




Digital Relationality, Rights, Resilience: Conceptualising a Digital Social Ecology for Children's Birth Family Relationships When in Care or Adopted

Mandi MacDonald ¹, Amy Conley Wright ²,
Amanda Taylor-Beswick¹, Kathryn Gillespie¹ and
Susan Collings ²

¹*School of Social Sciences, Education and Social Work, Queens University Belfast, Northern Ireland, United Kingdom*

²*Research Centre for Children and Families, University of Sydney, Sydney, Australia*

*Correspondence to Mandi MacDonald, School of Social Sciences, Education and Social Work, Queens University Belfast, University Road, Belfast, BT7 1NN, Northern Ireland, United Kingdom. E-mail: m.macdonald@qub.ac.uk

Abstract

The use of digital communication technology by children residing in out-of-home care or adopted from foster care has mainly been approached hesitantly and from a risk paradigm. The Covid-19 pandemic catalysed many digital and social work intersections, including practices used for birth family contact where in-person visits were supplemented or replaced with 'virtual' contact via digital devices. Whilst technology-mediated contact is characterised as 'virtual', the relationships it facilitates and emotions it generates are very real within children's social ecology. Digital ubiquity in social life and the rapid pace of technological change presents significant ethical and practical tensions. To help social workers navigate this complexity of 'contact-in-reality' and facilitate safe, ethical use of digital communication technology for birth family contact, we connect an understanding of the dynamics of birth family contact with literature on children's use of digital technology and ecological concepts of person-in-environment to offer a digital social ecology heuristic for social work practice. Three key aspects cut across all systems and levels, referred to here as the three Digital R's: digital relationality; digital rights; and digital resilience. Future research is needed to understand how these dynamics play out.

Keywords: adoption, birth family contact, children in care, digital communication technology, ecological social work

© The Author(s) 2022. Published by Oxford University Press on behalf of The British Association of Social Workers. All rights reserved. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

Accepted: June 2022

Introduction

Prior to the Covid-19 pandemic, engagement by social workers with on-line technologies was under-developed, despite considerable evidence to support its relevance (e.g. LaMendola, 1987; Rafferty, 1997). Calls for the profession to address its digital skills gap had largely been ignored (Taylor, 2017; Zgodaj and Shane, 2018) and an understanding of how technology intersects with the social and supports practice had been lacking (Susskind and Susskind, 2015). To mitigate the spread of Covid-19, governments in the UK and Australia, where the authors are located, and elsewhere imposed rules, such as physical distancing. The reduced opportunity for in-person interactions led to significant acceleration in technology-supported practice (Yadav and Yadav, 2022) including to replace or supplement in-person child safeguarding, care planning and reviews; however, it was birth family contact in foster care and adoption where its use flourished (Copson *et al.*, 2022). This practice shift, reactive and circumstantial rather than proactive and visionary, increased technology acceptance but also surfaced challenges of navigating contemporary hyper-connectivity. Whilst social workers had largely approached the use of mobile phones and social media by children in care or adopted with hesitancy and from a risk paradigm (Hammond *et al.*, 2018), the benefits of digital technologies for supporting relationships became more apparent and appreciated in the Covid-19 era, with the caveat that digital practices develop in safe and ethical ways (Neil *et al.*, 2020; Barnett-Jones and Manning, 2021; Ciftci *et al.*, 2022).

This article connects literature on children and young people's use of digital communication technology with understanding of the dynamics of birth family contact in out-of-home care and adoption, informed by our prior research (MacDonald, 2018, 2021; Collings *et al.*, 2022), to conceptualise the realities of digital contact as part of the child's social ecology. Our aim is to offer social workers involved in planning, reviewing and supporting contact a conceptual framework to help navigate this new terrain by underscoring how the digital has transformed social ecology and focusing on three key issues that relate to contact: digital relationality; digital rights; and digital resilience.

Not just virtual: the digital as part of the social ecology

Digital technologies now infiltrate all aspects of an individual's social ecology (Crawford and Schultz, 2019; Fuchs, 2021) such that it is

practically impossible not to be part of the hyper-connected digital world, wherein every keystroke or swipe has consequences (Eubanks, 2017; Noble, 2018; Benjamin, 2019). The ubiquity of digital communication technology necessitates a rethink of some fundamental assumptions underpinning social work, to better reflect human social interaction in the contemporary socio-technical context, where people and technologies intersect and interact, and to consider the role of the digital in social ecological systems (Bronfenbrenner, 1979).

In social work, ecological thinking is often operationalised through the person-in-environment perspective. This paradigm originates from the work of Richmond (1922), who emphasised that practice must consider the milieu in which life is experienced. The person-in-environment perspective has been accepted as fundamental to the social work knowledge base, and informs ecological understandings of resilience (Ungar, 2011). To promote positive outcomes for care-experienced children and young people, there is a need to focus on the interconnection between their individual capacities and characteristics, their access to social resources and the way they interact with these resources in their social world (van Breda, 2018).

Reflecting on how the digital is reshaping the social ecology, the conceptualisation being proposed builds on the person-in-environment, offering 'contact-in-reality' as the lens through which to analyse and support connection, which has become necessarily technology-involved. The sociotechnical orientation highlights the bi-directionality of interactions between people and technologies recognising that these interactions are not always person-led, person-centred or mutually agreed. This extends on the concept of 'digital dualism' (Jurgenson, 2012, p. 83), which challenges the popular notion that online social worlds are somehow less real (Rettie, 2004), or that technology-mediated interactions are a simulacrum, as implied by the term 'virtual'.

For children in care or adopted from care, the relational complexities and emotional significance of their birth family interactions should not be minimised (Neil *et al.*, 2020; MacDonald, 2021; Collings *et al.*, 2022). All contact arrangements, whether facilitated in-person or remotely, must be sensitive to how the potential legacy of trauma can be activated. Trauma involves emotional responses to threatening experiences; when children experience threat from an attachment figure, as occurs with child abuse and neglect, this can interfere with emotional regulation and cognitive processing (van der Kolk, 2003). Whilst technology-mediated contact has commonly been characterised as 'virtual', the emotions it generates are very real, as are the relationships it is intended to facilitate (Neil *et al.*, 2020). The term 'virtual' has inhibited our understanding of the opportunities, challenges and subjective realities of interactions involving digital communication technology which are part of the social ecology of children and young people in out-of-home care or adopted,

and this article considers what this ‘contact-in-reality’ conceptualisation means for birth family contact.

A digital social ecology for birth family contact

The social work role in relation to contact is often to mediate and negotiate interactions within and between the child’s various social systems. The ‘digital social ecology for birth family contact’, underpinned by ecological systems theory (Bronfenbrenner, 1979), frames digital technology as an integral part of, and bridge between, the various social systems, to help navigate the implications of technology for practice.

Considering the reality of contact today, it is apparent that communication technologies are a principal element of the mesosystem and a medium through which relationships can be enacted within and between birth and adoptive or foster family microsystems, and between the child and these dual microsystems of which they are a part. As such, technology has the potential to change and prescribe the nature of that communication, both by imposing technology-specific constraints and enabling new possibilities for interacting within and across systems. Technology-involved interactions are also an increasingly essential part of the macrosystem in terms of the communication infrastructure and the laws, governance practices, social policies and economic and educational resources that determine access to and use of this infrastructure (Crawford and Schultz, 2019). Social workers, as key elements in the exosystem, are themselves constrained and enabled in their role by the realities of how the digital operates at the macro- and microsystems levels.

This brief synopsis illustrates that birth family contact in the digital age is a complex system with multiple interlocking forces that profoundly shape relationships between children and their families. We, therefore, offer the digital social ecology for birth family contact (Figure 1) as a heuristic for social workers engaging with the proliferation and infusion of the digital in the specific practice context of birth family contact. To further assist with navigating this reality, the ecology focuses on three key aspects that cut across all systems and levels, namely, the three Digital R’s: digital relationality; rights and resilience.

Digital relationality

The purpose of contact is to facilitate sustained meaningful relationships between children and young people and their birth families. A question to ask about digital technology is whether it can facilitate the complex relational dynamics associated with contact. Many children and young people are adept at interacting and maintaining relationships via

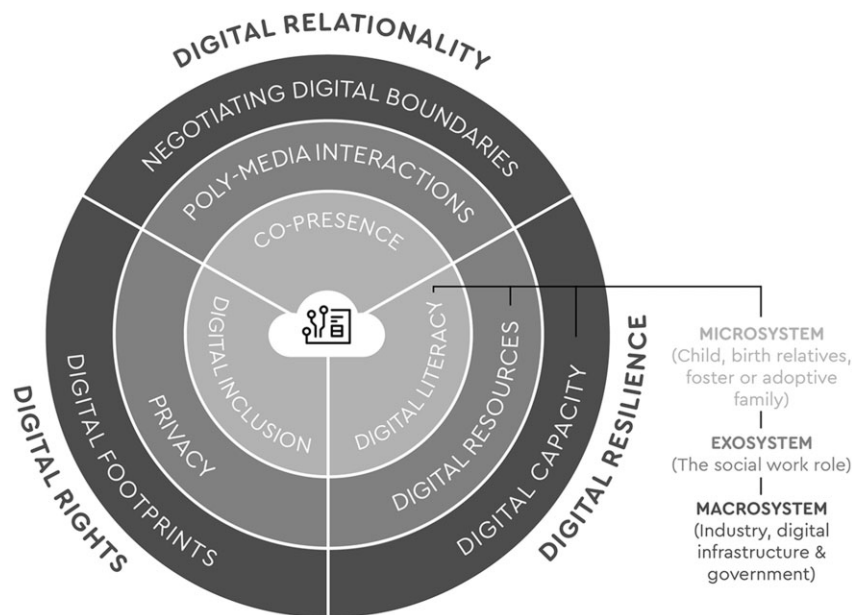


Figure 1: A digital social ecology for birth family contact.

technology. Some studies indicate that digital mediums may facilitate personal disclosure or sensitive discussions (Vincent, 2015; Chan, 2016; Gibson and Trnka, 2020) as they reduce non-verbal inhibitors (Best *et al.*, 2014) whilst others note a preference for in-person communication to discuss worries and resolve disagreements (Children’s Commissioner, 2018). Even in digital spaces, children and young people may prefer to exchange support with individuals they know offline, and with whom they have trust (Gibson and Trnka, 2020).

Co-presence—virtual proximity

Digital communication between relatives has become an almost compulsory family practice (Holmes and Wilding, 2019), so birth, adoptive and foster families, are not alone in seeking emotionally significant relationships via technology with individuals living elsewhere. Studies of transnational families highlight how digital communication technology allows geographically separated relatives to engage in family practices from a distance, even performing and delegating parental roles via smartphone (Waruwu, 2022). The types of direct interaction that occur in a shared physical space can also take place via communication technology, for example talking on video conferencing platforms enables people to be visibly co-present in the shared digital space. Even when not involved in

direct synchronous communication, family members can achieve co-presence which involves a perception of mutual attention and emotional engagement (Campos-Castillo and Hitlin, 2013) and a sense of emotional closeness, togetherness and being there for one another despite physical separation (Urry, 2002; Baldassar *et al.*, 2016).

Older children can exercise agency in these distant exchanges by initiating and administrating family groups, or using technology creatively to construct family narratives (Kędra, 2021). For refugee young people, creative use of technology allows imaginary co-presence through digitally edited images that symbolically represent what relationships could be like were circumstances different, signifying an imagined family experience that cannot be achieved but which, nonetheless, constructs a sense of family (Robertson *et al.*, 2016).

Contact offers the potential for identity development by enabling children to understand their origins and we need to understand how this process is impacted by digital communication technology. For young people, social media can be a platform for social comparison (Hur and Gupta, 2013) and a tool for identity formation (Swist *et al.*, 2015). Taking ‘selfies’, for example, gives children editorial control over the image (Phippen, 2017) and allows experimentation with self-representation and a chance to discover how others perceive them (Vincent, 2015).

Digital alteration of photographs can, however, negatively impact on children’s self-image (McCrary *et al.*, 2020), and raises questions about their capacity to critically read and judge other people’s online self-representations. This is particularly pertinent for children who lack a stock of memories or life story details, against which to assess the authenticity of birth relatives’ online self-representations, potentially leaving them ill-equipped to make informed choices about the nature of their relationship.

The way that digitally mediated proximity is practiced must acknowledge that close relationships can entail positive and negative aspects (Holmes and Wilding, 2019), and that close engagement with birth relatives can be emotionally ambiguous or actively distressing (Boyle, 2017). Relationships conducted through technology are shaped by their unique social, emotional and cultural history (Baldassar *et al.*, 2016); technology enables what already exists but is an inadequate vehicle for resolving relational difficulties (Madianou, 2016).

Polymedia interactions

Digital applications and devices offer various modes of communication, with different levels of proximity and ways of being co-present. Amongst the range of communication choices—or polymedia—video calls may offer the most intimate and immersive experience (Waruwu,

2022) as hearing and/or seeing one another can add depth of meaning (Shier, 2021). Alternatives to synchronous conversation include non-verbal mediums such as photo-sharing, typed chat or emoji exchange, allowing expression of information and emotion. Digital greetings cards and photo-sharing enable visual co-presence and casual sharing of experiences (Caballquinto, 2020) that can facilitate close engagement in day-to-day life (Kędra, 2021). Compared to letters, these various modes of asynchronous communication can make it easier for children and birth relatives to share thoughts and feelings in a more contemporaneous way (Barnett-Jones and Manning, 2021).

Technology can offer children less intense and onerous ways of connecting with birth relatives when these relationships are complex or emotionally challenging (Simpson, 2020; Waruwu, 2022). The ephemeral nature of messaging features on some social media platforms (Quinn, 2019) offers a helpfully fleeting mode of staying in touch, and the 'like' function on social media posts offers a spontaneous and instantaneous means of connecting without the concentrated focus of in-person contact, alleviating the pressure for a lengthy reply (Shier, 2021). The multiple uses to which devices can be put may simultaneously help young people manage boredom or uncomfortable interactions (Vincent, 2015), making them a valuable asset during voice or video calls. The range of communication applications potentially gives them agency to control the pace, frequency and timing of interactions, and the ability to use the features of the platform to impose rules for acceptable communication (Kędra, 2021).

Remaining connected via technology, however, requires time and effort and can be emotionally exhausting (Kędra, 2021). It requires participants to exercise care and sensitivity for the emotional experience of the person with whom they are communicating (Alinejad, 2019). If children cannot stay focused on the interaction or lack technological competence, this can result in misunderstanding, stress or conflict, thus widening the emotional gap between individuals (Waruwu, 2022).

Negotiating digital boundaries

A key tenet of trauma-sensitive practice is that relational security with primary caregivers should be promoted, and unnecessary intrusion or strain on family life avoided (Purvis *et al.*, 2015). The emotional realities of technology-mediated communication must be managed and the work of achieving meaningful co-presence balanced with boundary work. The overuse of digital technology in the home and disagreements over parental monitoring can lead to family conflict (UNICEF, 2017). Further concerns over the potential intrusion into family life for young people in or adopted from care, centre on the potential for them or their birth relatives to initiate new unmediated contact, with possible ramifications for

placement stability (Children's Commissioner, 2017), often without the knowledge or mediation of carers or adoptive parents. This can be destabilising or present safeguarding risks, especially in early adolescence, when young people's digital skills might outstrip their emotional maturity.

Boundary management is not entirely at the discretion of the technology users, as the digital ecosystem has much to benefit from promoting connection. Digital applications are developed primarily by global commercial corporations (Fuchs, 2021). Many applications function to extend and increase the size of users' social networks and are driven by algorithms that identify and suggest new connections (Crawford and Schultz, 2019), regardless of any safety or privacy concerns for the individuals, and operating largely beyond their control (Eubanks, 2017; Keddell, 2019).

Social media applications also operate to keep users engaged with existing networks, for example through constantly refreshed 'news feeds'. These commercial features are not developed with the needs of care-experienced children and young people in mind. In the absence of bespoke technology, they and their families can only use these commercially driven products, the feature of which can lead to children being 'always on' (Simpson, 2020; Shier, 2021). This constant, pervasive, peripheral awareness of online friends and family in strong relationships can offer some emotional reassurance, but in weak relationships can lead to conflict and unwanted surveillance (Madianou, 2016).

Some technological features can, however, be used to facilitate *clearer* boundaries and control through use of privacy settings or muting functions (Greenhow et al., 2017; Simpson, 2020; Shier, 2021). Text messages, for example, allow the sender to limit the disclosure of personal information such as location or appearance, particularly when interactions risk being intensely emotional or confrontational (Waruwu, 2022). Young people can engage in dis-connective practices, without exiting from applications entirely (Zhao, 2019), choosing their mode and timing of connection and disconnection in order to maintain a balance of autonomy, privacy and proximity.

In summary, digital communication can be used to enable children to interact positively with their birth family members, contributing to relationship building and identity formation, when social workers encourage attention to the different opportunities presented by various media and technologies, to boundaries and to the emotional responses and safety of children and family members.

Digital rights

Overall, approaches to mediating children's use of digital technology have focused on potential harms (Livingstone et al., 2017; Global Kids Online, 2019), but there is recent emphasis on rights. In March 2021, the

United Nations Committee on the Rights of the Child provided guidance on children's rights in relation to the digital environment (UNCRC, General Comment No. 25). This calls on governments to ensure that: parents are supported in understanding the digital world; digital services are accessible to all children; and digital design takes children's needs into account. A rights-based approach challenges the dominance of a risk paradigm and highlights the importance of children's equality of access to devices, applications, networks and guidance, viewing Internet access as their basic right (Berners-Lee and Leith, 2021) to be achieved ethically and safely.

Digital inclusion

Children and young people themselves consider digital technology as vital, aware of both its opportunities and risks (Third *et al.*, 2017). Supporting the child's emerging autonomy, therefore, means overcoming the socio-economic, geographic, educational, language and age-based barriers that can lead to digital inequities (UNICEF, 2017; Brosch, 2019), and equipping them with the skills to maintain their significant connections in a digital environment. Lacking access to technology, and/or the confidence to use it, can impinge on the rights of care-experienced young people (McGhee and Roesch-Marsh, 2020), including the right to stay in contact with their parents where this is consistent with their welfare (Article 9 UNCRC) (UN General Assembly, 1989). Digital disadvantage leaves some birth relatives lacking access to Internet-ready devices, effective WiFi or phone credit, inhibiting their meaningful engagement in contact (Copson *et al.*, 2022). Promoting inclusion for family networks is likely to require resourcing and supporting children and adults alike.

Children's digital inclusion must be viewed through the dual lenses of participation and well-being (McGhee and Roesch-Marsh, 2020). Children have a right to freedom of expression and access to information (Articles 13, 17 UNCRC), and to be kept safe in doing so. Parents and governments face a tension between balancing children's right to both participate and be protected in the digital world, to maximise the benefits without exacerbating existing vulnerabilities or exposure to harm (Livingstone *et al.*, 2017; Brosch, 2019). These rights can seem conflicting, for example, when children's rights to know about their origins simultaneously creates potential for birth relatives to contact them unpredictably (Aroldi and Vittadini, 2017).

Adult support and guidance must be developmentally appropriate, recognising the child's increasing capacity to make their own choices (Article 5 UNCRC), as excessive risk aversion may compromise the development of resilience and autonomy (Phippen, 2017). Draft UK

legislation mandating companies to safeguard users online has been critiqued as potentially curbing freedom of speech. Lack of guidance, however, is a key challenge, with new technological developments outstripping regulations and their uptake by children outpacing that of their parents (Livingstone *et al.*, 2018). Such tensions are highlighted by children's ability to circumvent age restrictions on social media platforms, sometimes without their parents' awareness, and their digital proficiency in hiding online activity. To enhance children's rights in digital spaces, platforms should employ 'age-appropriate' design (Children's Commissioner, 2018); however, the usual approach is 'age-blind' designs that do not verify user ages and are not tailored to differing skill levels (Brosch, 2019). This means informed critical judgement is required to ascertain the appropriateness of each application or platform for the individual. Social workers need to be technologically competent to promote inclusion of children, parents and carers through support and education (Taylor-Beswick, 2021), yet often it is young people who become the technology experts for the family (Copson *et al.*, 2022).

Privacy

Key to young people's sense of privacy is control over the online content posted about them and access to their own posts (Sen, 2016). Many parents feature children in their social media posts through the practice of 'sharenting', sometimes without children's knowledge or consent (Steinberg, 2017), leading to feelings of upset, embarrassment and powerlessness (UNICEF, 2017; Bessant, 2018; Children's Commissioner, 2018). There are safety implications if identifying information is included, whilst tagging and reposting afford information shared online a reach and durability of which parents may themselves not be aware (Bessant, 2018; NSPCC, 2021), and for children and young people represents a loss of control over their online narratives. Legal precedents emphasise parents' role in exercising control over the minor child (Steinberg, 2017), as guardians of their children's privacy (Bessant, 2018), leaving children with little recourse to challenge sharenting practices.

Contact visits can be an opportunity for birth parents to take or receive photographs of children, raising the possibility that they will subsequently post these on their social media accounts. Sharing children's achievements in this way may increase a sense of connectedness for birth parents and, when used appropriately, may contribute to establishing a positive cohesive narrative (Bessant, 2018). However, the taking and posting of images is sometimes done surreptitiously or in breach of specific contact agreements, with concerns raised about the possible lack of privacy settings on birth relatives' social media accounts, and the extent to which children's images might be re-shared (MacDonald, 2021).

All parents and carers should be aware of the potential impact of online sharing, and explicit agreements negotiated and reinforced. Assumptions that adults have a right to post images of children should be challenged (Phippen, 2017), whilst consultation with and consent from children about the use of their images and information should be encouraged (NSPCC, 2021).

Digital footprints

Digital technology can impact children's right to privacy (Article 16 UNCRC) in various ways: physical privacy can be violated when the use of tracking or tagging reveal a child's image or location; communication privacy can be violated when posts are accessed by unintended recipients; and information privacy can be violated when children's personal data are collected or processed without their understanding or consent (UNICEF, 2018), sometimes for corporate gain. For some children who have been maltreated, safeguarding privacy is important for their safety and sense of security. Young people can be made aware of privacy settings and assisted to limit their contacts and be selective about their choice of platform and audiences (Vincent, 2015). However, all social media practices have a significant material dimension, producing digital traces which can be collated to create a profile of the individual, their digital footprints or shadow, which becomes difficult to control. European guidelines indicate that states must protect the right of children to privacy and data protection and ensure that relevant stakeholders, including parents or carers, do likewise (Council of Europe, 2018). This includes the 'right to be forgotten' (Bunn, 2019), a right largely unknown or rarely enacted in children's services work, and about which parents, carers and young people require education. As attention to children's data rights is relatively recent, further research and regulation is needed to understand and meet their needs for digital access and privacy (Livingstone *et al.*, 2018).

There is general recognition of children and young people's rights to participate in digital communication, yet this right must be balanced with their right to safety. Social workers can encourage carers and relatives to protect children and young people's digital privacy and consult them before publicly sharing their images or personal information online.

Digital resilience

Developing resilience is an increasing area of focus of online well-being initiatives directed at children and young people (UK Council for Internet Safety, 2019). An ecological approach to resilience addresses the interplay between the individual's capacities and characteristics and the circumstances

of their social worlds (Ungar, 2011). Promoting children's digital resilience, therefore, includes developing their critical ability and technical competency; informing constructive parenting practices; and improving the digital expertise of relevant professionals (Livingstone et al., 2017).

Digital literacy

Digital literacy requires specific skills to communicate and interpret meaning, particularly emotional content. Many children and young people have developed some online emotional literacy and risk awareness (Vincent, 2015; Livingstone et al., 2017; Gibson and Trnka, 2020), employing similar critical judgements as they would in offline relationships (Wang and Edwards, 2016). They have been found to make responsible use of devices and applications, with awareness of their own and others' privacy and emotional safety needs (Gibson and Trnka, 2020) and to employ coping strategies after encountering online risk, such as telling a friend or parent, blocking contacts, modifying privacy settings or leaving the site. However, those vulnerable to offline risk are less likely to be resilient online (Livingstone et al., 2017).

Digital literacy is influenced by family support (Chaudron, 2015; Phippen, 2017), and is especially effective when it maximises children's and young people's expertise and recognises their strengths (Swist et al., 2015). Whilst adult influences can guide risk responses, young people must be afforded agency and space to develop strategies and resilience for themselves, through access to experiential learning (Swist et al., 2015; Wang and Edwards, 2016), as part of their development toward becoming digitally autonomous (Hammond et al., 2018). Whilst few educative initiatives have been evaluated (Livingstone et al., 2017), key learning features should address peer pressure, strategies to disconnect and understanding of digital algorithms, as well as helping children and young people to conceptualise the abstract realities of the digital world and develop critical thinking, particularly to differentiate between curated, or digitally altered images, and people's real lives (Children's Commissioner, 2018).

Digital resources

Parent and carer digital literacy, confidence and capacity to guide and encourage their children, are a crucial support (Chaudron, 2015) that may be undermined by significant knowledge gaps regarding digital technology and online privacy (Livingstone et al., 2018). With the rapid evolution of new digital technologies, parents and carers are not always aware of the range of children's online activities and can find it easier to anticipate risks than identify benefits (Kumpulainen and Gillen, 2017). Passive parental restriction measures, such as imposing filters, do not necessarily

eliminate the risk of online harm (Livingstone *et al.*, 2017). Instead, active education and mediation strategies are encouraged. Restrictive parenting reduces risks, but also impedes opportunity, whereas supportive mediation and active negotiation can empower safer online engagement and encourage healthy protective behaviours and coping responses (Livingstone *et al.*, 2018). Young people can express preferences for parental monitoring and can identify sound rationale for allowing parents to see their location, contacts and search history, but find it less acceptable for parents to control their device's functions, for example, restricting the use of the camera (McNally *et al.*, 2018). Parents and carers can access resources to educate themselves and prepare for conversations with children (Hur and Gupta, 2013) but professionals also have a key role as sources of information (Chaudron, 2015; Livingstone *et al.*, 2017).

Supportive relationships, facilitated and strengthened through online networks, may be a crucial aspect of developing resilience for care-experienced children and young people (McGhee and Roesch-Marsh, 2020). However, the dominance of a risk paradigm can present an obstacle to this (Hammond *et al.*, 2018) and training for social workers to develop their own digital competence (Taylor, 2017) and understand children's digital needs is crucial.

Digital capacity

Digital competence is likely to follow similar developmental trajectories to other skills development, but there is limited evidence on young children's use of communication technology. By age nine or ten years, children can perceive smartphone ownership to be essential to social life (Vincent, 2015). However, first encounters with digital devices often occur before the age of two years, commonly via a parent's device (Chaudron, 2015), and young children are sometimes allowed to use a parent's account, contradicting safety messages, and unintentionally exposing them to inappropriate content (Children's Commissioner, 2018). Trial and error digital learning occurs in the home from an early age, largely through observation and replication of others' practices, so skills may be more advanced than parents are aware of, and even with limited literacy, young children may use word auto-completion and voice and image recognition to communicate online (Chaudron, 2015; Kumpulainen and Gillen, 2017).

Children and young people with intellectual disability are considered to be more vulnerable to harm online where there are fewer boundaries or visual cues, making it harder to identify inappropriate behaviour and differentiate fantasy from reality (Livingstone *et al.*, 2017). This can be especially challenging for those who have difficulty with social skills or a tendency to interpret even their offline social interactions literally. Chadwick *et al.* (2019) note that whilst some young people with intellectual

disability have demonstrable capacity to manage online risks, and also evade restrictions, they can encounter increased parental monitoring, which may minimise risks, but also reduces benefits and weakens digital participation, potentially leading to unequal access and lower literacy.

General comment 25 should strengthen calls for the digital environment to be safe for all children by design and default, subject to similarly stringent safety monitoring as is applied to physical environments, such as playgrounds (see e.g. 5 Rights Foundation <https://5rightsfoundation.com/>). Until then, we must be mindful that digital technology is not designed with the capacities of children in mind, and even less so young or disabled children, or those who have experienced trauma

In the context of birth family contact, digital resilience means focusing on the child or young person's digital literacy, the potential risks and safeguarding resources in their digital social ecology, and how they and their families are equipped to navigate these. Social workers can offer strategies for mediating risk whilst promoting active coping strategies and opportunities for young people to become digitally autonomous, as they gradually assume responsibilities for maintaining relationships with their birth families.

Conclusion

This article has explored how the proposed digital ecology heuristic for birth family contact (Figure 1) can guide social workers and other practitioners who support children in or adopted from care and their families, and structure a research agenda. It suggests that resilience-boosting efforts should be directed toward the individual child and their support networks, but that this must be matched by efforts to achieve safety and privacy by design in the development of digital technology and applications, and in the laws and policies that govern their use (Livingstone *et al.*, 2017). Most social work practice is located at the exosystem level, and product design or global regulation of multi-national companies is beyond the scope of most social workers. However, they have an important role in promoting children's digital relationality, rights and resilience as they impact on children's closest relationships within microsystems.

Digital communication has significant potential to foster relationships between children adopted or in care and their birth families, but it is critical to stay mindful of the contact-in-reality aspect of their lived experience, and the emotionally real nature and potential impact of their digital interactions. Social workers should consider the additive function of online contact (Greenhow *et al.*, 2017), but not view it as any less real than in-person visitation. Given the limited potential for relational difficulties or tensions to be resolved in a digital environment, trauma-sensitive practice requires investment in relationship building and

mediation outside of and in support of all communications between children and their relatives (MacDonald, 2021; Collings *et al.*, 2022).

Social workers should be champions of children's participatory rights. They are required to practice to professional ethical codes that emphasise both privacy and self-determination (Reamer and Siegel, 2021), which in the digital world means training in and adhering to the cybersecurity protocols of their agency, modelling good practice in gaining informed consent for information-sharing, and maintaining up-to-date knowledge of relevant laws and industry guidelines. As corporate parents for children in care, social workers also have a responsibility to enhance their digital literacy and to be a supportive resource for parents and carers. This will require digitally literate social workers (Taylor, 2017) who are able to critically select technologies and online platforms whilst safeguarding children's best interests.

Digital communication alters the social ecology of birth family contact, introducing new considerations around children's digital relationships, rights and resilience. Some of the mediation undertaken by social workers can be undertaken by families and young people themselves, but this is likely to require assisted negotiation of the type of platform selected for contact, how and when it will be used, and what content will be shared. Improving social media and online privacy skills and knowledge for parents, carers, children and professionals offers potential for strengthening supportive online presence and alternative strategies for life story construction (Aroldi and Vittadini, 2017). Future research is needed to understand how these dynamics play out and how social workers facilitate the use of digital technology to keep children connected with birth family when they are physically separated.

Funding

This work was supported by a British Academy / Leverhulme Small Research Grant SRG1920/101614.

Conflict of interest statement. None declared.

References

- Alinejad, D. (2019) 'Careful co-presence: The transnational mediation of emotional intimacy', *Social Media + Society*, **5**(2), pp. 205630511985422–11.
- Aroldi, P. and Vittadini, N. (2017) 'Children's rights and social media: Issues and prospects for adoptive families in Italy', *New Media & Society*, **19**(5), pp. 741–49.
- Baldassar, L., Nedelcu, M., Merla, L. and Wilding, R. (2016) 'ICT-based co-presence in transnational families and communities: Challenging the premise of face-to-face proximity in sustaining relationships', *Global Networks*, **16**(2), pp. 133–44.

- Barnett-Jones, B. and Manning, C. (2021) *Modernising Post-adoption Contact: Findings from a Recent Consultation*, London, Nuffield Family Justice Observatory.
- Benjamin, R. (2019) *Race after Technology*, Cambridge, Polity Press.
- Berners-Lee, T. and Leith, R. (2021) 'To build a better world from the Covid crisis, we need a global push to connect the world's young people', World Wide Web Foundation, available online at: <https://webfoundation.org/2021/03/web-birthday-32/> (accessed July 22, 2022).
- Bessant, C. (2018) 'Sharenting: Balancing the conflicting rights of parents and children', *Communications Law*, **23**(1), pp. 7–24.
- Best, P., Manktelow, R. and Taylor, B. J. (2014) 'Online communication, social media and adolescent wellbeing: A systematic narrative review', *Children and Youth Services Review*, **41**, pp. 27–36.
- Boyle, C. (2017) 'What is the impact of birth family contact on children in adoption and long-term foster care?' A systematic review', *Child & Family Social Work*, **22**(1), pp. 22–33.
- Bronfenbrenner, U. (1979) *The Ecology of Human Development: Experiments in Nature and Design*, Cambridge, Harvard University Press.
- Brosch, A. (2019) 'Children's rights in digital environment – Cultural and geographical contexts across Europe and Africa', *The New Educational Review*, **56**(2), pp. 215–29.
- Bunn, A. (2019) 'Children and the "Right to be Forgotten": What the right to erasure means for European children, and why Australian children should be afforded a similar right', *Media International Australia*, **170**(1), pp. 37–46.
- Cabalquinto, E. C. (2020) "'They could picture me, or I could picture them": "Displaying" family life beyond borders through mobile photography', *Information, Communication & Society*, **23**(11), pp. 1608–24.
- Campos-Castillo, C. and Hitlin, S. (2013) 'Copresence: Revisiting a building block for social interaction theories', *Sociological Theory*, **31**(2), pp. 168–92.
- Chadwick, D., Chapman, M. and Caton, S. (2019) 'Digital inclusion for people with an intellectual disability', in Attrill-Smith, A., Fullwood, C., Keep, M. and Kuss, D. (eds), *The Oxford Handbook of Cyberpsychology*, Oxford, Oxford University Press.
- Chan, C. (2016) 'A scoping review of social media use in social work practice', *Journal of Evidence-Informed Social Work*, **13**(3), pp. 263–76.
- Chaudron, S. (2015) *Young Children (0–8) and Digital Technology*, Luxembourg, Publications Office of the European Union.
- Children's Commissioner (2017) *Growing up Digital in Care: Submission to the DfE Fostering Stocktake 2017*, London, Children's Commissioner for England.
- Children's Commissioner (2018) *Life in Likes: Children's Commissioner Report into Social Media Use among 8–12 Year Olds*, London, Children's Commissioner for England.
- Ciftci, S., Collings, S. and Wright, A. C. (2022) 'Action research with caseworkers: Responding to and reflecting on the impacts of COVID-19 on birth family contact', *Child and Family Social Work*. <https://doi.org/10.1111/cfs.12935>.
- Collings, S., Wright, A. C., McLean, L. and Buratti, S. (2022) 'Trauma informed family contact practice for children in out-of-home care', *British Journal of Social Work*, **52**(4), pp. 1837–58.
- Copson, R., Murphy, A., Cook, L., Neil, E. and Sorensen, P. (2022) 'Relationship-based practice and digital technology in Child and Family Social

- Work: Learning from practice during the COVID-19 pandemic', *Developmental Child Welfare*, **4**(1), pp. 3–17.
- Council of Europe (2018) 'Recommendation CM/Rec(2018)7 of the Committee of Ministers to member states on guidelines to respect, protect and fulfil the rights of the child in the digital environment', available online at: https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=09000016808b79f7 (accessed July 22, 2022)
- Crawford, K. and Schultz, J. (2019) 'AI systems as state actors', *Columbia Law Review*, **119**(7), pp. 1941–72.
- Eubanks, V. (2017) *Automating Inequality: How High-Tech Tools Police, Profile and Punish the Poor*, New York, NY, St Martin's Press.
- Fuchs, C. (2021) *Social Media: A Critical Introduction*, London, Sage.
- Gibson, K. and Trnka, S. (2020) 'Young people's priorities for support on social media: "It takes trust to talk about these issues"', *Computers in Human Behavior*, **102**, pp. 238–47.
- Global Kids Online (2019) *Global Kids Online: Comparative Report*, Florence, UNICEF Office of Research – Innocenti.
- Greenhow, S., Hackett, S., Jones, C. and Meins, E. (2017) 'Adoptive family experiences of post-adoption contact in an Internet era', *Child & Family Social Work*, **22**, pp. 44–52.
- Hammond, S. P., Cooper, N. and Jordan, P. (2018) 'Social media, social capital and adolescents living in state care: A multi-perspective and multi-method qualitative study', *British Journal of Social Work*, **48**(7), pp. 2058–76.
- Holmes, M. and Wilding, R. (2019) 'Intimacies at a distance: An introduction', *Emotion, Space and Society*, **32**, p. 100590.
- Hur, J. and Gupta, M. (2013) 'Growing up in the web of social networking: Adolescent development and social media', *Adolescent Psychiatry*, **3**(3), pp. 233–44.
- Jurgenson, N. (2012) 'When atoms meet bits: Social media, the mobile web and augmented revolution', *Future Internet*, **4**(1), pp. 83–91.
- Keddell, E. (2019) 'Algorithmic justice in child protection: Statistical fairness, social justice and the implications for practice', *Social Sciences*, **8**(10), p. 281.
- Kedra, J. (2021) 'Virtual proximity and transnational familyhood: A case study of the digital communication practices of Poles living in Finland', *Journal of Multilingual and Multicultural Development*, **42**(5), pp. 462–74.
- Kumpulainen, K. and Gillen, J. (2017) *Young Children's Digital Literacy Practices in the Home: A Review of the Literature*, COST ACTION ISI1410 DigiLitEY, available online at: https://digiliteymethodscorner.files.wordpress.com/2018/10/wg1-kumpulainen_gillen_lit-review-2017.pdf (accessed July 22, 2022).
- LaMendola, W. (1987) 'Teaching information technology to social workers', *Journal of Teaching in Social Work*, **1**(1), pp. 53–69.
- Livingstone, S., Davidson, J., Bryce, J., Batool, S., Haughton, C. and Nandi, A. (2017) 'Children's online activities, risks and safety: A literature review by the UKCCIS evidence group', available online at: <https://www.gov.uk/government/publications/childrens-online-activities-risks-and-safety-a-literature-review-by-the-ukccis-evidence-group> (accessed July 22, 2022)
- Livingstone, S., Stoilova, M. and Nandagiri, R. (2018) *Children's Data and Privacy Online: growing up in a Digital Age: An Evidence Review*, London, London School of Economics and Political Science.

- MacDonald, M. (2018) 'Imagined and occasional co-presence in open adoption: How adoptive parents mediate birth connections', in De Guzman, M. R., Brown, J. and Edwards, C. P. (eds), *Parenting from Afar and the Reconfiguration of Family across Distance*, New York, NY, Oxford University Press.
- MacDonald, M. (2021) 'Supporting face-to-face birth family contact after adoption from care: Learning for trauma-sensitive practice', *British Journal of Social Work*, **51**(3), pp. 1060–79.
- Madianou, M. (2016) 'Ambient co-presence: Transnational family practices in poly-media environments', *Global Networks*, **16**(2), pp. 183–201.
- McCrory, A., Best, P. and Maddock, A. (2020) 'The relationship between highly visual social media and young people's mental health: A scoping review', *Children and Youth Services Review*, **115**, p. 105053.
- McGhee, K. and Roesch-Marsh, A. (2020) *Bridging the Digital Divide for Care Experienced Young People: If Not Now, When?* Glasgow, CELCIS.
- McNally, B., Kumar, P., Hordatt, C., Mauriello, M. L., Naik, S., Norooz, L., Shorter, A., Golub, E. and Druin, A. (2018) 'Co-designing mobile online safety applications with children', *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. Association for Computing Machinery, New York, NY, USA, Paper, 523.
- Neil, E., Copson, R. and Sorensen, P. (2020) *Contact During Lockdown: How are Children and their Birth Families Keeping in Touch?* London, Nuffield Family Justice Observatory/University of East Anglia.
- Noble, S. (2018) *Algorithms of Oppression*, New York, NY, New York University Press.
- NSPCC (2021) *Photography and Sharing Images Guidance*, London, NSPCC.
- Phippen, A. (2017) 'Online technology and very young children: Stakeholder responsibilities and children's rights', *International Journal of Birth and Parent Education*, **5**(1), pp. 29–32.
- Purvis, K. B., Razuri, E. B., Howard, A. R. H., Call, C. D., DeLuna, J. H., Hall, J. S. and Cross, D. R. (2015) 'Decrease in behavioral problems and trauma symptoms among at-risk adopted children following trauma-informed parent training intervention', *Journal of Child & Adolescent Trauma*, **8**(3), pp. 201–10.
- Quinn, S. (2019) 'Positive aspects of social media', in Attrill-Smith, A., Fullwood, C., Keep, M. and Kuss, D. (eds), *The Oxford Handbook of Cyberpsychology*, Oxford, Oxford University Press.
- Rafferty, J. (1997) 'Shifting paradigms of information technology in social work education and practice', *British Journal of Social Work*, **27**(6), pp. 959–69.
- Reamer, F. G. and Siegel, D. H. (2021) 'Adoption ethics in a digital world: Challenges and best practices1', *Adoption Quarterly*, **24**(1), pp. 69–88.
- Rettie, R. (2004) 'Using Goffman's frameworks to explain presence and reality', *Presence 2004: Seventh Annual International Workshop*, Valencia, ISPR.
- Richmond, M. (1922) *What is Social Work?* New York, NY, Russell Sage Foundation.
- Robertson, Z., Wilding, R. and Gifford, S. (2016) 'Mediating the family imaginary: Young people negotiating absence in transnational refugee families', *Global Networks*, **16**(2), pp. 219–36.
- Sen, R. (2016) 'Not all that is solid melts into air? Care-experienced young people, friendship and relationships in the 'digital age'', *British Journal of Social Work*, **46**(4), pp. 1059–75.

- Simpson, J. E. (2020) 'Twenty-first century contact: The use of mobile communication devices and the internet by young people in care', *Adoption & Fostering*, **44**(1), pp. 6–19.
- Shier, A. M. (2021) 'Negotiating reunion in intercountry adoption using social media and technology', *British Journal of Social Work*, **51**(2), pp. 408–26.
- Steinberg, S. B. (2017) 'Sharenting: Children's privacy in the age of social media', *Emory Law Journal*, **66**, pp. 839–84.
- Susskind, R. E. and Susskind, D. (2015) *The Future of the Professions: How Technology Will Transform the Work of Human Experts*, Oxford, Open University Press.
- Swist, T., Collin, P., McCormack, J. and Third, A. (2015) *Social Media and the Wellbeing of Children and Young People: A Literature Review*, Western Australia, Commissioner for Children and Young People.
- Taylor, A. (2017) 'Social work and digitalisation: Bridging the knowledge gaps', *Social Work Education*, **36**(8), pp. 869–79.
- Taylor-Beswick, A. (2021) 'Social work, technologies, Covid 19', in Turner, D. (ed.), *Social Work and Covid-19: Lessons for Education and Practice*, St Albans, Critical Publishing.
- Third, A., Bellerose, D., De Oliveira, J. D., Lala, G. and Theakstone, G. (2017) *Young and Online: Children's Perspectives on Life in the Digital Age. The State of the World's Children 2017 Companion Report*, Sydney: Western Sydney University.
- Ungar, M. (2011) *The Social Ecology of Resilience: A Handbook of Theory and Practice*, New York, NY, Springer Science and Business Media.
- United Nations Committee on the Rights of the Child (UNCRC) (2021) *General Comment No.25 on Children's Rights in Relation to the Digital Environment*, Geneva, United Nations.
- UK Council for Internet Safety (2019) 'Digital resilience framework', available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/831217/UKCIS_Digital_Resilience_Framework.pdf (accessed July 22, 2022)
- United Nations (1989) *United Nations Convention on the Rights of the Child*, Geneva, United Nations.
- UN Committee on the Rights of the Child (2021) *General Comment No.25 on Children's Rights in Relation to the Digital Environment*, Geneva, United Nations.
- UNICEF (2017) *The State of the World's Children 2017: Children in a Digital World*, New York, NY, UNICEF.
- UNICEF (2018) *Industry Toolkit. Children's Online Privacy and Freedom of Expression*, New York, NY, UNICEF.
- Urry, J. (2002) 'Mobility and proximity', *Sociology*, **36**(2), pp. 255–74.
- van Breda, A. D. (2018) 'A critical review of resilience theory and its relevance for social work', *Social Work*, **54**(1), p. 18.
- van der Kolk, B. A. (2003) 'The neurobiology of childhood trauma and abuse', *Child and Adolescent Psychiatric Clinics of North America*, **12**(2), pp. 293–317.
- Vincent, J. (2015) *Mobile Opportunities: Exploring Positive Mobile Opportunities for European Children*, London, London School of Economics and Political Science.
- Wang, V. and Edwards, S. (2016) 'Strangers are friends I haven't met yet: A positive approach to young people's use of social media', *Journal of Youth Studies*, **19**(9), pp. 1204–19.

- Waruwu, B. K. (2022) 'Smartphone mothering and mediated family display: Transnational family practices in a polymedia environment among Indonesian mothers in Hong Kong', *Mobile Media & Communication*, **10**(1), pp. 97–114.
- Yadav, R. and Yadav, A. (2022) 'The 6 A's model of social worker associations and COVID-19: A preliminary insight', *Qualitative Social Work*. <https://doi.org/10.1177/14733250211068066>.
- Zhao, X. (2019) 'Disconnective intimacies through social media: Practices of transnational family among overseas Chinese students in Australia', *Media International Australia*, **173**(1), pp. 36–52.
- Zgoda, K. and Shane, K. (2018) 'Digital literacy in social work education: A case study incorporating technology and social media within the social work curriculum', *Journal of Nonprofit Education and Leadership*, **8**(1), pp. 32–41.