Children & Society

WILEY | NATIONAL CHILDREN'S BUREAU

ORIGINAL ARTICLE OPEN ACCESS

An Aid or an Obstacle? Parent and Teacher Perspectives on the Impact of Technology on Children's Wellbeing and School Life

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Received: 11 December 2023 | **Revised:** 2 September 2025 | **Accepted:** 29 October 2025

Keywords: child wellbeing | parent/carer | school | teacher | technology

ABSTRACT

The dominance of technology in the daily lives of modern-day children has raised much concern about the impacts on their wellbeing. However, there are also many advantages and opportunities transpiring. This paper asks whether technology is an aid or an obstacle to a child's wellbeing and school life. Parent and teacher perspectives were collected from a group of seven schools in Northwest England using surveys and interviews, seeking to compare perspectives and better inform the ongoing strategies of schools. The data revealed disconnections between the perspectives of parents/carers and teachers, highlighting the need for increased dialogue and collaboration to occur. Existing approaches of parent respondents tended to be adult-led and directive rather than viewing children as co-creators of establishing their own healthy pathway in the online world. Support and advice from schools could be transformative for families who find implementing technology boundaries to be highly stressful. It is evident that there is a need for significant investment and ongoing research in this area to harness the positive aspects of the ever-changing online world and reduce the impacts on school life.

1 | Introduction

There has long been concern about the impact of technology on children's wellbeing (Hutchby 2001; Livingstone and Helsper 2010; Palmer 2015; Turner 2015), but in recent years there has been increased focus on its impact, largely due to the Covid pandemic lockdowns and enforced online learning of children from home (Limone and Toto 2021). This paper is specifically interested in mental and socio-emotional wellbeing, although children's wellbeing must be considered holistically (Bohnert and Gracia 2021). Indeed, digital technology has been shown to impact children's life outcomes globally (Ghai et al. 2022). In the UK, most children aged 0–18 (97%) have online access (at home or elsewhere), with 69% accessing it via mobile phones and 64% on tablets (Ofcom 2023), so that children today live very digitally rich lives (Konca 2022). De Leyn et al. (2022) highlighted the complexity that there is a dialectical relationship of technology in-between child's play and popular culture. Whilst there are many positives to children's online access (Stoilova et al. 2021), and it is clear that not all digital risks necessarily result in actual harm (Hollis et al. 2020), there is evidence of detrimental effects on a child's socialisation and relationships (Wilson 2016), physical activity such as a child's exercise and eating habits (Rosen et al. 2014), and psychological and emotional wellbeing (Limone and Toto 2021). This tends to result from negative use in the form of compulsive or addictive use of devices and the Internet and negative online experiences/risky behaviours, such as cyberbullying (Messena and Everri 2023).

Landesman et al. (2023) observed that many digital or software functions undermine child wellbeing by collecting data invasively, using manipulative design patterns to exert purchase pressure on child users, and/or assuming all users are adults. However, Hollis et al. (2020) observed that the relationship

between digital life and mental health is a complex mix of positive and negative influences changing over time, impacted by personal characteristics and cultural, historical and socio-economic factors. This complexity concurs with the notion of a hybrid reality proposed by Granic et al. (2020), observing the contemporary reality of children being simultaneously and interchangeably in the physical and online worlds. Indeed, Landesman et al. (2023) highlighted that screen time's relationship to children's well-being is more nuanced than is portrayed in mainstream discourse, with recent definitions of digital well-being acknowledging complexities and dependencies upon the interaction between people and the media surrounding them. Within the school context, the academic *and* social use of technology is likely to impact children's wellbeing positively and negatively (Newland et al. 2019), having an impact on school life. It is therefore critical to examine the role and impact of technology in both the home and school contexts. Messena and Everri (2023) identified gaps in the research regarding children under 12 and explorations of cognitive wellbeing, and minimal research has explored the impact of technology on school life. This paper therefore seeks to contribute some insights into this thus far minimally researched area. Specifically, there is minimal existing research into the perspectives and interactions of teachers and parents on this topic. Yet schools help society to progress and help children learn how to work together as part of a successful society (Rotaru 2021).

This phenomenological study explores the topic from the perspective of both teachers and parents to ascertain firstly what their perspectives are of the impact of technology on children's wellbeing and learning. Secondly, this project examines whether there is alignment in their experiences and observations. Their perspectives are scrutinised using the lens of the narrative identity model, with particular interest in the interactions and implications at intrapersonal, interpersonal and cultural levels (Granic et al. 2020). Thirdly, this project explores what recommendations may be helpful in the school and home contexts to support children's wellbeing and learning in the light of technology prevalence in the lives of contemporary children.

Data was collected from staff and parents in a multi-academy trust (MAT) of seven primary schools in Northwest England. The senior management of this case study MAT were concerned to explore rigorously their anecdotal assumptions that technology was detrimental to children's wellbeing and learning and wished to explore parents' perspectives so that collaboration with parents could be better informed in their school-based approaches. Hence, in Spring 2023 an online survey of parents and staff across the seven schools occurred alongside in-depth interviews of five school representatives.

This data revealed that parents/carers and teachers have somewhat contrasting views about the impact of children's technology use on their school life, although they do agree that it impacts their general wellbeing. Parents and teachers alike were aware of the negative impacts of technology on children but seemed less aware of the positive possibilities and opportunities espoused in existing academic literature. It was striking that both parents/carers and teachers perceived that as adults they were required to impose restrictions and monitor the child's technology usage, although there seemed to be very little engagement or collaboration with the child on this issue. Recommendations of the research project are firstly that greater dialogue occurs between home and school to identify the potential risks and opportunities for the individual child; secondly that proactive strategies are implemented by school and home to ensure the healthy development and wellbeing of children in the reality of their technological surroundings; thirdly that investment is made into innovation to harness the positive learning and development opportunities for children; and fourthly that children are viewed as co-creators and responsible beings rather than mere consumers and passive bystanders as they engage in technological activity.

2 | Technology in Education

The Covid-19 Pandemic resulted in a paradigm shift concerning the use of technology within education (Haleem et al. 2022), since technology is now seen not only as a knowledge provider but also a co-creator of information, mentor and assessor. Children believe that technology has positively impacted their learning and sense of self and desire for it to be used more in school settings (Mourlam et al. 2020). Indeed, the advancement of technological tools has brought unimaginable opportunities for learning and development, personal exploration and growth (Hollis et al. 2020), in addition to being more interesting, it can also make life easier for students since they can use software rather than pen and paper to create presentations and projects or e-books rather than heavy physical books (Haleem et al. 2022). Developmentally appropriate technologies and apps can also aid the development of foundational coding skills and other aspects of STEM learning (Papadakis 2022). Further to developmental opportunities, Haleem et al. (2022) asserted that digital technologies play a key role in ensuring that education is inclusive and equitable for all and are simply much faster and easier to access learning opportunities than traditional classroom tools. Children are often more engaged in learning if technology is used in the classroom due to their proficiency, and complex 'digital play systems' exhibit children's social participation and involvement (Arnott 2020). Indeed, interacting with digital content has been linked to increases in social and emotional learning, empowerment and skill development (Landesman et al. 2023), and technology can be a useful aid for fostering self-directed learning in children which is a fundamental competence for an individual's daily living and work (Morris and Rohs 2023). Teaching with digital games is not yet a common practice in formal education (Rüth et al. 2022), although Drljević et al. (2022) found that there was less non-engagement or disengagement of students when using augmented reality modes rather than interactive learning experiences in multimedia digital lessons. Non-engagement and disengagement have obvious detrimental impacts on a child's learning but can also be the cause of or impact upon their wellbeing.

Despite the positivity regarding broadened possibilities and opportunities, children also identify some negative feelings associated with school technology use, such as frustration regarding how educational technologies are used in superficial ways and the sense of inequity regarding the rules for children's technology use versus the teachers' (Mourlam et al. 2020). Furthermore, Messena and Everri (2023) identified a gap in

research into cognitive well-being in this new paradigm of educational technology usage. Carstens et al. (2021) identified the need for more training for teachers and students to better implement technology in the classroom, and also to manage it so that it is not too heavily relied upon, which could impact students' fine motor development and problem-solving skills. It is therefore key for educators to discuss monitoring the amount of time children are engaging in the use of technology to learn online and balance this with other activities (Siskind et al. 2022). This indicates the complex interplay between learning using technology and a child's wellbeing. In fact, Wilson (2022) called for parents, students and teachers to work together to ensure greater accountability and responsibility for high-quality course design, resources and opportunities in the digital learning environment. Siskind et al. (2022) showed the value of educators infusing technology use with outdoor experiences, with teachers interacting with children while they are using devices or playing outdoors and intentionally using these experiences to foster development and academic outcomes. This would also serve to support their holistic wellbeing. This all shows that the realm of technology in education is a fast-evolving field, but still with many gaps in research to inform thinking and practice, particularly concerning the relatedness of learning using technology and the child's holistic wellbeing.

3 | Technology at Home

Technology has impacted how children play and is prominent in their forms of leisure activity (Slutsky and DeShetler 2017), so that it is integral to daily activities, such as socialisation, education and entertainment (Messena and Everri 2023). Konca (2022) found that children live in digitally rich home environments and parents play a key role in their child's interaction with digital technologies. This brings many advantages for families in the home context since it is generally convenient, easy for children to access and does not require supervision due to children's technological literacy (Hollis et al. 2020). However, despite this ease and convenience, there is a need to be aware of the impacts of these aspects on a child's general wellbeing. There is also continued disparity in terms of socio-economic gaps and divides in terms of access but also in terms of approach (Goldschmidt 2020). Whilst higher income families reported that technology usage can enrich parenting experiences, some in low-income families reported a preference for technology use rather than toys as they are able to download free applications on devices for their child instead of needing to purchase expensive toys which are prone to breaking (Radesky et al. 2016). Indeed, Konca (2022) found that family income and parents' screen time influenced their child's screen time. Conversely, Clark (2013) found that upper income families generally used media for the purpose of their child's education and self-development, whereas lower income families often encouraged their children to use technology in ways that are respectful, compliant towards parents and family focused. This highlights the complexities of the interplay of factors surrounding this topic.

Parental approaches to manage their child's technology use are inevitably connected with their parenting style (Livingstone et al. 2015). Indeed, Livingstone and Blum-Ross (2020) observed three distinct genres of 'digital parenting:' namely to embrace it, balance it or resist it, although they concluded by recommending negotiation and joint parent–child engagement with technology. It may also be that parental wellbeing plays a part in the extent to which parents model health use of digital interaction. Negotiation as a family is key since a child's use of technology can often cause tension between parents and child with competing viewpoints (Radesky et al. 2016). Many parents said that they desired guidance from their child's school or nursery about appropriate technology usage, but that they had received minimal guidance or information about their children's digital activities at school or nursery (Livingstone et al. 2015). Indeed, some parents described feeling disempowered due to the unlimited expanse of an unregulated internet, their child's demands for this preferred activity, peer influences and not knowing what their child was downloading (Radesky et al. 2016). This may also impact upon the parental or child's general sense of wellbeing. Yet, the ethos of a family towards technology usage is highly impactful, since parent screen time is the strongest predictor of child screen time (Lauricella et al. 2015). McDaniel and Radesky (2018) found that maternal and paternal problematic digital technology use predicted greater 'technoference' in mother–child and father–child interactions, leading to child problem behaviours.

4 | Hybrid Reality

The literature above highlights the prevalence of technology in education and the ever-present daily reality of navigating the use of technology in the home context. Navarro and Tudge (2023) presented an adapted version of the ecological theory of human development (Bronfenbrenner 1977). They observed that in contemporary times there are two types of microsystems: virtual and physical and echoing the flexibility of digital platforms, individuals can exist in more than one microsystem at one time. Likewise, other sectors of influence will undoubtedly span across the virtual and physical arenas. Granic et al. (2020) drew these understandings together in the narrative identity model (Figure 1), depicting the three levels of factors which interact to impact and influence an individual's identity development. Whilst they have depicted these three levels as separate sections, they emphasise that these levels are always interactive and mutually constituted. Granic et al. (2020) described intrapersonal factors as the processes which operate within individuals and cause them to construct their narrative identities with purpose and coherence. Interpersonal factors were communicated as aspects which influence how identities are shaped and shared during social interactions, and cultural factors were detailed as factors which determine the extent to which an individual can construct narrative identities which fit with their societal context and values. Whilst Granic et al. (2020) used this model to investigate how a child constructs their values and commitments, and resultant narrative identity considering simultaneous interactivity in the physical and online realms, it is proposed that this model may be similarly used as a theoretical framework for examining the impact of technology on a child's wellbeing and school life.

This theoretical framework enables examination of the extent to which teachers and parents are aware of the factors

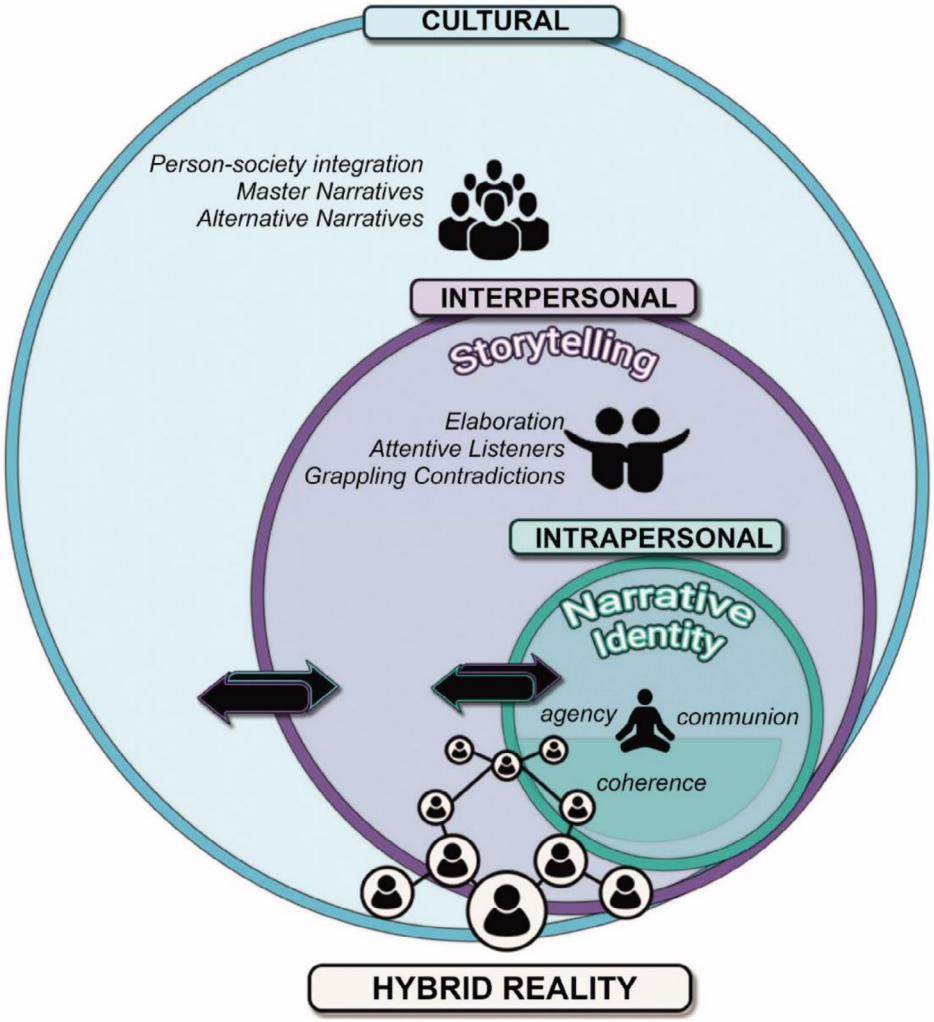

FIGURE 1 | Narrative identity model, with embedded factors at the intrapersonal, interpersonal and cultural levels (Granic et al. 2020).

at intrapersonal, interpersonal and cultural levels, which may be influencing the child's wellbeing and learning. This is a more nuanced approach to the impact of technology on children, since Granic et al. (2020) observed simply considering the frequency of time children spend on different devices and applications is not effective at monitoring or ensuring a child's wellbeing. Rather, there is a need for examining the function of digital media in relation to a child's mental health and wellbeing. Therefore, investigating the extent to which teachers and parents view the impact of technology at these three different levels provides a helpful lens to aid understanding of the complexity involved in this research project. This is key since Lauricella et al. (2015) revealed that the ethos of a family towards technology usage is highly impactful upon the child and their wellbeing, learning and behaviour, so it is important that families consider their ethos carefully at these three levels. Wilson (2022) argued that if parents and teachers can become more aware of these factors, this may facilitate collaboration to ensure greater accountability and responsibility for implementing technological resources and opportunities in the learning environment.

5 | Methodology

This phenomenological research study sought to explore the lived experiences and observations of teaching staff and parents of the impacts of technology on children's wellbeing and their school life. Teacher experiences about stress and wellbeing have been explored in previous studies (such as Turner et al. 2022) but not related to their perspectives on the impact of technology on children's wellbeing or school life. The focus of the research project was derived from the senior management of the MAT of seven primary schools, so it was decided that the research sample would be the MAT schools. The seven schools were geographically spread over approximately a five-mile radius, but provided a diverse range of school sizes, catchment areas, socio-economic contexts and academic outcomes. The proportion of pupils eligible for Pupil Premium ranges from 62% in one of the smaller schools (290 pupils) to 5% in the largest school (476 pupils). Similarly, the proportion of pupils on the SEND register ranges from 40% to 10% and the percentage of pupils who speak English as an additional language ranges from 10% to 1%. Another variation within

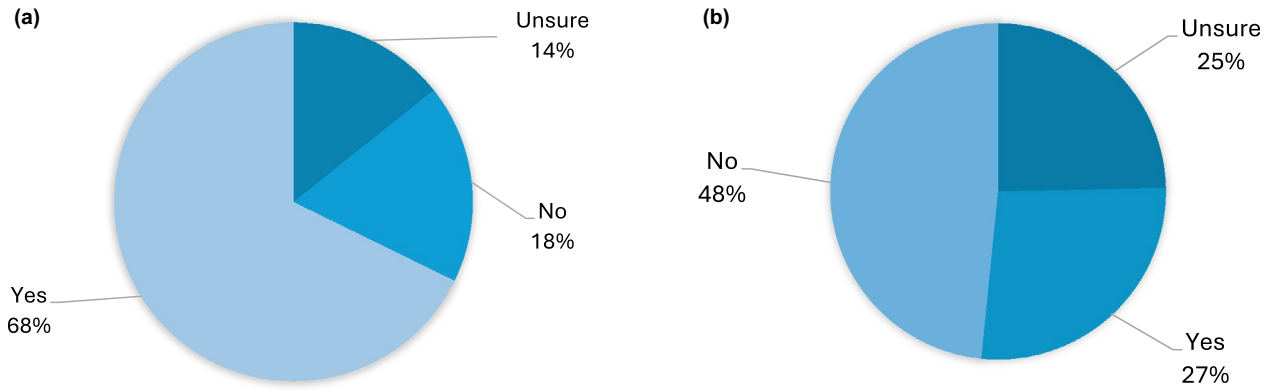

FIGURE 2 | (a) Do parents think that children's online activity at home affects their general wellbeing? (b) Do parents think that children's online activity at home affects their school life?

the MAT is that 2 of the 7 schools are Junior schools rather than 'all through Primary schools'. This diverse nature of the MAT provided a rich environment to explore this topic within. Survey responses were obtained from 224 parents and 35 staff, and five staff interviews took place. The parent responses did not include demographic information but were drawn from all of the schools in the group, inviting responses from all parents so it is hoped that this would represent the spread of diversity across the MAT area, although it is not possible to know. The response rate of parents was 15%.

In line with the aims of this project to uncover the perspectives of teachers and parents on this theme, the staff interviews and surveys asked participants about their observations of the impact of technology on children's wellbeing. The questions were deliberately kept broad so as not to predetermine the direction of the conversation but to allow respondents the space to say their genuine opinion and experience in an undirected manner. The hybrid reality model was not mentioned, as it was key to illuminate the awareness of parents and teachers of these levels without putting these ideas into their minds. Firstly, the teachers in all of the schools were invited to participate in an anonymous online survey, which simply asked for their observations of the impact of technology on children's wellbeing and any other comments. There were 35 responses to this survey, but given the anonymous nature, it is not possible to know the demographics of the staff. Simultaneously, an invitation was emailed to each of the schools to invite one member of staff to take part in an interview rather than the survey, either in person or on zoom. In each case, the deputy head teacher or the head teacher took part in the interviews. The interviews were open-ended, asking staff to describe their observations of the impact of technology on children's wellbeing and probing this as appropriate. Both the interviews and survey data streams therefore provided responses on the same topic but in greater depth. Whilst there are limitations (mainly limiting direct comparison), it was deemed appropriate to ask parents slightly different questions to ensure that the questioning was relevant to the two participant groups. Parents were therefore asked these open questions, with many providing copious and fulsome responses:

1. Do you think that children's online activity at home affects their general wellbeing? (please explain)
2. Do you think that your child's online activity at home affects their school life? (please explain)

The three strands of data were analysed using thematic analysis to initially identify codes, then cluster the codes and subsequently identify key themes in the responses (Braun and Clarke 2006). Two strands of data were analysed by firstly classifying the parents' responses into three categories 'Yes', 'No' and 'Not Sure', then identifying the codes and eventually extracting the key themes from the responses while also preserving parents' genuine responses. These themes were then compared across the parties to gain understanding of perspectives, outcomes and recommendations (see Figure 2). The findings are presented below and then were analysed as a final stage through the lens of the narrative identity model (Granic et al. 2020), to illuminate perceptions of parents and teachers about the intrapersonal, interpersonal and cultural factors influencing the child's wellbeing and learning within their hybrid everyday life. Table 1 shows an example of the coding by showing the initial codes extracted (right hand columns), and how they were clustered to form themes (left hand column) for the responses to the question: What have you noticed about how pupil use of online communication impacts their school life or their general wellbeing? The same process was followed for all of the question responses.

5.1 | Ethical Considerations

This project was scrutinised and approved by the Liverpool Hope University Ethics Committee. Since the research team developed the research aims and questions in conjunction with the senior management, from that point onwards the research team made contact with staff to invite their participation, providing information and requiring them to give their informed consent if they wished to take part. This reduced any elements of power relations and ensured ethical collection of data (Head 2020).

Data was collected from the parents using additional questions added onto a general school survey, with parents being informed of the purposes of those additional questions and informed that they were optional and entirely voluntary. All of the staff and parent surveys were anonymous, so that respondents could

TABLE 1 | Analysis process for responses to teacher question: What have you noticed about how pupils' use of online communication impacts their school life or their general wellbeing? Initial codes identified in responses to the teacher question: what have you noticed.

Theme	Issues	Impacts	Isolated	Parents	Impact on school
Initial codes	Devices used to occupy children	Child's behaviour heavily influenced by online interaction	Children can feel left out by whatsapp groups	Parents don't manage it well at home	Duty of care for online behaviour
	Pupil use of online communication risen	Online arguments brought into school	Leaving others out of WhatsApp groups	Parents do not seem to vet	Whatsapp groups cause lots of issues in school
	Children heavily involved in video games	Emotionally abuse online brought into school		Parents expect school to sort it out	Staff support KS2 with online media issues
	Online communication has increased	Unkind words spill into school		Parents do control youngers usage	Nightmare, Aggravation brought into school
	Impacts younger children more now	Falling out & unacceptable messages sent		Parents unwilling to restrict	Brings arguments into school
	Children use online communication more	Year 6 friendship issues over online miscommunication		Parents on devices	No phones in school rule upheld
	Most have positive online experience	Unpleasant			Online awareness taught in PSHE
	Year 6 online communications increased	Poor attitudes			Teachers deal with out of school messages
	Most Year 5/6 children have mobiles at school	Tiredness			Misuse of mobile phones dealt with in school
	Massively increased	Rough behaviour on playground			Part of the new PSHE scheme
	Huge part of their lives	Negative impact on behaviour			No mobile use in school but plenty of discussions
	Gaming preoccupies a lot of the boys	Inappropriate comments			Issues which occur on WhattsApp
	Massive negative impact	Can impact friendships			Happen outside of school get carried into school
	Some don't have monitored social media use	Can have positive effects but overuse causes harm			Parents expect us to do something
	Heavy use outside school by pupils	More fall out and misunderstandings			Unkind comments brought into school
	No escape for children	More friendship connections			Arguments need sorting out in school
	What's App increased even though under age	Name calling and unkind comments addressed in school			Tell children of safe and responsible phone use

(Continues)

TABLE 1 | (Continued)

Theme	Issues	Impacts	Isolated	Parents	Impact on school
	Children becoming older before they need to	Most year 6 children have phones			Some children feel unsafe or isolated
	Not emotionally mature to use it appropriately	Online conversations brought into classroom			
	Feels like there is never a switch off for the children	Negative effect on pupil relationship in school			
		Can lead them feeling anxious.			
		Main cause of friendships issues			
		Can have serious and detrimental affects on self esteem			
		Can lead to conflict in school.			
		Overwelm of WhatsApp messages			
		Disagreements from being 'kicked off' games			
		On phones too late into evening			
		Some children addicted to phones			
		Can be mean to each other online			
		Gaming all weekend bad for mental health and social skills			
		Issues within school for friendships			
		Can be addictive			
		Children late to bed and tired in school			
		Fall outs or unkind behaviour			
		Bullying and targeting certain children via whatsapp			
		Affects mental health and friendships with peers			
		Negatively affects their wellbeing			
Total	20	38	2	6	18
%	23.81	45.24	2.38	7.14	21.43

be assured of confidentiality and also did not feel impacted by power relations from the schools to take part. The interviews with staff were not able to be anonymous, given the nature of interviews; although participants were assured that they were voluntary and confidential.

6 | Findings

This project firstly sought to illuminate the perspectives of parents and teachers, and then to compare them.

6.1 | Perspectives of Parents

Figure 2a,b show the clustered response codes from parents regarding whether they perceive online activity at home impacts their general wellbeing or school life. Of those who said that yes, their general wellbeing was impacted (68%), there were a variety of textual responses given. Of the 22 initial codes generated in these responses, the most common reasons were: viewing more mature content than ready for (14%), low mood (11%), bad behaviour (10%), less social skills (8%), unkind behaviour in online communication (7%), angry (7%), obsessed/addicted (6%), poor concentration (5%), lazy (4%), withdrawn (4%), impacts sleep (3%), anxiety (3%). Interestingly, 5% cited the stress caused by putting boundaries or limitations of screen time in place whilst another 5% said that school homework being assigned for completion online was compounding the issue.

Of those who said 'no,' that their child's general wellbeing was not affected (18%), responses were captured by four codes, namely the parents controlled, monitored or supervised their child's activity (64%), their child had no online access (25%), their child used it to relax in a balanced way (7%), or their child learned a lot from YouTube (4%).

When asked for their views about whether their children's online activity at home affects their school life (Figure 2b), 27% said yes it did but 48% said that it did not. It is striking that many more parents were unsure about this question, compared with the question about general wellbeing (3a), intimating that there is perhaps less certainty about what occurs in school. All of the parents who said that it did not impact their child's school life said that they gave this response because they monitor or restrict their child's online access. One parent said:

> feedback from school if they notice issues with children that are related to online activity, should form an important dialogue between parents and teachers.

Reasons why parents said that their child's online activity did impact their school life were expressed by 15 different initial codes, showing a wide range of responses. Once clustered, 30% of the responses were positive impacts on school life (namely that it improved their child's learning opportunities, helped them to be internet-savvy and enabled them to connect with their friends outside of school) and 70% were negative impacts. There were a broad range of negative impacts expressed: unkindness in WhatsApp or similar chats spilling into school (22%), watching and sharing inappropriate content (14%), peer pressure to have a phone (10%). Additional codes only had a few occurrences each: anxiety about messages ignored, concentration impacted, overemphasis on physical appearance of girls, tiredness, peer pressure and reluctance to do homework due to prioritising online activity.

6.2 | Perspectives of School Staff

When asked what they had noticed about pupil use of online communication, five themes arose in the coded responses. The most common theme (45%) described the impacts on the children themselves, such as friendship issues, tiredness, negative behaviour, anxiety and being more emotional or more aggressive. Another prevalent theme (24%) was that staff observed increased use of technology by children. Twenty-one percent of the coded responses described the impacts on the school, namely fallout and arguments from social media spilling into school time, the need for schools to teach online awareness and support children in navigating through their technological interactions and expectations of parents to resolve issues arising. Of the remaining responses, 7% described parents' use of technology and their lack of monitoring of their child's use, and 2% stated that their child felt isolated or left out from social media.

School staff were then asked whether they thought children's online use outside school impacted on classroom or school life in any way. Once the initial codes were clustered and themes drawn out, 14% stated that they did not think so, whilst 86% expressed that it did, giving the reasons: staff having to deal with arguments and disagreements in school time as a result of social media conflict (72%) and the remainder (14%) describing children accessing content inappropriate for their age. Continuing the investigation further, staff were asked: Do you think that this impacts both your role and the children's capacity to learn? Many said that yes this takes considerable time away from learning so that conflicts can be resolved (59%), and some spoke of the distraction created by these conflicts (23%), whilst 18% did not think that learning was impacted too much.

6.3 | Comparison of Perspectives

Table 2 exhibits that there are some similarities across both parties in terms of perspective on this issue. However, it is striking to note that whilst many parents reported minimal impact on their child because they have implemented controls, restrictions and supervision on their child's technology usage, many school staff do not perceive that parents are adequately monitoring their child's use. Significant voices from both parties state that children are being exposed to inappropriate content for their age which is having detrimental consequences. There is a striking difference between perceptions of parents and school staff about the impact of children's online

TABLE 2 | Themes identified in parent and teacher responses.

Parents	School staff
Many have controls/ restrictions/supervision in place to reduce the impacts	Parents are not adequately monitoring child's use
Children exposed to content more mature to what they are ready for	Children exposed to inappropriate content for their age
Online activity caused bad behaviour, less social skills, unkind behaviour in online communication, poor concentration, lazy, impacted sleep	Impacts on children: friendship issues, tiredness, negative behaviour, anxiety and being more emotional or more aggressive
Online activity caused low mood, anger/frustration, obsessed/addicted to technology, withdrawn, anxiety	Child felt isolated or left out from social media
Some found the stress of implementing limited screen time detrimental	School staff need to support children in navigating social media & technology
Some found it detrimental that homework occurred online	School needing to resolve conflict/fallout from arguments on social media, taking learning time and causing distraction

usage on their school life. The majority of parents do not see this as an issue, although for school staff this is the most significant issue. It is interesting that some parents bemoaned homework being provided for children online, encroaching onto family time with more technology, whilst schools conversely bemoaned having to use school time to respond to and resolve issues arising from the child's technology use at home. This significant disparity of perspective and experience is key to address. Only one parent spoke of the need for communication between school and home about these issues so that both parties can work together to address any issues arising. This is clearly an area where future efforts could be focussed, particularly since both parties reported stress in implementing limitations, controls and guidance on children's technology use. Both parties concurred that online activity can cause significant issues for children including low mood, anger, frustration, anxiety, isolation and withdrawal. Both parties also agreed that it can negatively impact behaviour, social skills, communication and concentration. Whilst parents/carers conveyed a sense that they found implementation of boundaries and restrictions to be highly stressful, school staff reported that they spent considerable time supporting children in navigating through their technological interactions which took time away from their other teaching responsibilities. These differences in stressors and experiences between the home and school context are interesting and worthy of consideration as school and home seek to enhance outcomes for children.

7 | Discussion

The literature presented in the earlier part of this paper portrays a much more positive image of the advantages and opportunities brought by technology than do the responses of both parents and teachers in this research. There were a small number of parental voices stating that their child was learning effectively from YouTube or that technology aided their child to communicate socially with other children, but the vast majority of both groups emphasise the negative impacts much more. It may be that this study was more likely to attract participants who had strong opinions about technology, and therefore this dataset cannot claim to be a representative expression of the views of parents and teachers across the MAT. Indeed, it may be that those who were not concerned about the impact of technology chose not to participate in this study as they did not have strong feelings or concerns. Nevertheless, there was an overwhelming strong sense in the data of technology having a negative impact on the children, particularly on their general wellbeing.

7.1 | Intrapersonal Factors

In this study, children appeared to be viewed by parents and teachers as passive and uncritical users of technology with little agency for their own sense of boundaries in the online world. However, children feel that technology has positively impacted their learning and sense of self (Mourlam et al. 2020). Whilst this emphasises the need for the school and home contexts to be proactive and intentional about how to ensure that their child's use of technology is as safe and wholesome as possible, it also highlights that perhaps these teachers and parents were less conscious of the interactions and interplay at the intrapersonal level. In this study, there was minimal mention from teachers or parents about the intrapersonal aspects of the child's interactions and influences of technology or the complex interplay between the virtual and physical worlds of the child. However, it is acknowledged that this could be drawn out through further in-depth investigation. Nevertheless, more awareness and attentiveness to the role of technology in a child's intrapersonal development may serve to more positively support the child's wellbeing as they navigate and construct their own identity and values simultaneously across these spaces, seemingly with minimal input and awareness of the adults in their lives (namely teachers and parents). For example, Hollis et al. (2020) and Stoilova et al. (2021) called for more digital mental health intervention, which is an area schools could explore to further collaborations and information sharing with parents/carers. Embedding proactive approaches such as these would be more beneficial than what seems to be in existence currently and seem to be rather reactive, particularly in the school contexts. However, it is also critical that approaches adopted are deemed to be equitable and reduce disparity and access issues as much as possible (Goldschmidt 2020). Equally, strategies should be visibly equitable to both adult and child since children have reported feeling disparity in the 'rules' regarding technology usage for adults (teacher or parents) versus children (Mourlam et al. 2020).

Few of the parent responses spoke of equipping or empowering the children themselves to monitor their own boundaries, content or activity, although school staff reported that they spent considerable efforts to support children in navigating through their technological interactions. It is acknowledged that this could have been probed further amongst parents to gain greater insight into this. However, if schools could support parents in dialoguing with their children about these parameters and activities, it could be transformative on both easing stress for parents and ensuring that children's wellbeing is better protected as they engage in online activity. Furthermore, the restrictions described by parents were all adult-led and adult-imposed, although Livingstone and Blum-Ross (2020) recommended negotiation and joint parent–child engagement with technology. Indeed, such negotiation can serve to reduce tension between parent and child (Radesky et al. 2016). Ensuring to hear the child's voice in the midst of these negotiations in a largely adult-regulated world is key (Yoon and Templeton 2019). Schools often excel at educating and empowering children's voice and agency (Cook-Sather 2020), so if they could support parents in taking a similar approach, this could be highly effective at fostering the child's wellbeing in this intrapersonal space. This is particularly true since detrimental impacts are greater when children have compulsive or addictive use of devices and the internet (Messena and Everri 2023), so it is key that policy makers, technology creators, educators and parents/carers individually and collectively consider how to enable children to take their own responsibility for having healthy attitudes and approaches to their own technology usage. This equates to enabling children's wellbeing in this intrapersonal domain.

7.2 | Interpersonal Factors

The negative impacts reported in the data were firstly related to the child's mood, demeanour and behaviour and secondly, concerns about their social skills and communication both in person and online. It may be possible for school and parents to explore some positive developments of technological use presented in existing literature, such as capitalising on fostering children's self-directed learning (Morris and Rohs 2023), and viewing children as producers and creators of learning, not only as consumers of knowledge (Morris and Rohs 2023). This may serve to foster wellbeing in this interpersonal space.

Similarly, Mourlam et al. (2020) encouraged development of learning experiences informed by ongoing formative assessments; 'digital play systems' have been found to aid children's social participation (Arnott 2020), and digital formats have been found to reduce disengagement in learning (Drljević et al. 2022) and increase social and emotional skills (Landesman et al. 2023). In addition, positive effects on children's mental health and well-being are possible if children receive appropriate support (Stoilova et al. 2021). However, developing such tools is perhaps beyond the bounds of teaching staff but is an opportunity for innovation to occur if increased funding is made available to facilitate such research and development. Exploring opportunities and tools for this would be highly advantageous and could be signposted by either the home or school context.

The most marked difference between the teacher and parent perspectives concerned the impact of technology usage on the child's school life. The teacher participants expressed strongly that it was having a significant impact, with staff frequently having to deal with online issues having fallout in school and this detracting from teaching time. This undoubtedly would also be impacting on the teacher's sense of stress and wellbeing (Turner et al. 2022). However, the majority of the parent participants did not feel that their child's technology usage was impacting their school life, and in fact many were unsure, intimating that parents either had not considered this before the survey or they genuinely did not know what occurred in school. A small number of parents did acknowledge that the children were at times unkind in their online communication and this could spill over into school time. This discrepancy in the responses from the two sectors indicates that perhaps minimal communication occurs between school and home regarding their child's online usage and the potential impact it is having. Some of the responses from teachers conveyed a disappointed and almost judgmental tone on parents that they were not restricting their child's technological usage or managing any ensuing issues, perhaps reflecting the notion that children's screen time is usually highly influenced by parental attitudes (Lauricella et al. 2015). However, the parental data suggests that parents in this study are unaware of resulting issues or consequences of screen time in the home. It is therefore recommended that enhanced communication and dialogue between parents and school in this area would be beneficial. Indeed, previous studies found that parents/carers desire guidance from their child's school regarding technology usage (Livingstone et al. 2015). Equally, since parental use of technology is the strongest influence on a child's screen time (Lauricella et al. 2015; McDaniel and Radesky 2018), any strategies implemented by school will be less effective unless there is dialogue and collaboration with the home context. These conversations and ensuing strategies will undoubtedly have a positive impact on the interpersonal level of the child's wellbeing.

Enhanced dialogue and collaboration would also enable a more tailored and personal approach which is needed since Hollis et al. (2020) argued that schools and families needed to be aware that some children are more vulnerable than others due to personality factors, social factors and digital factors. This tailored approach is necessary given the complexities of each child's modern-day microsystem (Navarro and Tudge 2023) and influences in this interpersonal space (Granic et al. 2020). Stoilova et al. (2021) similarly observed that children's offline experiences impact their online experiences and outcomes, so factors such as their age, gender, home context and relationships with family, peers and school are key considerations when making decisions about appropriate and healthy technological activity, since these will impact their safety (online or in their neighbourhood), physical health, propensity to drug misuse, sexual abuse or violence. Given the demands upon schools, it is unrealistic to expect them to be aware of these multifaceted factors. There is therefore great benefit in schools collaborating with parents/carers to support the home in negotiating their child's online interactions in a more personalised and targeted manner.

7.3 | Cultural Factors

There was a strong sense within both the parent and teacher data that technological involvement was now a dominant part of children's daily lives, and many of the parental responses conveyed

a sense of simple acceptance and ambivalence about this. It seemed that parents were more accepting of the dominance of technology than the school staff were. This lack of concern may reflect the societal norms, since even pre-pandemic, many children were spending more time with screen media than has been recommended by the American Academy of Paediatrics (Lauricella et al. 2015).

It was interesting to note that where parents or teacher participants conveyed a sense that children were not impacted by technology, the main reason they gave for this response was that their child's access was limited or monitored, implying that the biggest factor influencing any impact was the length of time spent on devices. Indeed, many of the responses spoke of restricting their child's time on the device, but few mentioned adjustments of the nature of their online activities. This is despite concerns from both parents and teachers that children were often accessing content which was not age-appropriate for them. This reflects cultural values and norms relating to the contemporary hybrid world of children. There was no mention in any of the responses from teachers or parents about whether they determine or monitor the nature of their child's online activity rather than the length of time. This perhaps reflects the technological industry, which perceives that the success of a product or service is maximising the time users spend with it (Landesman et al. 2023). Conversations around this amongst parents and teachers could explore how this narrative could be changed to focus on the nature of the activity rather than only the time spent. This may aid parents who often feel disempowered and ill equipped due to their child being more proficient online than they are (Radesky et al. 2016). In addition, many parent respondents reported that implementing these boundaries created a great deal of stress, so perhaps there is scope for schools developing tools to support parents in this regard.

7.4 | Recommendations

The recommendations therefore fall into two broad categories: Firstly, enhancing dialogue between home and school to ensure that awareness and approaches can be tailored to the individual needs and circumstances of the child, and focus upon the intrapersonal space in addition to the interpersonal space. Secondly, establishing proactive strategies in both home and school to enable the child to access and harness the positive aspects of technology as part of their learning and development. Attentiveness to this may be particularly important in the intrapersonal space. Alongside this, including the voice and input of the child in these strategies will also equip and empower them in formulating their own identity, establishing their own boundaries and taking responsibility for their own wellbeing in the midst of technological prevalence. Schools supporting parents/carers in adjusting their approach at home to have a stronger awareness of the child as a co-creator of navigating the online world would be highly beneficial. This all requires investment into innovation to harness the positive learning and development opportunities for children.

8 | Limitations

There is scope for much more research in this area, particularly to capture the child's perspective of this (Newland et al. 2019). Exploring how to ethically examine in depth a child's sense of wellbeing as they engage in various aspects of the online world would be very enlightening and beneficial in developing safeguards and boundaries. Unfortunately, this research was limited by a low response rate from teachers, which they reported was largely due to the considerable time pressures on school staff in contemporary times. Seeking to capture more about the perspectives of school staff will further illuminate this area, so incorporating creative research methods for this purpose would be advantageous. This project explored the context of one MAT, and although this MAT did include a range of socio-economic contexts, it is not fully representative. Equally, it is acknowledged that greater depth of questioning on the same topics for both parties could provide more illuminating findings. Therefore, a larger scale exploration of this topic would serve to explore these arising issues in greater depth and scope.

9 | Conclusions

This paper sought to illuminate perspectives of teachers and parents about whether technology is an aid or an obstacle to children's wellbeing and school life. It is clear that this is a multi-faceted and complex issue, and the context is likely to be constantly changing as technology continues to evolve and develop. Whilst existing literature has highlighted concerns about the impact of technology on children's general wellbeing, little research has explored the impact on a child's school life. This data has revealed disconnections between the perspectives of parents/carers and school staff, highlighting the need for increased dialogue between these two parties to foster collaborative and proactive approaches to supporting children's wellbeing as they encounter the online world. This could occur through formal and informal routes, such as school information meetings, parent meetings, newsletters and the school website. It could also occur in collaboration with the children for enhanced effectiveness. It is critical that strategies and approaches are attentive to the three levels of intrapersonal, interpersonal and cultural factors. Strategies implemented must include the child as an active agent and co-creator of healthy boundaries and practices so that they equip and empower the child's emerging identity, sense of confidence in engaging effectively online and wellbeing as they navigate this ever-changing scene. Such investment and development in this area will hopefully reduce the negative impacts of technology on children's school life and general wellbeing and enable greater harnessing and integration of the more positive aspects of technology.

Acknowledgements

With grateful thanks to our research assistant, Chloe Wong Ke Ee for analysing much of the data. We are also most appreciative of the parents/carers and school staff who participated in this research project.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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