

Media Use and Child Development: The Missing Curricular Link in Child and Family Social Work Education

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Abstract: *Social work practice with children and families is one of the largest specialization areas in the profession. To prepare students for this area of practice, social work programs often offer several courses focused on child, adolescent, and family well-being. Technology-related topics, however, such as the role of child and family media use on children's developmental outcomes, are underrepresented in social work curricula, courses, and textbooks focusing on children and families. To highlight the importance of this content, our teaching note synthesizes evidence on the impact of two forms of media (television viewing and smartphone use) on children's self-regulation and parent-child interactions. Although we focus on only two forms of media, our research synthesis links media use to emergent issues influencing child development and family functioning—content highly applicable to direct and indirect social work practice activities with children and families. We further draw upon our translational findings to advance social work education and practice by offering low- and high-effort strategies to embed this content in child and family social work courses. We conclude with implications and future directions for social work educators, practitioners, and leaders that describe opportunities to prepare students for a technology-driven future and to use technology strategically to fulfill our profession's mission and values.*

Keywords: *Media use, technology, child and family social work, self-regulation, parent-child interactions*

Child, family, and school social workers draw on their training to assist vulnerable children and their families in developing healthy interactions and navigating complex social service systems. According to the United States Bureau of Labor Statistics (2022), there are approximately 340,000 child, family, and school social workers in the United States, with more than 25% of practitioners delivering individual services to children and their families. Beyond the scope of social work practice, child and family social work is one of the largest educational tracks within the profession. In 2020, the Council on Social Work Education (CSWE) reported that 61 of the 200 Master of Social Work programs offered child and family social work specialization tracks, making this one of the top areas of specialized social work practice in the United States. High interest and enrollment in child and family educational tracks are promising and necessary, as this specialized social work practice area is expected to grow by 6% (roughly 19,000 new positions) by 2024 (United States Bureau of Labor Statistics, 2022).

Given the reach and scope of child and family practice, social work programs are committed to ensuring that students have adequate knowledge, skills, and competencies to provide quality, evidence-based care. Core courses and electives offered in social work

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programs help prepare students for practice with children and families. *Human Behavior in the Social Environment* and direct and indirect social work practice courses, for example, focus on theories and research that support and strengthen students' child and family practice skills. Many programs also offer a range of child and family electives such as child welfare, social work practice with children, school social work, and child and family intervention courses to prepare future professionals for this important practice area. These curricular efforts provide students with substantial knowledge and skills on theories and research that can inform their future practice with children and families.

However, one important curricular topic, child and family media use, is often underrepresented in the social work curriculum and textbooks focusing on child and family practice. As teacher-scholars, we find the lack of attention to media use concerning, given that media use has undoubtedly become an integral part of the lives of children and families (Coyne et al., 2017; Rideout & Robb, 2020). For instance, according to recent estimates, 25% of children under the age of 8 spend more than 4 hours daily with screen media, with a majority of time spent watching television. Similarly, scholars estimate more than half of children in the 2 to 8 age range own a personal media device such as a tablet or smartphone (Rideout & Robb, 2020). Adults with children also are engaging with media and using smartphones more prevalently. The Pew Research Center (2021) reports that almost all adults in the 18 to 50 age group own and constantly use a smartphone.

Increased access to technology, combined with high usage among families, is contributing to a growing body of interdisciplinary scholarship on media use and child development. However, Nissen (2020) highlights that only a small and robust number of social work scholars are examining how technological advances are influencing the social work profession. From our perspective as educators, this small and robust group of scholars is promising and essential yet also indicative of why translational research and an emphasis on media use is often sparse in child and family social work curricula. The profession is missing opportunities to link research on child and family media use to the social work curricula, especially evidence that sheds light on media use in supporting or inhibiting child development and family well-being.

The ongoing COVID-19 pandemic further underscores the importance of considering how media use influences children and families. Online schooling, the cancellation of sports events, and work-from-home transitions have all resulted in dramatic spikes in media use (Eales et al., 2021; McClain, 2022). Excessive, independent, and unsupervised media use among children has several implications for child development, including but not limited to poor self-regulatory skills, peer relationships, and social competence (e.g., Jackson, 2018; Wan et al., 2021). Similarly, greater media use among parents likely has resulted in fewer high-quality child-parent interactions, which further exacerbates risks for behavioral difficulties in early childhood and later in life (see Carson & Kuzik, 2021). Hence, future social work practitioners need educational opportunities to explore and learn how our reliance on technology influences children's health and development.

Alternatively, researchers have also explored and noted the benefits of media use for child and family functioning. First, technology and media can connect families to social support, expand practitioners' reach, and cut the costs of providing effective, evidence-

based interventions to families, which in turn improves child and family outcomes (Hall & Bierman, 2015). Second, utilizing media in the household can be a tool that supports early learning and development and allows families to build prosocial relationships. For instance, scholars that conducted a meta-analysis of the effects of *Sesame Street* found that watching the show has various cognitive and social benefits for young children (Mares & Pan, 2013). Padilla-Walker et al. (2012) also found that co-viewing of movies and other forms of joint media screening can promote parental involvement and closeness between children and their parents. Likewise, watching certain forms of media as a family can become a family practice or ritual, contributing to optimal family functioning (Jordan, 2002). Coyne et al. (2014) also found that positive media use, such as using it as part of family tradition or as a reward, was associated with positive family functioning and high parental involvement. Thus, for better or worse, media has become increasingly prominent in the lives of children and their families and continues to transform the practice landscape for child and family social workers.

In response to the uptick in media use across all generations, especially among children and families following the COVID-19 pandemic, we have curated this teaching note to address this missing curricular link and to connect research on media use and child development to social work curricula. We aim to do so by synthesizing research on media use and child and family outcomes and articulating strategies that social work educators, curriculum committees, and programs can draw upon to strengthen social work education in this area. Given the breadth of information on media use, children, and families, we narrowed our research synthesis to the impact of media use on two specific and interrelated child and family outcomes: children's self-regulation and parent-child interaction. Although we focus on specific media formats and hone in on two child and family outcomes, similar templates can be used to synthesize and translate evidence for other media formats and for additional aspects of child and family well-being.

Our goal is to bring attention to how media-related research can help prepare future social workers to effectively practice with the current generation of children, who are considered "digital natives" because of the ubiquitous presence of media in their lives since birth (Dingli & Seychell, 2015; Prensky, 2001). We then build off this research synthesis to raise awareness about integrating media and child and family well-being content into social work curricula using low- and high-effort strategies. We believe integrating emergent scholarship can enhance social work curricula and help prepare students for technology practice standards (National Association of Social Workers [NASW], 2017) and competencies focused on culturally-responsive practice (CSWE, 2022).

Synthesis of Evidence on Child and Family Media Use

Media Use

Research on the effects of media has become increasingly complex due to the diverse forms of media that children and families consume and their likely differential effects. In this research synthesis, we focus solely on the effects of media via televisions and smartphones, given their frequent and pervasive use among children and caregivers (See

John et al., 2022 for the review criteria and process). As such, we reviewed and synthesized findings on various dimensions of television viewing, ranging from amount and duration (Inoue et al., 2016; Munzer et al., 2018) to the context of television viewing, which included solitary television viewing and co-viewing with parents (Jackson, 2018; Skalická et al., 2019). We also examined the content of television shows in the context of children's self-regulation (Lillard & Peterson, 2011).

Likewise, evidence on smartphone use is examined from various vantage points. Whereas some studies focus purely on the amount of smartphone use (Hosokawa & Katsure, 2018), others focus on the context and how smartphone use influences child-parent interactions (McDaniel & Radesky, 2018a, 2018b). One notable difference between research on the effects of television viewing and that on smartphone use is that studies on television viewing tend to focus primarily on the link between children's usage and their developmental outcomes (Jackson, 2018), whereas research on smartphones has more systematically examined the effects of parental use on children's outcomes (Carson & Kuzik, 2021). As linkages among children's media use and their outcomes can be quite complex, we also sought to highlight evidence that points toward bidirectional or transactional effects, specifically how children's lack of self-regulation could result in greater child or caregiver media use (McDaniel & Radesky, 2018a; Radesky et al., 2014; Thompson et al., 2013).

Media Use and Children's Self-Regulation

Self-regulation is an important developmental construct, foundational to children's academic success, peer relationships, and overall health and well-being (Blair, 2002; Edossa et al., 2018; Galla & Duckworth, 2015; Pandey et al., 2018). In the context of media use, past research has examined various aspects of children's self-regulation across social, emotional, behavioral, and cognitive domains. The social and emotional components of self-regulation are often operationalized through variables such as children's emotional understanding (Skalická et al., 2019) and social-emotional adjustment in school (Jackson, 2018). From a behavioral perspective, self-regulation is often measured via internalizing and externalizing behaviors (McDaniel & Radesky 2018a, 2018b; Sundqvist et al., 2020). Among infants, scholars assessed self-regulation by measuring fussiness (Thompson et al., 2013). Others examine children's executive functioning to explore how media use influences children's cognitive skills (Lillard & Peterson, 2011; Ribner et al., 2017). In brief, self-regulation is a multidimensional construct that is crucial for children's overall healthy development and highly relevant to child and family social work practice.

Figure 1 illustrates our synthesis of translational findings denoting the relationships between media use and children's self-regulation and provides a list of ways that research findings can inform how social workers engage with, assess, and intervene with children and families.

Figure 1. *Bidirectional Relationship: Children’s Media Use and Self-Regulation*

Type of Technology	Research Summaries	Translational Findings
Mobile Devices	For young children, regular mobile use was linked with conduct problems & hyperactivity/inattention (Hosokawa & Katsure, 2018).	<ol style="list-style-type: none"> 1. Populations at risk for high levels of technology use & poor self-regulation among children include children living in low-income households & children who watch more than 2 to 4 hours of TV daily. 2. Relationships among behavioral difficulties & technology use indicate that families may use technology as a behavior management tool for children with poor self-regulation, and/or that greater use of technology in the household increases risks for poor self-regulatory skills. 3. Greater media exposure before age 6 may increase risks for behavioral difficulties that lead to social-emotional issues during school-age years.
TV	<ul style="list-style-type: none"> -3- to 5-year-old children who watched more than 4 hours of TV daily were likely to demonstrate dysregulated behavior at age 5 (Inoue et al., 2016). -4-year-old children who watched fast-paced TV shows such as <i>SpongeBob</i> performed significantly worse on executive functioning tasks compared to children who watched slow paced shows like <i>Caillou</i> or spent their time drawing (Lillard & Peterson, 2011). -Among 4-year-old children from low-income families, duration of TV viewing was linked to lower self-regulation (Munzer et al., 2018). -Among low-income African American children, longer crying & fussiness predicted longer duration of daily TV viewing (Radesky et al., 2014; Thompson et al., 2013). -Young children whose TV viewing exceeded 2 hours a day performed poorly on executive functioning tasks, & this link was stronger for children from low-income families (Ribner et al., 2017). 	
Media Exposure	Children’s screen time at age 4 & having a TV in their room at age 6 was linked to less emotional understanding 2 years later (Skalická et al., 2019).	

Child & Family Social Work Practice Implications

- Engage in diversity & difference by recognizing how life experiences, such as living in a low-income, single-parent, or two-parent household with adults working from home influence child & adolescent media use.
- Assess family access to resources such as books, games, same-age peers, out-of-school-time activities, sport programs, safe play spaces, early education, & childcare to explore interactive relationship among access, media use, & children’s self-regulatory skills.
- Assess whether technology serves as a behavior management tool & intervene to empower caregivers with other positive parenting & co-regulatory relationship strategies (e.g., positive reinforcement, process praise, offering choice, routines, or active ignoring).
- Intervene by providing psychoeducation on children’s developmental needs (i.e., serve & return interactions), increasing familial access to resources such as childcare, or identifying alternative activities safe for young children (e.g., imaginary play or art).

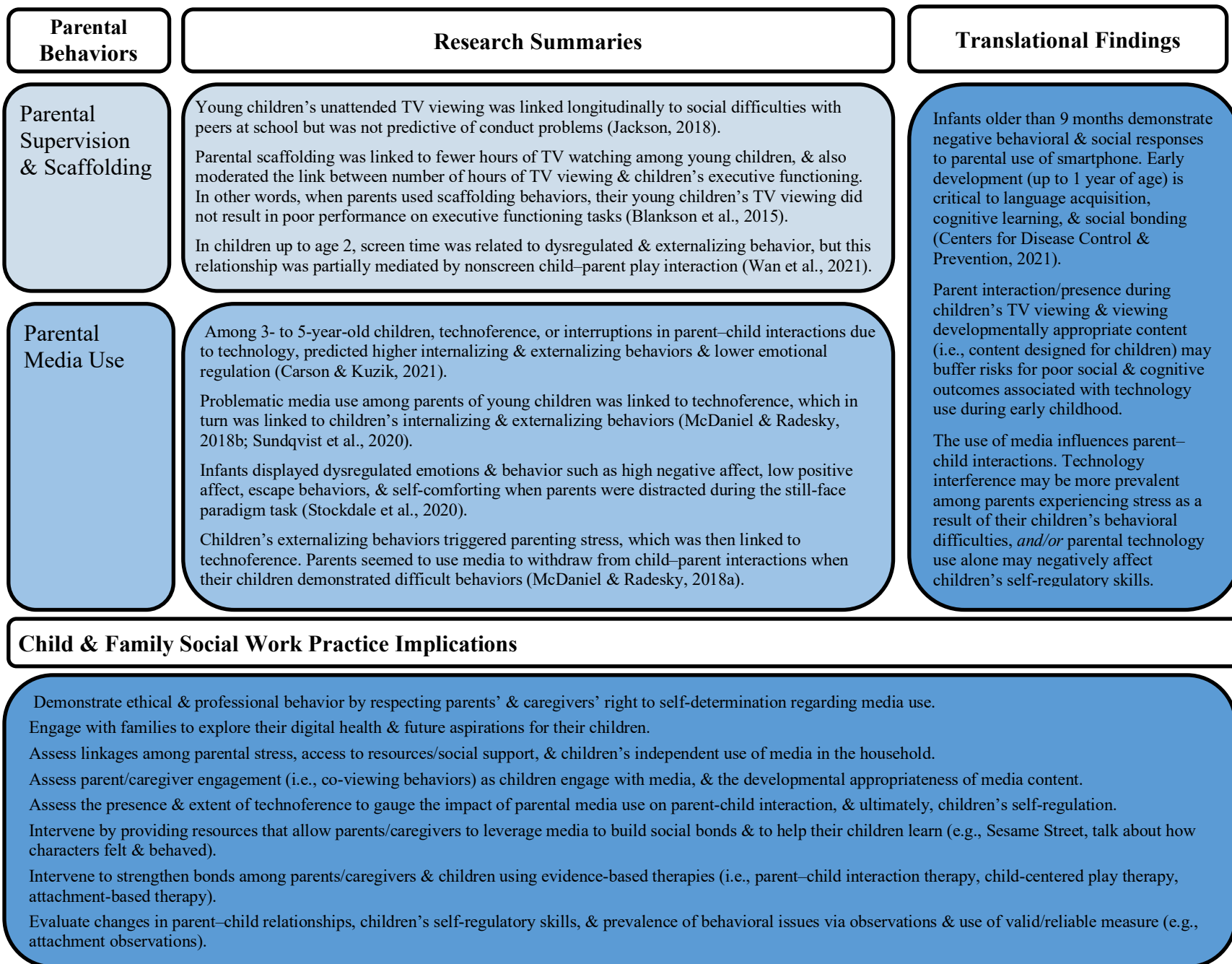
Media Use and Parent-Child Interactions

Parent-child interactions are family outcomes that are closely related to children's self-regulation and are an important area of engagement, assessment, and intervention for child and family practitioners (Kennedy et al., 2016; Maxwell & Rees, 2019). As we reviewed the evidence on media use and parent-child interactions, we found an indirect pathway from media use to children's self-regulation through parent-child interaction. Since children develop self-regulation in the context of positive and high-quality interactions with adults, "technoference," or interference in child-parent interactions triggered by technology use, can increase risks of developing poor regulatory skills (Kildare & Middlemiss, 2017). Given the relevance of these findings for child and family social workers, we synthesize research findings from the growing body of research linking media use, children's self-regulation, and parent-child interactions (see Figure 2; McDaniel & Radesky, 2018a, 2018b; Sundqvist et al., 2020). Figure 2 also includes a list of implications for social work practitioners when engaging in assessment and intervention practices with children and families.

Strategies to Integrate Evidence into Child and Family Social Work Curricula

To complement our research synthesis and recommendations for social work practice at the intersection of media use, child development, and family well-being, we describe low- and high-effort strategies that social work educators can use to integrate this content into social work curricula. Our goal is to help educators recognize ways to integrate media into training activities that support the next generation of child and family social workers. Through intentional lesson plans and activities, low-effort strategies can easily be incorporated into existing and required social work courses. In contrast, high-effort strategies are more intensive and thorough, and are meant to help students identify ways to harness media and technology in their future practice with children and families. In articulating these strategies, we not only present ideas centered around our research synthesis, but also articulate how child and family social workers can respond to the unique and complex needs of the digital natives they will serve and support.

Figure 2. *Media Use, Child-Parent Interactions, and Children's Self-Regulation*



Low-Effort Strategies

We recommend two low-effort strategies: a) assessment of media use, and b) dissemination and application of research on media use to case studies and practice education. For example, students can reflect on ways to include media and technology in their assessment practices, such as asking about media use and screen time during mental health assessments with children, adolescents, families, and other adults (i.e., grandparents, kinship caregivers, etc.). One example of an activity relevant to assessment and practice courses includes having students work in groups to identify questions to ask children and families about their media or technology use. Instructors can guide this discussion and help students reflect on how the following questions could inform assessment and intervention decisions:

- How would you describe a typical day in your household?
- What forms of technology does your child engage with on a day-to-day basis?
- What do you estimate is your child's daily time spent using technology? (probes for watching TV, engaging on mobile devices, or playing on tablets.)
- How often, if at all, are you in the room with your child when they are watching TV?
- What kind of shows does your child watch on TV?
- How does technology influence your child's behaviors? (probing for good or bad, such as use to quiet or comfort or as a reward.)
- Describe your most enjoyable interactions with your child. Is technology present, and if so, how is it used? Is technology absent, and if so, what about the interaction feels enjoyable?
- How, if at all, do you safeguard various forms of technology used in your household (e.g., parent protections, time limitations, or digital logs)?

These are just a few examples of questions relevant to a client's or family's health and well-being and relational dynamics that can be asked during the assessment or intervention phase of treatment. Our synthesis indicates that media use may contribute to poor self-regulation among socioeconomically vulnerable children. The assessment questions mentioned above can help practitioners to better support families in identifying alternative activities for engagement, linkage to welfare programs for childcare or social support (such as Head Start or Title XX services), or receipt of psychoeducation on media use, sleep, language development, behavioral issues, and the like.

Similarly, educators can infuse into social work courses timely and innovative peer-reviewed research on the effects of technology on human behavior, mental wellness, and family life. For example, developmental theories such as Bowlby's (1980) attachment theory and Bronfenbrenner's (2005) bioecological framework, often taught in these courses, were developed when technology was not a prominent part of family life. Recent studies have found that parents are less responsive to children when they are on their smartphones (Abels et al., 2018). This lack of responsiveness may undermine parental behaviors that promote secure attachment in infants and young children (Zayia et al., 2021). Similarly, Navarro and Tudge (2022) propose a neo-ecological framework incorporating

technology as a crucial aspect of children's microsystem. Indeed, these theories can be made especially relevant and current by infusing into them the developmental effects of media use and helping students recognize the intersection of technology and development. Further, educators can develop intentional case studies that direct students to consider theories and research on media use as possible factors underlying children's emotional and behavioral dysregulation.

Social work educators can also encourage students to think critically about how families can use technology to develop stronger connections or social support. To do so, social work educators, practitioners, and students need to be well-versed in recommendations set forth by the American Academy of Pediatrics that provides guidance on media use for young children and adolescents (Hill et al., 2016; Reid Chassiakos et al., 2016). Then, social workers can lead the development of novel family interventions that align with the recommendations, such as encouraging children and parents to co-view specific television shows or movies. In prior research, scholars found that sharing developmentally appropriate media content can serve as a means to promote parental involvement and healthy parent-child interaction (Coyne et al., 2014). Media-centered family rituals, community games, or movie nights also can address family disengagement, enhance social support, and foster cohesion. Furthermore, social work educators can engage students in role-playing exercises in which they ask parents and caregivers to reflect on their ideal media use. Using resources such as the 3-6-9-12 rules that align recommendations for media use among children of different ages (Young, 2017), educators can help practitioners prepare families to identify self-determination practices to improve their digital health. The 3-6-9-12 rules recommends no screen time before age 3, one hour of screen time a day before age 6, up to two hours of supervised screen time between ages 6 and 9, and up to two hours of responsible use between ages 9 and 12 (Young, 2017).

Discussing social work innovations related to media also requires minimal effort for social work educators. For instance, social workers in the field are innovating and responding to the uptick in media by engaging families in interventions called "tech resets." Tech resets help families recognize and respond to their dependence on media, address children's problem behaviors, and improve family communication (L. Rae, personal communication, January 2019). Given that media has become an essential and central aspect of family life, it seems incumbent upon social work educators to prepare future child and family social workers to support children and families in developing healthy relationships with this vital aspect of their ecosystem.

Students also can reflect on recent social movements related to technology, such as the Wait Until 8th (n.d.) campaign that advocates that children and adolescents should be in 8th grade or older before receiving a cell phone. Instructors can design discussions and activities that enable students to examine the research evidence to weigh and discuss the pros and cons of this campaign and the campaign's potential to support or harm child and adolescent mental health, or they may research the campaign's underlying origin and potential as a public health campaign. Notably, the Wait Until 8th (n.d.) website provides a synthesis of research and digital resources to help families monitor and safeguard technology use for adolescents and teens. Social work students could work in groups and access the tools on this website to design psychoeducation lessons around media use and

technology for clients and families. These learning opportunities would help students think critically about the ways technology aligns with assessment, intervention, and evaluation practices.

High-Effort Strategies

For high-effort strategies, we propose developing service-learning opportunities and course modules embedded in social work courses or provided as continuing education to practitioners. Courses on children and families might include service-learning opportunities that require students to develop and deliver parent education modules that promote awareness among families of the various translational findings articulated in Figures 1 and 2. Family literacy on the effect of media use can be critical in promoting child and family well-being (Terras & Ramsay, 2016). Families identified as high risk due to engaging in excessive amounts of media can benefit from learning about topics such as technofence and the link between media content and children's executive functioning. These psychoeducation opportunities can also be offered to other target audiences, such as schools or community organizations like Boys & Girls Club, that work closely with children, families, and policymakers. In addition to engaging with the community, such service-learning initiatives could support student competency development by requiring students to use evidence to inform family education and advocacy for child- and family-centered policies.

Our second high-effort strategy centers around developing in-depth modules on the impact of media use on children's socioemotional development and family processes, such as parent-child interaction. These may be housed in *Human Behavior in the Social Environment* classes and other specialized courses on children and families. Beyond the research summarized here, scholars are beginning to understand the effects of screen time on sleep. For example, Heo et al. (2017) found that screen time before bed reduced sleepiness and melatonin onset due to the blue light's effect on the brain. Thus, the modules can cover the impact of media on children's sleep, physical activity, mental health, and other critical aspects of their development.

In clinical and content-specific courses, social work instructors can develop modules that synthesize research on technology use and mental health and introduce students to new forms of therapeutic intervention to address technology challenges. For example, George et al. (2018) identified links between time spent using digital technology and attention-deficit/hyperactivity disorder and conduct disorder symptoms. The findings pointed toward overuse of technology when attentional programs were high, suggesting that technology is a way in which adolescents may seek to regulate themselves, but that its use only exacerbates preexisting issues. Including modules that summarize and advance what is known about behavioral health and technology use can enhance students' understanding of how online or media activities affect attention, focus, memory, and other regulatory behaviors.

Moreover, instructors can adapt existing case examples or assignments and ask students to research how, if at all, technology and media use is linked to specific mental health concerns or diagnoses. Given the prevalence of cyberbullying (Wright, 2019) and

gaming addictions (Paulus et al., 2018), and the critical role of school and family social workers in implementing prevention and intervention models around these issues, students and practitioners alike can undoubtedly benefit from comprehensive training on these technology-related topics (Slovak & Singer, 2014). Finally, considering the vast literature on media and technology and their important role in family life and well-being, educators can develop social work electives centered around this critical topic. Social work programs around the country offer a multitude of certificate programs and specializations such as global social work and forensic social work. Certificate programs focused on technology could also be developed to help students specialize in serving children and families in the digital age.

Implications and Future Directions for Social Work Education

Advancements in technology continue to influence social work education, practice, and research. According to Berzin et al. (2015), technology integration can increase access to mental health services due to its flexible, on-demand, personal, and individualized nature. However, it is also important to link emergent research to social work training programs. This paper focuses on how translational research findings on child and family media use can be integrated into social work curricula, courses, and training activities. Beyond curricular strategies to enhance education on child and family social work practice, we also believe there are opportunities to further promote and enhance technology-related content in social work curriculum and practice. Accordingly, we describe future directions for social work education regarding media and technology.

From a person-in-environment perspective, contemporary families are embedded in digital contexts, and it is imperative for both current and future professional social workers to competently navigate this context in how they engage with children and families, conduct holistic assessments, and intervene to promote positive child development and family functioning. Indeed, curricular content on media use can contribute to developing student competencies in providing culturally-appropriate and responsive assessments and interventions to children and families in the 21st century. This point is further reiterated in the technology standards for social work practice developed through a collaboration among the four leading professional social work organizations: the National Association of Social Workers, the Association of Social Work Boards, the Council on Social Work Education, and the Clinical Social Work Association (NASW, 2017). Specifically, NASW's Technology Standard 2.05 on "Assessing Clients' Relationships with Technology" calls on social workers to consider the role of technology while assessing the environmental aspects of their clients' psychosocial well-being. The standards deem technology, along with peers, neighbors, and colleagues, to be a crucial aspect of a client's environment and thus of their well-being.

Additionally, many social work educators argue that the profession must learn how to harness technology for social good while adapting and responding to the challenges technology presents to children, families, and communities. Berzin et al. (2015) advocate for gaming, mobile technology, social media, and robotics as just a few new avenues to advance social work practice using technology. Enhancing training and education for practitioners to support adoption and innovation in this space could help bridge this gap.

For instance, in 2018, the University of Toronto offered a course entitled Information Technology in Professional Social Work Practice that focused on the intersection of social work and technology. This aligns with the 2022 Educational and Professional Accreditation Standards of the social work profession, which focuses more on technology as a future direction for social work practitioners and researchers (CSWE, 2022).

Additional strategies to facilitate positive outcomes for social work practitioners and students include continuing education offerings to advance technology-based interventions, education, and training on technology in social work research (e.g., photovoice, digital storytelling, or online social organizing), and advocacy for interstate licensure. By training field receptors and licensed practitioners in technology-based practice, the profession will strengthen field education for future social work students to receive this content in the classroom and beyond. Enhancing our focus, as a profession, on technology-based research methods can elevate the voices and perspectives of socially vulnerable populations.

In addition, Berzin et al. (2015) argue that social work instructors themselves can use media and technology to support new forms of teaching and learning. Audio podcasts, avatars, online simulations, and classroom technology to reach and teach in creative ways are now accessible to instructors to enhance student learning. We are proponents of adopting tools such as Kahoot!, Padlet, online escape rooms, and quiz platforms to support our teaching practices and improve classroom activities, group discussions, and assessment practices. The use of technology by social work instructors has the potential to model to students how digital literacy can stimulate technology infusion into social work training and pedagogy.

Considered together, social work has an opportunity to do more to prepare students for our technologically-driven future. We agree that a paradigm shift around technology is necessary to make changes in the profession (Berzin et al., 2015) and hope that this article advances our understanding of the need to better train child and family practitioners to think about technology and media use to achieve our profession's mission and live out our social work values. Ultimately, children and families are living in a rapidly evolving, highly individualized, and technologically advanced world. Social workers can positively impact the future of child development by working with parents, teachers, and other providers to ensure media is used intentionally and creatively; does not displace sleep, exercise, and play; and families feel empowered to set healthy boundaries to safeguard their children's health and development. After all, relationships are the bedrock of self-regulation and self-regulation is the foundation of a balanced and healthy life.

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