

Digital Parenting: Media Uses in Parenting Routines during the First Two Years of Life

Yehuda Bar Lev¹, Nelly Elias¹

¹Department of Communication Studies, Ben-Gurion University of the Negev, Beer-Sheva, Israel

Correspondence: Prof. Nelly Elias, Department of Communication Studies, Ben-Gurion University of the Negev, Beer-Sheva 84105, Israel. E-mail: enelly@bgu.ac.il

Received: Sep. 16, 2020

Accepted: Oct. 20, 2020

Online Published: Oct. 21, 2020

doi:10.11114/smc.v8i2.5050

URL: <https://doi.org/10.11114/smc.v8i2.5050>

Abstract

According to the American Academy of Pediatrics, children younger than 18 months of age should have no access to screen media, while children aged 18 to 24 months may be allowed occasional viewing of high-quality children's programs together with their parents. Despite these stringent recommendations, however, television and digital devices manifest significant presence in the everyday lives of very young children, even during infancy. Therefore, major empirical efforts were exerted to reveal various predictors of young children's screen time and suggest effective means for its reduction. Along these lines, the present study examined parental media practices applied during infancy and early toddlerhood and how these practices contribute to children's excessive media exposure during the first two years of their life. It was based on a longitudinal study which followed ten families with children from the age of three months until they reached two years, and included a series of observations at the families' homes and in-depth interviews with parents. The findings reveal that parents extensively exposed their children to screen devices, which played a significant role in the daily parenting routines. All parents used screens as a "background," a "babysitter", a "pacifier" and a "childcare toolkit", regardless of their own attitudes towards media effects on their young children. Consequently, it is suggested to increase parental awareness towards their instrumental use of media as part of their parenting routine, which may impart unhealthy media habits and affect their children's long-term development.

Keywords: infants, toddlers, screen viewing, digital devices, media use, parenting

1. Introduction

According to the American Academy of Pediatrics (AAP, 2016) children younger than 18 months of age should have no access to screen media except when using video chat platforms to communicate with distanced family members, while children aged 18 to 24 months should not engage in solo media use, but may be allowed occasional viewing of high-quality children's programs together with their parents. Furthermore, it is recommended that toddlers aged two years and older watch educational programs for up to one hour per day. Despite these stringent recommendations, however, television and digital devices manifest significant presence in the everyday lives of very young children, even during infancy (Cheung et al., 2017; Elias & Sulkin, 2017; Vaala & Hornik, 2014; Wartella et al., 2013). Therefore, major empirical efforts were exerted to reveal various predictors of young children's screen time and suggest effective means of reducing its duration (Chassiakos et al., 2016; Cheung et al., 2017; Cingel & Krcmar, 2013; Evans, Jordan, & Horner, 2011; Lin et al., 2015).

As children's media habits are shaped, first and foremost, within the family context (Jordan, 1992; Vandewater, 2013), parents' sociodemographic characteristics and attitudes towards media effects were the chief factors investigated in previous studies (Anand & Krosnick, 2005; Cingel & Krcmar, 2013; Duch et al., 2013; Lauricella, Wartella, & Rideout, 2015). Another group of studies examined factors entrenched in daily parenting routines, as parents might employ different media as parenting tools, thereby extending children's screen time. These studies have identified several typical media uses aimed at satisfying various parental needs, such as using the screen as a background for the child's activities, keeping the child occupied (i.e. "babysitter"), calming the child and regulating his/her behavior (i.e. "pacifier") (Beyens & Eggermont, 2014; Elias & Sulkin, 2019; Nabi & Krcmar, 2016; Nikken, 2019; Zimmerman, Christakis, & Meltzoff, 2007).

The previous studies, however, were mostly based on surveys in which parents were asked to report how they use media

for their parenting needs and thus were susceptible to respondents' self-censoring. Moreover, these studies addressed parents of children belonging to a broad age range: 0-8 or 2-12 years of age. As such, very little is known about specific parental media uses in parenting infants and toddlers and about how these uses determine the intensity of children's screen exposure from the first months of their lives. To fill this gap, the present study aimed to identify the most common parental media practices applied from the age of three months to two years, as observed in a natural home environment, as well as to illuminate how these practices reflect on the children's television viewing and their use of digital devices.

The study was conducted in Israel – the country that has the highest fertility rate among the OECD (The Organization for Economic Co-operation and Development) countries. The average number of children per Israeli family in 2017 was between 3.30-3.71 (Israel Central Bureau of Statistics, 2017), which is about two times higher than the average in other OECD countries (approximately 1.6 children per family; OECD, 2015), or in the United States (1.9 children; Duffin, 2019). At the same time, Israel does not support families with young children financially and structurally, as might be expected from a pro-child society. For example, Israel provides only 15-weeks paid maternity leave, which forces many new mothers to return to the labor market shortly after birth, and to maneuver between raising three children on average with a full time job. Accordingly, the rate of working mothers of young children (age 0-4) in Israel reached 70% in the last decade (Peperman, 2013), which is much higher than employment rates among mothers in other industrialized countries (OECD, 2014).

The combination of high employment rates and caring for large families confronts Israeli parents (especially mothers) with everyday challenges to meet work demands, fulfill housekeeping tasks, and raise children. Hence, we believe that research among parents of infants in Israel might be very fruitful in revealing digital parenting practices typical of parents in Western societies in general, and in Israel more specifically, where the said practices might be especially salient under these unique circumstances.

2. Methodology

To conduct this study, we applied a combination of two qualitative methods: Observations at the families' homes every three months (in each family we conducted seven observations on average) and in-depth interviews with parents at the beginning, in the middle and at the end of the study. Ten families with infants three to six months of age were selected for the study. The families were recruited through the daycare centers where we invited parents who were expecting their second or third child to take part in the study. The study lasted two years between December 2015 – January 2018 and followed the families until the children were 24 to 30 months of age. All parents were heterosexual couples in their thirties, with academic degrees and white-collar professions. All mothers returned to full-time employment during the study, usually after the child turned 12 months.

Observations were filmed with the parents' permission and all interviews were audiotaped. During the observations, we focused on a systematic record of children's behaviors and activities, their media uses and those of their parents, interactions concerning the various screen devices and the parenting media practices applied. The interviews included questions concerning parents' attitudes towards media effects, children's daily media uses, the reasons behind the parents' uses of media with their children and the developmental changes that occurred during the period under study. The study was approved by the ethics committee of the Ben-Gurion University of the Negev and all parents signed a consent form prior to the study. All children's names cited in the study were changed to preserve anonymity.

The detailed field notes and the interview transcriptions were analyzed thematically, following conventional procedures of qualitative analysis, by conducting repeated readings to refine behavior categories (Lindlof & Taylor, 2019). The finalized findings presented below include four major parental media uses with their children that were found in all families in the study: using media devices as a "background", a "babysitter", a "pacifier" and a "childcare toolkit".

3. Results

3.1 Screens as a "Background"

From their first few months of life, all children who participated in this study were exposed to background television: The children played, ate or rested in front of a TV screen, as their parents watched their own programs. In such situations, parental attention was devoted mostly to the screen, leading to a marked absence of both verbal and non-verbal communication with the child. Furthermore, children were constantly witnessing their parents' use of digital media, particularly smartphones. One typical situation was mothers' smartphone use while nursing, generally for reading and writing messages, as can be seen in the interview with the mother of a six-months old boy:

I often breastfeed and chat via Whatsapp [instant messages application]. At that time, I realize that I am not maintaining eye contact with my son, but with my phone [...] It is really easy to spend an entire day without looking my baby in the eye. That's why whenever I breastfed, I would place my phone so that I always appear to be looking at him, while reading messages.

Screens served as a background for various parent-child activities as children got older as well. Thus, parents were constantly distracted by smartphones during different activities with their children, such as playing, feeding or taking care of the child. In these situations, parents regularly conducted work-related phone conversations or were engaged in various online activities, without maintaining eye contact and verbal communication with the child. The children, for their part, reacted with impatience and expressed anger and frustration. In one such observation, an 18-months old boy was bathing while his mother sat on the edge of the tub, typing and scrolling on her smartphone. The child sensed her lack of emotional availability and splashed the mother. She then had to put the phone into her pocket so it would not get wet. Subsequently, the child took a plastic toy, placed it to his ear, saying “Hallo? Hallo?” and mimicking his mother.

Moreover, meaningful parent-child interactions, such as reading a book, often took place while the television was tuned to a children’s channel. Hence, it was evident that the children were not focused on the story because their attention was divided between the screen and the book. Rather than shutting off the television, however, parents stopped reading while their children were focused on the screen. Similarly, screen content distracted parents during their activity with children. For example, when parents read books aloud to their children while watching their own programs, it was evident that they were not fully engaged in reading and attuned towards the child. In one such observation, when a two-years old girl pointed out the animals depicted in the book and asked what they were, her mother, who was watching the news, did not answer her questions. Later on, when the child misidentified an animal, her mother did not correct her, but rather commended her: “Good!”

3.2 Screens as a “Babysitter”

Using the television as a “babysitter,” so that parents could be free for other activities, began when children in the study were about six months of age and then started watching early childhood programs. This occurred more and more frequently as they grew older and demanded increasing attention from their parents. Accordingly, parental need to keep their children occupied gave rise to longer and longer viewing sessions: From 15 minutes of single viewing at six months to 40 minutes at two years. Note that all parents used television in this manner, even those who expressed critical views concerning television’s negative effects on young children, as can be seen from the interview with the mother of a 12-months old girl:

The children who are used to watching TV get bored terribly fast and can't occupy themselves compared to the children without a TV set at home. That is why I did not want it in my house, but we have a hard time with the kids. My husband travels abroad a lot, so I stay alone with two children. For example, if I need to make a bath for my older daughter, then I'll put her [the younger daughter] in front of the TV. And gradually I started using it [the TV] more and more often. I would say, unfortunately! But I'm alone with the kids and I need to find the balance, and the TV really helps.

In addition, during the second year of life, parents with more permissive attitudes towards media use also allowed their toddlers to watch YouTube via smartphone or tablet, generally for periods of about half an hour, with no parental supervision of content. On several occasions, we noted that the children were exposed to age-inappropriate videos, including those with violent or sexual content. At the same time, mothers were in the kitchen preparing dinner or in in another part of the house helping older siblings with their homework, as can be seen from the following observation of a two-years old boy:

At 7:00 PM, J’s mother handed him an iPad that was already playing his favourite song on YouTube and went into the kitchen to prepare dinner. At first, he appeared to lack interest in any particular video, viewing each for only a few seconds. Suddenly, a video came up that attracted his attention: It played a children’s song, but on the screen *Incredible Hulk* was engaging in some highly aggressive behaviour towards other animated figures. The child was totally engrossed in this content and spent more time watching it - 3.5 minutes - than any other video he watched on that occasion. All in all, J. watched YouTube for about half an hour, going through 41 clips. All that time, his mother remained in the kitchen, unaware of what her son was watching.

Moreover, we noticed that parents did not teach their children how to use the device, such as holding the screen correctly. Accordingly, while watching content on a smartphone or tablet, the children were sitting with slouching shoulders, their heads bent too close to the screen. Likewise, they were unaware of how to adjust volume, switch to full screen viewing or how to rotate screen content. As a result, they watched landscape mode videos in portrait mode and vice versa, possibly leading to some confusion and misunderstanding regarding the content. At times, when children watched smartphones in bed before falling asleep, often in total darkness, they were exposed to bright lights and loud sounds, all without parental presence.

Finally, we should stress that children were motivated to watch television or use a digital device in response to parents’ needs (e.g., more time to rest or engage in household chores) rather than at their own initiative. On the contrary, the children asked their parents to play with them or read them a book, but the screen was offered as a replacement for joint

activity. We also noticed that there was no “compensation” offered later, since parents did not devote extra time to children once they finished whatever they had been busy with.

3.3 Screens as a “Pacifier”

Screen viewing was also commonly used as a “digital pacifier”, when children were ill, tired or upset. At first, this use was observed around six months of age. As time passed, children got used to calming down in front of the screen—a ritual that turned into a routine daily activity. Furthermore, from the age of 18 months, similar use was made of smartphones. Parents were aware of their children’s attraction to the device and used it as a most efficient tool for achieving an instant calming effect. During the second year of life, smartphones were used even more often than television, as they enabled parents to select specific videos or applications that had the best chance of calming their child at once, as can be seen from the observation of a two-years old boy:

At noon the father decided to take his five-year-old daughter to the pool while the younger son was supposed to stay at home. The child realized that he was not going to the pool, ran to his father and asked him to take him in his arms. The father refused, handed him to the mother and the child began to cry. In response the mother sat him on her lap; gave him her smartphone and opened a video camera app. The child immediately calmed down; he was fascinated by his own image and slid his finger across the screen. At this time the father and the daughter left the house without the son noticing it.

This use of smartphones was common among all families, even those in which children were not allowed to use them under ordinary circumstances. During crisis moments, however, the smartphone was employed by all parents regardless of their attitudes towards young children’s media use. Finally, we should note that parental use of screens for calming purposes was more common than verbal communication with the child, suggesting a favourite toy or offering comforting physical contact, such as hugging or stroking.

3.4 Screens as a “Childcare Toolkit”

A significant difficulty typical of the first two years of life is the extensive care that parents need to provide, sometimes entailing children’s lack of cooperation or even strenuous opposition. In this context, we observed that having children view screen content served as an all-in-one “childcare kit” that made it easier for parents to get through the day, avoiding excessive effort and harsh confrontation with the child. For example, when children were only six months old, their parents sat them down to eat in front of the television set, especially those who were fussy eaters. This trend became more pronounced during the second year, as confirmed in observations demonstrating that most toddlers ate dinner—or at least snacks and fruit—in front of the screen. In the same manner, children were offered the opportunity to watch television before bedtime, if they go to bed afterwards without arguing. These uses of screen viewing were imprinted deeply in daily schedules among all families, even those who expressed critical views towards media effects on child development.

Similarly, the smartphone was recruited for situations in which the children’s cooperation was particularly necessary. For example, a toddler girl who was not allowed to use a smartphone under ordinary circumstances, was offered limitless access to the device as a means of encouraging her to use the potty. In response, she would sit there for half an hour, holding it in, so she could use the smartphone longer. Furthermore, she would also ask for the potty very frequently, even without an actual need, so she could gain more time with a smartphone. In the interviews the parents admitted that they were well aware of the children’s powerful attraction towards the smartphone, and hence used it each time they were expecting the child’s resistance, as can be seen from the interview with the mother of a 12-months old girl:

She really likes to watch the music videos on the smartphone. As a rule, we forbid it, but in situations like nails or cleaning her head from lice, the smartphone saves me because it is impossible, it is simply impossible to cut her nails and certainly not to remove lice. It’s a nightmare, she turns around, yells and makes it really hard on me. But with the smartphone she does not move and I can easily clean her head.

We should emphasize that these situations of parents’ breaking their own rules regarding smartphone use were very confusing for the children and made them feel frustrated and upset each time they tried to reach for the device but were restricted by their parents.

4. Discussion

The unique value of this research is reflected, first and foremost, in a long-term examination of a formative process of shaping media habits and skills of very young children in their familial environment. The research findings reveal extensive exposure to media devices during the first two years of the children’s lives. As such, the study not only supports the claim that screen viewing has become normative behavior among infants and toddlers (Vaala, 2014; Vaala & Hornik, 2014), but also illustrates how deeply it is integrated into the daily parenting routines. In all families, the children were exposed to background television as of the earliest months of their lives when their parents watched the programs of their choice. On these occasions, children not only were exposed to content not intended for them, but also experienced highly

limited interaction with their parents, which may exert a negative effect on the child's emotional and linguistic development alike (Pempek, Kirkorian & Anderson, 2014).

Extensive parental use of smartphones alongside their young children is also liable to have far-reaching negative implications. Such use may well constitute an inappropriate model for imitation, as well as limit the parent's emotional availability towards the child and exert a negative effect on the quality of parental childcare well constitute an inappropriate model for imitation, as well as limit the parent's emotional availability towards the child and exert a negative effect on the quality of parental childcare (Lin et al., 2020; McDaniel & Coyne, 2016; McDaniel & Radesky, 2018; Myruski et al., 2018).

One particularly problematic form of background screen exposure was observed in those situations when parents read stories to their children in front of a TV screen. On these occasions, they did so at the same time that a children's program was being broadcast, whereupon the child's attention was distracted, or the parents divided their attention between reading to the child and watching a program of their own choice. This practice is liable to lower the quality of parental mediation that is so essential at this age, while diminishing the possible benefits of reading stories out loud for promotion of children's linguistic and cognitive skills (Hutton et al., 2020).

Furthermore, parental use of media to occupy the child significantly contributed to intensified exposure to screen content, as shown in the previous studies among older children (Beyens, & Eggermont, 2014; Elias & Sulkin, 2019). The present study also revealed that when the digital devices served as an available and convenient "babysitter," this usually occurred without parental supervision, which might expose very young children to highly inappropriate content. This finding conforms with the warnings of online safety advisors stating that while watching children's programs online, the young viewers are only three clicks away from harmful content (Kaspersky Lab, 2013) and calls for intensified parental awareness of the online risks awaiting toddlers and pre-schoolers. Furthermore, use of the media devices to keep the child busy was found to replace parent-child quality time, thus potentially impeding the attachment process that is so essential during the first two years of life (Bowlby, 1969; Sroufe et al., 1992).

Similarly, use of media as a digital "pacifier" supplanted verbal communication or comforting physical contact with the children, possibly rendering them dependent on the screen devices for calming and impeding their ability to develop inner mechanisms for mood management (Radesky, Schumacher, & Zuckerman, 2015). Likewise, when parents employ media devices as a multipurpose childcare toolkit, using them to facilitate feeding, putting children to bed and even for potty training, they may well cause their children to adopt unhealthy media use habits. In addition, the lack of consistency regarding applying limitations on the digital devices use makes it difficult for children to internalize those rules, so they constantly long for the device and use every opportunity to get to it despite parents' restrictions.

Finally, the study reveals a significant contradiction between parental concerns regarding media effects and children's high media exposure from the first months of life. Despite the well-known assumption that parental attitudes determine the amount of children's screen time (e.g. Beyens, Eggermont, & Nathanson, 2016; Vaala, 2014), our findings indicate that other forces, and especially time pressure and daily constraints, seem to moderate the relationship between parents' negative attitudes and their substantial screen use in the childrearing routines.

5. Conclusions and Suggestions for Future Studies

The present study has provided a more nuanced perspective on the family life constraints and parental needs underlying infants and toddlers' media exposure. The parents in the study seem to employ the screen media as an "all-in-one" device that fulfills the variety of parenting needs - a practice that increases the young children's viewing time beyond the levels recommended for this age group (AAP, 2016). These findings are especially alarming given the adverse effects it may have on children's cognitive, physical, social and psychological development (Christakis, 2009, 2014; Domingues-Montanari, 2017). At the same time, it is crucial to acknowledge that the parents' extensive use of screen media does not originate in their permissive views, but rather in the numerous challenges with which they must cope in their daily routine.

Hence, the study's findings call for a more family-based ecological approach to screen time reduction among infants and toddlers. For example, it may be helpful to encourage parents to begin with small but important changes in their parenting practices, such as avoid using smartphone while nursing or turn off the television when parents and children are engaged in reading. Moreover, as parental screen uses play such a major role in determining children's viewing patterns, it is suggested to increase parental awareness that their frequent use of media for parenting objectives may result in adoption of unhealthy media habits and affect other aspects of their children's long-term development.

Thus, parents should be offered alternative tools and resources to support their parenting efforts that have a higher potential to advance healthy development instead of their heavy reliance on screen media. In parallel, and given the structural difficulty of finding readily available resources to fully replace screen media as a multipurpose parenting tool, there is also a need for programs aimed at improving parents' media literacy. Accordingly, parents acquire knowledge and

skills of how to promote their children's proper use of digital devices and how to select high-quality child-directed content aimed at facilitating their children's healthy development. In this way, parents may derive benefits from "digital parenting" while reducing its negative effects.

Finally, we would like to thank parents participated in the study, who allowed us a rare glimpse into the life experience of a contemporary family in which an infant is born into a media saturated home environment and is constantly exposed to diverse devices and contents. We wish to emphasize that our analysis does not seek to blame the parents for misuse of media with their children. On the contrary, it reveals the complexity of parenting in the digital age and calls for more studies that would shed light on modern parents' everyday life constraints and dilemmas.

Therefore, it is suggested to apply a similar methodology to other national contexts and to diverse samples of parents with different socio-demographic characteristics than those prevalent among the parents who participated in the present study. Moreover, given the high mobility of the digital devices that can be used virtually everywhere, it could be especially valuable to conduct observations in families while they are away from home. This approach will allow a more nuanced understanding of various parental factors responsible for further growth in young children's screen time and help identify those digital parenting tools that parents employ outside of a familiar home environment.

Acknowledgement

This research was supported by the I-CORE Program of the Planning and Budgeting Committee (1716/12). The authors wish to thank Dr. Sharona T. Levy for her valuable input to the early stages of planning and conducting the research presented in this article.

References

- American Academy of Pediatrics (2016). Policy statement: Media and young minds. *Pediatrics*, *138*(5), 1-18. <https://doi.org/10.1542/peds.2016-2591>
- Anand, S., & Krosnick, J. A. (2005). Demographic predictors of media use among infants, toddlers, and preschoolers. *American Behavioral Scientist*, *48*, 539-561. <https://doi.org/10.1177/0002764204271512>
- Beyens, I., & Eggermont, S. (2014). Putting young children in front of the television: antecedents and outcomes of parents' use of television as a babysitter. *Communication Quarterly*, *62*(1), 57-74. <https://doi.org/10.1080/01463373.2013.860904>
- Beyens, I., Eggermont, S., & Nathanson, A. I. (2016). Understanding the relationship between mothers' attitudes toward television and children's television exposure: A longitudinal study of reciprocal patterns and the moderating role of maternal stress. *Media Psychology*, *19*(4), 638-665. <https://doi.org/10.1080/15213269.2016.1142383>
- Bowlby J. (1969). *Attachment: Attachment and loss: Vol. 1*. New York: Basic Books.
- Chassiakos, Y. L. R., Radesky, J., Christakis, D., Moreno, M. A., & Cross, C. (2016). Children and adolescents and digital media. *Pediatrics*, *138*(5), e20162593. <https://doi.org/10.1542/peds.2016-2593>
- Cheung, C. H., Bedford, R., De Urabain, I. R. S., Karmiloff-Smith, A., & Smith, T. J. (2017). Daily touchscreen use in infants and toddlers is associated with reduced sleep and delayed sleep onset. *Scientific Reports*, *7*. <https://doi.org/10.1038/srep46104>
- Christakis, D. A. (2009). The effects of infant media usage: What do we know and what should we learn? *Acta Paediatrica*, *98*(1), 8-16. <https://doi.org/10.1111/j.1651-2227.2008.01027.x>
- Christakis, D. A. (2014). Interactive media use at younger than the age of 2 years: Time to rethink the American Academy of Pediatrics guideline? *JAMA Pediatrics*, *168*(5), 399-400. <https://doi.org/10.1001/jamapediatrics.2013.5081>
- Cingel, D. P., & Kremer, M. (2013). Predicting media use in very young children: The role of demographics and parent attitudes. *Communication Studies*, *64*(4), 374-394. <https://doi.org/10.1080/10510974.2013.770408>
- Domingues-Montanari, S. (2017). Clinical and psychological effects of excessive screen time on children. *Journal of Paediatrics and Child Health*, *53*(4), 333-338. <https://doi.org/10.1111/jpc.13462>
- Duch, H., Fisher, E. M., Ensari, I., & Harrington, A. (2013). Screen time use in children under 3 years old: A systematic review of correlates. *International Journal of Behavioral Nutrition and Physical Activity*, *10*(1), 102. <https://doi.org/10.1186/1479-5868-10-102>
- Duffin, E. (2019). *Average number of own children under 18 in families with children in the United States from 1960 to 2019*. Retrieved from <https://www.statista.com/statistics/718084/average-number-of-own-children-per-family>.
- Elias, N., & Sulkin, I. (2017). YouTube viewers in diapers: How toddlers' online viewing is related to child and parents' characteristics, parental perceptions, mediation styles and parenting media practices. *Cyberpsychology: Journal of*

Psychosocial Research on Cyberspace, 11(3). <https://doi.org/10.5817/CP2017-3-2>

- Elias, N., & Sulkin, I. (2019). Screen-assisted parenting: The relationship between toddlers' screen time and parents' use of media as a parenting tool. *Journal of Family Issues*, 40(18), 2801-2822. <https://doi.org/10.1177/0192513X19864983>
- Evans, C. A., Jordan, A. B., & Horner, J. (2011). Only two hours? A qualitative study of the challenges parents perceive in restricting child television time. *Journal of Family Issues*, 32(9), 1223-1244. <https://doi.org/10.1177/0192513X11400558>
- Hutton, J. S., Dudley, J., Horowitz-Kraus, T., DeWitt, T., & Holland, S. K. (2020). Associations between home literacy environment, brain white matter integrity and cognitive abilities in preschool-age children. *Acta Paediatrica*, 109(7), 1376-1386. <https://doi.org/10.1111/apa.15124>
- Israel Central Bureau of Statistics (2017). Fertility among Jewish women in Israel, by level of religiosity, 1979-2017. Retrieved from <https://www.cbs.gov.il/he/publications/DocLib/pw/pw101/pw101.pdf> (Hebrew).
- Jordan, A. B. (1992). Social class, temporal orientation, and mass media use within the family system. *Critical Studies in Mass Communication*, 9(4), 374-386. <https://doi.org/10.1080/15295039209366840>
- Kaspersky Lab (2013). Children at high risk of accessing adult content on YouTube, [N.A.]. Retrieved from <http://www.prnewswire.com/news-releases/children-at-high-risk-of-accessing-adult-content-onyoutube-189770621.html>
- Lauricella, A. R., Wartella, E., & Rideout, V. J. (2015). Young children's screen time: The complex role of parent and child factors. *Journal of Applied Developmental Psychology*, 36, 11-17. <https://doi.org/10.1016/j.appdev.2014.12.001>
- Lin, H. P., Chen, K. L., Chou, W., Yuan, K. S., Yen, S.Y., Chen, Y. S., & Chow, J. C. (2020). Prolonged touch screen device usage is associated with emotional and behavioral problems, but not language delay, in toddlers. *Infant Behavior and Development*, 58. <https://doi.org/10.1016/j.infbeh.2020.101424>
- Lin, L. Y., Cherng, R. J., Chen, Y. J., Chen, Y. J., & Yang, H. M. (2015). Effects of television exposure on developmental skills among young children. *Infant Behavior and Development*, 38, 20-26. <https://doi.org/10.1016/j.infbeh.2014.12.005>
- Lindlof, T. R., & Taylor, B. C. (2019). *Qualitative communication research methods-fourth edition*. Thousand Oaks, CA: Sage.
- McDaniel, B. T., & Coyne, S. M. (2016). "Technoference": The interference of technology in couple relationships and implications for women's personal and relational well-being. *Psychology of Popular Media Culture*, 5(1), 85. <https://doi.org/10.1037/ppm0000065>
- McDaniel, B. T., & Radesky, J. S. (2018). Technoference: Parent distraction with technology and associations with child behavior problems. *Child Development*, 89(1), 100-109. <https://doi.org/10.1111/cdev.12822>
- Myruski, S., Gulyayeva, O., Birk, S., Pérez-Edgar, K., Buss, K. A., & Dennis-Tiwary, T. A. (2018). Digital disruption? Maternal mobile device use is related to infant social-emotional functioning. *Developmental Science*, 21(4), e12610. <https://doi.org/10.1111/desc.12610>
- Nabi, R. L., & Krcmar, M. (2016). It takes two: The effect of child characteristics on US parents' motivations for allowing electronic media use. *Journal of Children and Media*, 10(3), 285-303. <https://doi.org/10.1080/17482798.2016.1162185>
- Nikken, P. (2019). Parents' instrumental use of media in childrearing: Relationships with confidence in parenting, and health and conduct problems in children. *Journal of Child and Family Studies*, 28(2), 531-546. <https://doi.org/10.1007/s10826-018-1281-3>
- OECD (2015). *Fertility rates indicator*. doi: 10.1787/8272fb01.
- OECD (2014). *Parents and work: Men and women participating in the labour force*. Retrieved from http://ec.europa.eu/justice/genderquality/files/documents/140502_gender_equality_workforce_ssr2_en.pdf
- Pempek, T. A., Kirkorian, H. L., & Anderson, D. R. (2014). The effects of background television on the quantity and quality of child-directed speech by parents. *Journal of Children and Media*, 8(3), 211-222. <https://doi.org/10.1080/17482798.2014.920715>
- Peperman, B. (2013). *The law for encouraging and enhancing women's integration and employment in workplaces*. Israel National Bureau of Economy. Retrieved from <http://www.moit.gov.il/NR/rdonlyres/9157CCCE-50D8-43D5-9F16->

7D5B55898985/0/X12521.pdf (in Hebrew).

- Radesky, J. S., Schumacher, J., & Zuckerman, B. (2015). Mobile and interactive media use by young children: the good, the bad, and the unknown. *Pediatrics*, *135*(1), 1-3. <https://doi.org/10.1542/peds.2014-2251>
- Sroufe, L. A., Cooper, R. G., DeHart, G. B., Marshall, M. E., & Bronfenbrenner, U. E. (1992). *Child development: Its nature and course*. Boston: McGraw-Hill Book Company.
- Vaala, S. E. (2014). The nature and predictive value of mothers' beliefs regarding infants' and toddlers' TV/Video viewing: Applying the integrative model of behavioural prediction. *Media Psychology*, *17*(3), 282-310. <https://doi.org/10.1080/15213269.2013.872995>
- Vaala, S. E., & Hornik, R. C. (2014). Predicting US infants' and toddlers' TV/video viewing rates: Mothers' cognitions and structural life circumstances. *Journal of Children and Media*, *8*(2), 163-182. <https://doi.org/10.1080/17482798.2013.824494>
- Vandewater, E. A. (2013). Ecological approaches to the study of media and children. In Lemish, D. (Ed.), *The Routledge international handbook of children, adolescents and media* (pp. 72-79). Routledge.
- Wartella, E., Rideout, V., Lauricella, A. R., & Connell, S. (2013). Parenting in the age of digital technology. *Report for the center on media and human development school of communication Northwestern University*. Retrieved from <https://contemporaryfamilies.org/wp-content/uploads/2014/04/Wartella.pdf>
- Zimmerman, F. J., Christakis, D. A., & Meltzoff, A. N. (2007). Television and DVD/video viewing in children younger than 2 years. *Archives of Pediatrics & Adolescent Medicine*, *161*(5), 473-479. <https://doi.org/10.1001/archpedi.161.5.473>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the [Creative Commons Attribution license](#) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.