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Exploring Parents' Everyday Experiences With Digital Media: Barriers and Opportunities for Digital Inclusion

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Abstract

This article presents qualitative research findings on parents' digital media practices. Through 32 in-depth interviews with parents of 0–6-year-olds in French-speaking Belgium, the study addresses digital inclusion by exploring the diverse ways parents experience and benefit (or not) from digital media. Our research uncovers the dual nature of digital media use in parenting, presenting both advantageous and problematic outcomes across four dialectical dimensions. Our work sheds light on how digital media can (a) offer informational support or constitute an informational challenge, (b) provide emotional assistance or cause emotional struggles, (c) grant access to social support or contribute to social pressures, and (d) serve as a tool for the daily organisation or complicate daily life. Our article also investigates the factors associated with either positive or negative outcomes. We show the role of personal, situational, social, and normative factors. To conclude, we identify strategies for childcare and parenting support professionals to promote digital inclusion among parents by addressing barriers to positive experiences and outcomes related to the use of digital media. By integrating the outcomes of parents' experiences with digital media into discussions of digital inclusion, this article contributes to a comprehensive approach to promoting digital equity beyond questions of access and skills. It calls for user-centric strategies that consider the diverse experiences and concrete outcomes associated with digital media use and emphasises the importance of supporting parents and families regarding these tools.

Keywords

Belgium; digital inclusion; media literacy; media practices; parenting support

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1. Introduction

Digital media play a crucial role in the ongoing evolution of our societies and the day-to-day experiences of individuals. Interpersonal communication, work-related tasks, administrative procedures, democratic participation, entertainment, and various other endeavours often require or are facilitated by online services. In this context, many studies have been conducted to better understand the complexities of digital inclusion and exclusion. This literature often revolves around access, skills, and practices, frequently entwined with socio-economic determinants. However, there appears to be a significant lack of understanding regarding how individuals actually experience digital media and whether they derive tangible benefits from its use in their everyday lives (Ragnedda et al., 2022; van Deursen et al., 2014).

This article aims to investigate this gap with a specific audience—parents. In a society where digital information is omnipresent and can help individuals achieve their goals and perform their different roles (Glushko, 2016; Jones, 2010), parents increasingly need to navigate among various sources of online information and services. The abundance and diversity of online information sources dealing with parenting are potentially beneficial to parents who can construct meaning (Dervin et al., 2003) when faced with questions or concerns. However, digital information sources can also disrupt parenting practices by generating stress and demanding complex skills (Mikolajczak & Roskam, 2017; Yardi et al., 2018). Parents face a significant challenge in identifying relevant, high-quality resources among the heterogeneous digital resources. Recent developments in the digital media landscape have made this even more difficult. Examples include product placement, advertisements in the discourse of influencers, pseudo-scientific discourse and the proliferation of fake news (Arif et al., 2018; Monvoisin, 2007), the opacity of recommendation mechanisms based on algorithmic processes (Claes & Philippette, 2020; Jacques et al., 2020), the expanding reach of normative prescriptions by influencers, and the facilitated peer-to-peer sharing of information (Beuckels & De Jans, 2022).

There is thus a need to understand better how parents experience digital media, how these information sources affect their parenting journey, how to facilitate parental abilities to benefit from digital media, and how to mitigate any harmful impact. This article seeks to bridge the current gap in the literature by examining the diverse outcomes of parents' interactions with digital media. We draw insights from a qualitative study involving 32 in-depth interviews. Our aim is to assist childcare and family support professionals in guiding parents to benefit from their digital experiences, thereby promoting digital inclusion among parents.

2. Theoretical Framework

2.1. Digital Inclusion

The internet and digital media facilitate the creation and maintenance of social connections, information research and education, entertainment, job research and work tasks, administrative tasks, and civic participation, among others (Boulianne, 2020; Jang, 2005; Kulviwat et al., 2004; Patriarche et al., 2017). Research has focused on the inequalities associated with the internet and digital media, shedding light on digital divides. Policies have been introduced to address these divides, as demonstrated by initiatives from the European Commission. The primary objective is to actively combat digital divides, based on the premise

that individuals need both access to and the ability to use digital media to fully engage with and benefit from contemporary society.

In this context, the first strand of studies on the digital divide and digital inclusion has primarily concentrated on issues of access to ICT, which "adopted a binary perspective in terms of those who have access ('haves') and those who have not ('have-nots')" (Ragnedda et al., 2022, p. 2). This includes both physical access to technologies and internet access. This literature demonstrates that digital exclusion has a significant impact on social exclusion, and vice versa: Socially marginalised groups are often vulnerable to digital exclusion (Helsper, 2012; Ragnedda et al., 2022; Reisdorf & Rhinesmith, 2020).

However, access does not guarantee an effective use of technologies. Consequently, attention has shifted to media and digital literacy skills (Hobbs, 2010; Potter, 2018). Researchers in this domain have focused on identifying such skills (Fastrez, 2010), documenting media literacy among specific groups (Alcalá, 2019; Tilleul, 2023), creating assessment tools (Chetty et al., 2018; Eristi & Erdem, 2017), developing pedagogical methods (Rogow, 2011; Talib, 2018), and analysing factors influencing media literacy (Bunnag, 2012; Martínez-Cantos, 2017). In this regard, findings consistently show that individuals' socioeconomic background tends to influence their digital practices and related media literacy (Hargittai, 2010; van Laar et al., 2020).

A third and often-overlooked aspect of the level of the digital divide is digital outcomes or benefits (Ragnedda et al., 2022; van Deursen et al., 2014), which refer to the ways individuals take advantage of their digital experiences. Among the limited research delving into this aspect, van Deursen et al. (2014) conducted a representative survey of the Dutch population to study who benefits from being online. The study charted benefits across five domains: economic, social, educational, political, and institutional. According to their findings, younger and more highly educated individuals not only possess the greatest access but also derive the most benefits from digital media. Ragnedda et al. (2022) further explored this topic and identified five areas of digital benefits: social, political, economic, cultural, and personal. The outcomes of digital media use were measured using a five-point Likert scale through a quantitative and deductive research approach. The findings indicate that socially disadvantaged individuals in the UK have lower levels of digital competencies and fewer benefits from using the internet. While these previous studies offer valuable insights into the broader impacts of the digital divide across various demographic segments, there remains a notable gap in understanding how these dynamics specifically affect parents and their capacity to benefit from digital media.

2.2. Parent's Digital Media Practices

Becoming and being a parent means dealing with many questions about raising children and caring for their health (Garbutt et al., 2012; Sorbring, 2014). This drives parents to actively seek information and construct knowledge on a variety of topics, such as nutrition, sleep, health, or education models. Numerous studies have examined the digital information practices of parents, particularly concerning children's health. Studies investigated parents' access to and use of digital media for information-seeking purposes (Greyson, 2017; Lupton et al., 2016) their underlying reasons or motivations (Yardi et al., 2018), the types of information they value (Lupton, 2016), and how digital media either aids or hinders their decision-making processes (Neill et al., 2015).

Alongside acquiring information, parenthood leads to additional needs that can be facilitated by a range of digital practices, such as the use of social media to access social support (Haslam et al., 2017). The motivations behind "sharenting" more specifically, which involves parents sharing information, photos, and details about their children on social media, extend beyond sharing experiences and advice (Verswijvel et al., 2019). Parents engage in sharenting to keep friends and family connected with their children, express pride in their children, collect memories, and portray themselves as good parents. Sharenting can also be a form of personal expression within a user's online self-representation (Blum-Ross & Livingstone, 2017). This phenomenon takes commercial aspects for parents who monetise their digital identity, such as influencers (Abidin, 2017). This practice demonstrates significant social motivations: to maintain, strengthen, and create social bonds while offering social support, peer interaction, and fostering a sense of community. Challenging situations, such as dealing with a child's disability (Ammari & Schoenebeck, 2015) or navigating single parenthood (Hartwig, 2016; Kotwal & Prabhakar, 2009), can intensify these needs. Similarly, isolation, fear, and stress can also influence parents' digital media practices and their effects, as observed during the Covid-19 pandemic (Drouin et al., 2020; Prikhidko et al., 2020).

A review of these studies highlights the same persistent gap regarding the third level of the digital divide. There is still limited knowledge about how parents experience and benefit from digital media. Although some studies have attempted to address such questions, these previous studies often focus on isolated aspects of the outcomes of digital media use. For instance, research indicates that using digital media to cope with childhood illness can either offer emotional support or exacerbate uncertainty and anxiety (Lupton, 2016; Neill et al., 2015). Similarly, social support frequently emerges as an outcome of digital media use, particularly on platforms such as forums and social media (Haslam et al., 2017). Conversely, several studies have identified potential risks of parents' technology use on parent–child interactions, including reduced parental attention and responsiveness (Kildare & Middlemiss, 2017; Knitter & Zemp, 2020; McDaniel, 2019). However, most of these studies focus on parents' use of digital media during times of detached parenthood. More knowledge is needed about their everyday digital practices with parental issues, questions, and practices.

These focused examinations provide only a partial view of the broader spectrum of parents' digital practices. This article aims to address the gap in the literature by examining the diverse digital experiences of parents and their outcomes. The intention is not to prescribe that parents must necessarily engage with digital media, as research shows that individuals can meet their needs and be included through alternative social participation methods (Smit et al., 2024). The focus is rather on investigating how parents can receive support in navigating digital media to maximise benefits. Although parents may seek guidance from relatives or friends, professionals, and traditional or digital media, these resources are generally considered more suitable for addressing non-digital issues (Livingstone et al., 2018). This is particularly true regarding grandparents, who are valuable sources for non-digital queries but are rarely consulted for digital concerns. This reveals a generational divide that leaves parents with limited support in addressing digital concerns. Yet, we argue that childcare, family support, and healthcare professionals can play a pivotal role in providing such support. Extensive research shows that many mothers consider these professionals to be valuable resources for seeking information, constructing their parenthood, and social support (Holappa et al., 2012; Rolfe & Armstrong, 2010). Consequently, this research aims to examine the roles of professionals in mitigating digital inequalities among parents, proposing strategies for them to actively enhance digital benefits for this group.

3. Research Questions and Method

Two research questions constitute the core of this article:

RQ1: How does digital media use impact the parenting experience, and what are its specific positive and negative outcomes?

RQ2: What hinders and, conversely, promotes positive or negative outcomes?

To address these research questions, this article draws on 32 qualitative interviews that were conducted between March and August 2022, as part of a project carried out within the framework of ONE Academy, an initiative that promotes scientific collaboration between the Office of Birth and Childhood, universities, and childhood fieldworkers (e.g., educators, caregivers, health professionals) in French-speaking Belgium. Interviewees comprised parents with at least one child aged 0–6. Parents came from 32 different households and were recruited through personal contacts, healthcare and parenting support practitioners, and snowball effect. Participants were recruited through theoretical sampling (Butler et al., 2018) to ensure a certain diversity among participants. The goal was to involve parents from diverse socio-economic backgrounds and family situations (Table 1) and with a broad spectrum of digital practices, ranging from limited to intensive use. However, it is imperative to acknowledge that this study was conducted within the Belgian context, which is characterised by a notably high level of digital access. This may influence the generalisability of our results, particularly in regions with varying levels of digital access. Furthermore, challenges in reaching certain demographic segments may imply that our results are not fully representative of the entire range of parenting experiences.

The interviews aimed to document how parents use digital media and whether the digital media each parent uses constitutes a resource or obstacle to their parenting journey. Firstly, the interview guide was inspired by the guided tour methodology (Jacques, 2016; Malone, 1983). Participants were asked to give a "guided tour" of their digital media environment related to their parenthood. This qualitative methodology encouraged respondents to produce a discourse rooted in the concrete reality of their practices. Secondly, the use of the explicitation interview method (Vermersch, 2012) enabled us to assist informants in articulating their actions, emphasising the "what" and "how" aspects rather than the "why." Thirdly, the interviews drew inspiration from the micro-moment timeline interview method (Dervin, 1992). This approach rooted in sense-making theory involves interviewees providing a detailed, step-by-step narration of events in specific situations. These combined methodologies allowed for the exploration of parents' concrete practices, uncovering their underlying motivations, documenting their media literacy competencies as defined by Fastrez (2010), and discerning the effects.

The interviews were conducted face-to-face, recorded, transcribed, anonymised, and analysed using thematic analysis (Miles & Huberman, 1994) on NVivo. The coding process started with a provisional coding grid based on initial questions and a literature review. The codes then evolved as the fieldwork progressed, using both inductive and deductive approaches to explore media practices and literacy in a more comprehensive and nuanced way (Ligurgo et al., 2018).

Table 1. Socio-demographic profile and family situation of the interviewees.

Socio-demographic characteristics	Frequency	Percentage	Family situation	Frequency	Percentage
Gender			**Number of children**		
Male	9	28.1%	1	21	65.6%
Female	22	71.9%	2	7	21.9%
			3	3	9.4%
Age			4	1	3.1%
20–24	4	12.5%			
25–29	4	12.5%	**Parental arrangement**		
30–34	18	56.3%	Coupled parent	21	65.6%
35–39	6	18.7%	Single parent	4	12.5%
			New partner	1	3.1%
Education			Co-parent	2	6.3%
None	1	3.1%	Co-parent/new partner	2	6.3%
Primary school	2	6.3%	Living apart together	2	6.3%
Lower secondary school	4	12.5%			
Upper secondary school	9	28.1%	**Age of youngest child***		
Bachelor	4	12.5%	Pregnancy	1	3.1%
Master's	11	34.4%	<6 months	8	25.0%
PhD	1	3.1%	<12 months	6	18.8%
			1 year old	6	18.8%
Housing status			2 years old	5	15.6%
Social care facilities	5	15.6%	3 years old	1	3.1%
Renting	12	37.5%	4 years old	4	12.5%
Owner	15	46.9%	6 years old	1	3.1%
Monthly income			**Age of other children****		
0€	4	12.5%	2 years old	1	3.1%
<1,000€	1	3.1%	3 years old	1	3.1%
1,000–1,500€	4	12.5%	4 years old	3	9.4%
1,500–2,000€	11	34.4%	5 years old	1	3.1%
2,000–2,500€	9	28.1%	6 years old	2	6.3%
>2,500€	2	6.3%	7–10 years old	2	6.3%
N/A	1	3.1%	11–14 years old	2	6.3%

Notes: * Two sets of twins (one to three months and four years old) were counted as one child each; ** two children (four and seven years old) are stepchildren.

4. Results

4.1. Outcomes of Parents' Digital Experiences (RQ1)

The interviews reveal that participants experience both positive and negative outcomes from their interaction with digital media. Digital media thereby emerge as both a support and a challenge to parenthood. This section outlines four types of outcomes (informational, emotional, social, and practical) of parents' digital engagement. Each type of outcome represents both favourable and adverse experiences.

4.1.1. Informational Outcomes

4.1.1.1. Information Resource

Digital media can provide valuable informational support for parenting as it offers easy and rapid access to a wide range of information: "It's above all practical....The information is available quickly" (Interview 1, father, 37, technician). According to parents, this stands in stark contrast to books, which require longer reading times. Digital media is often considered an easy-to-use solution, regardless of language or literacy barriers, unlike books or consultations with professionals. For instance, a mother reported making verbal inquiries on search engines due to her difficulty writing.

Digital media are also appreciated for their capacity to provide constant information from anywhere, eliminating the need for physical travel, contrary to consulting childcare, healthcare, and parenting support professionals. Another advantage for parents is that the available information is often free. The content covers a wide range of topics presented in different formats and enables parents to address specific questions and fill knowledge gaps. Digital media also provide opportunities to proactively seek information and gain comprehensive knowledge about parenting and education. Armed with this information, parents can develop their perceptions, attitudes, and behaviours: "At the beginning, regarding food diversification, they [online sources] advised to start with vegetables and then fruit. And that's what I did" (Interview 4, mother, 26, housekeeper).

4.1.1.2. Information Overload

Many parents stated that they sometimes feel lost or overwhelmed by the amount of information available. They may struggle to distinguish between relevant and reliable information, especially when confronted with an incessant stream of advice and recommendations of a contradictory nature. This can complicate decision-making in their parenting journey: "There are so many different opinions out there, for example, when it comes to food diversification....So when you have to start this food diversification, you're a bit confused" (Interview 22, father, 31, civil engineer).

Some parents have faced the issue of relying on inaccurate or ineffective information for forming their opinions or guiding their parenting practices: "I made him some chilli, because it was a recipe I'd seen on that blog, adapted without any spices or anything. It had red beans in it. Turns out...he got quite a lot of diarrhoea" (Interview 20, mother, 32, civil servant).

4.1.2. Emotional Outcomes

4.1.2.1. Emotional Comfort

Many informants reported positive emotional effects from the use of digital media as these resources provide information that can alleviate concerns. For example, a mother shared that she turned to the internet when concerned about her child's delayed ability to walk: "It reassured me to read that, to read that some children will walk earlier and others later" (Interview 17, mother, 34, auditor). Additionally, simply knowing they have easy access to information when needed gives some parents a sense of security: "And

I think the fact that I have easy access to it, even if I don't use it, is a bit reassuring, it's accessible" (Interview 16, father, 33, psychologist).

Likewise, the ability to communicate with others, to vent, or to realise that they are not alone in facing a particular or difficult issue provides comfort for many parents. Many participants fear feeling judged when seeking direct advice from acquaintances or health- and childcare professionals. In this context, they value certain digital media sources as safe spaces. The anonymity of some digital media platforms constitutes a valuable alternative. Lastly, digital communication with the caregivers of their child, whether acquaintances or professionals, enables parents to be informed of their child's wellbeing, which also alleviates their concerns.

4.1.2.2. Emotional Challenge

On the other hand, online readings can raise concerns or anxiety, particularly when researching medical information:

> I've got to stop! I've looked on the internet but…the big problem is that the symptoms we can see are symptoms that can be exaggerated, and that are very common….And so I have to stop looking at that because otherwise, I won't be able to sleep. (Interview 13, father, 31, educator)

Parents may experience stress when using digital media not only regarding their child's well-being but also due to feelings of incompetence and guilt. This often occurs when they encounter idealised models of parenting presented online through testimonials or images: "Today, parents are expected to be everything, to be super-parents…to be perfect. And I think multimedia really plays a major role in that…because everyone posts their perfect pictures" (Interview 27, mother, 34, social worker).

4.1.3. Social Outcomes

4.1.3.1. Social Support

Information retrieved from digital media is commonly exchanged and deliberated among partners, friends, and relatives, shaping their perspectives and choices in parenting. Moreover, these media platforms have an impact on the relationship between parents and health-, childcare and parenting support professionals, providing a foundation for discussions and initiating exchanges: "I'd base my questions [to the doctor] on what I read online. I'd made my little list and say: I've read lots of things in lots of different places. What do you think of it all?" (Interview 7, mother, 34, civil servant).

Online communication tools like Messenger and WhatsApp not only enable the exchange of information but also help maintain and strengthen social support networks, which many participants highly value. Social media platforms also provide parents with a venue to display their parenting abilities and their children and to engage socially by sharing experiences that might help others. In addition, digital media can provide an alternative source of social support for parents who are distant from family or have few parental acquaintances. This enables parents to access other parents' experiences, but also to share their own, creating a sense of community: "I think this forum is mainly about feeling less alone and telling yourself: 'Wow, I'm not the only one struggling.' That helps to feel better" (Interview 9, mother, 36, student).

4.1.3.2. Social Difficulties

Discussing digital media with child- and healthcare professionals can be difficult for some parents. The interviews revealed numerous instances in which parents hesitated to discuss their online research with professionals, sometimes because they were afraid that their digital practices might be viewed as inadequate: "No, I don't tell [the doctor about what I read on the internet], I do it for myself....If I tell the doctor, he'll say: 'You don't trust me'" (Interview 30, mother, 32, unemployed).

Navigating social dynamics on digital media can be challenging, particularly with contentious topics like breastfeeding, co-sleeping, or positive parenting, which often spark debates or disagreements. Furthermore, interactions on digital media platforms like social networks can contribute to feelings of guilt among parents. Different parents stated that they encounter messages they perceive as "judgmental" or "blaming": "Because that's the danger of social networks, you quickly come across women saying: 'Oh, you shouldn't do this, you shouldn't do that!'" (Interview 19, mother, 32, florist).

4.1.4. Practical Outcomes

4.1.4.1. Facilitated Daily Management

Firstly, messaging applications facilitate childcare coordination with (ex-)partners or relatives. Tools such as shared calendars and shopping lists also facilitate parents' collaboration in planning daily tasks, like medical appointments. Secondly, digital media are used for administrative tasks related to children, such as enrolling in daycare or acquiring health insurance. Thirdly, certain digital media offer features specifically designed to simplify parents' daily lives (e.g., finding a babysitter or locating a nearby playground). They also provide convenient and accessible entertainment options for families and means to occupy, distract, or soothe children: "Oh yeah, when she has trouble falling asleep, I put on a little music from YouTube and off she goes to sleep" (Interview 25, mother, 22, unemployed).

Digital media can facilitate the preservation of sentimental moments, for example, by posting pictures on social media. Some media are specifically designed for collecting memories, such as apps to record children's first words. Digital media can also serve as a daily memory support:

> We use this app which allows us to record every time we change him, whether he's had a wee, whether he's had a poo, when he feeds at the breast, for how long and on which breast. It's very useful....He's supposed to alternate breasts, so when there are three/four hours between two feeds, it helps to keep track. And the paediatrician also asks questions like "how many times a day does he eat," "how many times does he poo," and if you don't write it down, it's impossible to remember. (Interview 14, father, 27, cycling instructor)

Finally, participants identified the economic benefits of digital media, which enable product comparisons, price checks, and the identification of discounts, leading to efficient budget management.

4.1.4.2. Daily Life Risks

Digital media can harm the daily lives of parents and pose potential risks. One of the main risks brought up by participants is associated with posting photos on social media:

> My Facebook account is not completely made public. Only my friends can see a lot, I'm careful about that....Well, so that not everyone can see what I publish, the photos of my kid, and maybe use them without my consent. (Interview 3, mother, 31, childcare worker)

Participants also highlighted the risk of a potential loss of time due to the use of digital media, which can affect the time available for other activities:

> With these Facebook pages, I come across small articles...."Your child doesn't like solid food?" with a couple of little tips on how to get them to eat solids. I'm making this up...but it ranges from practical stuff like this to...sometimes it's just a battle over first names: "What do you prefer between Julie and Ophélie?"....It's completely stupid. And I feel like I'm really wasting my time on it. (Interview 16, father, 33, psychologist)

4.2. Factors influencing Outcomes (RQ2)

The frequency of digital media use varies widely among parents, with some using it sporadically and others using it daily. The upcoming analysis does not imply that scarce or extensive use of digital media is inherently good or bad unless experienced that way by the parent. Instead, our analysis outlines factors that, whether linked to a limited or frequent use of digital media, are associated with positive or negative outcomes for the parent. Our study found that personal, situational, social, and normative factors can influence parents' ability to derive benefits from their digital media practices.

4.2.1. Personal Factors

Parent-specific characteristics that shape their confidence in their parenting abilities play an important role in their ability to achieve positive outcomes from digital media. These include anxiety levels which seem to influence parents' emotional outcomes from online information, especially when related to health. It also includes prior childcare experience (e.g., caring for younger siblings, having had other children) and the age of their current child. As parents gain experience in childcare, they tend to develop increased confidence in themselves and their parenting skills, coupled with a better understanding of their children. These factors influence their capacity to contextualise and make sense of the encountered information.

According to the matrix approach to media literacy (Fastrez, 2010), interviewed parents demonstrated sufficient technical competence in terms of their reading and navigation skills. They were most of the time able to access and use digital tools and find information when needed. Conversely, disparities emerged in terms of informational competencies, which refer to the reader's ability to make sense of content and use media and information based on their intellectual and cultural resources. Differences were also noted in the social competencies necessary for understanding and navigating digital media. These competencies include the ability to identify and evaluate the institutional context of media productions, the intentions of content

creators, and the cultural stereotypes perpetuated by the media. Among those, we observe varying degrees of content evaluation skills. The strategies implemented by participants varied among relying on search engine rankings, checking the website's name, checking for spelling errors, identifying scientific terminology, verifying the authors' identity, assessing the presence of references, and cross-referencing multiple sources. Mastering higher levels of informational competencies is important as it enables parents to effectively interpret information, discern reliable sources, make informed comparisons, and avoid feelings of confusion or being overwhelmed. An example is a mother whose capacity to contextualise information found on Instagram prevents her from feeling incompetent: "When you come across those Instagram pages where folks only share their good side, you might start thinking, 'Oh, I suck.' But once you realise they're only posting what they choose to, it's cool" (Interview 21, mother, 31, NGO project assistant).

4.2.2. Situational Factors

Media literacy not only varies among individual parents but also from one situation to another. Some parents may exhibit strong media literacy skills in specific situations, especially in evaluating sources, but show less proficiency in other contexts. Online readings driven by anticipation or curiosity, rather than in response to immediate questions, appear to result in fewer negative emotional outcomes. Factors such as fatigue, stress, and time constraints can hinder the effective application of media literacy skills. Paradoxically, the same factors are cited by parents as reasons for resorting to digital media: "Because when you're exhausted, and your baby won't stop crying, in the beginning, it's something I could type in easily on the internet, on Google" (Interview 2, mother, 32, special needs teacher). However, a sense of urgency can also prompt parents to bypass digital media in favour of other sources such as healthcare professionals.

4.2.3. Social Factors

Positive experiences are often reported by parents who have a supportive social network available to discuss and reflect upon their digital findings. This network enables parents to interpret encountered information, evaluate it, and make collective decisions. While partners play a primary role, discussions about online content also extend to other close individuals, particularly those who are fellow parents: "I didn't discuss my readings about food diversification with doctors, but I did discuss it with people close to me, and of course with my partner, the baby's dad, to figure out what we were going to do" (Interview 8, mother, 39, media animator).

Simultaneously, having significant social support can reduce digital media use without necessarily increasing negative outcomes. This support serves as an alternative avenue to address parents' informational, emotional, material, and social needs. Digital media thus yields positive outcomes for parents with lower social support (e.g., being distant from family or having few friends who are also parents), bridging social and informational gaps and addressing feelings of isolation: "So, between friends and family, I've basically got my answers and I've got my parental support for pretty much everything" (Interview 15, mother, 33, administrative manager).

4.2.4. Normative Factors

The interviews reveal that many parents seem to perceive expectations regarding their media practices. Parents shared instances where they felt judged by healthcare professionals regarding their use of digital media:

I've kinda of brought it up a little before, but they quickly get all defensive when you mention the internet. I get it because there are a lot of people who fancy themselves a doctor because of the internet now. So yeah, I don't really go into it with them. (Interview 19, mother, 32, florist)

The apprehension of judgment, or the experience of feeling judged, diminishes parents' willingness to share their digital experiences with professionals, consequently limiting their ability to fully benefit from these resources. In contrast, parents who are at ease discussing their media consumption with professionals can validate or converse about their online findings. Such interactions facilitate their understanding and decision-making processes regarding the information gathered from digital media.

5. Discussion and Conclusion

This study contributes to the literature on digital inclusion by focusing on how parents use and experience digital media. The main objective was to gain a nuanced and contextualised understanding of the way parents benefit from digital media and to provide insights into the digital divide among this group, beyond questions of access and skills. The findings align with past research, which indicates that digital media can have both positive and negative effects on parenthood (Lupton, 2016; Neill et al., 2015). However, this study is the first attempt to examine the full scope of parents' digital practices and their outcomes via a qualitative methodology that combines inductive and deductive approaches.

Previous studies have suggested how digital media can lead to social, political, economic, cultural, and personal outcomes (Ragnedda et al., 2022; van Deursen et al., 2014). This study, for its part, highlighted informational, emotional, social, and practical outcomes of digital media use in the context of parenthood. The interviews revealed that digital media can provide parents with valuable opportunities, such as convenient childcare purchases, efficient daily organisation, and access to informational resources, social connections, and emotional support. These findings support prior studies that indicate that failing to derive benefits from digital media can be viewed as a form of digital exclusion that can reinforce social exclusion (Helsper, 2012; Ragnedda et al., 2022). The results also confirm previous findings that digital media may lead to certain negative outcomes, such as the well-documented effects of information overload or anxiety related to health information (Gage & Panagakis, 2012). This study adds that parents may also experience feelings of incompetence or guilt when using digital media. These negative outcomes frame digital media as a potential challenge in the context of parenting.

Secondly, this study sought to document the factors that may contribute to positive or negative outcomes. The literature on digital inclusion has shown that individuals, including parents, possess varying levels of media access and skills (Hargittai, 2010; van Laar et al., 2020). This study did not address access from a statistical point of view given its qualitative nature. However, it is worth noting that all interviewees had access to a smartphone and the internet, even those with comparatively more limited socio-economic conditions. Differences in levels of access (e.g., number of technological devices) were nonetheless observed. Our findings on media literacy are consistent with existing literature, indicating varying levels among parents. One key contribution of this study is its demonstration that media literacy and digital outcomes are influenced not only by socio-economic factors, but also vary for the same parent depending on personal, situational, and normative factors, which have received limited attention in the literature.

The theoretical framework underscored two other key points: the lack of support for parents regarding digital matters (Livingstone et al., 2018) and the pivotal role of healthcare, childcare, and family support professionals as resources for parents seeking information, constructing their parenthood, and obtaining social support (Holappa et al., 2012; Rolfe & Armstrong, 2010). This potential role is further reinforced in the Belgian context, where parents can easily access these professionals. For instance, prenatal consultations and consultations for children under the age of seven are provided free of charge. This article therefore suggests ways professionals can support parents in avoiding negative outcomes while deriving benefits from their digital media practices. Two factors emerge as particularly pertinent and actionable: parents' media literacy and normative issues. Addressing these elements can positively influence parents' self-confidence and emotional well-being, which in turn could contribute to a positive digital media experience. Two lines of action can address these factors: adopting a comprehensive approach to digital media and promoting media literacy.

The societal norms surrounding digital media use, as perceived by our participants, and the pressure to adhere to these norms can lead parents to conceal information or misrepresent their practices due to fear of judgment or seeming incompetent. The interviews align with prior research, unveiling that parents' information-seeking behaviours go beyond factual needs to include a fundamental need for reassurance. Findings also highlight a double bind that parents face. While many childcare and parenting support professionals commonly encourage parents to trust their instincts, parents simultaneously perceive the need or the importance of seeking information. In today's digital age, many parents resort to online resources. Society, including professionals, may criticise these resources and their use. This can destabilise parents and undermine their self-confidence and their willingness to discuss their digital practices. This situation presents a challenge for professionals in effectively assisting parents with their digital experiences and in mitigating negative outcomes. By embracing a positive, holistic, and proactive stance towards digital media, professionals can establish themselves as accessible and open-minded conversational partners in discussions about digital media usage. This requires challenging and deconstructing the prevailing belief that media primarily exert negative and immediate effects. Rather, digital media should be recognised as a societal phenomenon, one that brings both challenges and opportunities. Overcoming biases, avoiding judgments, actively listening to parents' needs and experiences, and dedicating specific time during consultations on digital matters represent valuable avenues to address the complexities of digital media. This includes addressing online medical information by acknowledging that parents' information practices extend beyond mere factual needs to encompass emotional and social needs. We also suggest that organising meetings for parents to specifically discuss their digital practices could help break the taboo surrounding digital media in a supportive environment. By facilitating exchanges on digital tools and resources, these meetings could encourage parents to explore alternative practices and reconsider their approach to digital media, while aligning with their consistent need to connect with others, share insights, seek support, and find reassurance.

However, formally addressing parents' media literacy skills may also prove beneficial. This study highlights significant variations in digital media skills among individuals and across different situations. It underscores the need to enhance parents' information and social literacy skills (Fastrez, 2010), which are crucial in overcoming challenges that diminish the positive outcomes of digital media practices. Improvement in these areas should focus on developing parents' abilities to understand media messages, evaluate sources, and interpret encountered information. This objective could be addressed through the development of tools aiming to help parents autonomously engage with and evaluate digital media. For example, a comprehensive

step-by-step guide could be created, offering essential insights and practical tips for navigating digital platforms and promoting critical attitudes and behaviours when interacting with diverse content.

Moreover, childhood and parenting support professionals can play a crucial role in enhancing parents' media literacy through educational initiatives. Professionals would benefit from essential knowledge, tools, and expertise in adult media education. Consequently, addressing the media literacy needs of these professionals becomes just as important, and effective solutions could involve the implementation of training programmes, media literacy workshops, and the creation of digital media-centric support groups involving both parents and professionals. Media education initiatives could be organised in partnership with specialised organisations. These initiatives can include separate programmes tailored for professionals to feel equipped to support and engage with parents, as well as joint initiatives targeting both parents and professionals. Professionals could not only gain insights into unfamiliar media but also find reassurance in observing firsthand the digital practices of parents. In this context, enhancing the media literacy of both professionals and parents can facilitate productive dialogues between them, thereby enhancing support within the community. This could help foster digital inclusion by empowering parents to maximise the benefits of digital engagement.

In conclusion, this study has shed light on the multifaceted dimensions of parents' experiences with digital media, providing valuable insights regarding their digital inclusion beyond access and usage. It contributes to an under-researched branch of digital inclusion literature by focusing on the tangible outcomes of digital media use, here in the context of parenthood. Moreover, going beyond documentation and conceptualisation, this study proposes actionable plans to address digital inclusion in practical settings. Despite the qualitative and contextualised nature of this research, it offers an opportunity to comprehend the intricacies of parenting in the digital age and paves the way for targeted interventions that can improve the digital and social inclusion of parents.

Conflict of Interests
The authors declare no conflict of interests.

References
Abidin, C. (2017). #familygoals: Family influencers, calibrated amateurism, and justifying young digital labor. *Social Media + Society*, *3*(2). https://doi.org/10.1177/2056305117707191

Alcalá, L. A. (2019). Media literacy among the elderly. In R. Hobbs & P. Mihailidis (Eds.), *The international encyclopedia of media literacy* (pp. 763–768). Wiley Blackwell.

Ammari, T., & Schoenebeck, S. (2015). Networked empowerment on Facebook among parents of children with special needs. In B. Begole & J. Kim (Eds.), *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 2805–2814). Association for Computing Machinery.

Arif, N., Al-Jefri, M., Bizzi, I. H., Perano, G. B., Goldman, M., Haq, I., Chua, K. L., Mengozzi, M., Neunez, M., Smith, H., & Ghezzi, P. (2018). Fake news or weak science? Visibility and characterization of antivaccine webpages returned by Google in different languages and countries. *Frontiers in Immunology*, *9*, Article 1215. https://doi.org/10.3389/fimmu.2018.01215

Beuckels, E., & De Jans, S. (2022). "My mom got influenced by yours": The persuasiveness of mom influencers in relation to mothers' food assessments and decisions. *Appetite*, *178*, Article 106269. https://doi.org/10.1016/j.appet.2022.106269

Blum-Ross, A., & Livingstone, S. (2017). "Sharenting," parent blogging, and the boundaries of the digital self. *Popular Communication*, *15*(2), 110–125.

Boulianne, S. (2020). Twenty years of digital media effects on civic and political participation. *Communication Research*, *47*(7), 947–966.

Bunnag, K. (2012). Factors affecting media literacy of early teenagers. *International Journal of Humanities and Social Sciences*, *6*(10), 2599–2603.

Butler, A. E., Copnell, B., & Hall, H. (2018). The development of theoretical sampling in practice. *Collegian*, *25*(5), 561–566.

Chetty, K., Qigui, L., Gcora, N., Josie, J., Wenwei, L., & Fang, C. (2018). Bridging the digital divide: Measuring digital literacy. *Economics*, *12*(1), 1–20.

Claes, A., & Philippette, T. (2020). Defining a critical data literacy for recommender systems: A media-grounded approach. *Journal of Media Literacy Education*, *12*(3), 17–29.

Dervin, B. (1992). From the mind's eye of the user: The sense-making qualitative-quantitative methodology. *Qualitative Research in Information Management*, *9*(1), 61–84.

Dervin, B., Foreman-Wernet, L., & Lauterbach, E. (2003). *Sense-making methodology reader: Selected writings of Brenda Dervin*. Hampton Press.

Drouin, M., McDaniel, B. T., Pater, J., & Toscos, T. (2020). How parents and their children used social media and technology at the beginning of the Covid-19 pandemic and associations with anxiety. *Cyberpsychology, Behavior, and Social Networking*, *23*(11), 727–736.

Eristi, B., & Erdem, C. (2017). Development of a media literacy skills scale. *Contemporary Educational Technology*, *8*(3), 249–267. https://doi.org/10.30935/cedtech/6199

Fastrez, P. (2010). Quelles compétences le concept de littératie médiatique englobe-t-il? Une proposition de définition matricielle. *Recherches en Communication*, *33*, 35–52.

Gage, E. A., & Panagakis, C. (2012). The devil you know: Parents seeking information online for paediatric cancer. *Sociology of Health & Illness*, *34*(3), 444–458.

Garbutt, J. M., Leege, E., Sterkel, R., Gentry, S., Wallendorf, M., & Strunk, R. C. (2012). What are parents worried about? Health problems and health concerns for children. *Clinical Pediatrics*, *51*(9), 840–847.

Glushko, R. J. (2016). *The discipline of organizing: Professional edition*.

Greyson, D. (2017). Health information practices of young parents. *Journal of Documentation*, *73*(5), 778–802.

Hargittai, E. (2010). Digital na(t)ives? Variation in internet skills and uses among members of the "net generation." *Sociological Inquiry*, *80*(1), 92–113.

Hartwig, E. K. (2016). Social networks: A village of support for single mothers. *Journal of Family Social Work*, *19*(1), 22–37. https://doi.org/10.1080/10522158.2015.1112333

Haslam, D. M., Tee, A., & Baker, S. (2017). The use of social media as a mechanism of social support in parents. *Journal of Child and Family Studies*, *26*(7), 2026–2037.

Helsper, E. J. (2012). A corresponding fields model for the links between social and digital exclusion. *Communication Theory*, *22*(4), 403–426.

Hobbs, R. (2010). *Digital and media literacy: A plan of action*. The Aspen Institute. https://www.aspeninstitute. org/wp-content/uploads/2010/11/Digital_and_Media_Literacy.pdf

Holappa, M., Ahonen, R., Vainio, K., & Hämeen-Anttila, K. (2012). Information sources used by parents to learn about medications they are giving their children. *Research in Social and Administrative Pharmacy*, *8*(6), 579–584.

Jacques, J. (2016). *Définition des compétences propres à l'organisation des collections d'informations personnelles numériques* [Unpublished doctoral dissertation]. UCLouvain.

Jacques, J., Grosman, J., Collard, A.-S., Oh, Y., Kim, A., & Jeong, H.-S. (2020). "In the shoes of an algorithm": A media education game to address issues related to recommendation algorithms. *The Institute for Education and Research Gyeongin National University of Education*, *3*(1), 37–62.

Jang, S. (2005). The past, present, and future research of online information search. In J. E. Mills & R. Law (Eds.), *Handbook of consumer behavior, tourism, and the internet* (pp. 41–47). Routledge.

Jones, W. (2010). *Keeping found things found: The study and practice of personal information management*. Morgan Kaufmann.

Kildare, C. A., & Middlemiss, W. (2017). Impact of parents mobile device use on parent-child interaction: A literature review. *Computers in Human Behavior*, *75*, 579–593.

Knitter, B., & Zemp, M. (2020). Digital family life: A systematic review of the impact of parental smartphone use on parent–child interactions. *Digital Psychology*, *1*(1), 29–43.

Kotwal, N., & Prabhakar, B. (2009). Problems faced by single mothers. *Journal of Social Sciences*, *21*(3), 197–204.

Kulviwat, S., Guo, C., & Engchanil, N. (2004). Determinants of online information search: A critical review and assessment. *Internet Research*, *14*(3), 245–253.

Ligurgo, V., Philippette, T., Fastrez, P., Collard, A.-S., & Jacques, J. (2018). A method combining deductive and inductive principles to define work-related digital media literacy competences. In S. Kurbanoğlu, J. Boustany, S. Špiranec, E. Grassian, D. Mizrachi, & L. Roy (Eds.), *Information literacy in the workplace* (pp. 245–254). Springer.

Livingstone, S., Blum-Ross, A., Pavlick, J., & Ólafsson, K. (2018). *In the digital home, how do parents support their children and who supports them?* LSE Department of Media and Communications. https://www.stjosephsrc. co.uk/wp-content/uploads/2019/08/P4DF-Survey-Report-1-In-the-digital-home.pdf

Lupton, D. (2016). The use and value of digital media for information about pregnancy and early motherhood: A focus group study. *BMC Pregnancy and Childbirth*, *16*(1), Article 171.

Lupton, D., Pedersen, S., & Thomas, G. M. (2016). Parenting and digital media: From the early web to contemporary digital society. *Sociology Compass*, *10*(8), 730–743.

Malone, T. W. (1983). How do people organize their desks? Implications for the design of office information systems. *ACM Transactions on Information Systems*, *1*(1), 99–112.

Martínez-Cantos, J. L. (2017). Digital skills gaps: A pending subject for gender digital inclusion in the European Union. *European Journal of Communication*, *32*(5), 419–438.

McDaniel, B. T. (2019). Parent distraction with phones, reasons for use, and impacts on parenting and child outcomes: A review of the emerging research. *Human Behavior and Emerging Technologies*, *1*(2), 72–80.

Mikolajczak, M., & Roskam, I. (2017). *Le burn-out parental: L'éviter et s'en sortir*. Odile Jacob.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. SAGE.

Monvoisin, R. (2007). *Pour une didactique de l'esprit critique—Zététique et utilisation des interstices pseudoscientifiques dans les médias* [Unpublished doctoral dissertation]. Université Joseph-Fourier— Grenoble I.

Neill, S. J., Jones, C. H. D., Lakhanpaul, M., Roland, D. T., & Thompson, M. J. (2015). Parent's information seeking in acute childhood illness: What helps and what hinders decision making? *Health Expectations*, *18*(6), 3044–3056.

Patriarche, G., Fastrez, P., Philippette, T., De Smedt, T., Ligurgo, V., Collard, A.-S., & Dufrasne, M. (2017). Digital media literacy in the workplace: A model combining compliance and inventivity. *Italian Journal of Sociology of Education*, *9*(1), 122–154.

Potter, W. J. (2018). *Media literacy*. SAGE.

Prikhidko, A., Long, H., & Wheaton, M. G. (2020). The effect of concerns about Covid-19 on anxiety, stress, parental burnout, and emotion regulation: The role of susceptibility to digital emotion contagion. *Frontiers in Public Health*, *8*, Article 567250. https://doi.org/10.3389/fpubh.2020.567250

Ragnedda, M., Ruiu, M. L., & Addeo, F. (2022). The self-reinforcing effect of digital and social exclusion: The inequality loop. *Telematics and Informatics*, *72*, Article 101852. https://doi.org/10.1016/j.tele.2022.101852

Reisdorf, B., & Rhinesmith, C. (2020). Digital inclusion as a core component of social inclusion. *Social Inclusion*, *8*(2), 132–137.

Rogow, F. (2011). Ask, don't tell: Pedagogy for media literacy education in the next decade. *Journal of Media Literacy Education*, *3*(1), 16–22.

Rolfe, S. A., & Armstrong, K. J. (2010). Early childhood professionals as a source of social support: The role of parent–professional communication. *Australasian Journal of Early Childhood*, *35*(3), 60–67.

Smit, A., Swart, J., & Broersma, M. (2024). Bypassing digital literacy: Marginalized citizens' tactics for participation and inclusion in digital societies. *New Media & Society*. Advance online publication. https://doi.org/10.1177/14614448231220383

Sorbring, E. (2014). Parents' concerns about their teenage children's internet use. *Journal of Family Issues*, *35*(1), 75–96.

Talib, S. (2018). Social media pedagogy: Applying an interdisciplinary approach to teach multimodal critical digital literacy. *E-Learning and Digital Media*, *15*(2), 55–66.

Tilleul, C. (2023). Young adults' social network practices and the development of their media literacy competences: A quantitative study. *Information, Communication & Society*, *26*(10), 2107–2125. https://doi.org/10.1080/1369118x.2022.2072751

van Deursen, A., van Dijk, J., & Helsper, E. (2014). *Investigating outcomes of online engagement* (Working Paper No. 28). Media@LSE. https://eprints.lse.ac.uk/59994/1/Helsper_etal_Media%40LSE-WP28_Investigating-outcomes-of-online-engagement_2014.pdf

van Laar, E., van Deursen, A. J. A. M., van Dijk, J. A. G. M., & de Haan, J. (2020). Determinants of 21st-century skills and 21st-century digital skills for workers: A systematic literature review. *SAGE Open*, *10*(1). https://doi.org/10.1177/2158244019900176

Vermersch, P. (2012). *Explicitation et phénoménologie: Vers une psychophénoménologie*. PUF.

Verswijvel, K., Walrave, M., Hardies, K., & Heirman, W. (2019). Sharenting, is it a good or a bad thing? Understanding how adolescents think and feel about sharenting on social network sites. *Children and Youth Services Review*, *104*, Article 104401. https://doi.org/10.1016/j.childyouth.2019.104401

Yardi, S., Caldwell, P. H., Barnes, E. H., & Scott, K. M. (2018). Determining parents' patterns of behaviour when searching for online information on their child's health. *Journal of Paediatrics and Child Health*, *54*(11), 1246–1254.

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