical Considerations**

11  
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13  
14 We worked to mitigate risks of confidentiality breaches, privacy and collusion whilst  
15  
16 upholding safeguarding procedures. Participants were encouraged to carefully consider  
17  
18 the space in which interviews took place. This was important because expressing personal  
19  
20 opinions in professional settings and/or interviews in their home environments may have  
21  
22 been uncomfortable both in terms of intrusion but also collapsing of physical boundaries  
23  
24 between work and home. Given the potential sensitivity of the topic, and the variety of  
25  
26 recruitment strategies used which initially relied upon research team members' existing  
27  
28 networks, we constantly reflected on if undertaking interviews with those known prior to  
29  
30 the research encounter was suitable, and arrangements were made on a case-by-case basis  
31  
32 accordingly.  
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Ethical approval was provided by the [name removed for peer-review]. No safeguarding  
issues arose during the project.

## 50 **Sampling and recruitment**

51  
52  
53 We used purposive sampling and recruited across dimensions of diversity. We sought to  
54  
55 include a wide range of different organisational positions and professional contexts.  
56  
57 Sample heterogeneity was sought in terms of age, gender, and ethnicity. To assist  
58  
59 diversity, participants were recruited through various ways including via existing  
60

1  
2  
3 networks, snowballing, newsletters, purposive social media strategies which made use of  
4  
5 hashtags, and blogs. Participants were either emailed recruitment packs (containing  
6  
7 participant information sheets and consent forms) directly, passed this information by  
8  
9 those within their network or contacted the lead author via responding to social media  
10  
11 posts.  
12  
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### 14 15 **Data Collection**

16  
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19 Semi-structured online interviews were conducted via Microsoft Teams. At the beginning  
20  
21 of the interview, the researcher explained the rules and checked understanding before  
22  
23 activating recording, taking consent, and obtaining participant demographics. Participants  
24  
25 were asked questions relating to their experiences of the connected lives of children with  
26  
27 disabilities within their roles. After the interview, participants were invited to ask any  
28  
29 questions, debriefed, and thanked for their time. Interviews were 35-55 minutes long.  
30  
31

32  
33  
34 Interview questions (see appendix 2) were piloted prior to data collection. Participants  
35  
36 were offered the chance to review their transcripts with 12/30 opting to do this with no  
37  
38 changes requested. Of 30 interviews, [removed for peer-review], an applied psychologist  
39  
40 qualified to PhD level and [removed for peer-review] a teacher educator researcher,  
41  
42 qualified to PhD level at the time of data collection conducted 9 interviews each,  
43  
44 [removed for peer-review], a medical researcher qualified to post-graduate level at the  
45  
46 time of data collection conducted 7 interviews, and [removed for peer-review], a teaching  
47  
48 assistant and researcher qualified to post-graduate level at the time of data collection  
49  
50 conducted 5 interviews.  
51  
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### 54 55 ***Analytical Procedure***

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58 Data were anonymised at the point of transcription and transcribed using playscript  
59  
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1  
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3 representations of talk. Files were then imported into Nvivo to assist coding. Drawing on  
4  
5 Braun and Clarke (2012) and Potter and Wetherell (1987), we conducted a thematic  
6  
7 discourse analysis within a social constructionist epistemology. Taking an emic approach,  
8  
9 we were primarily interested in understanding experiences from the participants'  
10  
11 perspectives through the internal language and meanings of the cultural group (Olive,  
12  
13 2014). In our analysis, this took the form of a two-stage approach.  
14  
15

16  
17  
18 Firstly, we began with an initial reading and open coding of 20% of the interview  
19  
20 transcripts. From this we met to develop an inductive coding framework in which we  
21  
22 began to cluster initial codes. [removed for peer-review] then tested this framework with  
23  
24 another 20% of the data utilising an iterative process including frequent meetings and  
25  
26 conversations to develop and refine the developing framework and selected of main  
27  
28 themes whilst discussing and apply existing theory/literature (Braun & Clarke, 2012).  
29  
30 Secondly, we then compared and contrasted themes and sub-themes focusing on  
31  
32 educators' discursive practices and performances. Extracts of relevant exchanges were  
33  
34 then revisited, re-listened to and re-transcribed using Jeffersonian transcription methods  
35  
36 (Jefferson, 1984).  
37  
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39  
40

41  
42 Transcription in a Jeffersonian style makes use of various of symbols to represent talk. In  
43  
44 so doing, features of talk which speakers deem relevant in interaction, often left out of  
45  
46 qualitative research are re-introduced (Wiggins & Potter, 2007). Given the paper's aim,  
47  
48 this was deemed necessary to provide a rigorous representation of participants' situated  
49  
50 talk. For those unfamiliar with the Jefferson transcription system, see Table 2 for  
51  
52 explanation.  
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56  
57 INSERT TABLE 2  
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60

## 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.

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>

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2  
3 the online society has no (.) n::o boundaries.  
4  
5

6 (Sarah, SEND Consultant)  
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12

13 In extract 1, Sarah's talk utilises several rhetorical devices to construct the connectivity  
14 of children with disabilities as taking place within a frontier. In working up this frontier  
15 as an infinite space with "*n::o boundaries*", Sarah's talk also indicates its apparent  
16 lawlessness. This is achieved via positing frontiers in comparison to "*face-to-face*"  
17 fortresses in which boundaries exist via social norms. In this frontier space, dangers are  
18 also hidden, with this worked up through the "*MINE::FIELD*" metaphor.  
19  
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27 Talk recruiting metaphors work via constructing abstract information and using more  
28 concrete terms to increase their simplicity (Thibodeau & Boroditsky, 2011). War  
29 metaphors, such as "*It's a MINE::FIELD*" are notable for the emotional valence they  
30 construct (Flusberg et al., 2018). Here, the "*MINE::FIELD*" metaphor works to convey  
31 the problematic nature of children with disabilities accessing the Internet in several ways.  
32 Firstly, threats are in the frontier space (i.e., the minefield), as opposed to somewhere safe  
33 like a fortress. Secondly, threats are not always visible. Thirdly, these threats can be  
34 'stepped on', at any time with long-term debilitating consequences.  
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47 Importantly, as Billig (1997) illustrates dominant discourse contains contrary tropes to  
48 reinterpret taken for granted versions of reality. The part of the metaphor which is left  
49 unsaid and hence hypothetically not privileged, is the potential role for educators to help  
50 minefield navigation. Drawing on the concept of digital resilience (Author's A, B; Sun et  
51 al., 2022; Vissenberg et al., 2022) and the minefield metaphor deployed by Sarah,  
52 educators' role could be to help children with disabilities learn what mines look like, how  
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1  
2  
3 they might react when they see one, how to react if they step on one, how to recover from  
4 this and how to implement mine-clearance procedures in future. This is something  
5 discussed further in the *getting comfortable with the uncomfortable* theme.  
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14 Building on the idea of frontiers being where risks are unmanageable, extract 2 illustrates  
15 how participants identified specific yet generalised risks from within their fortress, but  
16 positioned these as occurring “out there”:  
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22 Extract 2:

23  
24  
25 Nina: (.) the deception is hi↑gh out there (1.3) peo::ple who are being abused (0.5) who  
26 are being de::frauded of money (.) who are being lu:red somewhere because  
27 they've they've trusted <someone> some::one they don\*t know people? (.) like  
28 (.) like ↑↑serial killers or (.) °whatever it is°  
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36 (Nina, Consultant Psychiatrist)  
37  
38

39 Here, the generalised idea of “*deception*” is further worked up by Nina through what  
40 Potter (1996b) refers to as reification. Reification is a process of turning something  
41 abstract, in this case the threat of deception, into something material “*being de::frauded*  
42 *of money*”. Nina’s talk also features a generalised yet clear villain or folk devil (Cohen,  
43 1970). In this extract the folk devil “↑↑*serial killers*” further supports the construction of  
44 Nina’s experience of threats in the frontier as real, yet generalised. This point is further  
45 developed in extract 3:  
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55 Extract 3:

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58  
59 Researcher: >Can you say mo::re about (1.0) [that?]<  
60

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3 Adam: [We:::]l something that happens a lot is  
4  
5  
6 grooming (1.0) °it could be an abus:::ive adult in power° (.) <it could be the who:::le gang  
7  
8 issue> (2.7) th:::ey could be used for drug trafficking (1.1) there's quite a fe:::w examples  
9  
10 of <these things> happening  
11  
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13  
14 (Adam, Senior Advisory Teacher for Care-Experience Children)  
15  
16

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20  
21 Here Adam's talk identifies a list of potential folk devils operating in the frontier space.  
22  
23 This enables the risk identification features of Beck's (1992) risk society to be managed  
24  
25 and illustrates Adam as operating at this interface. Adam's talk also uses three-part lists,  
26  
27 seen by Atkinson (1984) as a way to allow a speaker to construct an air of unity and  
28  
29 completeness to discourse to allow it to remain unchallenged. Adam's repetition of the  
30  
31 same word "*could*" and different words with similar general meaning ("*a lot*", "*quite a*  
32  
33 *fe:::w examples*", "<*these things*> *happening*") contributes towards making the ideas  
34  
35 contained within his talk perform as common sense (Jones & Pecci, 2003). In so doing,  
36  
37 Adam's talk points to a privileged version of reality, frontiers are dangerous, these  
38  
39 dangers "*could*" happen and are frequent.  
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45 However, in line with research indicating that expected and realised experiences of online  
46  
47 risks are very different (Livingstone, 2013), educators' talk also demonstrated ways in  
48  
49 which they tried to make sense of their own experiences in comparison to dominant  
50  
51 technological panic discourses that seem incongruent to their lived experiences:  
52  
53

54  
55 Extract 4:  
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57  
58 Terence: It's °frigh:::tening°  
59  
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3 Researcher: ↑↑U::m =  
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5

6 Terence: = <the things that you hear about> (2.1) not things (.) that have  
7 necessarily affected us or that affect ↑our <children but the general  
8 picture> (.) the national picture and the local pic:ture and (.) the way that  
9 children are targ::eted  
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17 (Terence, Independent Secondary School Teacher)  
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23 Despite acknowledging that this risk is unlikely to affect them, Terence's talk illustrates  
24 the power of dominant understandings of children with disabilities as "*targ::eted* " by  
25 undefined attacks. Again, the use of spatial talk positions this threat as understood within  
26 the frontier. This talk works up ways to overcome the problem of invisibility and  
27 intangibility of threats positioned within the realm of the frontier that represents the  
28 Internet. They encompass the whole of society, but by moving closer with each iteration,  
29 from "*the general picture*" to "*the national picture*" to "*the local pic:ture*", Terence's talk  
30 constructs risk as close to *fortresses*, validating the emotionality expressed in his talk.  
31 Children with disabilities living connected lives becomes understood as "*frigh::ening*"  
32 via this sense-making, informed by dominant assemblies of talk which position threats as  
33 real and close despite not being experienced directly.  
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49  
50 In line with the work of G-Mascheroni et al. (2014) who explored discourse used by  
51 children to interpret online risks, we see how, like the children in their study, participants  
52 framed their experiences via narratives that prioritize fear. This was apparent, even when  
53 they had not directly experienced risks themselves. In the context of this paper, educators  
54 used spatial metaphors that constructed *fortresses and frontiers*, setting up a border where  
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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

1  
2  
3 by explicitly stating the speaker's awareness of this potential criticism (Potter, 1996b).

4  
5 Hence, in extract 5, Richard's talk functions to present an account of *patrolling the border*  
6  
7 made safer via keeping children with disabilities away from the frontier.  
8  
9

10  
11 A different experience of *patrolling the border* is illustrated in extract 6:  
12  
13

14 Extract 6:

15  
16  
17 June: It's about limit:::ing (1.) [their u:::se]

18  
19  
20  
21 Researcher: [the::ier? ]  
22  
23

24 June: (.) it's not s:::o mu:ch them using it <I think it's about limiting the use>  
25  
26 (.) and helping th::em to (.) to understand (.) ↑what is okay and what isn't  
27  
28 okay (1.0)  
29  
30

31  
32 Researcher: Arh (0.5) ° s:::o°  
33  
34

35 June: From a::n >education point of view< that's what we (.) we try to help  
36  
37 th::em with it (.) a::nd <limiting use> (1.9) I would ch::ange (.) the fact that  
38  
39 they have access to their personal Internet in school  
40  
41  
42

43 (June, SENCO, Secondary School)  
44  
45  
46

47 Here June's talk attempts to work up an account in which exploration of frontiers is not  
48  
49 the risk as such, it is about limiting the time children with disabilities are in frontiers: "*it's*  
50  
51 *not s:::o mu:ch them using it*" "*it's about limiting the use*>". In this way the risk  
52  
53 identified, perceived overuse, resides within the individual and therefore can be managed  
54  
55 within a risk society (Beck, 1992). This is something further developed as residing within  
56  
57 individuals as June's talk states she seeks to help children with disabilities "*to understand*  
58  
59  
60

1  
2  
3 (.) ↑*what is okay and what isn't okay (1.0)*”.

4  
5  
6 This positions children with disabilities within a deficit compared to educators and  
7  
8 simultaneously positions the adult, June, as required to help this group overcome this  
9  
10 deficit. June then draws on a membership categorisation (Baker, 1997), carrying with it  
11  
12 knowledge entitlements and norms “*From a::n >education point of view*” to build up a  
13  
14 professionalised position towards this practice. In this instance, evoking the role of  
15  
16 educators to assist children with disabilities to learn how to recognise and manage and  
17  
18 recover from risk experiences, linking to ideas of digital resilience functioning at a  
19  
20 community level (Author's, B).  
21  
22  
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29 Recruiting category memberships is useful for foregrounding cultural truths. In extract 6,  
30  
31 June's speech act performs to co-operate with the notion that educators are responsible  
32  
33 for protecting children with disabilities from themselves. However, in agreement with the  
34  
35 literature review of Seale and Chadwick (2017), it also illustrates a personal position that  
36  
37 disagrees with this stance and seeks distance from it by expressing a desire to restrict  
38  
39 seemingly unsupervised “*their personal internet*” exploration of the frontier.  
40  
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47 Despite the dominance of spatial metaphors setting up a false dichotomy which positioned  
48  
49 *fortresses and frontiers* as safe/unsafe respectively, leading to the need to *patrol the*  
50  
51 *borders*, a contrary mobilization was worked up by some educators:

52  
53  
54  
55 Extract 7:

56  
57  
58 Nadia: ↑W:::e see our worlds↓ as online and offline (.) <whereas> (.) I don't think  
59  
60

(.) 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\*c\*y 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 mobilization 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

1  
2  
3 managed (Beck, 1992). The current failure, having been identified and positioned in an  
4  
5 imagined distant future “*we’ve got t:o move away*” is then repositioned in talk in a way  
6  
7 that illustrates closeness. This is done via recruiting terminology which constructs  
8  
9 proximity to resolving this failure “*>we’re just lacking<*”. In so doing, the temporary  
10  
11 nature of this current failing is also worked up “*at the moment*”.  
12  
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### 18 ***Theme 3: Getting comfortable with the uncomfortable***

19  
20  
21 Despite the dominance of discourse setting up children with disabilities’ connected lives  
22  
23 as a risk best managed through staying inside *fortresses* and by *patrolling the borders*,  
24  
25 contrary mobilizations were recruited.  
26  
27  
28

29 Extract 8:

30  
31  
32 Abigail: For us (0.7) for us teachers it’s hard (1.8) but w::e need to (.) <we need to  
33  
34 understand> that children’s worlds are going more online and so (.) ↑↑it’s  
35  
36 really our job to educate an:::d teach (1.0)  
37  
38  
39  
40

41 Researcher: Umm:: and [so]

42  
43  
44 Abigail: [we] can restrict it (.) but we can’t stop it <it’s the way of the  
45  
46 world now> and our kids ↑↑need to be there too  
47  
48  
49  
50

51 (Abigail, Primary School Teacher)

52  
53  
54 Abigail’s talk recruits numerous subtle discursive devices to work up her position via a  
55  
56 combination of stake inoculation and categorization claiming (Drew & Heritage, 1992;  
57  
58 Potter, 1996b). Speakers recruit member categorisations as a resource to claim specific  
59  
60

1  
2  
3 forms of activities and behaviours as a function of group membership (Drew & Heritage,  
4 1992). Abigail's defensive talk indicates the difficulty of the task for her profession “...for  
5 *us teachers it's hard...*”. This works to inoculate her profession from undesirable  
6 positions of incompetence. The task is where the difficulties lie, not educators' lack of  
7 competence. She has identified the problem and how to solve it.  
8  
9

10  
11  
12 Within Abigail's talk, educator accountability within the connected lives of children with  
13 disabilities begins to be outlined: “*↑↑it's really our job to educate an:::d teach (1.0)*”.  
14 Drawing on Garfinkel (1967), this talk works up professional accountability via  
15 rationality: “*<it's the way of the world now>*”. Though instructive, talk uses binaries and  
16 remains generalised.  
17  
18

19  
20  
21 Abigail's sense-making posits that educators have professionalised accountability  
22 opposed to a choice about supporting the connected lives of children with disabilities.  
23 This is worked up via recruiting mobilisations of embracing powerlessness (Author's A).  
24 Abigail's talk recruits ideological common-sense drawing on knowledge regarding the  
25 saturated nature of connective technologies and children with disabilities' connectivity.  
26 This is still understood via online/offline binaries, rather than continuum-based  
27 understandings of connectivity (Author's C). However, Abigail's sense-making of her  
28 experiences is free from tropes about restricting frontier access by patrolling the borders  
29 via inevitability: “*...[we] can restrict it (.) but we can't stop it..*”. Her talk still operates  
30 within a risk society, but with subtle difference (Beck, 1992). Abigail's talk positions  
31 internet access as a “*need*” for children with disabilities, not optional, something implied  
32 by previous themes discussed. It also posits that other “*kids*” are already “*there*” (i.e.,  
33 online). Hence, drawing on ideas of digital exclusion (Chadwick et al., 2019; Helsper,  
34 2012; Lundy et al., 2019), Abigail's talk positions “*...our kids..*” (i.e., children with  
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disabilities) as needing to “*be there too*”.

In extract 9, Maria’s talk shares similar features to Abigail’s, and these parallel Author’s (B)’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

1  
2  
3 as opposed to frontier exploration (something we discuss at length in Author's. (D)). In  
4  
5 this theme, our analysis illustrated accounts where taken for granted versions of realities  
6  
7 were less sensitively re-worked than in extracts 8 and 9. As extract 10 illustrates,  
8  
9  
10 Coronavirus induced school closures shifted dominant discourses:  
11  
12  
13  
14

15 Extract 10:

16  
17  
18  
19 *Researcher:* S::o (.) >you're saying< lockdown made that better for (1.) you?  
20  
21

22 *Connie:* Well (.) because w::e went online for teaching (1.0) issues came up (0.4)  
23  
24 risks became (.) well learning points <it all become> very very well real  
25  
26  
27 an::d our kids need that"  
28  
29

30 (Connie, Primary School Teacher)  
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## 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



1  
2  
3 educators can position their role as restricting children's access to frontier spaces to  
4 reduce risk experiences. The final theme, '*getting comfortable with the uncomfortable*',  
5 demonstrated how educators can renegotiate this positioning to provide opportunities for  
6 experiential learning.  
7  
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12  
13 In line with previous research, we demonstrate that educators may amplify digital  
14 exclusion for children with disabilities (Alper & Goggin, 2017; Gómez-Puerta & Chiner,  
15 2020; Giovanna Mascheroni et al., 2022). Our analysis advances understandings by  
16 illustrating *how* dominant discourses used by educators when attempting to make sense  
17 of the increasing connectivity of children with disabilities shapes, and in some cases  
18 mandates, digital exclusion. In agreement with Alper and Goggin (2017), we argue that  
19 the connectivity of children with disabilities needs to be reconceptualised. Connectivity  
20 is a vital space for experiential learning and needs to be viewed through a life course lens.  
21 Such a position enables risky online experiences to be seen in a more balanced manner  
22 (e.g., short-term risk of autistic youth participating in online autism communities versus  
23 the positives, i.e., social capital, more control over how they engage etc) cultivated via  
24 participation (Hassrick et al., 2021)).  
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### 45 ***Limitations***

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

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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 socialization 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,

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3 fail, and be supported by educators to learn and grow. Scenario-based role-playing games  
4 (e.g., Doom the Gloom (LEGO, 2021)) offer spaces in which mistakes can be made and  
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6 learnt from with minimal consequences. The acceptability and effectiveness of such  
7  
8 games warrant further examination.  
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13 Importantly, online risks do not, by default, result in harm (Livingstone, 2013). On the  
14  
15 contrary, there is increasing evidence that digital resilience can only be built and shown  
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17 as a result of risky online experiences (Sun et al., 2022; Vissenberg et al., 2022), with  
18  
19 community actors such as educators playing an important role. The importance of this  
20  
21 role also warrants a closer examination of how educators' talk distinguishes (or not)  
22  
23 children's differing disabilities and/or severities. As does how differing severities or  
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25 forms of disabilities (e.g., neurodiversity, physical or sensory disabilities) impact (or not)  
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27 risks encountered and how educators experience these.  
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33 If we continue to disregard the connected lives of children with disabilities, we risk  
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35 providing less supported learning opportunities to those who need them the most.  
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37 Research might want to adopt a realist analytical framework to review existing practices  
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39 and create theoretically informed Programme Theories from which testable complex  
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41 interventions (such as evidence-based training and guidance) informed by rigorous  
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43 theorisation can take place. There is also the need to robustly develop validated  
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45 psychometric scales which are accessible to the target population and enable the ongoing  
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47 assessment of the impact of pedagogical innovation and interventions. This can promote  
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49 moving beyond universal approaches to ISE and allow better differentiation, with social-  
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51 ecological understandings of digital resilience providing rigour through which to explore  
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53 this possibility (Author's B).  
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## 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 conceptualizations 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.

## Acknowledgments

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## Declaration of interest statement

[removed for peer-review] is a member of the UKCIS Digital Resilience and Vulnerable Users Working Groups, Internet Matters Expert Advisory Panel and Ofcom's Research Working Group. The remaining authors have no interests to declare.

**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

**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.
↑↓	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.
<u>Underlining</u>	Indicates emphasis; the extent of underlining within individual words locates emphasis and also indicates how heavy it is.
CAPITALS	mark speech that is hearably louder than surrounding speech. This is beyond the increase in volume that comes as a by product of emphasis
°↑I know it,° that's r*ight.	“degree” signs enclose quieter speech. 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.
Ybu-u- >he said<	hyphens mark a cutoff of the preceding sound. “greater than” and “lesser than” signs enclose speech that 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.
((shrill))	Double brackets mark comments from the transcriber, e.g., about features of context or delivery.

Source. Adapted from <http://homepages.lboro.ac.uk/~ssah2/transcription/transcription.htm>.

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Educators' experiences of supporting (or not) children with disabilities online

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

Topic	Item No.	Guide Questions/Description	Reported on Page No.
<b>Domain 1: Research team and reflexivity</b>			
<i>Personal characteristics</i>			
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	5	What experience or training did the researcher have?	8-9
<i>Relationship with participants</i>			
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 interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	9
<b>Domain 2: Study design</b>			
<i>Theoretical framework</i>			
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
<i>Participant selection</i>			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	8
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	8
Sample size	12	How many participants were in the study?	8
Non-participation	13	How many people refused to participate or dropped out? Reasons?	NA
<i>Setting</i>			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	7-8
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	7-8
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	6-7
<i>Data collection</i>			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	8
Repeat interviews	18	Were repeat interviews carried out? If yes, how many?	No
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	8
Field notes	20	Were field notes made during and/or after the interview or focus group?	No
Duration	21	What was the duration of the interviews 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?	8
<b>Domain 3: analysis and findings</b>			
<i>Data analysis</i>			

Educators' experiences of supporting (or not) children with disabilities online

Number of data coders	24	How many data coders coded the data?	8-9
Description of the coding tree	25	Did authors provide a description of the coding tree?	No
Derivation of themes	26	Were themes identified in advance or derived from the data?	8-9
Software	27	What software, if applicable, was used to manage the data?	9
Participant checking	28	Did participants provide feedback on the findings?	No
<i>Reporting</i>			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	Yes
Data and findings consistent	30	Was there consistency between the data presented and the findings?	Yes
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 themes?	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)

1. **Can you tell me about how you feel about young people with vulnerabilities and internet technologies?**
2. **What are your experiences of supporting young people with vulnerabilities in their online lives?**
3. **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?**
4. **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?)**
5. **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?)**
6. **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?**
7. **If there was something you could change about young person with vulnerabilities being online what would it be?**
8. **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