Child & Family Social Work

WILEY

CHILD & FAMILY SOCIAL WORK

ORIGINAL ARTICLE OPEN ACCESS

Digital Professional Practice, Digital Competences and Impact on Family Support Services

Guacimara Rodríguez[1] | Sonia Byrne[2] | Miriam Álvarez[1] | Nauzet Gutiérrez-Rodríguez[3] | Sonia Padilla[4] | Juan Carlos Martín[5] | María José Rodrigo[2]

[1]Department of Communication Sciences and Social Work, University of La Laguna, Tenerife, Spain | [2]Department of Developmental and Educational Psychology, University of La Laguna, Tenerife, Spain | [3]Department of Educational Sciences, University of Lleida, Lleida, Spain | [4]HESTIA Association for Family, Psychoeducational and Social Research and Intervention, Canary Islands, Spain | [5]Department of Education, University of las Palmas de Gran Canaria, Las Palmas, Spain

Correspondence: Guacimara Rodríguez (grodrigs@ull.edu.es)

Received: 29 May 2025 | **Revised:** 10 November 2025 | **Accepted:** 8 December 2025

Keywords: digital competences | digital management profiles | digital practice | family outcomes | social services | social work

ABSTRACT

Digital-mediated practices in public social services require new strategies for administration, communication, assessment and intervention. Within this field, research framed under UNESCO's (2020) Media and Information Literacy model—examining digital media management and digital competence in information management, communication, digital content creation, online safety and problem-solving—remains scarce. This study explores how the variability of digital media management profiles relates to the levels of digital competence and the perceived impact on professional practice and family outcomes. Participants were 103 practitioners from public social services for family support, who completed an online survey. Using a person-centred approach, four digital media management profiles were identified: *Novice Users* (11.7%), *Diversified Users* (32%), *Instant Communication Users* (32%) and *Information-Seeking Users* (24.3%). Members of Clusters 2 and 4 demonstrated higher proficiency in safety measures, digital content creation and technical problem-solving skills. They also reported that online support had a positive impact on family well-being, satisfaction with services and parental autonomy. These results underscore the need for targeted training to effectively integrate digital media and develop advanced digital competences. Both elements should be considered as quality standards and best practices, promoting more effective, responsible and adaptable approaches to support families' autonomy in an increasingly digital world.

1 | Introduction

In recent decades, the incursion of information and communication technologies has changed our lives. Digitalisation processes have transformed interactions with users, as well as their demands and needs. These processes have also transformed the public social services where practitioners engage in digital practices aimed at child protection and family welfare, whether they are working in the community resources services or in the more specialized child and family services. Those services align with the Council of Europe Recommendation of the Committee of Ministers to the 46 member states on policies supporting positive parenting, which emphasizes the shared responsibility in creating the best conditions, particularly among vulnerable families (Council of Europe, Rec 2006/19; Rodrigo et al. 2015). Today, the use of digital media in social work practice is required for service delivery, case management, administration, collaboration and communication with customers and other agencies (Fjeldheim et al. 2024). In this scenario, recent studies have addressed how digitalization affects social work practice

(Heinsch et al. 2023), as well as other disciplines such as psychological therapy (Pote et al. 2021) or education (Heine et al. 2022).

The use of digital media in family social services involves advantages but also some risks and challenges (Canário et al. 2022; Heinsch et al. 2023; Mishna et al. 2021; López-Peláez et al. 2017). Delivering parenting programs and other forms of family support by videoconferencing may be particularly convenient for families that find it difficult to visit a provider in person, improving accessibility and increasing retention of families. Moreover, videoconferences may also reduce the burden on practitioners by reducing the time needed to travel to the site of program delivery, gaining flexibility and cost reduction (Tóth and Jávor 2022). On the risk side, there is the threat of dehumanizing the relationship with families (Reamer 2018), increased difficulty in establishing a therapeutic alliance or higher economic costs that may result in increased social exclusion (López-Peláez et al. 2017). In terms of challenges and uncertainties, a need to deal with ethical and legal considerations arises, concerns over privacy and confidentiality, informed consent, protection of user data on computers, maintaining professional boundaries, management of records of online conversations or responsibility for using online material from reputable sources (Afrouz and Lucas 2023; Mishna et al. 2021; Reamer 2018). Despite the risks and challenges, the increasing use of digital media in the service provision system of family support is unstoppable and requires further examination.

The present study is based on the Media and Information Literacy (MIL) framework promoted by UNESCO (2020) to support the development of digital competences within the knowledge society. At a policy level, the European Commission in the Digital Education Action Plan (2021–2027) has established the European Digital Competence Framework for Citizens (DigComp 2.2) (Vuorikari et al. 2022). Digital competence involves the knowledge, skills and attitudes/values that enable individuals to use digital technologies in a creative, critical, meaningful and responsible manner in all spheres of life, both independently and with others in the knowledge society (Carretero et al. 2017). Recently, the MIL model has been adopted in the social work field, where digital competence is a requirement for frontline social workers and social work educators (Byrne et al. 2024; Fjeldheim et al. 2024; Zhu and Andersen 2022). The MIL model includes three key components for good professional practices in digital environments: *Digital media management*: Professionals should make informed and planned decisions when selecting digital tools for exchanges with families and intervention, ensuring that these choices enhance the quality of digital interactions and services. *Digital competence development*: Professionals should strengthen their skills in information management, communication, digital content creation, online safety and problem-solving. *Ethical and legal practices*: Professionals must act according to children's rights and the principle of the best interests of the child in digital contexts. The aim is to build a work environment that promotes a balanced, healthy and safe use of digital media, ensuring quality care for children, adolescents and their families, as well as the protection of their rights.

Our study empirically examines the first two aspects of the MIL model in the field of child and family support services: digital media management and digital competence development. Concerning digital media management for supporting families, the digital landscape is composed of a wide range of activities and resources, including psychoeducational websites, blogs and apps; professional attention through videoconferences, email or instant messaging such as Telegram or WhatsApp; self-directed online resources; structured online parenting programs; or online peer support (Canário et al. 2022). The characteristics and outcomes of these tools differ and should be suitable for the families' needs. For example, professional guidance may not be present on websites or online peer support but is essential when attending to families facing problems (Canário et al. 2022). Along the same lines, Leijten et al. (2024) found in a meta-analysis that online parenting support compares well with in-person parenting support in reducing child and parent mental-health problems and improving parenting practices, at least when professional guidance is provided. Given the wide variety of media available, it is important to investigate what digital tools practitioners are using in their work with families, as well as the existence of a combinatorial use of digital resources in the working space.

Concerning the second aspect of the MIL model, digital competence in social services is now seen as a measure of professional capability that could be related to the quality of the online support provided (Peiró and Martínez-Tur 2022). The European Commission in the Digital Education Action Plan (2021–2027) has articulated the digital competence in five areas to further support the adaptation of the education and training systems of European Union member states to the digital age: (1) *information and data management*, which involves skills related to organizing, storing and retrieving data, as well as processing them in a structured environment; (2) *communication and collaboration*, which deals with the skills to interact through a variety of digital technologies and apply appropriate digital media to a given personal and societal context; (3) *digital content creation*, which refers to creating and editing digital content in different formats, as well as expressing oneself through different digital means; (4) *security measures*, which is about protecting digital devices and content, understanding risks and threats in digital environments and being responsible regarding reliability and privacy; and (5) *technical problem solving*, referring to identifying technical problems in current digital tools and being able to solve them. For each area, users can present ranges from one to five proficiency levels: low, medium, intermediate, advanced and specialized, considering the complexity of the tasks, the autonomy to face them and the demands they imply. We explored all these skills in the case of family support services located at the municipal level.

Regarding the level of expertise in digital competences of social services employees, some studies have identified a gap between digital development in society, welfare services and social work education (Fjeldheim et al. 2024; Zhu and Andersen 2022). Before the COVID-19 pandemic, Berzin et al. (2015) found that social service practitioners used digital competences just for administration tasks and for communication in practice. And yet nowadays, little academic training is regularly offered on digital competences (Fjeldheim et al. 2024; Heinsch et al. 2023; Zhu and Andersen 2022). This

is certainly important for the current digital expertise of those professionals involved in child and family welfare.

To address some of these knowledge gaps, this study has three main objectives, based on the two aspects of the MIL model and their impact on perceived professional and family outcomes. First, to examine the digital media management for supporting families, we analysed the interindividual variability in the user profiles in the working space, given the wide range of online resources available. A person-centred approach (Bergman et al. 2003), guided by the exploratory and combinatorial character of our study, was used to identify variability in media user profiles measuring frequency of use and usefulness perception. Unlike variable-centred approaches—which focus on associations among variables and assume that the same patterns apply to all individuals—a person-centred approach seeks to identify subgroups or clusters of individuals who share similar response patterns. The second objective is to examine the relationships between the level of professional expertise in digital competences and the interindividual variability in the media user profiles. There is no previous evidence on the potential relationships between these two aspects of the MIL model: digital media management and competence. The level of professional expertise was defined according to the five areas of digital competences required normatively by the European Framework for Digital Competence (DigComp 2.2) already mentioned.

Finally, the third aim of the study is to examine the impact of variability in digital media management on practitioners' views on four relevant outcomes in the work with families. Particularly, the study examines as positive outcomes of online support: the perceived improvements in professional practice, the family satisfaction with online services (Ebata and Curtis 2017), the improvements in child and family well-being (Rodrigo et al. 2014, Valkenburg 2022) and the greater family autonomy in exercising the parental role and increasing e-empowerment for autonomous decision-making about child-rearing issues (Amichai-Hamburger et al. 2008). The results will contribute to progress in detecting professional needs in terms of improving digital competences, as well as in the combined use of digital resources that better promote a positive context for the functioning and well-being of families.

2 | Methods

2.1 | Participants

The sample was composed of professionals from social services for family support, working in the community resources services and in more specialized child and family services, which are both public services dependent on the municipality. Families attending social services present more severe psychosocial risk conditions, and professionals have the responsibility to promote family preservation to prevent children's displacement to alternative homes or residential care centres. The participants were 103 practitioners working in municipal social services in the Canary Islands (Spain). As shown in Table 1, participants had a mean age of 45.5 years, a mean experience in their jobs of 15.6 years, and most of them were females (87.1%). Also, the majority of them (62.1%) worked in the child and family support services, whereas 37.9% worked in the community resources services. The vast majority worked as frontline practitioners (87.4%), and the rest of them worked as coordinators or directors.

2.2 | Measurements of Survey Content

The survey was composed of the following four sections of questions:

a. *Demographic-professional data* (five ad hoc questions): age, gender, years of expertise in social services, type of social services (community resources services, child and family support services) and job position (practitioner, coordinator/director). Mean scores, standard deviations and percentages are used as variable scores for the analyses.

b. *Digital media management in child and family support* (16 questions on the current use of digital resources in the family support practice based on a survey study) (Canário et al. 2022): It measures frequency of use and perceived usefulness in websites, blogs, structured programs, instant messaging, videoconferences, emails, multimedia contents (Youtube/Vimeo and Podcast) and social networks

TABLE 1 | Participants description ($n = 103$).

	Percentage	Mean	SD	Min. value	Max. value
Age		45.5	7.8	27	61
Years of experience		15.6	9.1	1	33
Gender (female)	87.1				
Type of social services					
Community resources services	37.9				
Child and family support service	62.1				
Job position					
Practitioner	87.4				
Coordinator/directive	12.7				

(TikTok, Instagram, Facebook, Twitter). The frequency of use was measured with a five-point Likert scale ranging from *never* (1), *seldom* (2), *monthly* (3), *weekly* (4) and *everyday* (5) and the perceived usefulness with a 5-point Likert scale ranging from *nonuseful at all for my professional practice* (1) to *absolutely useful for my professional practice* (5). Mean score and standard deviation are used as variable scores for the analyses.

c. *Practitioner digital competences in family support services* (22 questions): based on the five areas of the European Digital Competence Framework for Citizens (Carretero et al. 2017), adopted by the social work field (Fjeldheim et al. 2024; Zhu and Andersen 2022). The questionnaire is organized in five sections with good reliability in the current sample according to Cronbach's alpha coefficients: (1) information and data management involving navigation, search, data filtering and digital content, evaluation, storage and retrieval of information (five items, $\alpha = 0.861$); (2) communication and collaboration involving how to interact through technology, know how to share information and content at personal and citizen levels, as well as manage labels and identity (four items, $\alpha = 0.874$); (3) digital content creation involving the development of content and knowledge of copyright and licences and integration re-elaboration of content (four items, $\alpha = 0.892$); (4) Safety measures involving protection of devices, personal health and also safety for the environment, as well as the protection of personal data and privacy (six items, $\alpha = 0.894$); and (5) Technical problem solving involving innovation and the creative use of digital technology, as well as the identification of gaps within digital skills (three items, $\alpha = 0.881$). Answers were given on a 5-point Likert scale: *Never* (1); *Yes, with high difficulty* (2); *Yes, with some difficulty* (3); *Yes, I can do it acceptably* (4); and *Yes, and I can even help others* (5). Mean score and standard deviation are used as variable scores for the analyses.

d. *Impact of digital practice on professional and family variables*: Measure four aspects with one ad hoc question each: whether it is beneficial to improve my professional practice (1), whether it is beneficial to improve family satisfaction with the service (2), whether it is beneficial to promote the psychological and social well-being of families (3) and whether it is beneficial to promote the autonomy of families in the care and education of their children (4). Practitioners' answers to each question were given on a 5-point Likert scale of level of agreement, ranging from absolutely disagree (1) to absolutely agree (5). Mean score and standard deviation are used as variable scores for the analyses.

2.3 | Procedure

An advertising email on the project's aims and content and an invitation to participate were sent to the coordinators of professionals working in the 54 community social services and child and family support services in the province of Santa Cruz de Tenerife (Autonomous Community of Canary Islands in Spain). The link to the online survey using Google Forms was also sent, and participants were asked to fill it out in 2 months (from the beginning of April to the end of May 2023). Participants agreed to participate by filling out the written informed consent, including the use of the data anonymously for research, teaching and dissemination purposes, also included in the online survey (the acceptance rate from those who responded was higher than 95%). The data were automatically exported to an Excel file.

2.4 | Statistical Analyses

To address the first objective—analysing user profiles across various digital resources—descriptive analyses were conducted, reporting mean values and standard deviations. Subsequently, a cluster analysis was performed to assess the variability in the use and perceived usefulness of digital tools. Cluster analysis is a statistical technique explicitly designed to identify groups (clusters) of individuals who are similar on a set of selected variables, while differing from individuals in other clusters. It operationalizes the person-centred perspective by grouping participants based on their shared characteristics, thereby uncovering naturally occurring subpopulations that may not be visible through traditional variable-centred analyses (e.g., regression or correlation). Although latent profile analysis also offers advantages as a model-based approach, including statistical criteria for model selection and classification uncertainty, the selection for cluster analysis was guided by our aim to identify naturally occurring groupings in an unexplored field rather than test a hypothesized latent structure based on previous evidence.

The clustering procedure began with a hierarchical clustering approach, which included examining the dendrogram, assessing cluster sizes and interpreting the results based on theoretical considerations. This was followed by an iterative nonhierarchical k-means cluster analysis, using ANOVAs to identify the key variables that contribute to the solution. To further examine the differences among clusters, univariate analyses of variance and chi-square tests were carried out. These analyses considered the results of Levene's test (equality of variance: $p > 0.05$). Scheffe post hoc test was used for multiple comparisons (Popa 2010), and Cramer's V was applied to evaluate the strength of association among groups, as it is recognized as a robust measure in multigroup analyses.

In relation to the second objective, which focused on assessing the level of professional digital competence, a descriptive statistical analysis was initially conducted to obtain mean values and standard deviations. Following this, single-factor multivariate analyses of variance (MANOVA) were conducted to explore the associations between the five defined levels of professional expertise and the digital user profile clusters. The assumption of homogeneity of variances was verified using Levene's test ($p > 0.05$). Where appropriate, post hoc comparisons were carried out using Scheffe's test, following the methodological recommendations outlined by Popa (2010).

Regarding the third objective, assessing the influence of user profiles on four professional and family-related variables, single-factor MANOVAs were also performed. Again, Levene's test was used to verify the assumption of equal variances ($p > 0.05$), and Scheffe's post hoc comparisons were interpreted

in accordance with Popa (2010). All statistical analyses were conducted using IBM SPSS Statistics, Version 27.0 (IBM Corp., Armonk, NY).

3 | Results

3.1 | Practitioners' Digital Media Management

Descriptive analyses showed the frequency of use and usefulness assigned by practitioners to a variety of resources (Table 2). Resources such as emails, instant messaging and websites were the most used, with weekly or even daily frequency, whereas blogs, social networks, multimedia content, videoconferences and structured programs showed levels of use less than monthly frequency. As regards the usefulness that participants attribute to the digital resources, emails, structured programs, instant messaging, websites and videoconferences are considered the most useful resources for their professional work. On the other hand, blogs, multimedia content and social networks are considered not very useful.

To examine the interindividual variability in digital management profiles and the perceived usefulness of these resources in professional engagement with families, a hierarchical cluster analysis was initially performed. This analysis yielded a four-cluster solution, which was theoretically coherent and supported by visual inspection of the dendrogram and cluster metrics. To validate the stability and discriminative power of the solution, a nonhierarchical k-means cluster analysis was subsequently conducted. The use of squared Euclidean distance revealed intercluster distances greater than 1, indicating a satisfactory level of differentiation among the clusters.

The variables that significantly contributed to the cluster are detailed in Table 3. Based on the dominant patterns of digital resource usage, the clusters were characterized and labelled as follows: Cluster 1 *Novice User* ($n = 12$), Cluster 2 *Diversified User* ($n = 33$), Cluster 3 *Instant Communication User* ($n = 33$) and Cluster 4 *Information-Seeking User* ($n = 25$). To further explore statistically significant differences among clusters, post hoc comparisons were conducted following the identification of relevant main effects.

TABLE 2 | Frequency of use and usefulness of digital resources (1–5 scale).

Digital resource	Use *M* (SD)	Usefulness *M* (SD)
Websites	3.31 (0.99)	4.21 (0.62)
Blogs	1.42 (1.08)	2.84 (1.20)
Structured programs	1.88 (0.64)	4.39 (0.75)
Instant messaging	3.37 (1.24)	4.26 (1.11)
Videoconferences	1.90 (0.98)	4.16 (1.02)
Emails	3.91 (0.32)	4.79 (0.56)
Multimedia contents	1.55 (1.49)	2.95 (1.30)
Social networks	1.66 (1.32)	3.30 (1.18)

All clusters showed intermediate levels of use of emails, and they varied according to the use of other digital resources and their perceived usefulness. The Cluster 1 *Novice user* ($n = 12$) was represented by practitioners with low scores in the use and perceived usefulness of any kind of digital resources, except websites and emails and the usefulness of structured programs and emails which showed no differences between clusters. The Cluster 2 *Diversified user* ($n = 33$) comprised practitioners who reported high levels of use and perceived usefulness of a wide range of digital resources, including static digital content, communication technologies, and social media platforms. Cluster 3 *Instant Communication Users* ($n = 33$) comprised practitioners who reported high levels of use and perceived usefulness of direct communication tools, particularly instant messaging and email, in the context of their professional activities. Conversely, these individuals demonstrated low usage and low perceived utility of other digital resources, such as blogs, social media platforms and multimedia content, indicating a preference for more immediate and personal forms of communication in their work. The Cluster 4 *Information-Seeking Users* ($n = 25$) included practitioners characterized by a predominant use and positive appraisal of digital tools aimed at retrieving information relevant to their work with families. In addition to utilizing information retrieval tools, members of this cluster also frequently employed instant messaging and email to maintain contact with families and other practitioners. However, similar to Cluster 3, they reported limited use and perceived value of other types of digital resources.

3.2 | Practitioners' Expertise in Digital Competences

For the second objective, we first identified the level of practitioners' expertise in the DigComp's five core knowledge areas of digital competences (Carretero et al. 2017). The 5-point Likert scale used in the questionnaire was transformed into equivalent levels of competence: low level (1 point), medium level (2 points), intermediate level (3 points), advanced level (4 points) and specialized level (5 points). As shown in Table 4, on average, the mean level of medium, digital content creation and technical problem solving had the lowest level of competence, while slightly higher means were obtained on competences in Safety measures. Finally, the means for the information and data management and communication and collaboration competences had also an average mean level of medium but higher in scoring than the other ones.

3.3 | Relationships Between the Level of Digital Competences and Digital Management Profiles

The analysis revealed significant associations between digital competence levels and digital management profiles among practitioners (see Table 5). Specifically, three out of the five assessed areas of digital competence (safety, digital content creation and technical problem solving) showed statistically significant relationships with the identified clusters.

Practitioners who demonstrated higher competence in *Safety* and *Digital Content Creation* were more likely to be categorized under Cluster 2 *Diversified Users*, indicating a broader and more varied

TABLE 3 | Cluster solution with variables and intercluster differences of practitioners´ frequency of use of digital resources; Likert scale: *Never* (1), *Seldom* (2), *Monthly* (3), *Weekly* (4) and *Everyday* (5).

Digital resources frequency of use	C1. Novice user ($n=12$)	C2. Diversified user ($n=33$)	C3. Instant communication user ($n=33$)	C4. Information seeking user ($n=25$)	$F(1,101)$	Post hoc test Scheffe
Websites	3.17	3.58	2.79	3.72	6177***	2–3** 3–4**
Blogs	1.33	1.91	0.67	1.84	11657***	2–3** 3–4**
Structured programs	1.83	2.21	1.73	1.68	4825**	2–3* 3–4**
Instant messaging	0.67	3.67	3.70	3.88	57639***	1–2*** 1–3*** 1–4***
Emails	3.92	3.94	3.91	3.88	0.165	—
Videoconferences	1.83	2.18	2.18	1.2	7105***	2–4*** 3–4***
Social networks	0.42	3.33	0.91	0.6	70759***	2–1*** 2–3*** 2–4***
Multimedia contents	0.75	3.00	1.00	1.24	31967***	2–1*** 2–3*** 2–4***
Perceived usefulness						
Websites	3.92	4.42	4.00	4.36	4335**	1–2* 2–3*
Blogs	2.50	3.30	1.88	3.68	20539***	1–4* 2–3*** 3–4***
Structured programs	4.25	4.48	4.39	4.36	0.311	—
Instant messaging	1.83	4.61	4.58	4.56	55377***	1–2*** 1–3*** 1–4***
Emails	4.50	4.85	4.85	4.8	1293	—
Videoconferences	4.42	4.21	4.45	3.6	3956**	3–4*
Social networks	1.92	3.82	2.58	2.8	10892***	2–1*** 2–3*** 2–4**
Multimedia contents	2.50	4.03	2.79	3.4	10304***	1–2*** 2–3***

*$p \leq 0.05$.
**$p \leq 0.01$.
***$p \leq 0.001$.

TABLE 4 | DigComp 2.2. core knowledge areas of digital competence (1–5 scale).

Digital competence areas	*M* (*SD*)	Assigned level	Recommended level
Information and data management	2.85 (0.70)	Medium	Advanced
Communication and collaboration	2.83 (0.66)	Medium	Advanced
Digital content creation	2.12 (1.05)	Medium	Intermediate
Safety measures	2.18 (0.91)	Medium	Intermediate
Technical problem solving	2.12 (0.95)	Medium	Intermediate
Total mean of competences	2.43 (0.74)	Medium	Advanced-intermediate

engagement with digital tools. In addition, those with higher competence in *Technical Problem Solving* were significantly more likely to be part of Cluster 4 *Information-Seeking Users*, suggesting a more focused use of digital resources aimed at information retrieval and professional communication. Conversely, lower competence levels in these same areas were associated with membership in Cluster 3 *Instant Communication Users*, a group characterized by a reliance on basic communication tools such as email and instant messaging and limited engagement with other types of digital resources. Beyond digital competence, digital management profiles also demonstrated a significant association with professional characteristics. Practitioners in Cluster 4 were more frequently employed in social services aimed at supporting children and families, compared to those working in community resources services (χ^2 (3, $n=103$)$=7.578$, $p \leq 0.05$, Cramer's $V=0.26$). This suggests that the nature of professional roles may influence both the type and intensity of digital resource usage.

3.4 | Impact of Digital Management Profiles on Professional, Family Well-Being and Autonomy Dimensions

For the third objective, professionals' digital management profiles have been related to several aspects of professional and service quality (Table 6). Although the use of digital resources was not related to the perceived improvement of professional practice, it was highly related to family development. Those practitioners in Cluster 2 with a diversified use of digital resources were more likely to consider that these tools promote the psychological and social well-being of families and improve family satisfaction with the service. Those practitioners in Cluster 4, who focused on searching for information content useful for their work with families, were more likely to consider that they promote families' autonomy in their parental tasks.

TABLE 5 | Mean differences in the digital competences according to the digital management profiles (Likert scale 1–5 scores).

Digital competences	C1. Novice user ($n=12$)	C2. Diversified user ($n=33$)	C3. Instant communication user ($n=33$)	C4. Information seeking user ($n=25$)	$F(3,99)$	Post hoc Scheffe
	M (SD)	*M* (SD)	*M* (SD)	*M* (SD)		
Information and data management	2.76 (0.92)	2.98 (0.64)	2.68 (0.79)	2.92 (0.52)	1.172	—
Communication/ collaboration	2.77 (0.84)	2.90 (0.63)	2.69 (0.65)	2.95 (0.63)	0.882	—
Digital content creation	2.00 (0.87)	2.44 (0.93)	1.77 (1.18)	2.21 (1.01)	2.410*	2–3*
Safety measures	2.00 (0.92)	2.43 (0.91)	1.87 (0.86)	2.33 (0.87)	2.634*	2–3*
Technical problem solving	2.27 (0.99)	2.23 (0.98)	1.77 (0.92)	2.37 (0.85)	2.345*	3–4*

*$p \leq 0.05$.

TABLE 6 | Mean differences in professional and family outcomes according to the digital management profiles.

Online support outcomes	C1. Novice user ($n=12$)	C2. Diversified user ($n=33$)	C3. Instant communication user ($n=33$)	C4. Information seeking user ($n=25$)	$F(3,99)$	Post hoc Scheffe
Improve professional practice	4.00 (0.73)	4.45 (0.66)	4.36 (0.65)	4.24 (0.43)	1.762	—
Improve family satisfaction with the service	3.75 (0.86)	4.15 (0.71)	3.54 (1.09)	3.84 (0.74)	2.674*	2–3*
Promote well-being of families	3.33 (1.07)	3.72 (0.83)	3.09 (0.94)	3.52 (0.77)	2.965*	2–3*
Promote autonomy in the parenting task	3.41 (1.24)	3.69 (0.95)	3.12 (0.99)	3.84 (0.74)	3.260*	3–4*

*$p \leq 0.05$.

4 | Discussion

This study is based on the MIL model and explores the variability in the digital management profiles as a selective work context created by the practitioners to support families. We also examined the potential relationships between management profiles and the level of expertise in digital competences, as well as the impact on some aspects of professional and family development in social services. It highlights the idea that not only the use and perceived usefulness of a particular resource could be relevant, given the widespread use of digital resources nowadays. What could be relevant to explore is the interindividual differences in the combination of resources that shape the professional's digital space in their supportive work with families. The MIL model ensures that practitioners can navigate the complex media landscape, make informed and ethical decisions and use communication as a powerful tool to support, empower and advocate for families.

According to our first objective, to analyse the variety of digital management profiles used in family support services, our descriptive findings show that emails, websites and instant messaging are the resources that practitioners use the most in their work with families. Those resources are also seen as the most useful, along with videoconferencing and structured programs. It is noteworthy that despite their perceived usefulness, practitioners were not frequently using these latter resources. And yet, evidence shows that following videoconferencing service delivery, parents reported improved parenting satisfaction, improved feelings of self-efficacy and greater confidence using web resources (Canário et al. 2022). Moreover, videoconferences may also reduce the burden on practitioners by reducing the time needed to travel to the site of program delivery, gaining flexibility and cost reduction (Tóth and Jávor 2022). However, practitioners seem to prefer in-person interventions whenever possible (Pink et al. 2020). In turn, online family support programs based on evidence have proved their effectiveness in improving child and family outcomes (Callejas et al. 2021; Canário et al. 2024; Suárez-Perdomo et al. 2018). Therefore, it seems necessary to encourage their use in social services. Finally, the use of resources like blogs, multimedia content and social networks is less developed and seen as less useful by social services' practitioners, demonstrating a similar pattern to that of practitioners from non-profit social agencies (Byrne et al. 2024).

A novelty of this study is the use of a person-centred approach (Bergman et al. 2003), which moves beyond the assumption of homogeneity and allows for a data-driven identification of meaningful patterns of individual differences. Four distinct digital management profiles were identified among practitioners in social services. The Cluster 1 *Novice user* (11.7%) involves practitioners with low rates of digital resources except for websites and emails, although they find useful videoconferences, structured programs, and emails. The Cluster 2 *Diversified user* (32%) includes practitioners who use a wide variety of digital resources, including websites, instant messaging, emails, social networks and multimedia content, all considered to be useful for their work. The Cluster 3 *Instant communication user* (32%) is composed of practitioners who specifically use resources aimed at communication, including emails and instant messaging, although they perceive the usefulness of most digital resources. Finally, the Cluster 4 *Information seeking user* (24.3%) involves practitioners who, besides using communication tools such as emails and instant messaging, also tend to use websites to search for information for their work. Therefore, 43.7% of the practitioners are either novice users (Cluster 1) or instant communication users (Cluster 3), which involved combinations with a poorer and more restrictive use of digital resources. The rest of practitioners, 56.3% are either diversified users (Cluster 2) or information seeking users (Cluster 4), which involved combinations with wider and more specialized use of digital resources in their work with families. Those practitioners who are information seeking users mostly work in specialized child and family support services rather than in community resources services. Wider and more task-specialized variability in the use of digital resources creates better learning opportunities that allow practitioners to build a richer learning environment for family support.

The second objective was to analyse the level of digital competence of social services' practitioners. Results show medium levels of expertise in all five areas of digital competences, as defined by the European Digital Competence Framework for Citizens (DigComp 2.2) applied to social work and social work education (Fjeldheim et al. 2024; Zhu and Andersen 2022). Therefore, these practitioners are far from achieving the expertise recommended, which corresponds to the advanced level with competences related to the areas of information and data management and communication and collaboration.

The areas of digital content creation, safety measures and technical problem-solving also show lower measures in the range of Medium level of competences. The level recommended by the European Framework for Citizens (DigComp 2.2) (Vuorikari et al. 2022) to practitioners in these three areas is intermediate. The design and delivery of family interventions require safety competences at an advanced level, which ensures that interventions accomplish ethical standards regarding the protection of personal and user data and confidentiality (López-Peláez et al. 2017; Mishna et al. 2021; Pascoe 2021; Reamer 2018). Moreover, fields such as child protection require specific measures to ensure that the safety of service users is not compromised (Afrouz and Lucas 2023). In sum, it seems that all the areas of digital competences still need to be improved by social services' practitioners: the more basic ones, the more technical, as well as the ones that allow safe, ethical and creative content uses to improve the quality of digital resources. These poor results contrast with evidence showing advanced and intermediate levels of expertise in the five areas in practitioners working in non-profit social agencies targeting child and family welfare (Byrne et al. 2024), which happen to be younger and probably better technically equipped than those from family support services in the current sample.

Our findings regarding the second objective, which relates practitioners' digital competences to digital management profiles—the two components of the MIL model—provide important evidence: Improving expertise conditions facilitates a richer and more integrated use of digital resources in the workplace. Practitioners who report being less skilled in digital technical competences, such as content creation and

safety measures, belong to Cluster 3 (instant communication users), compared with those in Cluster 2 (diversified users). They also report lower skills in technical problem-solving compared to practitioners in Cluster 4 (information-seeking users). Therefore, it seems that lower levels of digital expertise hinder the efficient and integrated use of digital resources in their work with families.

Finally, the third objective of this study examined to what extent the variability in the digital management profiles could be related to the practitioners' perceptions of their impact on professional development and family outcomes. Results showed that variability in the use of digital resources is not related to perceived improvements in the professional practice to support families, suggesting an overall lack of awareness or lower internalization of the positive impact of digital media on their professional development. However, practitioners are more aware of the importance of digital practice to improve family outcomes. For Cluster 2 practitioners characterized by the diversification of digital media, digital practice promotes the psychological and social well-being of families and improves family satisfaction with the service (Ebata and Curtis 2017; Tóth and Jávor 2022). For members in Cluster 4 focused on searching for information content for their work with families, the use of digital media promotes families' autonomy in their parenting tasks (Amichai-Hamburger et al. 2008). Their higher expertise is a vehicle through which to assist parents and families with learning how to effectively use and choose technology for parenting purposes. The lack of awareness of the importance of the use of digital tools in professional development could be a consequence of poor technical academic training on these matters. The lack of awareness may also stem from the absence of quality standards for digital skills as a benchmark for best practices and career advancement within the service. This is a serious drawback, since technology-mediated practice has become essential in social services, and practitioners may no longer be able to return to a solely in-person mode of working (Afrouz and Lucas 2023).

5 | Limitations and Recommendations

As for methodological limitations, we first recognize that the sample size is relatively small and geographically limited to a certain region, which may affect the stability of the cluster analysis and compromise the generalizability of the results. However, the type of public assistance provided by municipal social services is very homogeneous throughout the country, being ruled by similar regulations, served by a multidisciplinary professional staff and dedicated to the prevention and promotion of family preservation within the child protection system. Second, the cross-sectional nature of the data precludes any inference of causal relationships. Third, an online survey did not allow for a more in-depth analysis of the parents' points of view. Finally, our data on the family outcomes are restricted to the practitioner's point of view; therefore, our study did not allow for further interpretations on the family side that should be explored in future studies involving parents as direct informants.

Regarding recommendations, our findings highlight the need for specific training in digital competences and in the effective and integrated use of digital resources to enhance family support. Moreover, the observed variability in digital management profiles—particularly those associated with lower digital competences and reduced expectations for family outcomes—may inform targeted interventions or policies tailored to this subgroup of practitioners, ultimately enhancing the ecological validity and practical applicability of the research findings. In this regard, little academic training is still offered on digital competences, and both students and supervisors may still have a lack of confidence and even negative attitudes towards digital-mediated intervention (Fjeldheim et al. 2024; Heinsch et al. 2023; Zhu and Andersen 2022). There is also the need to update quality standards and best practices aimed at supporting the effective, inclusive, responsive and ethical use of digital resources (Reamer 2018; Tóth and Jávor 2022). Although new graduates or young practitioners are expected to handle digital competences with more proficiency, this does not necessarily imply that they are ready to effectively implement digital tools into their professional practice (Berzin et al. 2015). A focus on the combination of digital media is necessary to create a wider and more task-specialized scenario in the family support services.

Particular attention should also be paid to the differences found in digital skills and management profiles in the professional workforce, depending on the public social services and nonprofit social agencies (Byrne et al. 2024). These differences create a source of inequality in supporting parents and children as subjects of rights who all deserve the best assistance. Within the realm of public social services, those who are oriented to community resources support are more at risk of having underdeveloped user profiles and digital competences compared to those specifically oriented to child and family support. The quality of community resource support is also very important, as it provides a network of potentially inclusive resources that are gaining value as a complement in the field of child and family support, especially in cases of vulnerable households and neighborhoods, as well as to promote the deinstitutionalization in the child protection system.

In conclusion, the MIL model is relevant in family support services as it enhances communication, informed decision-making, ethical practice, advocacy and community engagement. By integrating MIL components, professionals become more effective, responsible and adaptable in supporting and empowering the autonomy of families in an increasingly digital and information-rich world. This model also helps to solve the gap between digital development in society, welfare services and social work education, since it is crucial to develop academic and social policies associated with initial and continuing training of social workers to improve the combined use of digital resources and competences. Increasing education would help to raise the level of awareness that effective digital interaction with the child and family is important for professional development and family outcomes. This is a way to keep up with technological advances within the framework of quality standards and best practices aimed at supporting the effective, inclusive, and ethical use of digital resources in social services.

Funding

This work was supported by the Spanish Ministry of Science, Innovation and Universities and by the European Regional Development Fund, under the grant PID 2021-128467NB-100 to María José Rodrigo and Sonia Byrne.

Ethics Statement

This study was carried out in accordance with the recommendations of the Ethics Committee of the University of La Laguna, Spain (CEIBA2021-3114). In accordance with the Declaration of Helsinki, written informed consent was obtained from the participants.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

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

References

Afrouz, R., and J. Lucas. 2023. "A Systematic Review of Technology-Mediated Social Work Practice: Benefits, Uncertainties, and Future Directions." *Journal of Social Work* 23: 1–22. https://doi.org/10.1177/14680173231165926.

Amichai-Hamburger, Y., K. Y. McKenna, and S. A. Tal. 2008. "E-Empowerment: Empowerment by the Internet." *Computers in Human Behavior* 24, no. 5: 1776–1789. https://doi.org/10.1016/j.chb.2008.02.002.

Bergman, L. R., D. Magnusson, and B. M. El-Khouri. 2003. *Studying Individual Development in an Interindividual Context: A Person-Oriented Approach*. Lawrence Erlbaum Associates.

Berzin, S. C., J. Singer, and C. Chan. 2015. "Practice Innovation Through Technology in the Digital Age: A Grand Challenge for Social Work." American Academy of Social Work & Social Welfare. Washington.

Byrne, S., G. Rodríguez, M. Álvarez, et al. 2024. "Professionals' Digital Competences and User Profiles in Social Agencies and Their Impact on Professional Practice, Family Autonomy and Wellbeing." *Frontiers in Psychology* 15: 1363444. https://doi.org/10.3389/fpsyg.2024.1363444.

Callejas, E., S. Byrne, and M. J. Rodrigo. 2021. "Feasibility and Effectiveness of 'Gaining Health & Wellbeing From Birth to Three' Positive Parenting Programme." *Psychosocial Intervention* 30, no. 1: 35–45. https://doi.org/10.5093/pi2020a15.

Canário, A. C., S. Byrne, N. Creasey, et al. 2022. "The Use of Information and Communication Technologies in Family Support Across Europe: A Narrative Review." *International Journal of Environmental Research and Public Health* 19: 1488. https://doi.org/10.3390/ijerph19031488.

Canário, A. C., R. Pinto, M. Silva-Martins, et al. 2024. "Online Parenting Programs for Children's Behavioral and Emotional Problems: A Network Meta-Analysis." *Prevention Science* 26, no. 4: 592–609. https://doi.org/10.1007/s11121-024-01735-1.

Carretero S. R. Vuorikari, and Y. Punie. 2017. "DigComp 2.1. The Digital Competence Framework for Citizens With Eight Proficiency Levels and Examples of Use." EUR 28558 EN. https://doi.org/10.2760/38842.

Council of Europe. 2006. "Recommendation no. R (2006) 19 of the Committee of Ministers to Member States on Policy to Support Positive Parenting (Adopted by the Committee of Ministers on 13 December 2006 at the 983rd Meeting of the Ministers' Deputies)." http://rm.coe.int/native/09000016805d6dda.

Ebata, A., and S. L. Curtis. 2017. "Family Life Education on the Technological Frontier." In *Family Life Education: Principles and Practices for Effective Outreach*, edited by S. F. Duncan and H. S. Goddard, 236–626. Sage.

Fjeldheim, S., L. C. Kleppe, E. Stang, and B. Støren-Vaczy. 2024. "Digital Competence in Social Work Education: Readiness for Practice." *Social Work Education* 44: 600–616. https://doi.org/10.1080/02615479.2024.2334800.

Heine, S., M. Krepf, and J. König. 2022. "Digital Resources as an Aspect of Teacher Professional Digital Competence: One Term, Different Definitions–A Systematic Review." *Education and Information Technologies* 28: 3711–3738. https://doi.org/10.1007/s10639-022-11321-z.

Heinsch, M., K. Cliff, C. Tickner, and D. Betts. 2023. "Social Work Virtual: Preparing Social Work Students for a Digital Future." *Social Work Education* 44: 1–7. https://doi.org/10.1080/02615479.2023.2254796.

Leijten, P., K. Rienks, A. P. Groenman, et al. 2024. "Online Parenting Support: Meta-Analyses of Non-Inferiority and Additional Value to In-Person Support." *Children and Youth Services Review* 159: 107497. https://doi.org/10.1016/j.childyouth.2024.107497.

López-Peláez, A., R. Pérez-García, and M. V. Aguilar-Tablada. 2017. "E-Social Work: Building a New Field of Specialization in Social Work?" *European Journal of Social Work* 21, no. 6: 804–823. https://doi.org/10.1080/13691457.2017.1399256.

Mishna, F., J. E. Sanders, J. Daciuk, et al. 2021. "#Socialwork: An International Study Examining Social Workers' Use of Information and Communication Technology." *British Journal of Social Work* 52: 1–22. https://doi.org/10.1093/bjsw/bcab066.

Pascoe, K. M. 2021. "Considerations for Integrating Technology Into Social Work Practice: A Content Analysis of Nine Professional Social Work Associations' Codes of Ethics." *International Social Work* 66, no. 2: 298–312. https://doi.org/10.1177/0020872820980833.

Peiró, J. M., and V. Martínez-Tur. 2022. "'Digitalized'. A Crucial Challenge Beyond Digital Competences." *Journal of Work and Organizational Psychology* 38, no. 3: 189–199. https://doi.org/10.5093/jwop2022a22.

Pink, S., H. Ferguson, and L. Kelly. 2020. "Child Protection Social Work in COVID-19: Reflections on Home Visits and Digital Intimacy." *Anthropology in Action* 27, no. 3: 27–30. https://doi.org/10.3167/aia.2020.270306.

Popa, M. 2010. *Multivariate Statistics Applied in Psychology*. Polirom Iaşi.

Pote, H., A. Rees, C. Holloway-Biddle, and E. Griffith. 2021. "Workforce Challenges in Digital Health Implementation: How Are Clinical Psychology Training Programmes Developing Digital Competences?" *Digital Health* 7: 1–11. https://doi.org/10.1177/2055207620985396.

Reamer, F. 2018. "Ethical Standards for Social Workers' Use of Technology: Emerging Consensus." *Journal of Social Work Values & Ethics* 15, no. 2: 71–80.

Rodrigo, M. J., S. Byrne, and B. Rodríguez. 2014. "Parenting Styles and Child Well-Being." In *Handbook of Child Well-Being*, edited by A. Ben-Arieh, F. Casas, I. Frones, and J. Korbin, 2173–2196. Springer.

Rodrigo M. J., M. L. Máiquez, J. C. Martín, S. Byrne, and B. Rodríguez. 2015. "Manual Práctico de Parentalidad Positiva." Madrid Síntesis.

Suárez-Perdomo, A., S. Byrne, and M. Rodrigo. 2018. "Assessing the Ethical and Content Quality of Online Parenting Resources. [Evaluación de la Calidad Ética y Del Contenido de los Recursos Online Para Padres]." *Comunicar* 54: 19–28. https://doi.org/10.3916/C54-2018-02.

Tóth, L., and R. Jávor. 2022. "Do Digital Information and Communication Technologies in Social Work Practice Increase the Quality and Effectiveness of Work?" *Szociális Szemle* 15: 53–74. https://doi.org/10.15170/SocRev.2022.15.02.04.

UNESCO. 2020. "Seoul Declaration on Media and Information Literacy for Everyone and by Everyone: A Defence Against Disinfodemics." https://www.unesco.org/en/articles/seoul-declaration-media-and-information-literacy-everyone-and-everyone.

Valkenburg, P. M. 2022. "Social Media Use and Well-Being: What We Know and What We Need to Know." *Current Opinion in Psychology* 45: 101294. https://doi.org/10.1016/j.copsyc.2021.12.006.

Vuorikari, R., S. Kluzer and Y. Punie. 2022. "DigComp 2.2: The Digital Competence Framework for Citizens - With New Examples of Knowledge, Skills and Attitudes." EUR 31006 EN, Publications Office of the European Union, Luxembourg. https://doi.org/10.2760/115376.

Zhu, H., and S. T. Andersen. 2022. "Digital Competence in Social Work Practice and Education: Experiences From Norway." *Nordic Social Work Research* 12, no. 5: 823–838. https://doi.org/10.1080/2156857X.2021.1899967.