

Connected caregiving: investigating mothers in the era of digital access

Anissa Saidi¹, Wong Yee Von¹, Tirzah Zubeidah Zachariah @ Omar¹, Lim Seong Pek²,
Rita Wong Mee Mee³, Khoo Kim Leng⁴

¹Department of Language Studies, Faculty of Education and Social Sciences, University Selangor, Batang Berjuntai, Malaysia

²Faculty of Education and Liberal Arts, INTI International University, Negeri Sembilan, Malaysia

³Centre for Language, National Defence University of Malaysia, Kuala Lumpur, Malaysia

⁴School of Management and Marketing, Taylor's University, Subang Jaya, Malaysia

Article Info

Article history:

Received Mar 7, 2024

Revised Sep 29, 2024

Accepted Oct 22, 2024

Keywords:

Digital access

Mother

Motherhood

Mothering

Technology

ABSTRACT

Mothers have embraced and utilized digital access for nurturing and personal use to enhance their roles while balancing newfound demands. The Internet has provided mothers access to information on various topics, including pregnancy, childbirth, and infant care. Social media tools and platforms have also provided mothers with a space to connect with other mothers, share experiences, and seek support. This scoping review aims to identify the relationship of the focus skills among mothers in utilizing digital access. Four databases, including Scopus, web of science (WOS), education resources information centre (ERIC), and ScienceDirect, were used in this research, which found 36 articles for eligibility. Only 16 articles are eligible for analysis and reference after the exclusion and inclusion process for data collection. Based on the 16 publications examining mothers' use of internet access, four essential skills have been identified. These included social, digital, cultural, and problem-solving skills and are acknowledged as being related to digital access mothering. The findings show these skills are offered to mothers through digital access, fostering diverse skill sets, contributing to their empowerment, and supporting sustainable development goal 5: gender equality, aiming to enhance women's roles and ensure equal opportunities through digital inclusion.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Wong Yee Von

Department of Language Studies, Faculty of Education and Social Sciences, University Selangor

Batang Berjuntai, Selangor, Malaysia

Email: yeevonwong@unisel.edu.my

1. INTRODUCTION

Digital technologies have completely changed how everyone acquires knowledge and information [1], including significant changes in the lives of mothers, shaping their roles and responsibilities [2]. Motherhood is a universal yet deeply personal journey of one experiencing maternal roles in the qualities [3] while performing and displaying motherhood to the family and wider audience, like social norms of motherhood or societal developments in the practice of mothering [4]. When mothers need to take their time and energy into their children to establish strong "attachments" [5], mothering becomes the act of a nurturer to shape and guide children's lives [6]. This act is presumed to be best satisfied when the mother is physically present and meets the child's needs [7]. When mothers watch their children, identify their cues and preferences, and attend to their needs [7], it gives them the finest care possible.

In a survey conducted in Cyprus by Özgen and Ekşi [8], 97.5% of mothers have used the internet to look up information on various topics, such as pregnancy, childbirth, and baby care. In line with Malaysian statistics from the National Library (2022) [9], 69.8% of parents whose children were between the ages of 7 and 12 used digital resources to aid in their kids' education. Mothers in the digital world have the chance to share experiences, seek advice, and build friendships that transcend geographical boundaries [2]. The availability of cloud computing [10], health informatics [10], or ICTS [11] is essential for career mothers in the digital era as it improves digital access to careers and makes data management, decision-making, and service delivery more efficient. An empowered woman can positively impact a family [12].

While the journey is often romanticized and idealized, it is full of complexities, joys, and challenges that require in-depth exploration of mothers' relationship with digital access [13]. For instance, a scoping study by Rahayu and Haningsih [14] in Indonesia found that mothers using digital access were at the basic level in facilitating digital competence. This research aims to delve into the mothers in the era of digital access, exploring how technology impacts their daily lives, parenting styles, relationships, and overall well-being. By examining the intersection of motherhood and digital access, this scoping review will shed light on the challenges, opportunities, and implications for mothers navigating this digital age. Through delving into the experiences and behaviors of mothers in the digital world, this review aims to present valuable insights into the understanding of contemporary motherhood in a digitally connected world.

2. RESEARCH METHOD

The scoping review met the preferred reporting items for systematic reviews (PRISMA) criteria. Table 1 lists the research questions and specific aims that guided the review process. The methodological framework developed in the PRISMA guidelines [15] served as the foundation for the scoping review and comprised several key steps: (1) identification of research questions; (2) identification of relevant studies; (3) selection of relevant studies; (4) collection of data; and (5) collation, summarisation and reporting of results. This strategy aimed to collect as many relevant studies as possible using appropriate search terms related to the relationship between mothers and digital access, as indicated in Table 2. The search strategy was implemented in various databases, including Scopus, web of science (WOS), ScienceDirect and education resources information centre (ERIC), using a search string to capture relevant literature. The inclusion and exclusion criteria listed in Table 3 ensured that only relevant studies published from 2020 onwards, written in English and available in full text, were considered for analysis. This comprehensive approach enabled a thorough examination of the existing literature on mothers and digital access to improve understanding and provide information for future research.

Table 1. Research questions were formed based on problem-centered curriculum (PCC)

Research questions	Specific objectives
1. How are past studies on mothers in digital access distributed?	1. To explore the temporal and geographical relationship and the setting of past studies.
2. What research design was used by past studies on mothers in digital access?	2. To determine the research method used in past studies
3. What are the research aims of past studies on mothers in digital access?	3. To analyze the research purpose of past studies on mothers in digital access to improve mother's learning.
4. What skills of the study were found in past studies on mothers in digital access?	4. To investigate the skills that have been researched in past studies.
5. What are the findings of past studies on the impact of mothers on digital access?	5. To report the results of past studies on the impact of mothers on digital access.

Table 2. Search string

Search directory	Search string
1. Scopus	(mother*) AND (digital* OR technolog*) AND (behav*) AND (manner*)
2. WoS	TS= ((mothering*) AND (digital* OR technology*))
3. ScienceDirect	digital AND mothering
4. ERIC	digital AND mothering

Using a representative selection of the studies to be analyzed and a Microsoft Excel-based data collection form, the research team identified the elements of the articles that needed to be extracted for summarisation and analysis. The finalized structure of the data table was used to find the following study elements: author, year of publication, country of origin, study source, study purpose, research design, study elements, and findings. In addition, the research team summarised and reported the results of the charting

process. The results were then organized by applying codes and keywords to minimize the data and limit it to related content. The codes and keywords are revised to ensure that the data collected is relevant to the study and summarised into pre-defined categories. Table 3 shows the criteria for inclusion in the study. Although the results were prepared according to PRISMA principles, protocols for scoping reviews are unsuitable for PROSPERO publication [16]. The titles and abstracts for each publication use predetermined inclusion and exclusion criteria.

Table 3. Inclusion and exclusion criterion

Inclusion criterion		Exclusion criterion	
1.	Article published from 2020-Recent	1.	Article published before 2020
2.	Related to mothers	2.	Not related to mothers
3.	Text in the English language	3.	Other languages
4.	Full text available	4.	Without full text

3. RESULTS AND DISCUSSION

The search found 101 articles in four selected databases: Scopus, WOS, ERIC, and ScienceDirect. Figure 1 shows that 25 titles were extracted from the Scopus database, while 72 were identified from the WOS database. During the identification phase, 4 titles were downloaded from ERIC, and 4 titles were found in ScienceDirect databases. Of the 101 articles, 5 duplicate titles were excluded, leaving 96 to be screened for eligibility. In addition, 72 titles were excluded from the review by title and abstract. Thus, 36 titles were checked for suitability by data extraction. A total of 21 titles were excluded as they did not fulfil the inclusion criteria. Therefore, 16 titles were identified and included in this review.

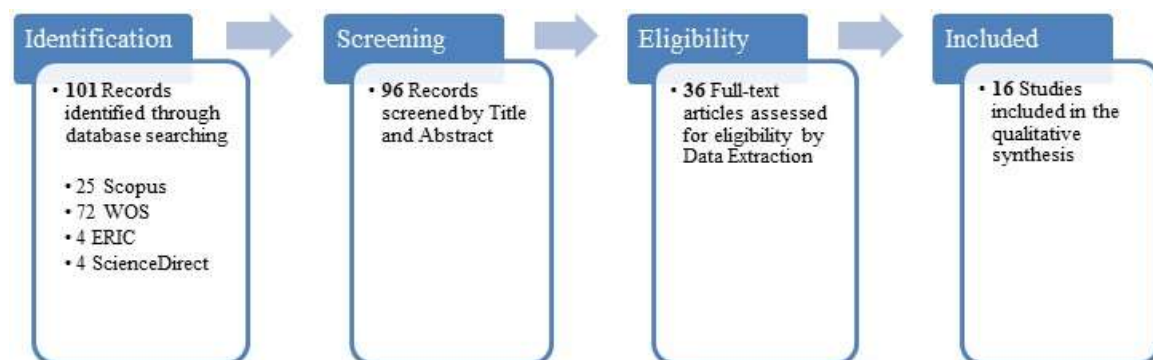


Figure 1. Flow diagram of this scoping review

3.1. Distribution of past studies

The studies that were included in this review were published between the years 2020 and 2023. In 2020, two articles were found [17], [18] in the research of mothers in digital access. In 2021, On the other hand, three articles were found on the same topic, which was [19]-[21] from the four databases. In 2022, five articles were identified [22]-[26], while six articles were found in 2023 [27]-[32] as the largest amount of mothers in digital access.

According to the distribution by region, Europe has published the most studies with $n=10$ about mothers in digital access. On the other hand, $n=3$ studies were carried out in the Oceania region. While North Africa placed third, $n=2$, in Asia and the Middle East, respectively, there was only $n=1$ research found based on past studies. In terms of the distribution by nation, the United Kingdom [21], [23], [25] and Australia [18], [30], [31] had the greatest number of studies with $n=3$. Meanwhile, the Netherlands [19], [24] and Canada [17], [22] placed the second highest with $n=2$, respectively. On the other hand, seven nations from China [27], Latvia [28], Sweden [26], Finland [20], Turkey [32], and England [29] were recorded with $n=1$ each.

3.2. Research design used in past studies

From the accumulated 16 studies, $n=4$ [19], [23], [30], [21] were found in the interview research design. Followed by three studies found with $n=3$, which were case study [24], [25], [31], narrative research [20], [22], [28], and ethnographic research [17], [26], [32]. Furthermore, semi-structured interviews were found with $n=2$ [18], [28]. Lastly, [27] with only $n=1$ survey study.

3.3. Research aims of past studies

There were three categories of aims for conducting a study on mothers in digital access. The highest recorded with $n=6$ studies [17], [21], [22], [24], [25], [28] aims to cultivate digital experiences among mothers such as digital foodscapes and promoting digital literacy among mothers. Consequently, there were two categories recorded $n=5$ studies [19], [26], [30]-[32] recorded which focused on the mother empowerment, justice-seeking, and gender-sensitive approach. Just as important in the aim, where it investigates motherhood behavior [18], [20], [23], [27], [29] like self-expression and unhappiness for instance.

3.4. Focus skills of the studies

There were four main skills identified from the 16 articles. There were two highest-recorded skills found in the 16 articles. Firstly, the cultural skills with $n=5$ studies, speaking up about gender roles and activism [19], [22], [26], [30], [32]. Secondly, the social skills with $n=5$, [17], [20], [23], [27], [28] diving into communication between mothers in social media. Thirdly, with $n=4$ studies, one of the skills was digital skills [18], [21], [24], [31] about digital literacy and digital mothering. Lastly, with $n=2$, respectively, [25], [29] focused on problem-solving skills, such as the idealization of mothering on the online site.

Digital platforms can provide mothers with easily accessible resources on child development and parenting strategies [33]. Online courses, interactive tutorials, and informative apps can give mothers the necessary knowledge and make them confident and effective carers [34]. Understanding and critically evaluating online information and differentiating reliable sources from misinformation is important to find relevant and trustworthy maternal and child health resources [35]. Mothers with better digital skills are more likely to search the internet for information about their child's health and development [36]. Four essential skills were identified based on 16 publications examining mother's internet use. These include social, digital, cultural, and problem-solving skills. These skills are recognized to be associated with mothers' digital access.

3.4.1. Cultural skills among mothers in cultural narratives

Firstly, mothers' cultural skills in digital access are prevalent in cultural narratives. Ooryad [26] suggests that cultural skills in digital access in the digital experience of empowered mothers into their online communications to promote empathy, demand equality, and embrace gender roles. Mothers are fighting for justice and addressing their movement's historical, legal, and generational implications and current political developments [37]. Due to food insecurity, where less than 15% of people consume more than five of nine food groups, mothers' activism focused on improving access to essentials [38]. Besides, empowering mothers with cultural skills allows mothers to navigate cultural identity, societal integration, and digital media integration [39]. We can conclude that empowering mothers with cultural skills in the digital age is crucial, where mothers the role models within families and society, influencing future generations through their ambition, drive, and focus on education [40].

3.4.2. Social skills among mothers in cultural narratives

Based on the findings, mothers who have the skills to feel safe and belong to the community helped grow together as mothers. Mothers actively engage in online communities, receive information and advice at once, develop a sense of belonging, and share experiences [41]. This sense of community, fostered by strong social skills, and valuable for mothers who feel isolated or lack physical support networks [42]. Mothers who feel a sense of belonging [31], vulnerable mothers often feel pressured to achieve impossible and unjustified standards of motherhood [39]; there is a growth of personal blogs where mothers share details of their personal lives and frustrations and confess to being 'bad mothers' [43]. Many state the intention to scatter the motherhood myths and bring out the ideals of good motherhood. By strengthening mothers' strong connections and speaking their minds about the challenges of motherhood, they will not only receive valuable support and information for the knowledge as carers but also encourage a healthier view of motherhood, which ultimately empowers them to manage their roles effectively.

3.4.3. Digital skills among mothers in digital landscapes

Mothers' digital skills positively influence online experiences as tools. The expectation of being happy and satisfied with their position as a mother is a reality; mothers must follow the norm [44]. Based on our findings, the acquisition of mothers' digital skills has improved the practice of service providers in communities and families, opened opportunities for supportive, idealizing online practice, and promoted digital literacy. Digital literacy utilizes information and communication technologies (ICT) to find, evaluate, create, and communicate information. It enables individuals to navigate the digital world effectively [11]. Mothers who connected and collaborated online in their professional roles were shown to feel empowered and supported [12] and could think more critically about how systems work and whether they encourage

flexibility or discourage boundary pushing [21]. In addition, digital literacy enables mothers to create content using information technologies on the Internet. Donelle *et al.* [45] found that newly pregnant mothers used the Internet to obtain resources and create and consume content related to their lives and experiences.

3.4.4. Problem-solving skills among mothers in the digital era

“Good mothers” are often never good enough and always go the extra mile with the endless changes in the digital sphere [46]. Problem-solving skills are critical for mothers to adapt, learn new technologies [26] and effectively share accurate and helpful information within their online communities [47]. The findings show that acquiring problem-solving skills enables mothers to unleash their creativity and idealize themselves online. A study by Barnes [25] explores how digital food landscapes provide a platform for mothers to showcase their creativity in preparing bento for their children. The use of popular micro-celebrities [48] and digital food influencers [49] as food inspirations illustrates how the act of online idealization as a mother has a lot of behind-the-scenes work that often goes unnoticed in cultural narratives and digital practices, leading to both creative expression and disguised labor, reflecting the complexity of modern motherhood. From Das and Mishra [50] emphasize the role of mothers in food preparation and decision-making. They ensure their children eat a balanced diet, are open to new foods [25], and advocate for a plant-based diet and lifestyle and wellness counseling [51]. According to a study by Bliznashka and Jeong [52], children of empowering mothers performed better on tests measuring cognitive development and healthier eating and were not stunted or wasteful.

3.5. Overall findings of past studies

Understanding the challenges faced by mothers and the strategies they employ is crucial for achieving sustainable development goal 5: gender equality. Empowering women through digital access not only promotes gender equality but also contributes to other SDGs related to economic growth, decent work, and poverty reduction [53]. Based on this scoping review conducted, significant findings were identified from the 16 articles reviewed. The first findings were related to mothers belonging as part of the community involved in n=5 studies [18], [20], [21], [28], [31]. Results from two findings with n=4 studies, the first [19], [26], [30], [32] mothers pursued justice and broader societal support, along with n=4 [23]-[25], [29] state online idealization in motherhood. Lastly, with n=3, studies showed a negative association with devices [17], [22], and [27], respectively.

4. CONCLUSION

Mothers in the digital age face opportunities and challenges, highlighted by the influence of digital access on motherhood. Mothers gain important cultural, social, digital, and problem-solving skills that enable them to be better nurturers as they leverage digital tools to seek community, support, and knowledge. Social skills help mothers feel supported and belong in online networks, while cultural skills help mothers handle society’s expectations and fight for their rights. Having digital skills makes it easier for mothers to access important data and resources, which helps them make wise decisions. Despite these positives, the journey to motherhood is often seen as a “personal journey” between mothers due to societal and motherhood pressure in digital spaces that leads mothers to feel incompetent and doubt their role as mothers. This scoping review emphasizes the importance of understanding motherhood with digital technologies and the interactions that impacted their act of mothering and relationships and influenced their overall well-being. Exploring the intersection of motherhood and digital access highlights the need to recognize the complexity of mothers’ experiences in a digitally connected world.

ACKNOWLEDGEMENTS

We extend our thanks to the Malaysian Minister of Higher Education for providing funding for this study through the Fundamental Research Grant Scheme (FRGS Nos. FRGS/1/2023/SS10/UNISEL/03/2) and Universiti Selangor (UNISEL) for supporting this study.

REFERENCES





- [1] T. S. Cooner, L. Beddoe, H. Ferguson, and E. Joy, “The use of Facebook in social work practice with children and families: exploring complexity in an emerging practice,” *Journal of Technology in Human Services*, vol. 38, no. 2, pp. 137–158, Oct. 2019, doi: 10.1080/15228835.2019.1680335.
- [2] N. Sawalha and V. Karnowski, “Digital motherhood,” *European Journal of Health Communication*, vol. 3, no. 3, pp. 69–91, Sep. 2022, doi: 10.47368/ejhc.2022.304.
- [3] W. Y. Hwang, S. Y. Choi, and H. J. An, “Concept analysis of the transition to motherhood: a methodological study,” *Korean Journal of Women Health Nursing*, vol. 28, no. 1, pp. 8–17, Mar. 2022, doi: 10.4069/kjwhn.2022.01.04.

- [4] D. H. J. Morgan, "Family practices in time and space," *Gender, Place and Culture*, pp. 1–11, Jan. 2019, doi: 10.1080/0966369x.2018.1541870.
- [5] C. Berghammer and M. A. Milkie, "Felt deficits in time with children: Individual and contextual factors across 27 European countries," *The British Journal of Sociology*, vol. 72, no. 5, pp. 1168–1199, Oct. 2021, doi: 10.1111/1468-4446.12899.
- [6] E. Hulen, "What is natural is best: a qualitative exploration of women's engagement in attachment parenting," *Journal of Family Issues*, p. 0192513X2199388, Mar. 2021, doi: 10.1177/0192513x21993885.
- [7] A. Byrt and D. Dempsey, "Encouraging 'good' motherhood: self-tracking and the provision of support on apps for parents of premature infants," *Information, Communication and Society*, pp. 1–16, Dec. 2020, doi: 10.1080/1369118x.2020.1850837.
- [8] G. T. Özgen and H. Ekşi, "Expertise in motherhood: a grounded theory study on motherhood during middle childhood," *The Family Journal*, p. 106648072211242, Sep. 2022, doi: 10.1177/10664807221124245.
- [9] M. Mail, "National unity ministry conducting malaysian reading profile study," *Malay Mail*, Apr. 03, 2023, <https://www.malaymail.com/news/malaysia/2023/04/03/national-unity-ministry-conducting-malaysian-reading-profile-study/62973> (accessed Aug. 13, 2024).
- [10] A. Ullah, I. Laassar, C. B. Şahin, O. B. Dinle, and H. Aznaoui, "Cloud and internet-of-things secure integration along with security concerns," *International Journal of Informatics and Communication Technology (IJ-ICT)*, vol. 12, no. 1, pp. 62–71, Apr. 2023, Accessed: Feb. 27, 2024. [Online], doi: 10.11591/ijict.v12i1.pp62-71.
- [11] J. M. Dahiru, "Knowledge and utilization of health informatics among medical doctors in Ahmadu Bello University Teaching Hospital, Shika-Zaria," *International Journal of Informatics and Communication Technology (IJ-ICT)*, vol. 10, no. 3, pp. 171–181, Dec. 2021, Accessed: Mar. 01, 2024, doi: 10.11591/ijict.v10i3.pp171-181.
- [12] A. Dyrich and M. Oliver, "Use of the veeadamom electronic app as a pregnancy treatment companion," *Journal of Feminist Family Therapy*, vol. 32, no. 1–2, pp. 38–56, Apr. 2020, doi: 10.1080/08952833.2020.1793562.
- [13] L. Muthelo *et al.*, "Reflections on digital maternal and child health support for mothers and community health workers in rural areas of Limpopo Province, South Africa," *International Journal of Environmental Research and Public Health*, vol. 20, no. 3, p. 1842, Jan. 2023, doi: 10.3390/ijerph20031842.
- [14] N. W. Rahayu and S. Haningsih, "Digital parenting competence of mother as informal educator is not in line with internet access," *International Journal of Child-Computer Interaction*, vol. 29, p. 100291, Sep. 2021, doi: 10.1016/j.ijcci.2021.100291.
- [15] H. Arksey and L. O'Malley, "Scoping studies: towards a methodological framework," *International Journal of Social Research Methodology*, vol. 8, no. 1, pp. 19–32, 2005, doi: 10.1080/1364557032000119616.
- [16] A. C. Tricco *et al.*, "PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation," *Annals of Internal Medicine*, vol. 169, no. 7, pp. 467–473, Sep. 2018, doi: 10.7326/m18-0850.
- [17] T. N. Cesare Schotzko, "A year (in five months) of living dangerously: hidden intimacies in zoom exigencies," *International Journal of Performance Arts and Digital Media*, vol. 16, no. 3, pp. 269–289, Sep. 2020, doi: 10.1080/14794713.2020.1827206.
- [18] L. W. Veazey, "Migrant mothers and the ambivalence of co-ethnicity in online communities," *Journal of Ethnic and Migration Studies*, pp. 1–17, Jun. 2020, doi: 10.1080/1369183x.2020.1782180.
- [19] L. Candidatu, "Diasporic mothering and Somali diaspora formation in the Netherlands," *Journal of Global Diaspora and Media*, vol. 2, no. 1, pp. 39–55, Jun. 2021, doi: 10.1386/gdm_00013_1.
- [20] A. Mustosmäki and T. Sihto, "'F*** this shit' - Negotiating the boundaries of public expression of mother's negative feelings," *Nora: Nordic Journal of Feminist and Gender Research*, vol. 29, no. 3, pp. 216–228, Jun. 2021, doi: 10.1080/08038740.2021.1921844.
- [21] L. Thomas, C. V. Talbot, and P. Briggs, "The digital lives of student mothers: a consideration of technologies that support or erode the student/parent boundary," *International Journal of Human-Computer Studies*, vol. 154, p. 102689, Oct. 2021, doi: 10.1016/j.ijhcs.2021.102689.
- [22] M. J. Brady, E. Christiansen, and E. Hiltz, "Good Karen, Bad Karen: visual culture and the anti-vaxx mom on Reddit," *Journal of Gender Studies*, pp. 1–16, May 2022, doi: 10.1080/09589236.2022.2069088.
- [23] L. Lazard, "Digital mothering: Sharenting, family selfies, and online affective-discursive practices," *Feminism and Psychology*, Mar. 2022, doi: 10.1177/09593535221083840.
- [24] G. He, K. Leurs, and Y. Li, "Researching motherhood in the age of short videos: stay-at-home mothers in China performing labor on douyin," *Media and Communication*, vol. 10, no. 3, pp. 273–289, Sep. 2022, doi: 10.17645/mac.v10i3.5510.
- [25] C. Barnes, "Precarious digital mothering: creativity, entrepreneurship and hidden labor within digital foodscapes," *Food, Culture and Society*, pp. 1–20, Aug. 2022, doi: 10.1080/15528014.2022.2100972.
- [26] S. K. Ooryad, "Dadkhah mothers of Iran, from Khavaran to Aban: digital dadkhahi and transnational coalitional mothering," *Feminist Theory*, p. 146470012211271, Oct. 2022, doi: 10.1177/14647001221127144.
- [27] X. Wu, L. Zhang, R. Yang, G. Duan, and T. Zhu, "Mother phubbing and harsh mothering: mothers' irritability and adolescents' gender as moderators," *Acta Psychologica*, vol. 241, p. 104086, Nov. 2023, doi: 10.1016/j.actpsy.2023.104086.
- [28] E. Lāma and G. Lāma, "Mothers on twitter (X): exchanging support and narrating motherhood," *Culture Crossroads*, vol. 23, pp. 257–271, 2023, doi: 10.55877/cc.vol23.372.
- [29] S. Holmes and B. Atkins, "Locating the 'invisible' mum: exploring maternal selfie practices," *Journal of Gender Studies*, pp. 1–18, Sep. 2023, doi: 10.1080/09589236.2023.2262938.
- [30] F. Heaselgrave, "Unpaid digital care work: unmasking the parental mediation practices of contemporary mothers," *New Media and Society*, Jun. 2023, doi: 10.1177/14614448231174420.
- [31] F. Zirakbash, M. Savic, and K. Cook, "Young parents and digital technologies: navigating pathways to enhance agency for vulnerable mothers," *Journal of Technology in Human Services*, vol. 41, no. 1, pp. 43–64, Jan. 2023, doi: 10.1080/15228835.2023.2169855.
- [32] İ. Baliç, "How do you manage? An auto-ethnographic inquiry into contemporary maternal labor," *Equality, Diversity, and Inclusion: An International Journal*, Oct. 2023, doi: 10.1108/edi-08-2022-0222.
- [33] S. S. Alamiyah, "'I become more confident': mother use of online platform for parenting information," *Proceedings of the 2nd International Media Conference 2019 (IMC 2019)*, 2020, doi: 10.2991/assehr.k.200325.039.
- [34] E. C. Cabalquinto, "Standby mothering: temporalities, affects, and the politics of mobile intergenerational care," *Journal of Intergenerational Relationships*, vol. 18, no. 3, pp. 358–376, Jul. 2020, doi: 10.1080/15350770.2020.1787049.
- [35] N. Middleton *et al.*, "Mixed-method study on internet use and information-seeking during the transition to motherhood," *European Journal of Public Health*, vol. 30, no. Supplement_5, Sep. 2020, doi: 10.1093/eurpub/ckaa165.905.





- [36] E. Frey, C. Bonfiglioli, and J. Frawley, "Parents' use of social media for health information before and after a consultation with health care professionals: australian cross-sectional study," *JMIR Pediatrics and Parenting*, vol. 6, p. e48012, Oct. 2023, doi: 10.2196/48012.
- [37] F. A. White *et al.*, "Beyond direct contact: the theoretical and societal relevance of indirect contact for improving intergroup relations," *Journal of Social Issues*, vol. 77, no. 1, Oct. 2020, doi: 10.1111/josi.12400.
- [38] S. Haque, M. Salman, M. S. Rahman, A. Rahim, and M. N. Haque, "Mothers' dietary diversity and associated factors in megacity," *Dhaka, Bangladesh. Heliyon*, vol. 9, no. 8, p. e19117, 2023, doi: 10.1016/j.heliyon.2023.e19117.
- [39] S. Hong, F. Hardi, and K. Maguire-Jack, "The moderating role of neighborhood social cohesion on the relationship between early mother- child attachment security and adolescent social skills: brief report," *Journal of Social and Personal Relationships*, Aug. 2022, doi: 10.1177/02654075221118096.
- [40] A. Khalid, "Mothers and their daughters' education: a comparison of global and local aspirations," *Comparative Education*, pp. 1–23, Mar. 2023, doi: 10.1080/03050068.2023.2186656.
- [41] N. Vershinina, N. Phillips, M. McAdam, "Online communities and entreprenuring mothers: practices of building, being and belonging," *Entrepreneurship and Regional Development*, vol. 34, no. 7–8, pp. 742–764, 2022, doi: 10.1080/08985626.2022.2083692.
- [42] K. Budds, "Validating social support and prioritizing maternal wellbeing: Beyond intensive mothering and maternal responsibility," *Philosophical Transactions of the Royal Society B*, vol. 376, no. 1827, 2021, doi: 10.1098/rstb.2020.0029.
- [43] M. Lehto, "Bad is the new good: negotiating bad motherhood in finnish mommy blogs," *Feminist Media Studies*, vol. 20, no. 5, pp. 657–671, 2020, doi: 10.1080/14680777.2019.1642224.
- [44] G. Constantinou, S. Varela, and B. Buckby, "Reviewing the experiences of maternal guilt – the 'Motherhood Myth' influence," *Health Care for Women International*, vol. 42, no. 4–6, pp. 1–25, Feb. 2021, doi: 10.1080/07399332.2020.183591.
- [45] L. Donelle, B. Hiebert, and J. Hall, "An investigation of mHealth and digital health literacy among new parents during COVID-19," *Frontiers in Digital Health*, vol. 5, Jan. 2024, doi: <https://doi.org/10.3389/fdgh.2023.1212694>.
- [46] C. Collins, "Is maternal guilt a cross-national experience?," *Qualitative Sociology*, vol. 44, no. 1, pp. 1–29, Apr. 2020, doi: 10.1007/s11133-020-09451-2.
- [47] D. Marchetti and V. Sawrikar, "Parents' illness representations of their child with anorexia nervosa: a systematic review of qualitative studies using the common-sense model," *The International Journal of Eating Disorders*, Nov. 2023, doi: 10.1002/eat.24081.
- [48] B. Usher, "Rethinking microcelebrity: key points in practice, performance and purpose," *Celebrity Studies*, vol. 11, no. 2, pp. 171–188, doi: 10.1080/19392397.2018.1536558.
- [49] D. Lupton, "Understanding digital food cultures," *Routledge eBooks*, pp. 1–16, Feb. 2020, doi: 10.4324/978042940213.
- [50] S. Das and A. J. Mishra, "Dietary practices and gender dynamics: understanding the role of women," *Journal of Ethnic Foods*, vol. 8, no. 1, May 2021, doi: 10.1186/s42779-021-00081-9.
- [51] R. O'Neill, "'Glow from the inside out': deliciously Ella and the politics of 'healthy eating,'" *European Journal of Cultural Studies*, vol. 24, no. 6, p. 136754942092186, Jun. 2020, doi: 10.1177/1367549420921868.
- [52] L. Bliznashka and J. Jeong, "Investigating the direct and indirect associations between birth intervals and child growth and development: a cross-sectional analysis of 13 demographic and health surveys," *SSM - Population Health*, vol. 19, p. 101168, Sep. 2022, doi: 10.1016/j.ssmph.2022.101168.
- [53] S. Devi, R. Thinakaran, S. B. M. Hanefar, and N. R. M. Nadzri, "Tracking academic contributions to women's empowerment in Malaysia: A bibliometric investigation," *Heliyon*, 2024, doi: 10.1016/j.heliyon.2024.e37052.

BIOGRAPHIES OF AUTHORS



Anissa Saidi     is currently a graduate research assistant funded under Fundamental Research Grant Scheme by Malaysian Ministry of Higher Education. Her research interest involves digital mothering and digital literacy. She can be contacted at email: anissasaidi26@gmail.com.







Wong Yee Von     is a TESL lecturer at the Faculty of Education and Social Sciences, Universiti Selangor (UNISEL). She specialised in classroom discourses and motherhood studies. She can be contacted at email: yeevonwong@unisel.edu.my.







Tirzah Zubeidah Zachariah @ Omar     is a senior lecturer at the Faculty of Education and Social Sciences, Universiti Selangor (UNISEL). She specialised in english literature and feminism in education. She can be contacted at email: tirzah@unisel.edu.my.







Lim Seong Pek     is a senior lecturer at the Faculty of Education and Liberal Arts, INTI International University. He received his Doctorate in Education (Ed.D) degree from Universiti Selangor. He specialises in media literacy, multimodality and teacher education. He can be contacted at email: seongpek.lim@newinti.edu.my.



Rita Wong Mee Mee     is a TESL lecturer at the Centre for Language at the National Defence University of Malaysia (NDUM). She received her Doctorate in Education (Ed.D) degree from Universiti Selangor. She specialises in materials development, game-based learning, and early childhood literacy. She can be contacted at email: ritawong@upnm.edu.my.



Khoo Kim Leng     is an associate professor at the School of Management and Marketing, Taylor's University. She specialises in consumer behaviour and digital marketing. She can be contacted at email: kimleng.khoo@taylors.edu.my.