

Young Children and the Creation of a Digital Identity on Social Networking Sites: A Scoping Review

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Submitted to: JMIR Pediatrics and Parenting
on: November 08, 2023

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Abstract

Background: There is limited understanding of the concept of the digital identity of young children created through engagement on social networking sites.

Objective: The objective of this scoping review was to identify key characteristics of the concept of digital identity for children from conception to 8 years on social networking sites.

Methods: This scoping review was conducted using the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) guidelines for scoping reviews. The key databases searched were EBSCO, Web of Science, ProQuest ERIC, and Scopus. Grey literature sources (National Grey Literature Collection, ProQuest Dissertation and Theses, and Google Scholar) were also searched to identify unpublished studies. Articles were selected if they were published in English and reported data on the digital identity of children in relation to social networking sites.

Results: The key terms used in the literature were “sharenting”, followed by “digital footprints” and ‘children’s identities’. Our study revealed two approaches to the creation of digital identity, ‘social digital identity’ and ‘performative digital identity’. Articles in this review most commonly used the term ‘sharenting’ to describe the behaviour parents engage in to create digital identities for children on social networking sites. Motivations to post information about children differed among parents, however, the most common reasons were to share with friends and family and to create digital archives of childhood photos, termed “social digital identity. The second motivation was categorised as performative digital identity. The risk of digital kidnapping and identity theft associated with the creation of digital identities also influenced parent’s behaviours.

Conclusions: Digital identity of children is an emerging concept. Our review develops a deeper understanding of sharenting behaviours that can be used to better support parents and their children to create a digital identity with children and awareness of the potential future impact. We recommend that future studies explore the perspectives of children as key stakeholders in the creation of their digital identity. Clinical Trial: <https://osf.io/4kyjw/> Registration of the protocol with Open Science Framework

(JMIR Preprints 08/11/2023:54414)

DOI: <https://doi.org/10.2196/preprints.54414>

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Original Manuscript

Young Children and the Creation of a Digital Identity on Social Networking Sites: A Scoping Review

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Abstract

Background: There is limited understanding of the concept of the digital identity of young children created through engagement on social networking sites.

Objective: The objective of this scoping review was to identify key characteristics of the concept of digital identity for children from conception to 8 years on social networking sites.

Methods: This scoping review was conducted using the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) guidelines for scoping reviews. The key databases searched were EBSCO, Web of Science, ProQuest ERIC, and Scopus. Grey literature sources (National Grey Literature Collection, ProQuest Dissertation and Theses, and Google Scholar) were also searched to identify unpublished studies. Articles were selected if they were published in English and reported data on the digital identity of children in relation to social networking sites.

Results: The key terms used in the literature were “sharenting”, followed by “digital footprints” and ‘children’s identities’. Our study revealed two approaches to the creation of digital identity, ‘social digital identity’ and ‘performative digital identity’.

Articles in this review most commonly used the term ‘sharenting’ to describe the behaviour parents engage in to create digital identities for children on social networking sites. Motivations to post information about children differed among parents, however, the most common reasons were to share with friends and family and to create digital archives of childhood photos, termed “social digital identity. The second motivation was categorised as performative digital identity.

The risk of digital kidnapping and identity theft associated with the creation of digital identities also influenced parent’s behaviours.

Conclusion: The creation of a digital identity of children is an emerging concept. Our review develops a deeper understanding of sharenting behaviours that can be used to better support parents and their children to create a digital identity with children and awareness of the potential future impact. We recommend that future studies explore the perspectives of children as key stakeholders in the creation of their digital identity.

Keywords

Digital identity, Children, Social networking sites, Sharenting

Introduction

Every post made on social networking sites contributes to the development of a digital identity. For some this occurs naturally through their engagement with social networking sites and for others, the process is planned or curated. Children and vulnerable populations can be represented on social networking sites without control over the creation of the digital identity developed on their behalf [1-7]. Children's digital identities are often created before the child is born [8,9]. The creation of a child's digital identity can start with parents sharing information about their soon to be born or newly born child on social networking sites [3,10-12]. Digital identity development continues beyond the initial post as images, events and milestones are shared, with or without the permission of the child.

One of the major limitations in the literature on children and social networking sites is the under-representation of the voice of the younger child. There is little information available on social networking sites and their use and impact on children and even less from the perspective of the child [13-16]. The lack of research with children is mainly attributed to the minimum age requirement for a child to register an account. Each social media site and app has its own criteria for minimum age requirements which range from 13 years of age to 16 years (13 with parental consent). It is common for parents to either post on behalf of their children or post (knowingly or unknowingly to the child) about their children between conception and 8 years [17].

While literature on the digital identity of children is emerging [8,12,18,19], evidence on the digital identities of adults has grown rapidly over the past two decades [20-25]. Despite the increase in the literature that explores adults' digital identity, the key concepts related to process and outcomes have not been established [1,20]. Approaches to define digital identity often draw on existing theories, such as Goffman's [26] theory of self-presentation [27]. Goffman describes identity as performative and the world as a stage on which the act is taking place. The performance cannot take place without an audience who are there to validate the social performance [26]. Social networking sites are often seen as a stage where one is actively trying to manage their impression or performance to be liked by others [28].

Research on adolescents' digital identity (development) also draws on Goffman's theory [29], and identity development theories such as Erikson's stages of psychosocial development, Marcia's identity status theory [30] and Boyd's concept of networked publics [31]. Identity development theories describes the adolescent years as the most important phase of identity development, and little is theorised about young children's identity development [20, 32,33]. However, Schachter and Ventura[34] argue that identity formation starts before adolescence and that parents play an active role in their children's identity formation and later identity development. This aligns with the early formation of *digital* identities which often starts with parents posting about their children on social networking sites.

Objective

There is limited understanding of the concept of digital identity for young children [21,35]. The purpose of this scoping review is to explore key characteristics in the literature on the concept of digital identity for children from conception to 8 years of age on social networking sites. The review question is 'What are the key concepts, definitions and characteristics related to the concept of digital identity as generated through engagement with social networking sites for children from conception to 8 years of age?'

Methods

A preliminary search of the Cochrane Database of Systematic Reviews and JBI Evidence Synthesis was conducted and no current systematic reviews or scoping reviews on the topic were identified. The updated methodological guidance for conducting a JBI scoping review was used in tandem with the 'Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews' (PRISMA-ScR) to guide this scoping review [36]. The completed PRISMA-ScR checklist can be found in Appendix 1. A scoping review was assessed as the most appropriate method where the purpose of this review was to identify and clarify concepts [37] around the digital identity of children. The scoping review protocol was registered with the Open Science Framework

(OSF) and can be retrieved online (see reference for link to the protocol) [38].

Search Strategy

Relevant databases were searched using a constructed Boolean strategy of subject headings and keywords to reflect the inclusion criteria. The first search was conducted between July and September 2022 and the second search in February and April 2023. The strategy was developed in conjunction with a specialist librarian. The search strategy, including all identified keywords and index terms, was adapted for each included database and/or information source. The databases EBSCO, Web of Science, ProQuest ERIC and Scopus were searched. Reference lists of included studies were cross-checked with search outcomes to identify studies not previously identified. Grey literature sources such as National Grey Literature Collection, ProQuest Dissertation and Theses, and Google Scholar (the first 200 results) were also searched to identify unpublished studies.

Search terms were as follows:

Population: child OR children OR infant OR toddler OR preschooler AND

Concept: (digital AND identity) OR 'digital identity' OR (online AND profile) OR 'online profile' OR (social AND presence) OR 'social presence' OR sharenting AND

Context: 'social media' OR Facebook OR Instagram OR Twitter OR Snapchat OR Tumblr OR 'social networking'.

Inclusion and Exclusion Criteria

Studies of any research design that included the presentation of findings on digital identity in relation to children from conception to 8 years on social networking sites were included if a full text could be retrieved. The viewpoint within the studies could be generated by the young person, family, health professionals, peers, or others. Further inclusion criteria were peer-reviewed, written in English, and published between January 2000 to April 2023 inclusive. Grey literature was included if research findings were reported. No restrictions on the inclusion of studies were applied in relation to the geographic location or setting of the studies except for the generation of the data within social networking sites.

Participants

Social media relating to children from conception to 8 years old. Data relating to family members who posted about their children were also included.

Concept

The concept explored was digital identity on social networking sites in relation to children from conception to 8 years. This review focused on online presence on social networking sites and therefore literature on digital identity purely data generated were excluded. Data generated identities include for example logins, personal information saved on websites for identification purposes, and data saved while using apps and playing games. This type of digital identity is discussed elsewhere e.g., [39].

Types of Sources

This scoping review included both qualitative and quantitative studies. Quantitative study designs including experimental and quasi-experimental study designs, randomized controlled trials, non-randomized controlled trials, before and after studies, interrupted time-series studies, analytical observational studies (prospective and retrospective cohort studies), case-control studies, and analytical cross-sectional studies were considered for inclusion. This review also considered descriptive observational study designs including case series, individual case reports, netnography, and descriptive cross-sectional studies for inclusion.

Screening

Following the search, all identified references were imported into Endnote 20.1 (Clarivate Analytics) for the identification and removal of duplicates, and then exported to Joanna Brigg's Institute (JBI) System for the Unified Management, Assessment, and Review of Information (SUMARI) (Ovid) for a second identification of duplicates and the independent screening of titles

and abstracts against the inclusion criteria by two reviewers [40]. Any differences between the reviewers regarding the inclusion or exclusion of articles for full-text review were discussed, and if not resolved were referred to a third reviewer. The full-text of the retained articles was independently reviewed by two reviewers. Any differences between the reviewers were discussed and if not resolved were referred to a third reviewer. The reasons for excluding studies at full-text review were recorded. The study selection, screening, and reasons for exclusion at full-text review are reported in the PRISMA diagram [36] in Appendix 1.

Charting the Data

Data extraction tables were developed with the team and used to ensure a uniform data extraction process. Data extraction was undertaken by a minimum of two reviewers. The selected studies were analysed to identify the key characteristics such as study design, aim, country of study, setting and context, participant characteristics (the age and gender of children and their family), and sample size. Key terms and concepts related to children's digital identity were identified and themes and trends were charted. Where required and possible, authors of papers were contacted to request missing or additional data for clarification.

Analysis and Presentation of Results

All articles in this scoping review were searched for key terms used in relation to the concept of digital identity. If the term was mentioned two or more times, it was included in the count. Key terms were included if they appeared in the main text, titles, abstracts, or keywords but not in references, footnotes, or headers.

Where variations of the term existed, all variations were analysed as related to the core term. For example, for the core term 'children's identities,' variations such as 'children's identity' 'child's identity', 'the identity of the child', or 'their (children's) identity' were included. Similarly, variations of 'sharenting' such as 'oversharing', 'anti-sharenting', and 'grand-sharenting' e.g., [41] were analysed as related to the core term 'sharenting'.

The search was carried out in the PDF reader Nitro and words were copy-pasted into the search bar to avoid spelling mistakes. The search strategy included terms such as 'identit' to quickly identify all terms related to identity such as online identity, digital identity, and social identity ('identity' on its own was not counted).

Data are presented in tabular form, which allows for easy comparison between articles. A graphic was chosen as a way to demonstrate the relationship between key terms. Quantitative and qualitative data were extracted into tables to compare and contrast studies, qualitative data were sorted into key themes. Key trends are discussed in the results and discussion.

Results

Overview of Results

The search produced a total of 2,367 abstracts, 1,764 references from database and register searches, and 809 references from searches through other methods (PRISMA flowchart Appendix 1⁴¹). Out of the 1,764 references, 652 were identified as duplicates, leaving 1,112 references. No duplicates were part of the 809 other references. After title and abstract reviews were completed on all remaining references, 1,040 references were excluded from the database references, and 801 references were excluded from the other references. This left 72 articles. One article was excluded as there was no way to retrieve the full text of the article, and there were no contact details to the corresponding author⁴². Of the remaining combined 71 articles, after the full-text review, 50 articles were excluded, with the most common reasons being ineligible phenomena of interest (n = 20), age (n = 14) and that the article was not about the child/children (n = 8). This resulted in 21 articles. An additional hand search in March and April 2023 identified 7 articles for full text review, of which 6 were included and 1 excluded due to the article not being about the child/children. This resulted in a total of 27 articles included in this scoping review [9,10,17-19, 29, 41, 44-63].

Characteristics of the Studies

Participants

The total reported number of participants in this scoping review was 8643, comprised of mothers (N=1768), fathers (N=585), grandparents (N=1), and participants reported collectively as parents (N=1841). One study reported on data from child participants (N=68) [61]. The remaining 4263 participants were not identified further. Overall, more female participants were reported in the studies (N=4158) than male participants (N=1753).

The sample size of included articles ranged from one [18] to 3,472 [59] participants. Notably, eight articles did not provide sample characteristics [44-46, 48,49,53,55,57]. This was due to study context (e.g., content analyses of social networking sites posts and photos) [44-46,48,49,53,55,57] and the nature of the articles such as books or reviews [55] (see Table 1).

Study Origin

Eleven studies were conducted in America [9,19,41,44,48,50,51,53,59,60]; three in Turkey [49,58,62], two in Australia [2,18], followed by one study conducted in both Czech Republic and Spain [53], one in Germany and Austria [63], and one from each of the following: the United Kingdom [47], Malaysia [52], Poland [10], Sweden [61], Italy [64], Indonesia [56] and Portugal [17]. The remaining two studies did not name the country of data origin [45,46].

Context

The main social networking sites used were Instagram and Facebook. Seven studies focused on Instagram [17,18,44,45,48,49,53] and four studies focused on Facebook [9,10,47,58]. The remaining studies focused on social media more broadly.

Study Design

Thirteen studies employed a qualitative approach [9,10,17-19, 44,45,49,52,53,56,62,63]. Seven studies used a mixed-methods approach [47,48,50,51,58-60]. Three studies used a quantitative design [30,61,65]. Two studies used both qualitative and literature review [41,55]; one article was a book chapter [7].

Key terms and concepts used to describe digital identity

In this first part of the results section, we explore key terms and concepts used in relation to the concept of the digital identity of children on social networking sites. We then explore the concept of digital identity in relation to two types of behaviours that underpin the develop of young children's digital identity.

Table 1: Characteristics of the Included Studies

Author	Study Aim	Study Design	Country	Setting and Context	Identity type	Participants	Age	Gender
Ammari et al. (2015)	To investigate how parents decide what to disclose about their children on social network sites (SNSs).	Qualitative	United States of America)	Sharenting and the shared responsibility of parents in managing their children's online identities.	SDI	102 parents	Data unavailable	Male and female
Bare, (2020)	To provide an overview of the images of children being posted to Instagram by parents under the hashtag #letthembelittle.	Qualitative	United States of America	Content analysis of Instagram posts of children with the hashtag #letthembelittle with a focus on types of the posted child-related images being, the amount of personal information shared with the public, and follower's reaction to these postings. the followers.	SDI and PDI	Unspecified	Data unavailable	Data unavailable
Benevento, (2022)	To understand how photographs shared in social media connects and expresses values regarding childhood.	Narrative inquiry	Not specified	Analysing Instagram postings and comments of photos of children on two hashtags - #letthekids and #fashionkids	SDI	Not specified	Data unavailable	Data unavailable
Bezakova et al. (2021)	To identify the extent of the problem of sharing content on minors with family members on social media (sharenting), identify legal solutions to the problem and point out the importance of adequate social mechanisms (media and marketing) i to raise awareness of the issue	Analytical-synthetic research and comparative research methods	Not specified	Analysing sharenting of sensitive data on social media, comments, reviews, blogs, web portals and emails. Identifying legal solution to protect children.	SDI	Not specified	Data unavailable	Data unavailable
Briazu et al. (2021)	To investigate how the risks and benefits alongside psychosocial variables affected Facebook sharenting	Mixed methods	United Kingdom	Facebook sharenting behaviours of mothers	SDI	190 mothers with young children	62.6% were aged between 25 and 34 years	Female

	behaviour of mothers with young children							
Brosch, (2016)	To learn about parents' habits regarding to their children on Facebook, especially how much and what kind of information about the children they share	Social media ethnography	Poland	Sharenting on Facebook. Exponential non-discriminative snowball recruiting	SDI	168 parents with a child or children under the age of 8	Data unavailable	Data unavailable
Choi & Lewallen, (2018)	To examine how children are represented on Instagram, and how children are depicted in their relationships to traditional stereotypes	Mixed methods	United states of America	Content analysis of 510 photos of children on Instagram on children's gender and racial representations on social media	SDI and PDI	Not specified	Data unavailable	Data unavailable
Cino Vandini, (2020)	To investigate how boundaries of children's social media presence are understood and experienced within interacting systems, regarding to the relationship between MILs and DILs	Literature Review & Qualitative	United States of America	Digital dilemmas on their children's digital footprints, privacy and social media presence created by external members to family such as child's teacher. Analysis of parent's posts on a BabyCenter community: an online parenting forum	SDI	300 posters/parents	The majority were females. Specific data is unavailable	Data unavailable
Dobson & Jay, (2020)	This paper explores the representation of children and family life, with an emphasis on the 'image of the child' that exists on Instagram.	Qualitative	Australia	Perspectives and experiences of an influencer parent sharenting photos on Instagram.	SDI and PDI	1 mother	Data unavailable	Female
Er et al., (2022)	To investigate 'sharenting' during the early COVID-19 pandemic and quarantine periods	Qualitative	Turkey	Sharenting in the pandemic and quarantine period. Descriptive content analysis of the Instagram profiles of the parents - 401 posts from Instagram	SDI	Unspecified	Data unavailable	Data unavailable
Fox et al., (2022)	To explore first time dads' vulnerabilities and decisions to engage in sharenting, especially given that marketers	Mixed methods	United States of America	First time dad's willingness to sharent on social media and their level of perceived sensitivity to their child's	SDI	75 first-time dads	Aged 20 to 40 years	Males

	seek to connect with new parents on social media via engagement tactics that prompt sharenting			information. Online survey on Amazon Mechanical Turk, using Prime Panels and grounded theory				
Fox & Hoy, (2019)	Study 1: To explore mothers' expressions of vulnerability and how these relations can be linked to their motivations for sharing children's personally identifiable information on social media. Study 2: To explore mothers of young children in a Twitter chat, and the extent to which they post children's personally identifiable information, as well as the mother's vulnerability	Mixed methods	United States of America	Qualitative: Interaction of consumer vulnerability of mother, and the reasons and decision to post about their children on social media Quantitative: Interaction of a brand – Carter's Inc and Children's Apparel with the engagement of mothers on twitter	SDI	Study 1: 15 Mothers Study 2: 122 participants	Aged 24- 40 years Data unavailable	Females Data unavailable
Hashim et al. (2021)	To investigate the trends, motives, or purposes behind sharenting by Malaysian parents and their awareness (or lack thereof) of its related privacy issues	Qualitative	Malaysia	Mothers' motives to sharent and the type of content they post frequently and like to update their status with or post on social media.	SDI	40 mothers	52.5% were aged between 31 to 40 years	Data unavailable
Holiday et al. (2022)	To identify how parents self-present in their sharenting posts.	Qualitative	United States of America	self-representation in Instagram posts about their children	SDI and PDI	Unspecified	Data unavailable	Data unavailable
Jorge et al. (2022)	To explore how Cristiano Ronaldo, his partner, and his mother, shared information about his children on Instagram between 2018 and 2020	Qualitative	Portugal	Sharenting of a celebrity, Cristiano Ronaldo, and his family members. The digital identity of Cristiano Ronaldo children analysed through the sharenting of the Ronaldo, his partner and his mother on Instagram.	SDI and PDI	3 participants (mother, father, grandmother)	Data unavailable	Data unavailable

Kopecky et al. (2020)	To investigate the type of content that parents publish about their children, and to compare this behaviour between Czech and Spanish parents	Quantitative study	Czech Republic and Spain	Comparing sharenting content, extent and behaviours in two countries. Study was conducted online (google forms distributed through Facebook, Instagram, Email and WhatsApp channels)	SDI	1093 Czech parents 367 Spanish parents	Parents aged 25 to 64 Spanish parents aged 21 to 61	Men and women
Kumar & Schoenebeck, (2015)	To gather mothers' narratives and experiences about sharing baby photos on Facebook. To show how identity performance allows mothers to enact—and receive validation of—good mothering.	Qualitative study	United States of America	Attitudes, opinions and experiences of sharing baby photos on Facebook and mothers' perceptions of Facebook and other sites.	SDI	22 mothers	Aged 25 to 39 years	females
Kumar, (2021)	To investigate how power works through three fields of discourse to govern parents' social media conduct	Review, and Qualitative: 'Thinking with theory' method	United States of America	Governmentality and parents conduct in sharenting	SDI	Unspecified	Data unavailable	Data unavailable
Latipah et al., (2020)	To describe the sharenting model by millennial parents as a process of exchanging information between parents in parenting, mentoring, education and child development.	Phenomenological approach	Indonesia	Motives, impact and ways of sharenting. Interview was completed online	SDI and PDI	10 parents	Aged 24 to 35	5 Females and 5 males
Leaver et al., 2020	To investigate how exactly the digital communication and sharing of and by parents about their children can be balanced with children's rights to privacy both in the present, and more challengingly, in the future	Critical review of parenting practices through examples	Australia	Sharenting children's sensitive information on Instagram, Facebook Wearables and apps (Owlett smart sock; Peakaboo Moments), online safety and children's rights to opt out.	SDI and PDI	Unspecified	Data unavailable	Data unavailable
Marasli et	To investigate the	Mixed methods	Turkey	Sharenting on	SDI	219 parents	41.7% were	Data

al., (2016)	usage frequency and the content of social media sharing, and investigating the information a group of parents shared online about their children, via content analysis			Facebook			aged from 31 to 40	unavailable
Mascheroni et al. (2023)	To investigate the patterns of sharing among a national representative sample of parents of 0- to-8-year-olds children to identify the presence of recurrent sharenting styles. To examine the relationship between sharenting styles and parents' sociodemographic information, and between sharenting styles and parental practices of privacy management adopted to govern their children's social media presence.	Quantitative	Italy	Sharenting styles, extent of sharenting and parents' privacy management practices	SDI	1000 Italian parents	Aged 18 to 54 years	Males and females
Minkus et al., (2015)	To measure adults' sharing of children's personally identifiable information in online social networks, namely Facebook and Instagram.	Mixed methods	United States of America	Analysis of images shared on Facebook and Instagram.	SDI	2,383 Facebook users 1,089 Instagram users	18 years and older	Women and men
Morris, (2014)	To give insight into the types of child-related content mothers of infants and toddlers are willing to share on social networking sites.	Mixed methods	United states of America	How mothers of young children use Facebook and Twitter, and mothers' perceptions on the appropriate site to share photos of their children. Survey was completed online.	SDI	412 mothers	Aged 19 to 46	females
Sarkadi et al., (2020)	To investigate children's' thoughts about sharenting	Quantitative	Sweden	Children views on sharenting. Survey was completed online	SDI	68 children	4 to 15 years of age	Boys (2/3) Girls (1/3)

Turgut et al., (2021)	To investigate what factors affect what parents share on social media about their children	Qualitative study	Turkey.	Sharenting and their associated factors, and parents' views on legal liability.	SDI	88 parents	Aged 22 to 45	Data unavailable
Wagner and Gasche, (2018)	To investigate what factors parents consider when disclosing personal information about their children on social networking sites and what strategies they apply	Qualitative	Germany and Austria	Parents thought on drivers and inhibitor of disclosing child's photos on social networking sites	SDI	220 mothers	Data unavailable (mean age 31.1)	Data unavailable

Note: SDI= social digital identity, PDI= performative digital identity

Note. PII = Personally identifiable information. The percentage represents the number of articles that use the term in relation to digital identity.

Figure 1. Terms Used in Relation to Digital Identity

The key term ‘Sharenting’

The term ‘sharenting’ was the most commonly used term in the literature (21 articles) on the development of children’s digital identities (see Fig. 1) [7,10,17,41,45-55,58,61,62]. Most articles discussed the term in more detail and provided a definition of sharenting [41,46,48,50,51]. Bezakova et al.[46, p54] explained the term sharenting as ‘the overuse of social media by parents or legal guardians who share photos or various home videos of minors with the virtual community.’, whereas Brosch [10 p226] defined sharenting as “the practice of a parent to regularly use the social media to communicate a lot of detailed information about their child” and drew on the Collins dictionary definition. All authors appear to share a similar understanding of the term ‘sharenting’. Thus, the definition of sharenting is widely accepted and used frequently in the context of digital identities of children on social networking sites.

Digital Footprint

Thirteen articles referred to the concept ‘digital footprint(s)’ [9,10,19,41,46,47,49,51,54,55,57,62,64]. The term ‘digital footprints’ is sometimes used interchangeably with the word ‘digital identity’. It often comes down to the authors preference of wording to describe the creation of digital identities for children. For example, Brosch [11] and Bezakova et al.[46] explain that children’s digital footprints are mostly created by parents early in the child’s life sometimes before or, just after the birth of the child, or during infancy [10,46]. Brosch [10] further explains that 10.7% of Polish parents in their sample created digital footprints for their unborn children by posting sonogram images and 8.3% shared photos of the expectant mother on Facebook. As illustrated by this example, the term ‘digital footprints’ was used synonymously with the term ‘digital identity’.

When the risks of sharing children’s content online is discussed, the term ‘digital footprints’ is often chosen. Kumar & Schoenebeck [9] discuss the risk of mothers creating digital footprints for their children in relation to the benefits of receiving validation. Mothers in their study were hesitant and uncertain about how their photo sharing behaviour might impact their child’s online identity later and restricted their sharing to pictures that were cute, funny, and showed milestones. Nevertheless, they found that benefits of receiving validation via shared content outweigh mother’s concerns about digital footprints and oversharing. The authors introduce a new term ‘privacy stewardship’ to describe ‘the responsibility mothers take on as they consider what kinds of baby photos are appropriate to share and the implications for their children’s digital footprint’. In line with this, Cino & Vandini [41] describe the pressure and responsibilities of motherhood as mothers are eager to and are expected to actively manage their children’s digital footprints. The literature suggest that the management of children’s digital footprints and digital identities is mostly considered to be the responsibility of parents, especially mothers [9,41,57,64].

The use of the term or concept ‘Identity’

The different types of identities that were mentioned in relation to children’s digital identities on social networking sites are discussed below.

Children’s Identities

The term ‘children’s identities’ or variations of this term (e.g., child’s identity) was used in twelve articles [9,17,19,44,45,49,53-55,57,58]. The term ‘children’s identities’ was employed to represent a broad concept that often-encompassed other sub-terms or concepts related to identity. Seven articles that included the term ‘children’s identities’ further discussed the concept of ‘online identity’

[9,17,19,44,46,54,62] and four articles discussed the term ‘digital identity’ [17,55,62,64].

Online Identity

All articles that used the term ‘online identities’ discussed how parents were the creators of their children’s online identities [9,17,19,44,46,54,62]. Similar to the other concepts related to the digital identity of children, ‘online identity’ could often be used interchangeably with the term ‘digital identity’. However, the context online identity was used in differed from the other terms. Most studies discussed children’s online identities in the context of children’s rights and agency over their online identity and the missing consent from children to allow their parents to post about them online [17,19,44,46,54].

Digital Identity

The literature did not generate an accepted definition of digital identity; however, some authors briefly discussed the concept and its relationship with ‘sharenting’. Kumar [55, p134] links the concepts of digital identity and sharenting; ‘sharenting is potent thanks to the concept of a ‘digital identity’, also called a digital persona, profile, legacy, trail, footprint, or presence’ and ‘Sharenting discourse portrays the creation of a digital identity as a choice, one best left to the child.’

Mascheroni [64, p121-122] also links the two terms by discussing the consequences of sharenting on children’s digital identity ‘Generally speaking, almost half of the parents are reportedly aware of the consequences of sharenting for children’s digital identity, but regular sharers show a lower average value, suggesting a lower degree of awareness’.

Jorge et al.[17] discuss the term ‘digital identity’ in more detail by exploring how celebrity sharenting contributes to the construction of children’s digital identities. They found that the parents shared information and photos that align with the theme of happy and grateful parenthood and that the family posts represent the children as the extended self of the father, stepmother, and grandmother.

Thus, there is an understanding that the digital identities are created by parents through sharenting. Here, sharenting is seen as the action (sharing information about the child) and the digital identity is described as the consequence or outcome or the sharenting behaviour (see Fig. 2). While sharenting is well defined, definitions for children’s digital identity are not provided in the articles.

Other terms or concepts that included the word ‘identity’ were used less frequently for example; ‘relational identity’ was mentioned in two articles. Whereas the terms ‘identity performance’, ‘mediated identity’, ‘private identity’, ‘social identity’, ‘social media identity’, and ‘moral identities’ only appeared each in one of the 27 articles. Overall, the majority of articles (19) in this review discussed some form of identity in relation to children’s presence on social networking sites.

We have outlined the relationship between the different key terms in Fig. 2 below. *Sharenting* is the behaviour parents engage in when sharing information about their children on social networking sites. This creates long lasting *digital footprints* online which form children’s *digital identities*. The literature identified a number of risks related to the creation of children’s digital identities on social networking sites such as *digital kidnapping* and *identity theft*, especially if the information that was shared contains *personally identifiable information*. These areas will be explored in relation to the concept of the digital identity of young children.

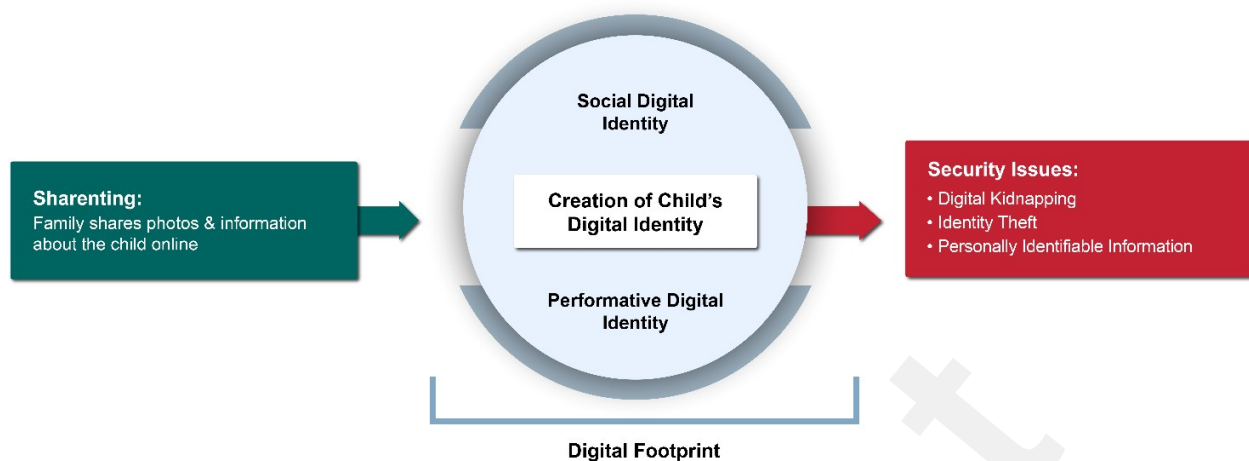


Figure 2. Relationship Between Key Terms

Safety: Digital Kidnapping

Three articles in this review discussed the concept of ‘digital kidnapping’[44,49,52]. The terms ‘identity theft’, ‘personally identifiable information’ (PII), and ‘privacy stewardship’ were used in two articles of this review (see Fig. 1) [9,47,50-52,55]. The term ‘digital kidnapping’ is defined as ‘people who steal a child's identity and photo on social media and pass the child off as their own’ [49, p2]. Digital kidnapping is described as one of the risks of creating digital identities for children by sharing images, especially those that include personal information about the child and reveal the child’s face [44,49]. Hashim et al. [52] found that Malaysian mothers were concerned about digital kidnapping and identity theft and therefore, were conscious not to share locations in their posts and actively hid information regarding their children’s names, places, and dates of birth.

Children’s Digital Identity as an Extension of Parents’ Digital Identities

Two articles discussed the concept ‘extended self’ [17,53]. These two articles also discussed the term ‘relational identity’. In Holiday et al. [53], the authors discuss the theory of the ‘extended self’ and apply it to the concept of sharenting. The authors describe parent’s engagement in sharenting as fundamental to their identity as a parent, which they argue says more about the parent as an individual than the depicted child. Following this thought, sharenting is seen as a form of parent’s self-presentation that includes children as a component in the definition of the self.

Jorge et al. [18] also described the parents' representation of children on social networking sites as the extended self of the family members. When children’s digital identities on social networking sites are interpreted as extension of their parent or family members’ identities then parent’s and family members identities form part of the child’s digital identity. Accordingly, some articles in this review discuss the digital identity of parents, mothers, and families in relation to the child’s digital identity [9, 50,55,64].

Overall, the review of the key term and concepts related to digital identity shows that there is limited research defining key terms such as children’s ‘digital identity’ and ‘digital footprints’, whereas ‘sharenting’ is a commonly used and widely accepted term that is clearly defined.

Content and Image Analyses

The Development of Social & Performative Digital Identities

The synthesis of the data generated through the content and image analyses generated two types of digital identity: ‘social digital identity’ and ‘performative digital identity’. Children’s social digital identity creation involves parents who create their children’s digital identity by sharing information such as everyday activities and milestones without links to commercial products or promotion of

their children. Parents motivation to create social identities for their children is most often to share with family and friends and to keep a digital diary [9,10,52,53,55,63]. Whereas children's performative digital identity was created when parents promoted or marketed their children, often for their own benefit. For example, to promote their clothes and brands [18,45,53]. This means that parents post information and photos of their children to convey a picture of the child that can deviate from the actual identity of the child. These posts often present the child in a neat and fashionable way and can include links to products that parents get a financial share of. For example, 'mummy' or fashion bloggers (e.g., #fashionkids) create performative digital identities for their children which mostly benefits them and often disregards the needs of the child [18,66].

The Use of Social and Performative Digital Identities in the Literature

The majority of articles (N=18) discussed 'social digital identities' exclusively [9,10,19,29,41,46,47,49-51,54,55,58-60,62,63,67], while eight discussed 'performative digital identities' [17,18,44,45,48,53,56,57]. Social digital identities were mostly created on Facebook or discussed in a social media context in general, whereas performative digital identities were mostly created on Instagram. A summary of the types of posted content are presented in Table 2. The percentages indicate the number of articles that discussed the different topics.

Table 2. Analysis of Children's Posted Content Related to Children on Social Networking Sites

Content	Activity / Leisure time	Events: Birthday/ Family	Posing/ influencer/ income	Developmental stages/ milestones	Family holiday/ outings	Embarrassing/ cute	Face visible	Name/ D.O.B.	Nudity
Social DI K = 18 (96.3%)	11/18 61.1%	13/18 72.2%	1/18 5.5%	6/18 33.3%	3/18 16.6%	8/18 44.4%	6/18 33.3%	7/18 39%	5/18 28%
Performative DI K = 8 (29.63%)	7/8 87.5%	2/8 25%	6/8 75%	1/8 12.5%	1/8 12.5%	2/8 25%	3/8 37.5%	2/8 25%	3/8 37.5%

Note. DI = Digital Identity, K = Number of articles.

Social digital identities were often created through images of events such as birthdays and family gatherings. Whereas the majority of the articles that demonstrated a performative digital identity included images and descriptions of children posing for photos and in some cases the family made an income from these posts [7,17,18,44,45,48,53,56].

In the following sections we explain what information (including text and photos) parents typically share when creating social and performative digital identities for children and what motivates them to share this information.

Social Digital Identities

What Parents Share When Creating 'social Digital Identities' for Their Children

Most studies report that parents create social digital identities for their children by sharing happy moments of their children. Brosch [10] found that these happy moments were often recorded during daily life activities, outings, and special events (95.6%). Similarly, most of the mothers in Briazu et al.'s [47] study shared information about special days (72.7%) or social activities (52.6%), and some shared information about health (6.7%) or educational issues (5.2%). Brosch [10] found that

many parents revealed private information about their child by sharing posts containing images of child's birthday party (23.2%), baby videos, birth certificates, kindergarten diploma, or the child's art (32.7%), as well as sonogram images (10.7%). Information about the child was also shared via posts containing information such as the child's name and date of birth (48.2%). Brosch [10] also found that some of the posts contained embarrassing photos (e.g., nude or semi-nude pictures of the child during bathing or on the beach), or where children are in distress (e.g., crying or angry), or where children are covered in food after dinner (e.g., chocolate on their faces).

Kopecky et al.[54] surveyed parents from the Czech Republic and Spain and found that these parents share photos of celebrations, family moments, holidays, important milestones, and photos that parents consider to be cute or funny. Most parents reported to share content in which the child can be identified (by face), but which does not contain sexual content (81.7%). One fifth of parents shared photos in which the child is partially exposed to the extent that the identity of the child can be determined. A small proportion (3.5%) of parents from Czech Republic reported that they share nude photos of their young child.

Er et al.[49] investigated sharenting behaviours during the beginning of the COVID-19 pandemic. They found that mothers posted more often than fathers and that the majority of posts contained photos, and some contained videos of the children. Out of the 226 post they analysed, 207 included the child's face, with a limited number of parents who blurred their children's faces (n=17). In line with the other studies, the posts were generally happy, for example expressing the joy of spending time with children, love towards children, and showing how children and the family happily play games, cook, or learn together. The daily lives of the children were also posted, including birthdays, vacations, and anniversaries. A smaller proportion of the posts expressed unpleasant encounters during covid, such as boredom, complaints, and unhappiness with quarantine.

Cino and Vandini [41] explore the digital identities that are created for children by the mothers' mothers-in-law and the conflict this raises with the mother. The content is either shared before the birth of the child (e.g., pregnancy status of mother, gender reveal, or labor) or afterward (e.g., daily life activities) and usually against the will or knowledge of the mother.

Fox et al. [51] investigated first time fathers sharenting behaviour and found that fathers try to avoid posting sensitive information (e.g., their naked child). However, they do post everyday activities such as going to the park, playing, birthdays and firsts (e.g., first tooth). Fathers were aware of security risks and therefore, hid the child's face, and name.

Hashim et al. [52] found that parents mostly share social events (e.g., vacations, events, family activities, outings; 29.3%), moments (e.g., good, funny, happy, important, or special moments; 25.3%), day to day activities (13.3%), memories of their children (12%), school (10.6%), food (4%), antics (2.6%), and milestones (2.6%) about their children.

Kumar and Schoenebeck [9] interviewed mothers about their sharenting experiences. Mothers described the photos that they shared about their children as cute and funny and explained that the photos often contained family or friends and developmental milestones of the child.

Marasli et al. [58] found that the most common theme parents shared on Facebook were special days (81.4%) such as birthdays, graduations, and year end shows, followed by social activities (54.98%) and educational issues (30%). Less commonly shared themes included sports and arts activities (18.96%), play activities (17.54%), health issues (12.8%), and recommendations about products for children and informatics (12.32%). The majority of parents in this study (63.77%) also reported that they liked sharing pleasant things about their children.

Minkus et al. [59] used an online Application Programming Interface (API) called Face++ to analyse Facebook and Instagram photos. The software identified children via age estimates based on the faces in the photos. Over 25% of the photos on Facebook and 16% of the photos on Instagram with children aged 0 to 7 had comments that revealed the child's names and 2.7% (Facebook) and 5% (Instagram) included the word 'birthday'. The authors were also able to infer the child's last name from the parent's last name. Overall, 5.6% of Facebook accounts and 19% of Instagram accounts with child photos revealed the name, and date of birth of the child, which is enough information to identify the child. By further linking the parents Facebook account with

public records (e.g., voter registration records), the authors were also able to identify the address of the parent and child.

Parents Motivation to Create 'Social Digital Identities' for Their Children

In this section we explore mothers', fathers' and mother-in-law's motivations to create social digital identities for their children on social networking sites. Briazu et al.⁴⁶ found that mothers' motivation or perceived benefits of posting about their children were to build connections, to gain practical benefits such as asking for parenting advice, to gain emotional benefits (e.g., pride and joy of their children), to help others, and some mothers did not identify any benefits.

Fox and Hoy [50] found that the desire to be a 'good' mother motivated mothers sharenting behaviour. Mothers used sharenting as a coping strategy. They shared their experiences as a mother and information about their children to seek affirmation and social support from others. The authors also explore mothers' motivation *not* to post about their children. Mothers focused on portraying the 'right' image of the child and avoided posts that potentially could have made them look like a 'bad' parent. It was also important to mothers in this study that the child would not be upset or embarrassed by their posts later in life.

Kumar and Schoenebeck [9] found that most mothers in their study used Facebook as an archive for their children's photos. It was important to these mothers to portray their children and themselves in a favourable light and to receive validation and support as a mother.

Wagner and Gasche [63] investigated German and Austrian mothers' decision process and strategies when sharing about their children. Most mothers indicated that the costs of sharing photos of their children online outweigh the benefits and therefore more than half of the mothers (60%) never shared a photo of their child on social networking sites. The mothers' main motivation to share was social participation (to inform others, to keep others up to date, and to document the child's development), followed by showing how proud they are of their children, and the need to be liked, approved, and accepted by others.

Fox et al.[51] found that fathers' motivation to share was not to gain support from others but rather to express humour or to spotlight themselves as fathers. Overall, fathers made fewer sharenting decision and the main responsibility of sharenting most often lied with the mothers [51].

Hashim et al [52] found that the most common motivation (42.8%) for Malaysian parents to share about their children was to save memories of their children. Social networking sites served as an archive or journal for them to refer to at a later stage. The second most common motivator (31.6%) was the desire to share their experiences, information, activities, and feelings about raising children. Other motivations included to be influenced by other social media users, to stay connected and engaged with others, and to motivate, encourage, and inspire other parents. In line with this

Turgut et al. [62] described parents' motivation to post about their children as related to keeping in touch with others (e.g., relatives and friends) and to record and memorise their child's development. Brosch [10] found that the number of Facebook friends was a significant predictor of sharenting.

Cino and Vandini [41] investigated the motivation of mothers-in-law to post about their grandchildren. They report that the grandmothers' motivation stems from a desire to show excitement for the grandchild, which is often at the costs of the parent's desire for agency over their children's digital identities. However, it is noted that grandparents might be less knowledgeable about the internet and online safety and are potentially more naive about sharing information about their grandchildren online.

Performative Digital Identities

What Parents Share When Creating 'Performative Digital Identities' for Their Children

Posts that contribute to a child's performative digital identity creation are usually well planned out to present the child in a fashionable/favourable way. Benevento [45] investigated posts with the hashtags; #letthekids and #fashionkids. These hashtags are often used by parents who create performative digital identities for their children by sharing well prepared posts that have been planned out. The hashtag #letthekids emerged as a counter hashtag to the more established hashtag

#fashionkids, it stands for 'let the kids dress themselves'. The author found that #fashionkids photos often show the child alone during structured activities outdoors. Children are often displayed smiling or with still expressions posing with their possessions (e.g., clothing and accessories). The attention is drawn to the child and their outfit rather than the location or activity. The background locations include well maintained spaces like parks, backyards, and playgrounds as well as home settings (e.g., bedrooms, kitchens). Although children are often presented as posing with a focus on their clothes, their clothes are most often casual.

Whereas #letthekids photos often show the child during unstructured activities, such as during play or eating in their home environment or in nature (e.g., forest). This hashtag often displays children acting on their own, for example while playing with their toys in their room, but also sometimes includes family members. The children in #letthekids hashtags often look away or are shown from behind as if they are not aware of the photo being taken. Interestingly, #letthekids posters upload more professional photographs than #fashionkids posters and more naked or semi-naked picture of their child than #fashionkids posters [45].

Choi and Lewallen [48] investigated children's gender representations on Instagram and found that parents post more about their female children than their male children and generally present both their female and male children with positive emotions in white or gender typical (i.e., pink and blue) clothes. Children on Instagram were often displayed as playing or having fun, in indoor settings by themselves. Girls were found to be frequently displayed as engaging in fashion.

Holiday et al. [53] explored how parents self-present themselves in their children's presentation on Instagram. The authors identified three presentational categories, 'polished', 'promotional', and 'intimate'. Photos in the polished category displayed children as visually appealing and suggest that parents invested time and effort in the post to portray and idealised image of the child. The parents were presented as favourably themselves with possessions including the child. The attention is often directed toward the parents not the child (via text and/or the image). Children in this category serve as accessories (e.g., in the parents' arms or on the side of the photo). Parents typically present themselves as 'ideal self' in this category. The promotion category included posts in which parents use their children to promote their own skills, competencies, services, or products. Lastly, the intimate category portrays children more realistically without perfecting of the image. With a strong focus on the child in the intimate category, more information is revealed about the child, which adds to the child's digital identity [53].

Jorge et al. [17] explored celebrities' creation of their children's digital identities through sharenting. The authors analyse Cristiano Ronaldo's family's sharenting practices and the portrayal of the children as the parents' extended self. The results show that celebrities sharenting contributes to the digital identities via the themes of happy and grateful parenthood and the representation of children as the extended self of the father, stepmother, and grandmother. Lastly, Latipah et al. [56] found that millennial parents shared content about their children relating to everyday activities that are perceived as fun and that are often displayed as aesthetically pleasing, with some posts including promotion of products.

Parents Motivation and Motives for Creating Performative Digital Identities for Their Children

Parents that engage in performative digital identity creation for their children have several motives for sharenting. Some parents want to pass on knowledge and educate other parents by providing advice, products, and insights into their daily live activities etc. [18,56], whereas others motive is to primarily promote their products/clothes [45,53]. In Holiday et al. [53] promotion category the motivation behind posting was often to promote products or services to other parents. Whereas parents' motivation in the intimate category was often to preserve memories, which is in line with our findings on the motivation to create social digital identities.

Dobson & Jay [18] found that the motive of their case study was to connect with others as the family lives in a rural area. The mother reported that she had made friendships online and that followers empathise with her posts and offered support and a sense of community.

In Latipah et al.'s [55] study parents' motivation to share about their children were to receive

affirmation and social support, to demonstrate the ability to care for their children, social participation, and documentation.

The only article that included children as participants could not be classified as either 'performative' or 'social' digital identity. In this article children were asked for their opinion about sharenting [60]. Children aged 4-15 indicated that it is not okay for parents to post photos of their children (them) on social networking sites, whereas sending the photos to relatives was more accepted by the children in the study. The lowest (least acceptable) scores were found among the youngest children (4-6) in the study. Irrespective of the participants age, children wanted to be asked before parents take or share photos of them and they wanted their answers to be listened to.

Discussion

Summary of Main Results

This scoping review identified 27 studies. Participants included were mothers and fathers, collectively reported as parents, and grandparents. Based on the analysis of the key terms and concepts used in the literature, the following description of how these relate to one another has been developed. The creation of a child's digital identity is developed through the behaviours of parents, most referred to as sharenting. The behaviour of parents through the online decisions they make creates a digital identity that can be described as social digital identity or performative digital identity (see Fig. 2). We found that much of the literature on the concept of the digital identity of the child reports on parents, especially mothers, and their sharenting behaviour on social networking sites. The most used terms relating to digital identity in the literature are 'sharenting', followed by 'digital footprint' or 'children's identity' (see Fig. 1). The term sharenting is well defined and popular among researchers and the media. Whereas the term 'digital identity' was only used in 14% of the articles and definitions were lacking. We found that the term 'digital footprint' was more commonly used than digital identity, however, clear definitions were also lacking in the articles of this review. Common across all terms was parents making decisions about what to share about their children, mostly without the child's consent.

The term digital identity is more commonly used in the adult literature [20-25,68,69]. However, we expect a rise in the term 'digital identity' in relation to children in the coming years, since there has been a steep increase in research that focuses on the consequences/risks of sharenting [51,70,71]. The use of digital identity terms often depends on authors' preference of words. We found that 'digital footprints', 'children's identity', 'online identity' and 'digital identity' are used interchangeably by authors. Together with 'sharenting', these four constructs were the most used terms across the articles, suggesting that they are closely related.

Digital Identity Creation: What and Why

We found that most content shared by parents related to *social digital identity* and included sharing special events such as birthdays and family gatherings, as well as everyday activities, and leisure time. In the *performative digital identity* category posts also included content about everyday activities and leisure time but with a focus on children that are posing for a photo with some posts contributing to the posters' income (e.g., influencers). In the *performative digital identity* category, the motives of some parents were to sell products and/or promote themselves and their child. The content posted appeared carefully prepared and polished. The literature on the digital identity of children frequently made reference to the concepts of online safety and the rights of the child and these two areas will be explored further with reference to the findings of the review.

Safety risks – digital footprints

While some awareness among parents of the potential risks of creating digital footprints via sharenting and the creation of their children's digital identities was noted, there is still uncertainty about the exact impact and consequences of parental sharing behaviour. One of the potential risks, digital kidnapping, was considered by some parents, however, the benefits of sharing was described as outweighing the risks of creating digital footprints and identities [9]. The perceived risks about

sharenting may differ depending on the parents' cultural background. For instance, in Wagner & Gasche's [63] study, 60% of German and Austrian mothers reported to have never shared a photo of their children online. In an Australian study, participants refrained from posting about their children on social media as a strategy for privacy [72]. Other researchers suggest that parents who perceive online social networks as a source of support are highly likely to sharent [73,74].

To make an informed decision about whether to share children's content online or not, parents need to receive information and guidance. Researchers and policy makers have started to develop new policies and guidelines for parents. While there is a need to update existing policies to reflect the addition of online identities [75-77], the focus of many of these guidelines and policies is on children's screen time exposure and not on children's digital identity development or children's right of their digital identity and footprints [75,78,79]. We, therefore, recommend more rigorous research on parents' attitudes towards privacy and the influencing factors that affect their sharing of children's photos and information online. Findings from such studies could inform efforts and emerging policies directed at mitigating sharenting behaviours that are associated with online risks.

Children's rights/privacy

The process of children's digital identity creation most often takes place without the child's permission or input [10,17-19,44,46,53-55,64]. No articles in this review investigate young children's creation of their own digital identities on social networking sites. One article in this review asked children for their opinion on their parents sharenting behaviour [61] and very few of the studies in this review address the agency of the child e.g., [18, 19,55,61]. When digital identities are created early for the child without the input of the child, the child's right to create their own digital footprint or identity is taken away, leaving the child without a voice and choice [46,55,62]. Where possible children should be involved in the development of their digital identities. Research to identify how this can be achieved and to give voice to the experience of young children is needed to better understand this important and fast-moving area [19]. Future studies should explore the perspectives of children as key stakeholders in the creation of their digital identity [19,80].

Strengths and Limitations

To our knowledge, this review is the first scoping review to map out the literature published on the creation of digital identities among young children through social networking sites. We strove to apply rigorous methods to search and select articles and chart the data. Due to our strict age range exclusion criteria, we did not review articles that discussed the digital identity of children on social networking sites who were aged 9 years and over. The use of search terms and the selected databases may not have been exhaustive and the omission of social networking sites such as YouTube are limitations. The search is only valid up to April 2023. In the same vein, most of the included studies were conducted in the Western world, with only two studies conducted in Asia and none in African or South America. The interpretation of the findings should take this geographical bias into consideration.

Conclusions

Digital identities on social networking sites are created when photos and information about a person are being shared. The digital identities of children on social networking sites from conception to 8 years of age are most often created by their parents (without the child's permission). Children's digital identities can be grouped into two categories; social and performative. Parents use the online environment to capture moments that matter to them, while also creating positive narratives around the child's life. The content that is being shared for each type of identity and the motivation behind the creation of such identities differ. Research into young children and the digital world has focussed on areas such as the effect of screen time and child development and digital safety [81-85]. We urge greater attention to the important area of how the digital identity is created, the impact of this and how young children can be involved in important decisions that impact their lives.

Acknowledgement

This research was supported by the Australian Research Council Centre of Excellence for the Digital Child through project number CE200100022.

Conflict of Interest

None declared.

Abbreviations

DI = Digital identity.

Data availability

The original data are all publicly available.



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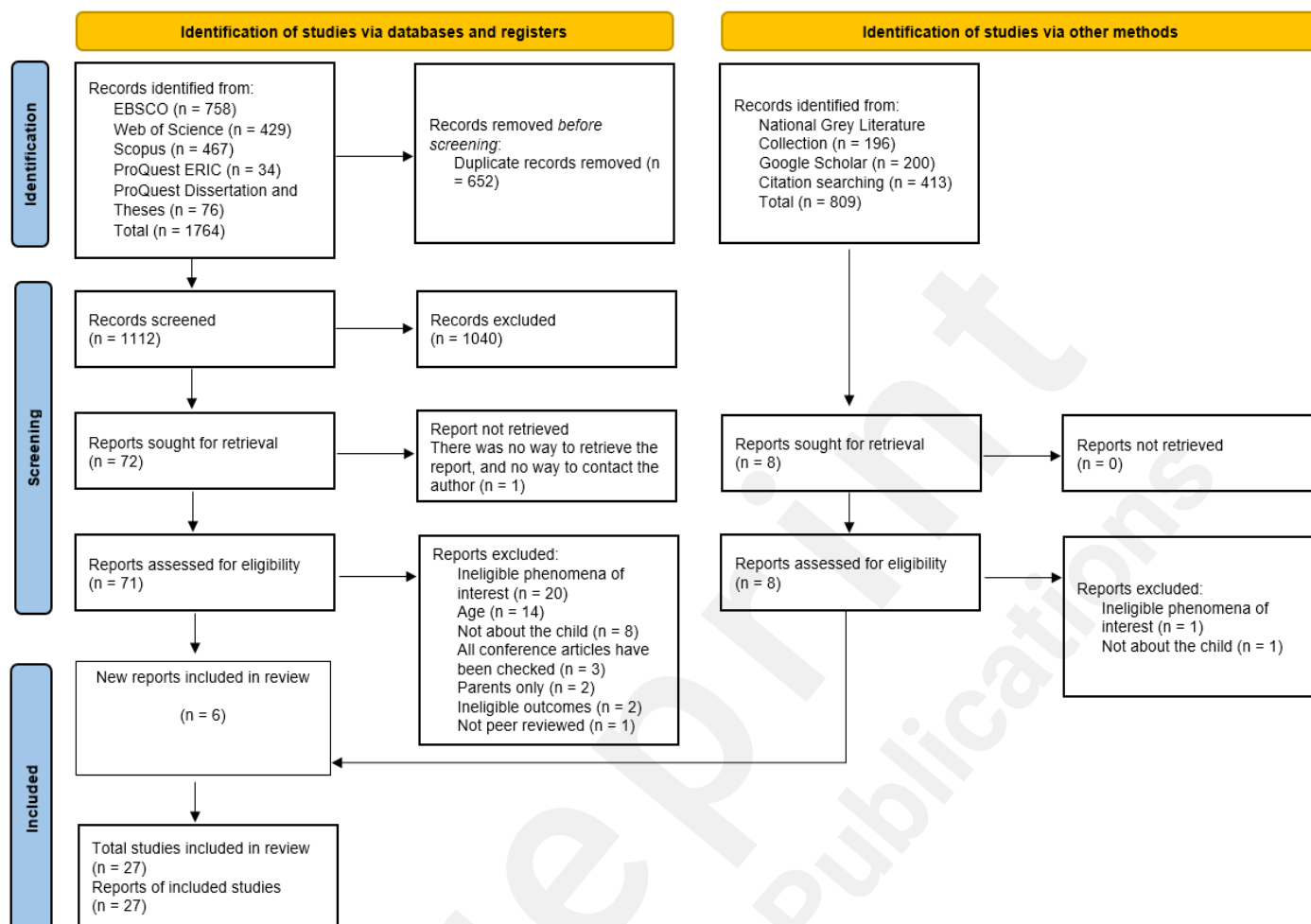
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Appendix I

Figure 1: PRISMA Flowchart of the Study Selection and Inclusion Process



Appendix II

Search Strategy

Population: child OR children OR infant OR toddler OR preschooler

AND

Concept: (digital AND identity) OR "digital identity" OR (online AND profile) OR "online profile" OR (social AND presence) OR "social presence" OR sharenting

AND

Context: "social media" OR facebook OR instagram OR twitter OR snapchat OR Tumblr OR "social networking"

Limits: English and 2000 -2023.

Supplementary Files

CONSORT (or other) checklists

PRISMA ScR checklist.

URL: <http://asset.jmir.pub/assets/a9503ddcafad2201df6a5b0e60cfcfe2.pdf>

TOC/Feature image for homepages

Phone with heart.

