

## Article

# The COVID-19 Pandemic: Changes in Parent–Child Activities at Home from Spring 2020 to Spring 2021 from a Cross-Cultural View

Galia Meoded Karabanov <sup>1,\*</sup> , Dorit Aram <sup>1</sup>, Carmen López-Escribano <sup>2</sup>, Katerina Shtereva <sup>3</sup> , Merav Asaf <sup>4</sup>, Margalit Ziv <sup>5</sup>, Michele Lee Stites <sup>6</sup>  and Susan Sonnenschein <sup>6</sup>

<sup>1</sup> Constantiner School of Education, Tel Aviv University, Tel Aviv 6997801, Israel; dorita@tauex.tau.ac.il

<sup>2</sup> Department of Research and Psychology in Education, Complutense University of Madrid, 28040 Madrid, Spain; carmenle@edu.ucm.es

<sup>3</sup> Department of Logopedics, Sofia University “St. Kliment Ohridski”, 1574 Sofia, Bulgaria; kshtereva@uni-sofia.bg

<sup>4</sup> School of Education, Kaye Academic College of Education, Beer-Sheva 8414201, Israel; merav@kaye.ac.il

<sup>5</sup> Early Childhood Graduate Studies, Kaye Academic College of Education, Beer-Sheva 8414201, Israel; margalit.ziv@gmail.com

<sup>6</sup> Psychology Department, University of Maryland Baltimore County, Baltimore, MD 21250, USA; mstites@umbc.edu (M.L.S.); sonnensc@umbc.edu (S.S.)

\* Correspondence: galiam1@mail.tau.ac.il

**Abstract:** This study explored young children’s (2–8 years old) daily activities during the first lockdown with the outbreak of the COVID-19 pandemic (spring/2020, T1) and a year later (spring/2021, T2) from a cross-cultural perspective. It describes parent–child literacy and digital activities in Bulgaria, Israel, and Spain. Participating parents (747 in T1 and 432 in T2) answered online questionnaires about the frequency of parent–child literacy activities (alphabetic, book reading, and play) and digital activities (joint activities, selecting content, scaffolding) and the child’s screen time. The findings indicated moderate parent–child literacy and digital activities during the time points. A series of ANCOVAs revealed differences between time periods and cultures beyond the demographic measures (child’s age, parent’s education and age, and family size). During the first lockdown, parent–child joint digital activities and the child’s screen time were higher than a year later. A year later, parents were more involved in book reading, literacy play activities, and scaffolding their children’s use of digital devices. Interactions between the period and culture showed that Bulgarian and Spanish parents were more involved in their children’s literacy and digital activities than Israeli parents. Spanish children had more independent screen time than Bulgarian and Israeli children. Associations between literacy and digital activities implied a consistent parenting style across the activities.

**Keywords:** COVID-19; literacy; digital literacy; cross-cultural



**Citation:** Meoded Karabanov, G.; Aram, D.; López-Escribano, C.; Shtereva, K.; Asaf, M.; Ziv, M.; Stites, M.L.; Sonnenschein, S. The COVID-19 Pandemic: Changes in Parent–Child Activities at Home from Spring 2020 to Spring 2021 from a Cross-Cultural View. *Educ. Sci.* **2023**, *13*, 1013. <https://doi.org/10.3390/educsci13101013>

Academic Editor: Robyn M. Gillies

Received: 18 July 2023

Revised: 18 September 2023

Accepted: 29 September 2023

Published: 7 October 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

The COVID-19 pandemic triggered an unprecedented series of events that upended and affected the lives of families around the globe. It constituted the worst public health crisis in a century and disrupted everyday life. It shuttered daycares, preschools, and schools and, during lockdowns, isolated families in their homes with little outside support [1].

The first lockdown created a unique situation in numerous countries. On top of parents’ stress from the dangerous pandemic, they had to juggle at-home childcare, household chores, and work. Many parents worked from home without access to extended family support (grandparents, aunts, etc.) or outsourced help (babysitters, etc.). Some were challenged with financial insecurity, health issues, and confinement-related stresses, influencing family life [2]. The continuous stress was related to young children’s learning outcomes and mental health and impacted early literacy development [3,4]. The worldwide

COVID-19 crisis created a situation that enabled studying parent–child home literacy and digital activities from a cross-cultural perspective.

The current study documents parent–child activities from the perspective of the “Developmental Niche” model [5,6]. According to this approach, parents play a central mediating role between the culture and their children’s developmental experiences. While parenthood’s complex and intensive nature is perceived as universal, some of its aspects are mediated by cultural contexts. Parents make choices regarding the best ways to care for their children. These choices follow cultural patterns, such as organizing a child’s daily life and activities [7].

The study explored parents’ daily literacy activities with their young children. UNESCO (2023) defines young children as children between two and eight years old [8]. We studied literacy and digital activities of parents with their young children (aged 2–8 years) during the first lockdown and a year later in three cultures: Bulgaria, Israel, and Spain. These cultures were chosen to include Eastern and Western Europe and the Middle East. They are geographically close, yet their family structure and values are somewhat different.

The data for this study were collected in two waves: during the March–May 2020 lockdowns and a year later. At the height of the closures in April 2020, in-school classes were stopped for 94% of students worldwide, and distance learning was implemented in many places [9,10]. Between March 2020 and May 2021, closures are estimated to have lasted an average of 41 weeks (10.3 months). They have significantly negatively affected children’s learning [11]. During this year, parents were frequently their children’s primary teachers.

The literacy activities at the focus of this study were parent–child alphabetic activities on paper (e.g., writing notes with the child, reading signs), shared book reading, and literacy play activities (games that involve letters, reading, and writing). The digital activities included parent–child joint digital activities, parental scaffolding, and support of the child’s use of digital devices, parents’ involvement in selecting digital content for their children, and the child’s screen time.

### 1.1. Home Learning Environment (HLE)

The first years are important for creating an infrastructure for effective later learning [12]. The *HLE* relates to parental involvement that encourages children’s development of academic skills [13–15]. It includes materials available in the home (e.g., books, educational games, digital books, educational apps, and web-based games) and parenting behaviors that aim to enhance children’s educational outcomes [16–18]. Young children need exposure to activities that foster their interest in and development of language, literacy, mathematics, science, and more [19–22].

A child’s ability to acquire basic literacy skills, such as letter knowledge and phonological awareness, at an early age predicts reading and writing abilities later in school [23]. Hence, one of the essential assets for children is a home environment in which the parents are actively involved in engaging their child in activities aimed at early literacy promotion [13,18,24].

The use of screen devices has become a routine activity in modern parenting [25]. Screen devices can strategically improve children’s educational environments. Parents can use digital devices to scaffold their preschool children’s literacy development (e.g., tablets) [26,27]. For example, they can encourage their children to listen to electronic stories on digital devices (iPad, computer, or mobile phone) and express themselves in writing [28–30]. Home use of screen devices can enhance a child’s literacy, especially if the parents combine digital devices with scaffolding strategies involving physical, verbal, and emotional support [26].

Indeed, young children pick up and make sense of literacy information from their home environment, whether from print or screen [31]. Studies suggest that parents’ home literacy activities with their preschool children, integrating traditional ones (e.g., books, pencils, and paper) with digital ones, generate optimal home literacy environments [32].

### 1.2. Parent–Child Literacy Activities

A parent who supports preschoolers' early literacy teaches the child print knowledge, phonological awareness, and oral language during reading and writing activities with the child. Print knowledge refers to children's knowledge of letters and letter-sound correspondence and the conventions of print (e.g., the alphabet, print directionality, word boundaries, punctuation, etc.). Phonological awareness refers to the ability to detect and manipulate the sound components of words (e.g., rhymes, opening sound), and oral language refers to the children's ability to understand and convey information effectively, and it includes children's vocabulary, syntactic, and morphological knowledge, among other skills [33].

During parent–child *alphabet activities*, the parents can write with the child (e.g., letters, notes, names, and greeting cards) to promote learning about print concepts, letter sounds, etc. [13,16,34–37]. Parents also point out letters of the alphabet when looking at street signs and labels on products in the child's environment [35].

Parent–child *shared book reading (SBR) activities* are important to young children's language development, listening and reading comprehension, and more [38,39]. Children's books provide broader, more grammatically correct vocabulary and a range of subject matter than everyday conversation [40–42]. Many parents begin reading to their children shortly after birth [43]. Reading books helps children build their foundation for later academic skills [44] and increases their motivation to read for pleasure [45].

During SBR, parents read the text as written and converse with the child about its content. Repeated SBR and post-reading conversation enrich parent–child discourse and increase the children's involvement with literacy [46]. During SBR, parents can read either children's print books [47] or electronic books [48,49]. In a joint reading activity, parents can encourage their children to tell a story or perform an imaginary play based on a book they read [50].

*Literacy play activities* are collaborative parent–child activities that encourage meaningful discourse, enthusiasm, and sustained attention and provide opportunities for adults to help and promote a child's literacy [51]. In these activities (e.g., traditional board letter games), children are exposed to new situations, and occasions arise for cognitive development within their interests, which may use and expand on their knowledge of a familiar topic, allowing for materials to be processed at a deep level [52]. During *literacy play activities*, parents can play games with the child where the child learns letters (e.g., card games) or plays digital games (e.g., letter tracing). Parents can also create the alphabet from varied materials (e.g., cookie dough); this may promote a child's early literacy in a relaxed home environment where the focus and content of the activities are goal-directed.

### 1.3. Parent–Child Joint Digital Activities

General digital activities where parents and children act together, using technologies and media (e.g., game-like applications and versions of classic board games), can promote positive parent–child interactions [53]. Even before the onset of COVID-19, a survey showed that 47% of parents of 4–13-year-old children played digital games together more often than they played board games together [54]. Many parents feel that through media use, their children develop, in accordance with their physical, cognitive, and emotional capacities, a wide range of media skills, defined as the child's knowledge and understanding of the role of media and technology in society [55]. When using digital media with their children, parents talk with their kids and discuss technology and digital games [56].

These joint activities emphasize communicating, bonding, and spending time with one another rather than focusing on the media form itself [57]. Parents' involvement in their children's digital activities also manifests in selecting content and downloading apps, such as games [58]. Parents can scaffold the child's understanding by giving explanations, instructions, or translating digital text written in a foreign language to the language spoken at home (or with digital text that the child cannot read) according to the child's understanding and abilities [59].

As to *independent children's screen time*, researchers, educators, and parents have been interested in the benefits and dangers of young children's exposure to screens [58,60]. Acknowledging the high prevalence of digital tools at home, the World Health Organization (2019) has recommended limited screen time for children older than two years old [61]. The social distance during the pandemic and the isolation dramatically increased children's time with screens without their parents' presence ([62–64]). Because of this, monitoring young children's digital activities became a challenge for parents [65].

To conclude, during the lockdowns and the first year of the pandemic, children did not regularly attend their customary educational settings. Similar to many countries, the education system was closed during the lockdown in Bulgaria, Israel, and Spain, and parents had to respond to their children's educational needs. Parents were concerned that they would be unable to provide adequate educational support to their young children and that children's early literacy skills would be delayed [66]. Parents' long days with their children at home raised the need for literacy activities to release stress through enjoyable interactions, providing them with a sense of safety [67]. We aimed to explore the nature of these activities from a cross-cultural perspective.

#### 1.4. A Cross-Cultural View of Parenting

While parenthood's complex and intensive nature is perceived as universal, various aspects are mediated by social and cultural contexts. The "Developmental Niche" model [5,6] stresses the importance of culture in parenting unique definitions, activities, and the way parents care for their offspring [7]. Parents choose the best ways to care for their children, mostly implicitly. These choices follow culturally recognizable patterns, such as the organization of a child's daily life and aspects considered necessary for a child's healthy development [68]. We explored parent–child joint activities with young children aged 2–8 years in three cultural contexts within a relatively close geographic region (alphabetically): Bulgaria (East Europe), Israel (Jews) (Middle East), and Spain (West Europe).

**Bulgarian Parenting.** Bulgarian parenting strongly emphasizes family values, discipline, and a nurturing approach to child-rearing [69]. Bulgarian families are generally more conservative than Western European families [70]. Bulgarian parents are highly involved in their children's lives, providing guidance and support across various domains, including education, personal development, and moral values [69]. While embracing their cultural heritage in navigating the demands of modern society, women actively participate in the labor market, combining paid work with caring for the family and being involved in the domestic economy [71].

**Israeli-Jewish Parenting.** Traditional Jewish norms focus on the centrality of the family and children within the family [72,73]. Extended family relationships are based on interdependence and mutual care [74]. Despite international influences, the Israeli family is more stable than in other industrialized countries [75]. At the same time, most Israeli Jews hold Western, individualistic family values, such as egalitarianism among family members and children's autonomy [76]. Parents tend to give freedom to their children, show low levels of authority, and provide few rules and boundaries [77].

**Spanish Parenting.** The Spanish culture has been characterized as being horizontal collectivist, where parents understand the individual self as part of the family self and emphasize the use of affection and involvement in children's socialization [78–80]. However, parenting is particularly concerned about children's safety and physical and emotional well-being, and multiple forms of control appear to be justified and considered necessary for children's security [81]. Education is crucial for Spanish families to optimize children's future possibilities [81]. Parents' concerns about the possibility of their children failing in school and, as a consequence, falling victim to economic precariousness is an essential motive for exercising intensive parenting [82].

### 1.5. The First Year of the Pandemic in the Three Countries

With the outbreak of the COVID-19 pandemic and during the first days of lockdown in March 2020, a state of emergency was declared in Bulgaria, Israel, and Spain. Daycare centers and schools were closed, including special education, youth movements, and after-school programs. The Bulgarian Ministry of the Interior set up barriers limiting movement in and out of Sofia neighborhoods [83]; Israelis were not allowed to leave their homes unless it was necessary [84], and in Spain, children and teenagers under the age of 14 were forced to stay at home, the majority without even going out on the street at all [85].

During the first year of the pandemic, the three countries were under additional lockdowns in overlapping periods due to the rise in cases of infection. In Bulgaria, this occurred from November 2020 to January 2021 and from 22 until 31 March 2021 [86,87]; in Israel, from November 2020 to March 2021; and in Spain, for a more extended period, from October 2020 until May 2021. In Bulgaria and Israel, in April 2021, schools reopened fully, with in-person classes and no particular limitations on class size [87,88]. A month later, the state of emergency ended in Spain [89].

### 1.6. The Present Study

This study explored young children's day-to-day HLE from a cross-cultural perspective. Data were collected within three cultural contexts: Bulgaria (Eastern Europe), Israel (Middle East), and Spain (Western Europe). Data collections were conducted during the first lockdown (T1: March–May 2020) and a year later (T2: April–July 2021). Because the literature points to the possible impact of the children's age [90], parents' education [91], and family size [92] on the HLE, we statistically controlled for these measures.

Our research questions were: (1) How are the time points (T1 and T2), the cultures, and the family background measures (i.e., child's age, parent's age and education, and the number of children in the family) related to parent–child literacy and digital activities? (2) Within each time point, did parents have a parenting style? Did parents who reported more literacy activities also report more joint digital activities with their children? Due to the lack of previous studies that examined the consequences of an ongoing and complex global health crisis on young children's HLE, no hypotheses were proposed.

## 2. Materials and Method

### 2.1. Participants

Participants in the three cultures were parents with at least one child between the ages of two and eight. During the first wave of data collection (T1: March–May 2020), 747 parents completed online questionnaires: 153 Bulgarian, 290 Israelis (Jewish), and 304 Spanish. During the second wave of data collection (T2: April–July 2021), 432 parents completed online questionnaires: 140 Bulgarian, 172 Israelis (Jewish), and 120 Spanish. The majority of the parents were mothers (T1: 92.0% and T2: 87.7%) from a middle socio-economic background (T1:  $n = 687$  mothers and T2:  $n = 379$  mothers). Most parents were married (T1: 92.6% and T2: 91.1%). Their mean age was 37.6 years (T1:  $SD = 4.94$  and T2:  $SD = 4.99$ ), and their education level ranged from a primary/high school diploma (T1: 10.9% and T2: 3.7%) to a Ph.D. (T1: 6.2% and T2: 7.2%). Most of the parents (T1: 80.1% and T2: 86.1%) had at least a bachelor's degree (T1: 90.2%, 88.3%, 67.1%, and T2: 92.9%, 89.0%, 74.2% in Bulgaria, Israel, and Spain, respectively).

Half the participating children were girls (T1: 51.3% and T2: 51.0%). Their mean age ranged from 24 to 96 months and was 59.9 months ( $SD = 19.32$  and  $SD = 19.60$  for T1 and T2, respectively). The mean number of children per family was 1.65 ( $SD = 1.06$ ) for Bulgaria, 2.51 ( $SD = 1.08$ ) for Israel, and 1.75 ( $SD = 0.74$ ) for Spain, and they lived in suburban-to-urban middle-class settings.

In T2, most of the parents in the three cultures reported that they worked before the COVID-19 outbreak (92.4%) and one year later (T2) (86.1%). About half of them switched to a hybrid format, combining work from home and the workplace (48.1%). Some reported working only from home (22.2%) or only from the workplace (20.8%). A similar picture

was found among the spouses of the responding parents. Most of them worked before the COVID-19 outbreak (96.4%) and one year later (93.3%). About half of them switched to a hybrid format and combined work from home and the workplace (50.8%); some worked only from home (27.2%) or only from the workplace (16.9%).

The homes in the three cultures were relatively rich in technology. All parents reported having at least one mobile phone. Most families had at least one computer (100%, 96%, and 92% in Bulgaria, Israel, and Spain, respectively) and a tablet (99%, 56%, and 82% in Bulgaria, Israel, and Spain, respectively). For the demographic elaborations in each country, see Table 1.

**Table 1.** Participants' demographics ( $N = 1179$ ).

| During The Lockdown ( $n = 747$ ) |                        |               |                      |               |                     |               |
|-----------------------------------|------------------------|---------------|----------------------|---------------|---------------------|---------------|
|                                   | Bulgaria ( $n = 153$ ) |               | Israel ( $n = 290$ ) |               | Spain ( $n = 304$ ) |               |
|                                   | Range                  | Mean (SD)/%   | Range                | Mean (SD)/%   | Range               | Mean (SD)/%   |
| Child's age in months             | 24–95                  | 61.77 (19.49) | 24–96                | 56.65 (18.16) | 24–96               | 61.38 (20.30) |
| Child's gender (girls)            |                        | 54.2%         |                      | 49.3%         |                     | 50.3%         |
| Parent's age                      | 24–49                  | 35.91 (5.14)  | 23–54                | 37.58 (4.95)  | 21–50               | 38.66 (4.57)  |
| Parent's gender (female)          |                        | 94.8%         |                      | 93.8%         |                     | 87.5%         |
| Parent's education                | 0–5                    | 3.56 (0.84)   | 1–5                  | 3.44 (0.83)   | 0–5                 | 2.67 (1.30)   |
| Children in the family            | 1–4                    | 1.64 (0.61)   | 1–8                  | 2.70 (1.21)   | 1–9                 | 1.85 (0.80)   |
| Marital status (married)          |                        | 96.1%         |                      | 95.9%         |                     | 85.8%         |
| A Year Later ( $n = 432$ )        |                        |               |                      |               |                     |               |
|                                   | Bulgaria ( $n = 140$ ) |               | Israel ( $n = 172$ ) |               | Spain ( $n = 120$ ) |               |
|                                   | Range                  | Mean (SD)/%   | Range                | Mean (SD)/%   | Range               | Mean (SD)/%   |
| Child's age in months             | 25–96                  | 63.87 (18.60) | 24–96                | 57.08 (19.91) | 24–96               | 58.88 (20.28) |
| Childs' gender (girls)            |                        | 50.7%         |                      | 45.3%         |                     | 56.0%         |
| Parent's age                      | 23–52                  | 36.49 (5.45)  | 26–50                | 37.54 (4.46)  | 29–52               | 39.21 (4.81)  |
| Parent's gender (female)          |                        | 90.0%         |                      | 83.1%         |                     | 90.0%         |
| Parent's education                | 1–5                    | 3.69 (0.71)   | 1–5                  | 3.49 (0.92)   | 1–5                 | 2.98 (0.91)   |
| Children in the family            | 1–3                    | 1.66 (0.54)   | 1–5                  | 2.33 (0.96)   | 1–4                 | 1.66 (0.69)   |
| Marital status (married)          |                        | 93.6%         |                      | 94.8          |                     | 85.0%         |

## 2.2. Measures

The parents answered questionnaires about the frequency of parent–child engagement in literacy and digital activities. In the first data collection (T1), parents were asked to refer to the period since the outbreak of the COVID-19 crisis. A year later (T2), the guidance for parents was to refer to the period of the last month.

### 2.2.1. Literacy Activities Questionnaire

A 15-item questionnaire adapted from Aram and Levin, 2014 [93] about literacy activities at home was used. The questionnaire referred to three parent–child literacy activities: alphabetic, shared book reading, and literacy play. The parents reported how often they engaged with their children in these activities on a 5-point scale ranging from (1) = “Rarely” to (5) = “Very frequently”.

In the questionnaire, five items referred to the alphabetic activities (e.g., “Write notes with the child”, “Read signs or labels”), five items referred to shared book reading (e.g., “Read children's storybooks with the child”, “Read information books”), and five items related to literacy play activities (e.g., “Play rhyming games”, “Create the alphabet from varied materials”). The mean score across the items served as the score of the specific literacy activity.

The reliabilities for the alphabetic activities in the two-time points (T1 and T2, respectively) were Cronbach's  $\alpha = 0.736$  and  $0.745$  for Bulgaria;  $\alpha = 0.846$  and  $0.839$  for Israel; and  $\alpha = 0.782$  and  $0.864$  for Spain during T1 and T2, respectively. The reliabilities for shared book reading were Cronbach's  $\alpha = 0.596$  and  $0.728$  for Bulgaria;  $\alpha = 0.620$  and  $0.656$  for Israel; and  $\alpha = 0.656$  and  $0.660$  for Spain during T1 and T2, respectively. The reliabilities for literacy play activities were Cronbach's  $\alpha = 0.759$  and  $0.807$  for Bulgaria;  $\alpha = 0.815$  and  $0.812$  for Israel; and  $\alpha = 0.654$  and  $0.727$  for Spain.

### 2.2.2. Digital Home Environment Questionnaire

A four-item questionnaire, adapted from Meoded Karabanov et al. 2021 [94] about the digital home environment (DHE), was used. Parents were asked to refer to three aspects of their joint digital activities with their child using digital devices (mobile phone, tablet, and computer): (1) *joint activities* (e.g., "To what extent do you and your child work on digital devices at home together?"). The parents rated on a 5-point scale ranging from (1) = "Never" to (5) = "Frequently". (2) *Parental scaffolding and explaining instructions* (e.g., "To what extent do you explain instructions that appear on a device for your child?"). The parents rated on a 5-point scale ranging from (1) = "Never" to (5) = "Frequently". (3) *Selecting digital content* (e.g., "What is your level of involvement in selecting digital content that your child uses?"). The parents rated on a 5-point scale ranging from (1) = "Very low" to (5) = "Very high". They also reported on their children's independent screen time (e.g., "How much time, on average, does your child spend using digital devices per day?"). The parents rated on a 7-point scale ranging from (1) = "Not at all" through to (4) = "Up to three hours" to (7) = "More than five hours".

### 2.2.3. Socio-Demographic Questionnaire

The participants completed a socio-demographic questionnaire requesting background information on the participating child (e.g., gender and age), the parents (e.g., gender, age, education, and marital status), and the family (e.g., number of children). The parents also reported on the prevalence of digital tools at home and their employment status before and since the pandemic outbreak.

### 2.3. Procedure

The study received the approval of the Ethics Committee of Tel-Aviv University. The Hebrew questionnaires were translated back and forth to the other languages (Bulgarian and Spanish) by native speakers of both languages (e.g., Bulgarian, Hebrew, and Spanish). The researchers distributed the anonymous self-report questionnaires through social media in each participating country during March–May 2020 and about a year later during April–July 2021. The parents first read the information about the study and then indicated their consent to participate by continuing with the survey.

### 2.4. Data Analysis

First, we tabulated the descriptive data for each activity within each culture and time point. Second, we ran a series of ANCOVAs to learn the effect of the family background measures (child's age, parent's age and education, and number of children in the family), periods (T1 and T2), and culture (Bulgaria, Israel, and Spain), as well as the interaction between the period and culture on parent–child literacy activities (alphabetic, book reading and play), parent–child digital activities (joint activities, parental scaffolding, selecting content), and screen time. Last, we calculated the correlations between literacy and digital activities, controlling for the child's age due to the age range (2–8 years).

## 3. Results

### 3.1. Parent–Child Literacy and Digital Activities at Home

Table 2 presents descriptive statistics of the HLE in the three cultures and the two periods (T1: during the first lockdown, and T2: a year later) for literacy and digital activities.

**Table 2.** Descriptive statistics ( $N = 1179$ ).

|                            |                | During The Lockdown<br>( $N = 747$ ) |                         |                        | One Year Later<br>( $N = 432$ ) |                         |                        |
|----------------------------|----------------|--------------------------------------|-------------------------|------------------------|---------------------------------|-------------------------|------------------------|
|                            | Possible Range | Bulgaria<br>( $n = 153$ )            | Israel<br>( $n = 290$ ) | Spain<br>( $n = 304$ ) | Bulgaria<br>( $n = 140$ )       | Israel<br>( $n = 172$ ) | Spain<br>( $n = 120$ ) |
|                            |                | M (SD)                               | M (SD)                  | M (SD)                 | M (SD)                          | M (SD)                  | M (SD)                 |
| <b>Literacy activities</b> |                |                                      |                         |                        |                                 |                         |                        |
| Alphabetic                 | 1–5            | 3.38 (0.87)                          | 2.65 (1.05)             | 3.50 (0.92)            | 3.49 (0.86)                     | 2.74 (0.99)             | 3.49 (1.06)            |
| Book reading               | 1–5            | 3.24 (0.66)                          | 2.79 (0.71)             | 3.12 (0.75)            | 3.30 (0.81)                     | 2.90 (0.73)             | 3.33 (0.70)            |
| Play                       | 1–5            | 3.39 (0.82)                          | 2.57 (0.94)             | 2.99 (0.77)            | 3.58 (0.94)                     | 2.70 (0.89)             | 3.31 (0.83)            |
| <b>Digital activities</b>  |                |                                      |                         |                        |                                 |                         |                        |
| Joint activities           | 1–5            | 3.03 (1.17)                          | 3.10 (0.95)             | 3.23 (1.20)            | 2.88 (1.18)                     | 2.80 (0.99)             | 3.08 (1.04)            |
| Scaffolding                | 1–5            | 2.68 (1.18)                          | 2.68 (1.05)             | 2.58 (1.17)            | 2.76 (1.16)                     | 2.48 (0.93)             | 3.27 (1.40)            |
| Selecting content          | 1–5            | 4.08 (0.95)                          | 4.04 (0.87)             | 4.08 (0.90)            | 4.11 (1.01)                     | 4.15 (0.89)             | 4.23 (1.20)            |
| Child's screen time        | 1–7            | 3.54 (1.33)                          | 3.43 (1.16)             | 4.67 (1.58)            | 2.99 (1.24)                     | 2.78 (0.99)             | 2.67 (1.13)            |

In general, parents reported that they occasionally (about 2–3 times per week) shared literacy activities (alphabetic, shared book reading, and play) with their children during the first lockdown and a year later in the three cultures. As for the digital activities, parents reported a high level of involvement in selecting digital content for their children in both time points (slightly higher in T2). As to the children's independent screen time, parents reported that it was high during T1, ranging between two to four hours a day. During T2, the child's screen time was reduced to one to up to two hours a day in the three cultures.

We ran a series of ANCOVAs to analyze the effect of the family background measures (child's age, parent's age and education, and number of children in the family), periods (T1 and T2), and culture (Bulgaria, Israel, and Spain), as well as the interaction between the period and culture on parent–child literacy activities (alphabetic, book reading and play), parent–child digital activities (joint activities, parental scaffolding, selecting content), and screen time. When we found an interaction, we explored and reported its sources.

### 3.2. Parent–Child Literacy Activities

**Parent–child alphabetic activities.** The child's age was significantly related to joint alphabetic activities ( $F(2, 1158) = 226.964, p < 0.001, \eta^2 = 0.164$ ). The children in the study were within the age range of 2–8 years old. The parents were more active in alphabetic activities with the older children. We did not find significant differences between the periods (T1 and T2) across cultures. However, we found significant differences between the three cultures ( $F(2, 1158) = 57.961, p < 0.001, \eta^2 = 0.091$ ), with no significant interaction between period and culture. Bonferroni post hoc comparisons indicated that Bulgarian and Spanish parents were more involved in parent–child joint alphabetic activities than Israeli parents ( $p < 0.001$  for all pairwise comparisons). No significant differences were found between the Bulgarian and Spanish parents.

**Book reading.** The family size (number of children in the family) ( $F(2, 1157) = 8.390, p < 0.004, \eta^2 = 0.007$ ), parent's age ( $F(2, 1157) = 4.127, p < 0.042, \eta^2 = 0.004$ ), and education ( $F(2, 1157) = 7.927, p < 0.004, \eta^2 = 0.005$ ) were significantly related to shared book reading. Older parents and parents with more children reported fewer book-reading interactions, while more educated parents reported more shared book reading with their children. The analyses revealed significant differences between periods ( $F(2, 1157) = 6.095, p < 0.014, \eta^2 = 0.005$ ). Across cultures, during T2, parents were significantly more involved in shared book reading with their children compared to T1. In addition, the analysis also revealed differences between cultures ( $F(2, 1157) = 23.455, p < 0.001, \eta^2 = 0.039$ ), with no significant interaction between the period and culture. Bonferroni post hoc comparisons indicated that Bulgarian and Spanish parents reported more shared book-reading activities than Israeli parents ( $p < 0.001$  for all pairwise comparisons). No significant differences were found between the Bulgarian and Spanish parents.

**Literacy play activities.** The child's age was significantly related to literacy play ( $F(2, 1158) = 38.639, p < 0.001, \eta^2 = 0.032$ ). Parents of older children reported more literacy play with their children. We found significant differences between T1 and T2 across the cultures ( $F(2, 1158) = 57.315, p < 0.001, \eta^2 = 0.090$ ). In T2, parents were significantly more involved in literacy play activities with their children than in T1. The culture was also related to literacy play activities at home ( $F(2, 1158) = 14.204, p < 0.001, \eta^2 = 0.012$ ), with no significant interaction between the period and culture. Bonferroni post hoc comparisons indicated that Bulgarian and then Spanish parents were more involved in literacy play activities at home than Israeli parents ( $p < 0.001$  for all pairwise comparisons).

### 3.3. Parent–Child Digital Activities

**Parent–child digital activities.** The child's age ( $F(2, 1158) = 7.257, p < 0.007, \eta^2 = 0.006$ ) and parent's education ( $F(2, 1158) = 14.376, p < 0.001, \eta^2 = 0.012$ ) were related significantly to parent–child joint digital activity. Parents of older children were more engaged with their children in digital activities, and more educated parents reported less joint digital activities with their children. We found significant differences between the periods across the cultures ( $F(2, 1158) = 8.648, p < 0.003, \eta^2 = 0.007$ ). During the lockdown (T1), parents were more active with their children using digital devices than a year later (T2). No significant differences were found between the three cultures or significant interaction between the period and culture.

**Parental scaffolding.** The child's age related significantly to this activity ( $F(2, 1158) = 57.784, p < 0.001, \eta^2 = 0.048$ ). Parents reported that they scaffolded their older children more in understanding directions on digital devices compared to their younger children. We found significant differences between the periods ( $F(2, 1158) = 8.315, p < 0.004, \eta^2 = 0.007$ ), between cultures ( $F(2, 1158) = 5.141, p < 0.006, \eta^2 = 0.009$ ), and we found a significant interaction between the period and culture ( $F(2, 1158) = 17.204, p < 0.001, \eta^2 = 0.029$ ). Bonferroni post hoc comparisons indicated that during T2, Spanish parents were more involved in explaining and translating instructions to their children than Israeli parents ( $p < 0.006$  for all pairwise comparisons). Spanish parents were more involved in this activity ( $p < 0.000$ ) in T2 than in T1. There were no significant differences between the periods (T1 and T2) for Bulgarian and Israeli parents.

**Selecting digital content.** The family size ( $F(2, 1158) = 4.945, p < 0.026, \eta^2 = 0.004$ ), parent's age ( $F(2, 1158) = 19.530, p < 0.001, \eta^2 = 0.017$ ), and parents' education ( $F(2, 1158) = 13.109, p < 0.001, \eta^2 = 0.011$ ) were significantly related to the parents' involvement in selecting digital content. Parents in larger families and older parents reported less involvement in selecting digital content for their children, while more educated parents reported more involvement. We did not find significant differences between the two periods, between the three cultures, or a significant interaction between the period and culture.

**Child's screen time.** The analyses revealed that the child's age ( $F(2, 1158) = 32.213, p < 0.001, \eta^2 = 0.027$ ), parent's age ( $F(2, 1158) = 7.101, p < 0.008, \eta^2 = 0.006$ ), and parent's education ( $F(2, 1158) = 26.321, p < 0.001, \eta^2 = 0.022$ ) were related to the child's exposure to media and digital devices. Older children and children of older parents were more exposed to digital media and screens. The children of more educated parents were less exposed to screens. We found significant differences between the periods ( $F(2, 1158) = 249.786, p < 0.001, \eta^2 = 0.177$ ) and an interaction between the periods and cultures ( $F(2, 1158) = 67.547, p < 0.001, \eta^2 = 0.104$ ). Post hoc Bonferroni tests confirmed significant differences between the periods across the three cultures. During the lockdown (T1), the child's screen time was higher ( $p < 0.000$ ) than a year later (T2) in each culture. However, screen time among Spanish children was significantly higher than among Bulgarian and Israeli children, with no significant differences between Bulgaria and Israel in this activity during the two periods (T1 and T2).

### 3.4. Parent–Child Activity Style

To learn if the parents used a consistent style across activities, meaning that parents who reported more literacy activities also reported more joint digital activities, we calculated the correlations between literacy and digital activities at home during the two periods within each of the three cultures, controlling for the child's age (because of the large age range). Table 3 presents the correlations.

**Table 3.** Correlations between literacy activities and digital interactions at home, controlling for child's age ( $N = 1179$ ).

| Literacy Activities                        | During the Lockdown ( $n = 747$ ) |                      |                   |
|--------------------------------------------|-----------------------------------|----------------------|-------------------|
|                                            | Digital Activities                |                      |                   |
|                                            | Joint Activity                    | Parental Scaffolding | Selecting Content |
| <b>Bulgaria (<math>n = 153</math>)</b>     |                                   |                      |                   |
| Alphabetic                                 | 0.203 **                          | 0.206 **             | 0.064             |
| Book reading                               | 0.067                             | 0.100                | 0.160 *           |
| Play                                       | 0.141                             | 0.103                | 0.135             |
| <b>Israel (<math>n = 290</math>)</b>       |                                   |                      |                   |
| Alphabetic                                 | 0.205 ***                         | 0.289 ***            | 0.107             |
| Book reading                               | 0.161 **                          | 0.288 ***            | 0.239 ***         |
| Play                                       | 0.275 ***                         | 0.361 ***            | 0.152 **          |
| <b>Spain (<math>n = 304</math>)</b>        |                                   |                      |                   |
| Alphabetic                                 | 0.227 ***                         | 0.099                | 0.135 **          |
| Book reading                               | 0.089                             | 0.076                | 0.226 ***         |
| Play                                       | 0.219 ***                         | 0.097                | 0.233 ***         |
| <b>A Year Later (<math>n = 432</math>)</b> |                                   |                      |                   |
| <b>Bulgaria (<math>n = 140</math>)</b>     |                                   |                      |                   |
| Alphabetic                                 | −0.020                            | 0.270 ***            | 0.009             |
| Book reading                               | 0.085                             | 0.279 ***            | 0.140             |
| Play                                       | 0.024                             | 0.255 **             | −0.009            |
| <b>Israel (<math>n = 172</math>)</b>       |                                   |                      |                   |
| Alphabetic                                 | 0.025                             | 0.320 ***            | 0.016             |
| Book reading                               | 0.079                             | 0.320 ***            | 0.344 ***         |
| Play                                       | 0.119                             | 0.346 ***            | 0.085             |
| <b>Spain (<math>n = 120</math>)</b>        |                                   |                      |                   |
| Alphabetic                                 | 0.016                             | 0.230 **             | 0.274 **          |
| Book reading                               | 0.095                             | 0.236 **             | 0.093             |
| Play                                       | 0.167                             | 0.271 **             | 0.244 **          |

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

Table 3 reveals cross-cultural associations between the parents' literacy and digital activities with their children at home during the lockdown (T1), especially among the Israeli group. Interestingly, one year later (T2), we generally found only a few significant correlations between parent–child literacy and digital activities in the three cultures. However, parents who were more involved in literacy activities with their children reported more frequent translations and explanations of digital text (scaffolding) to their children across the cultures.

## 4. Discussion

This study describes the home learning environment (HLE) of young children (aged 2–8 years) during a crisis. It describes the literacy and digital activities of young children with their parents at home during the first lockdown (T1) and a year later (T2) from a cross-cultural view in Bulgaria (Eastern Europe), Israel (Middle East), and Spain (Western Europe). Following the “Developmental Niche” model [5,6], we demonstrated the parents' central role in mediating between culture and literacy and digital activities in homes.

Our research findings indicated relatively moderate parent–child literacy and digital activities and high parental involvement in selecting digital content for children’s use during the first lockdown and a year later in the three cultures. However, we found significant differences between the periods and the cultures beyond the children’s age, parents’ age and education, and the number of children in the family. During T1, parent–child joint digital activities and children’s independent screen time were higher than in T2. In T2, parents were more involved in book reading, literacy play activities, and scaffolding (translating and explaining) the child while using digital devices. Generally, Bulgarian and Spanish parents were more involved in their children’s literacy and digital activities than Israeli parents. Spanish children had more independent screen time than Bulgarian and Israeli children. Additionally, parents of older children in the sample were more engaged with their children in literacy and digital activities (except for book reading and selecting the digital content). Interestingly, older parents and parents of larger families were less involved. Educated parents were more involved in book-reading activities and selecting digital content, and their children were less exposed to screens.

Finally, controlling for the children’s age, significant positive associations were found between parent–child literacy and digital activity measures during T1. These associations were especially salient among Israeli parents. A year later (T2), associations were found cross-culturally between the parent–child literacy activities and parents’ involvement in translating and explaining digital content to their children (scaffolding). These findings imply that parents may have a parent–child activity style. This study’s findings present the frequency of different parent–child activities (literacy and digital) during a stressful year and point to their relationship with culture.

#### *4.1. Parent–Child Literacy Activities in Uncertain Times*

Our study’s findings indicated that parents reported relatively moderate parent–child literacy activities (alphabetic, book reading, and play) during the first lockdown and a year later in the three cultures. Studies based on data collected starting in March 2020 confirmed similar effects of the pandemic on parent–child literacy activities at home. Ilari et al. 2022 [95] explored the perceptions of parenting and parent–child activities in American families during this period. They found that academic activities were rated by parents as ‘the least liked to do with their children’ compared to athletic and artistic activities. Still, most parents reported that they were helping with homework and reading with their children in the initial months of the pandemic.

We did not find differences between T1 and T2 in parent–child alphabetic activities. Still, parents were significantly more involved in literacy play activities and shared book reading in T2 compared to the first lockdown period (T1) across the cultures. Play activities and book reading with children are usually less structured and require the parents’ availability, creativity, and spontaneity. Activities such as discussing books, rhyming games, inventing stories, or creating the alphabet from diverse materials also probably challenged parents during the outbreak of COVID-19, a period of uncertainty. In the days of the first lockdown (T1), parents were physically and mentally preoccupied with personal pressures caused by the pandemic. As a result, they were less available to their children [96]. Our findings suggest that parents gradually became used to the situation and pulled themselves together a year following the COVID outbreak [97], increasing their book-reading interactions. We assume that decreased parental tension and the new reality of parents and children have made literacy play activities possible under more relaxed conditions.

Regarding cultural differences, overall, Bulgarian and Spanish parents were more involved in literacy activities at home than Israeli parents. In Spanish families, a child’s education is an important milestone in optimizing a child’s future possibilities [81], and parents are highly involved in their children’s education [82]. Bulgarian parenting is also characterized by a high investment in the child’s education and personal development [69].

As to Israeli parents, this result may relate to Israel’s demographic and geopolitical situation. The birthrate in Israel is relatively high, with  $M = 3.1$  children per family compared

to OECD countries ( $M = 1.6$ ) [98]. Also, in May 2021, a significant outbreak of violence occurred in the ongoing Israeli–Palestinian conflict. Therefore, Israeli parents experience a challenging life reality that permeates their parenting and affects the parent–child relationship and the parent’s availability [99]. A decrease in the parental availability of Israeli parents may be related to practicing relatively less literacy play and book reading compared to the Bulgarian and Spanish parents.

Supporting these findings, we found that parents with more children (not only Israelis) reported less shared book reading with their children. Also, like in previous studies with parents from different cultures, more educated parents were more involved in these activities with their children at home [16].

#### 4.2. Parent’s Involvement in the Child’s Digital World

Being under lockdown (T1) was characterized by various parent–child joint activities with digital devices, young children’s independent use of digital media, and children’s screen time. These activities facilitated education, socialization, cultural activities, and family gatherings [100,101]. Indeed, we found that, during the lockdown (T1), parents were significantly more active in digital activities with their children using digital devices than a year later (T2) across the cultures. Likewise, our findings indicated that the children’s screen time was higher in T1. Parents provide media to their young children so that they can complete home and work obligations uninterrupted [102], and children use media more independently [103]. In T2, despite the continued stress, families adapted to the situation; the education settings were more open, children could spend more time outside their homes, and their screen time decreased. Interestingly, we found that children in Spain had more screen time at both time points compared to Israel and Bulgaria. These cultural differences may be explained by Spain’s most extended and strictest quarantine days compared to other European countries during the COVID-19 pandemic. Children’s outdoor recreational spaces and sports facilities were closed from March to June 2020, and Spanish children were confined to their homes for more than three months without going outside [104]. Data collected in 2017 regarding the screen time of Spanish children show that 44.3% of children aged 1–11 years were exposed for two hours or more to screens, while screen time increases with the child’s age and decreases according to the parent’s education [105]. These findings are consistent with the results of our study.

Regarding parental involvement in selecting digital content for the child’s use, parents from the three cultures showed high involvement in T1 and T2. Similar to book-reading activities, parents of larger families and less educated parents were less involved in selecting digital content for their children. Our results suggest that more educated parents and parents who have fewer children are more in control. They are more aware of the dangers of their child’s exposure to inappropriate content and tend to be involved in selecting high-quality software for their children to interact with [58,60,106,107].

Unlike the parents’ relatively high involvement in selecting digital content, parental scaffolding, translation of instructions, and explanations of digital devices were found to be relatively low across the three cultures. The interaction between time and culture showed that only Spanish parents were more involved in this activity in T2. Also, in T2, they explained and translated instructions to their children more than Israeli parents. These findings are consistent with a cross-cultural study by Harkness et al. 2011 [68] showing that Spanish parents perceive HLE parent–child activities as a training ground for their child’s development and preparation for real life.

We also found that parents were more active in scaffolding and explaining digital activities to the older children in our sample. Children’s age is meaningful to the type and complexity of their digital activities [108]. We assume that parents are aware of this and scaffold their older children more, who usually use more complex software.

Our research findings indicated that during the stressful period we studied, and especially during the lockdown (T1), parents of young children were generally active in digital activities with their children. Joint digital activities, selecting content for the child to

use, and scaffolding indicate responsible parental actions [109,110]. Given the young age of our research children, screens may displace meaningful literacy opportunities for digital reading and writing (e.g., e-reading) [111], as well as for motor, linguistic, social-emotional, cognitive development, and self-regulation skills [112,113]. Parents can direct digital activities to be educational and minimize the cumulative damage of prolonged exposure to screens in young children by being involved in their young children's digital activities.

#### 4.3. Parents' Style across Activities

In T1, during the first lockdown, positive associations were found between parent–child literacy and digital activity across the three cultures. These findings indicate stability in the parents' support and involvement in their young children's education, whether traditional or digital. Indeed, the research that studied parents' literacy activities showed that parents have a style across writing tools (e.g., keyboard and pencil) [114] and different book genres (picture book or e-book) [111]. Our results show that, during the lockdown, when parents and children were at home, parents showed a parenting style across different activities (literacy and digital). These findings imply a parenting style and the parent's perceptions of their role in promoting their children's general learning [115]. Parents who feel this responsibility are more involved in literacy activities with their children [93] and are more motivated to engage in those activities [116].

The relations between literacy and digital activities were especially salient among Israeli parents. During the lockdown, when Israeli parents were at home with their children, those who were more actively engaged in literacy activities with their children were also engaged in more digital activities. This may be related to the perception of Israeli parents of the importance of digital technological entrepreneurship and their encouragement of their children to cultivate digital skills [117,118].

Interestingly, no associations were found between parent–child joint literacy and joint digital activities a year later across the cultures. However, in the three cultures, parents who were more involved in literacy activities with their children reported more frequent translations and explanations of digital texts (scaffolding) to their children and, to some extent, more content selection. Parents largely returned to work and children to the educational frameworks in the second year when the state of emergency ended across the three cultures [87–89].

The findings may emphasize the parents' importance in explaining, demonstrating, and translating digital content and activities. Parents who are more involved educationally (involved in literacy activities) also saw the importance of providing scaffolding to the child when there was no extended closure. Five-year-old children are on the seamline; they know how to 'navigate well' but need scaffolding to maximize their use. A parent who explains to his child how to use digital means responds to the child's needs (e.g., attachment theory) [119], strengthens the feeling of togetherness with technologies, expands the digital experience for him and the possibilities inherent in it.

The findings of our study align with the "Developmental Niche" model and add to the literature regarding the child's HLE and parent–child daily literacy and digital activities, specifically in times of crisis in different cultures. This study sheds light on the role of culture in parents' choices concerning the settings children inhabit and the competencies they acquire, as well as directly influencing parent–child interactions.

#### 4.4. Strengths and Limitations

Our findings highlight significant cross-cultural and cultural-specific aspects of parenting to young children and their manifestation in parent–child literacy and digital activities in times of crisis. Considering the crucial role of parents in maintaining the well-being, education, and leisure of their young children during stressful times (for example, lockdowns) emphasizes the need for educational professionals to collaborate with parents regularly to guide them in a concise and orderly manner in developmentally appropriate ways to promote literacy, digital activity, and other areas of their children's development. The

participating cultures in the study included Eastern and Western Europe and the Middle East, and educators in different countries must tailor their guidance to the general picture we see and the specificities of parenting in their country.

The main limitations of this study are that we did not follow the same sample from T1 to T2, and our samples may not represent the entire population in each culture. Similar to other studies that recruit participants through social networks [120,121], many of the participants across the three cultures were college graduates.

Another limitation of this study is that our study presents a picture that includes specific activities. By including more activities and elaborations on the activities we studied, we could have ended with a broader picture that allowed a comprehensive observation. Also, by including more cultures, we could have contributed further cross cultural knowledge. Furthermore, we did not collect data on home learning from an educational source. It is possible that this information would have added to understanding the total literacy activity in the homes. We operated during the first lockdown under pressure and uncertainty; we did not know how long COVID-19 would last. Despite these limitations, we believe our findings contribute to the understanding of parent–child literacy and digital activities at home in times of uncertainty.

## 5. Conclusions, Implications, and Future Directions

This study explored young children’s literacy and digital activities with their parents at home during the first lockdown and a year later in Bulgaria, Israel, and Spain. The findings indicated similarities and differences between the cultures and the periods. During the two periods in the three cultures, we found relatively moderate parent–child literacy and digital activities and high parental involvement in selecting digital content. We also found significant differences between the periods and cultures beyond the demographic measures.

Not surprisingly, we can conclude that during the stressful period of the lockdowns (T1), parent–child joint digital activities and children’s independent screen time were higher than in T2. A year after the COVID-19 outbreak (T2), when the health, occupational, and social situations improved slightly, there was a return to formal studies while maintaining the familiar daily routine (for example, ensuring a balanced screen time). Parents were more involved in shared book reading, literacy play, and scaffolding (translating and explaining) digital content for their children. Differences between cultures demonstrated that Spanish and Bulgarian parents were more involved in their children’s literacy and digital activities than Israeli parents. Spanish children had more independent screen time than Bulgarian and Israeli children. We found that parents of larger families were less involved in literacy and digital activities with their children. Educated parents were more involved in book-reading activities and selecting digital content, and their children were less exposed to screens. Finally, controlling for the children’s age, we found a general association between parent–child literacy and digital activity measures. During T1, these associations were especially salient among Israeli parents. A year later (T2), associations were found cross-culturally between the parent–child literacy activities and parents’ involvement in translating and explaining digital content to their children (scaffolding). These findings imply a parent–child activity style.

The research indicates that children born worldwide during the pandemic have significantly reduced literacy skills compared to pre-pandemic children [122,123]. During COVID-19, parents reported higher stress levels than adults without children. Managing learning for their children and adjusting to new routines, a high level of insecurity, and childcare disruptions, as well as worsening mental health overall, were common strains among parents during the pandemic [124,125]. Therefore, due to work and other responsibilities, parents were engaged in joint literacy activities with their children only to a certain extent, which apparently was not enough to maintain adequate achievements of the children [122,123,125]. They may have prioritized the child’s emotional socialization, entertainment, and physical activity [103]. Three years later, when discussing pandemic-related learning loss, parents stated that caring for their children’s literacy involved ‘extra work’ [126,127].

As to our study's implications, we recommend that parents should be regularly guided on how to effectively involve their young children's early literacy and digital activities. Preparing protocols for use, including reference to digital content, will help them in stressful times, such as war, children's illnesses, academic irregularities, and the absence of regular presence at school. Consideration must be given to the cultural characteristics as well as the structure of the family, the social issues in each culture (for example, minority populations), as well as the digital means found in homes.

**Author Contributions:** Conceptualization, G.M.K. and D.A.; methodology, G.M.K. and D.A.; software, G.M.K.; validation, G.M.K. and D.A.; formal analysis, G.M.K. and D.A.; investigation, G.M.K. and D.A.; resources, G.M.K., D.A., C.L.-E., K.S., M.A., M.Z., M.L.S. and S.S.; data curation, G.M.K., D.A., C.L.-E., K.S., M.A., M.Z., M.L.S. and S.S.; writing—original draft preparation, G.M.K.; writing—review and editing, G.M.K., D.A. and S.S.; visualization, G.M.K.; supervision, none; project administration, G.M.K.; funding acquisition, none. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board (or Ethics Committee) of Tel Aviv University (protocol code 0001208-1 March 2020 and 0001208-2 April 2021).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Data will be available upon request from the corresponding author.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Bornstein, M.H. Introduction: The SARS-CoV-2 pandemic—Issues for families, parents and children. In *Psychological Insights for Understanding COVID-19 and Families, Parents, and Children*; Bornstein, M.H., Ed.; Routledge: Oxfordshire, UK, 2021; pp. 1–68.
2. Prime, H.; Wade, M.; Browne, D.T. Risk and resilience in family well-being during the COVID-19 pandemic. *Am. Psychol.* **2020**, *75*, 631–643. [\[CrossRef\]](#)
3. Brown, S.M.; Doom, J.R.; Lechuga-Peña, S.; Watamura, S.E.; Koppels, T. Stress and parenting during the global COVID-19 pandemic. *Child Abuse. Negl.* **2020**, *110*, 104699. [\[CrossRef\]](#)
4. Deoni, S.C.; Beauchemin, J.; Volpe, A.; D'Sa, V.; the RESONANCE Consortium. Impact of the COVID-19 pandemic on early childhood cognitive development: Initial findings in a longitudinal observational study of child health. *MedRxiv* **2021**. [\[CrossRef\]](#)
5. Harkness, S.; Super, C.M. Culture and parenting. In *Handbook of Parenting*; Bornstein, M.H., Ed.; Lawrence Erlbaum Associates: Mahwah, NJ, USA, 2002; Volume 2, pp. 253–280.
6. Super, C.M.; Harkness, S. The developmental niche: A conceptualization at the interface of child and culture. *Int. J. Behav. Dev.* **1986**, *9*, 545–569. [\[CrossRef\]](#)
7. Harkness, S.; Super, C.M.; Moscardino, U.; Rha, J.; Blom, M.; Huitrón, B.; Johnston, C.; Sutherland, M.A.; Hyun, O.K.; Axia, G.; et al. Cultural models and developmental agendas: Implications for arousal and self-regulation in early infancy. *J. Dev. Process.* **2007**, *2*, 5–39.
8. UNESCO. Child Definition. 2023. Available online: <https://uis.unesco.org/en/glossary-term/child> (accessed on 5 September 2023).
9. UNESCO. UN Secretary-General Warns of Education Catastrophe, Pointing to UNESCO Estimate of 24 Million Learners at Risk of Dropping Out. 2020. Available online: <https://en.unesco.org/news/secretary-general-warns-education-catastrophe-pointing-unesco-estimate-24-million-learners-0> (accessed on 1 July 2023).
10. United Nations Children's Fund; UNESCO; World Bank. *Where are We on Education Recovery?* UNICEF: New York, NY, USA, 2022. Available online: <https://eric.ed.gov/?id=ED619435> (accessed on 1 July 2023).
11. Lennox, J.; Reuge, N.; Benavides, F. UNICEF's lessons learned from the education response to the COVID-19 crisis and reflections on the implications for education policy. *Int. J. Educ. Dev.* **2021**, *85*, 102429. [\[CrossRef\]](#)
12. Hegde, A.; Mitra, R. Environment and early life: Decisive factors for stress-resilience and vulnerability. *Int. Rev. Neurobiol.* **2020**, *150*, 155–185. [\[CrossRef\]](#)
13. Puranik, C.S.; Phillips, B.M.; Lonigan, C.J.; Gibson, E. Home literacy practices and preschool children's emergent writing skills: An initial investigation. *Early Child. Res. Q.* **2018**, *42*, 228–238. [\[CrossRef\]](#)
14. Rodriguez, E.T.; Tamis-LeMonda, C.S. Trajectories of the home learning environment across the first 5 years: Associations with children's vocabulary and literacy skills at prekindergarten. *Child Dev.* **2011**, *82*, 1058–1075. [\[CrossRef\]](#)
15. Son, S.H.; Morrison, F.J. The nature and impact of changes in home learning environment on development of language and academic skills in preschool children. *Dev. Psychol.* **2010**, *46*, 1103–1118. [\[CrossRef\]](#)

16. Farver, J.A.M.; Xu, Y.; Lonigan, C.J.; Eppe, S. The home literacy environment and Latino head start children's emergent literacy skills. *Dev. Psychol.* **2013**, *49*, 775–791. [\[CrossRef\]](#) [\[PubMed\]](#)
17. Krijnen, E.; van Steensel, R.; Meeuwisse, M.; Jongerling, J.; Severiens, S. Exploring a refined model of home literacy activities and associations with children's emergent literacy skills. *Read. Writ.* **2020**, *33*, 207–238. [\[CrossRef\]](#)
18. Sénéchal, M.; LeFevre, J.A. Continuity and change in the home literacy environment as predictors of growth in vocabulary and reading. *Child Dev.* **2014**, *85*, 1552–1568. [\[CrossRef\]](#) [\[PubMed\]](#)
19. Guo, Y.; Puranik, C.; Kelcey, B.; Sun, J.; Dinnesen, M.S.; Breit-Smith, A. The role of home literacy practices in kindergarten children's early writing development: A one-year longitudinal study. *Early Educ. Dev.* **2020**, *32*, 209–227. [\[CrossRef\]](#)
20. Piasta, S.B.; Justice, L.M.; McGinty, A.S.; Kaderavek, J.N. Increasing young children's contact with print during shared reading: Longitudinal effects on literacy achievement. *Child Dev.* **2012**, *83*, 810–820. [\[CrossRef\]](#)
21. Saracho, O.N. Literacy and language: New developments in research, theory, and practice. *Early Child Dev. Care* **2017**, *187*, 299–304. [\[CrossRef\]](#)
22. Sonnenschein, S.; Gursoy, H.; Stites, M. Elementary School Children's Home Learning Environments: Mathematics, Reading, Science, and Written Language. *Educ. Sci.* **2022**, *12*, 313. [\[CrossRef\]](#)
23. Konishi, H.; Froyen, L.C.; Skibbe, L.E.; Bowles, R.P. Family context and children's early literacy skills: The role of marriage quality and emotional expressiveness of mothers and fathers. *Early Child. Res. Q.* **2018**, *42*, 183–192. [\[CrossRef\]](#)
24. Foster, T.D.; Froyen, L.C.; Skibbe, L.E.; Bowles, R.P.; Decker, K.B. Fathers' and mothers' home learning environments and children's early academic outcomes. *Read. Writ.* **2016**, *29*, 1845–1863. [\[CrossRef\]](#)
25. Kabali, H.K.; Irigoyen, M.M.; Nunez-Davis, R.; Budacki, J.G.; Mohanty, S.H.; Leister, K.P.; Bonner, R.L. Exposure and use of mobile media devices by young children. *Pediatrics* **2015**, *136*, 1044–1050. [\[CrossRef\]](#)
26. Neumann, M.M.; Neumann, D.L. The use of touch-screen tablets at home and pre-school to foster emergent literacy. *J. Early Child. Lit.* **2017**, *17*, 203–220. [\[CrossRef\]](#)
27. Schmitt, K.L.; Hurwitz, L.B.; Duel, L.S.; Linebarger, D.L.N. Learning through play: The impact of web-based games on early literacy development. *Comput. Hum. Behav.* **2018**, *81*, 378–389. [\[CrossRef\]](#)
28. Geist, E. Using tablet computers with toddlers and young preschoolers. *Young Child.* **2014**, *69*, 58–63.
29. Korat, O.; Shamir, A.; Arbiv, L. E-books as support for emergent writing with and without adult assistance. *Educ. Inf. Technol.* **2011**, *16*, 301–318. [\[CrossRef\]](#)
30. Kucirkova, N.; Messer, D.; Sheehy, K.; Flewitt, R. Sharing personalised stories on iPads: A close look at one parent–child interaction. *Literacy* **2013**, *47*, 115–122. [\[CrossRef\]](#)
31. Barr, R. Growing up in the digital age: Early learning and family media ecology. *Curr. Dir. Psychol. Sci.* **2019**, *28*, 341–346. [\[CrossRef\]](#)
32. Chen, C.; Chen, S.; Wen, P.; Snow, C.E. Are screen devices soothing children or soothing parents? Investigating the relationships among children's exposure to different types of screen media, parental efficacy, and home literacy practices. *Comput. Hum. Behav.* **2020**, *12*, 106462. [\[CrossRef\]](#)
33. Lonigan, C.J.; Goodrich, J.M.; Farver, J.M. Identifying differences in early literacy skills across subgroups of language-minority children: A latent profile analysis. *Dev. Psychol.* **2018**, *54*, 631–647. [\[CrossRef\]](#)
34. Levin, I.; Ehri, L.C. Young children's ability to read and spell their own and classmates' names: The role of letter knowledge. *Sci. Stud. Read.* **2009**, *13*, 249–273. [\[CrossRef\]](#)
35. Martini, F.; Sénéchal, M. Learning literacy skills at home: Parent teaching, expectations, and child interest. *Can. J. Behav. Sci. Rev. Can. Sci. Comport.* **2012**, *44*, 210–221. [\[CrossRef\]](#)
36. Neumann, M.M. The effects of a parent–child environmental print program on emergent literacy. *J. Early Child. Res.* **2018**, *16*, 337–348. [\[CrossRef\]](#)
37. Puranik, C.S.; Lonigan, C.J. From scribbles to scrabble: Preschool children's developing knowledge of written language. *Read. Writ.* **2011**, *24*, 567–589. [\[CrossRef\]](#) [\[PubMed\]](#)
38. Mol, S.E.; Bus, A.G. To read or not to read: A meta-analysis of print exposure from infancy to early adulthood. *Psychol. Bull.* **2011**, *137*, 267–296. [\[CrossRef\]](#) [\[PubMed\]](#)
39. Sonnenschein, S.; Munsterman, K. The influence of home-based reading interactions on 5-year-olds' reading motivations and early literacy development. *Early Child. Res. Q.* **2002**, *17*, 318–337. [\[CrossRef\]](#)
40. Batini, F.; D'Autilia, B.; Pera, E.; Lucchetti, L.; Toti, G. Reading aloud and first language development: A systematic review. *J. Educ. Train. Stud.* **2020**, *8*, 49–68. [\[CrossRef\]](#)
41. Montag, J.L.; Jones, M.N.; Smith, L.B. The words children hear: Picture books and the statistics for language learning. *Psychol. Sci.* **2015**, *26*, 1489–1496. [\[CrossRef\]](#)
42. Noble, C.H.; Cameron-Faulkner, T.; Lieven, E. Keeping it simple: The grammatical properties of shared book-reading. *J. Child Lang.* **2018**, *45*, 753–766. [\[CrossRef\]](#)
43. Deckner, D.F.; Adamson, L.B.; Bakeman, R. Child and maternal contributions to shared reading: Effects on language and literacy development. *J. Appl. Dev. Psychol.* **2006**, *27*, 31–41. [\[CrossRef\]](#)
44. Braid, S.; Bernstein, J. Improved cognitive development in preterm infants with shared book reading. *Neonatal Netw.* **2015**, *34*, 10–17. [\[CrossRef\]](#)

45. Sénéchal, M. Shared book reading: An informal literacy activity par excellence. In *The Routledge International Handbook of Early Literacy Education*; Kucirkova, N., Snow, C., Grøver, V., McBride, C., Eds.; Routledge: Oxfordshire, UK, 2017; Chapter 22; pp. 273–283.
46. Schapira, R.; Bergman Deitcher, D.; Aram, D. Variability and stability in parent–child discourse during and following repeated shared book-reading. *Read. Writ.* **2021**, *34*, 273–300. [\[CrossRef\]](#)
47. Kucirkova, N. Children’s reading with digital books: Past moving quickly to the future. *Child Dev. Perspect.* **2019**, *13*, 208–214. [\[CrossRef\]](#)
48. Korat, O.; Shneor, D. Can e-books support low SES parental mediation to enrich children’s vocabulary? *First Lang.* **2019**, *39*, 344–364. [\[CrossRef\]](#)
49. López-Escribano, C.; Valverde-Montesino, S.; García-Ortega, V. The impact of E-book-reading on young children’s emergent literacy skills: An analytical review. *Int. J. Environ. Res. Public Health* **2021**, *18*, 6510. [\[CrossRef\]](#)
50. Cremin, T.; Flewitt, R.; Swann, J.; Faulkner, D.; Kucirkova, N. Storytelling and story-acting: Co-construction in action. *J. Early Child. Res.* **2018**, *16*, 3–17. [\[CrossRef\]](#)
51. Treiman, R.; Decker, K.; Robins, S.; Ghosh, D.; Rosales, N. Parent–child conversations about literacy: A longitudinal, observational study. *J. Child Lang.* **2018**, *45*, 511–525. [\[CrossRef\]](#)
52. Lukie, I.K.; Skwarchuk, S.L.; LeFevre, J.A.; Sowinski, C. The role of child interests and collaborative parent–child interactions in fostering numeracy and literacy development in Canadian homes. *Early Child. Educ. J.* **2014**, *42*, 251–259. [\[CrossRef\]](#)
53. Musick, G.; Freeman, G.; McNeese, N.J. Gaming as family time: Digital game co-play in modern parent–child relationships. In *Proceedings of the ACM on Human-Computer Interaction*, 5 (CHI PLAY), Stratford, ON, Canada, 10–13 October 2021; pp. 1–25. [\[CrossRef\]](#)
54. Yip, J. *Exploring How “Digital Families” Shape Children’s Learning*; Joan Ganz Cooney Center: New York, NY, USA, 2017; Available online: <https://joanganzcooneycenter.org/2017/12/11/exploring-how-digital-families-shape-childrens-learning/> (accessed on 8 August 2023).
55. Marsh, J.; Brooks, G.; Hughes, J.; Ritchie, L.; Roberts, S.; Wright, K. *Digital beginnings: Young Children’s Use of Popular Culture, Media and New Technologies*; University of Sheffield: Sheffield, UK, 2005; Available online: <http://www.digitalbeginnings.shef.ac.uk/DigitalBeginningsReport.pdf> (accessed on 1 July 2023).
56. Sonck, N.; Nikken, P.; De Haan, J. Determinants of Internet mediation: A comparison of the reports by parents and children. *J. Child. Media* **2013**, *7*, 96–113. [\[CrossRef\]](#)
57. Ito, M. *Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media*; The MIT Press: Cambridge, MA, USA, 2013; p. 440.
58. Chaudron, S.; Marsh, J.; Navarette, V.D.; Ribbens, W.; Mascheroni, G.; Smahel, D.; Cernikova, M.; Dreier, D.; Korkeamäki, R.; Livingstone, S.; et al. Rules of engagement: Family rules on young children’s access to and use of technologies. In *Digital Childhoods*; Danby, S., Fleer, M., Davidson, C., Hatzigianni, M., Eds.; Springer: Berlin/Heidelberg, Germany, 2018; pp. 131–145. [\[CrossRef\]](#)
59. Papadakis, S.; Alexandraki, F.; Zaranis, N. Mobile device use among preschool-aged children in Greece. *Educ. Inf. Technol.* **2022**, *27*, 2717–2750. [\[CrossRef\]](#)
60. Chassiakos, Y.L.R.; Radesky, J.; Christakis, D.; Moreno, M.A.; Cross, C. Children and adolescents and digital media. *Pediatrics* **2016**, *138*, e20162593. [\[CrossRef\]](#)
61. World Health Organization. *Guidelines on Physical Activity, Sedentary Behavior and Sleep for Children under 5 Years of Age: Web Annex: Evidence Profiles* (No. WHO/NMH/PND/19.2); World Health Organization: Geneva, Switzerland, 2019.
62. Hartshorne, J.K.; Huang, Y.T.; Paredes, P.M.L.; Oppenheimer, K.; Robbins, P.T.; Velasco, M.D. Screen time as an index of family distress. *Curr. Res. Behav. Sci.* **2021**, *2*, 100023. [\[CrossRef\]](#)
63. Masonbrink, A.R.; Hurley, E. Advocating for children during the COVID-19 school closures. *Pediatrics* **2020**, *146*, e20201440. [\[CrossRef\]](#)
64. Wiederhold, B.K. Connecting through technology during the coronavirus disease 2019 pandemic: Avoiding “Zoom Fatigue”. *Cyberpsychol. Behav. Soc. Netw.* **2020**, *23*, 437–438. [\[CrossRef\]](#) [\[PubMed\]](#)
65. Benedetto, L.; Ingrassia, M. Digital parenting: Raising and protecting children in media world. In *Parenting: Empirical Advances and Intervention Resources (Online)*; Benedetto, L., Ingrassia, M., Eds.; IntechOpen: London, UK, 2020. [\[CrossRef\]](#)
66. Harris, E.A. “It Was Just Too Much”: How Remote Learning Is Breaking Parents; The New York Times: New York, NY, USA, 2020; Available online: <https://www.nytimes.com/2020/04/27/nyregion/coronavirus-homeschooling-parents.html> (accessed on 27 April 2020).
67. Zhang, C.; Qiu, W.; Li, H.; Li, J.; Zhang, L.; Li, X.; Li, J. Parental stress and home activities for young children during the stay-at-home quarantine time in China. *Early Educ. Dev.* **2021**, *32*, 843–862. [\[CrossRef\]](#)
68. Harkness, S.; Zylicz, P.O.; Super, C.M.; Welles-Nyström, B.; Bermúdez, M.R.; Bonichini, S.; Moscardino, U.; Mavridis, C.J. Children’s activities and their meanings for parents: A mixed-methods study in six Western cultures. *J. Fam. Psychol.* **2011**, *25*, 799–813. [\[CrossRef\]](#)
69. Andonova, D. Effective organization of the process of adaptation from the family to the institutional and educational environment—A key to the successful socialization of children. *Pedagogy* **2018**, *90*, 993–1000. Available online: <https://www.ceeol.com/search/article-detail?id=699721> (accessed on 7 September 2022).

70. United Nations Development Programme Bulgaria. Ten Things to Know About UNDP Bulgaria. 1995. Available online: [http://www.maxconsult.bg/images/useful/useful\\_79\\_bg.pdf](http://www.maxconsult.bg/images/useful/useful_79_bg.pdf) (accessed on 7 September 2022).
71. Luleva, A. Post-socialist gender order in Bulgaria: Between state-socialist legacy and EU gender regulations. In *Women in the Balkans/Southeastern Europe*; Deimel, J., Schubert, G., Eds.; Biblion Media: Leipzig, Germany, 2016; pp. 89–105.
72. Lavee, Y.; Katz, R. The family in Israel: Between tradition and modernity. *Marriage Fam. Rev.* **2003**, *35*, 193–217. [CrossRef]
73. Oryan, S. Democratic parenting: Parental interpretation of parent education messages in the USA and Israel. *Int. J. About Parents Educ.* **2014**, *8*, 34–47.
74. Samoocha, S. Is Israel western? In *Comparing Modernities: Pluralism Versus Homogeneity*; Ben-Rafael, E., Sternberg, Y., Eds.; Brill Academic Publishers: Cambridge, MA, USA, 2005; pp. 413–442.
75. Scharf, M. Parenting in Israel: Together hand in hand, you are mine and I am yours. In *Parenting Across Cultures*; Selin, H.H., Ed.; Springer: Berlin/Heidelberg, Germany, 2014; pp. 193–206. [CrossRef]
76. Malach-Pines, A.M.; Zaidman, N. Gender, culture, and social support: A male–female, Israeli Jewish-Arab comparison. *Sex Roles* **2003**, *49*, 571–586. [CrossRef]
77. Chen, P.; Aram, D.; Tannenbaum, M. Forums for parents of young children: Parents’ online conversations in Israel and France. *Int. J. About Parents Educ.* **2014**, *8*, 11–25.
78. García, J.F.; Gracia, E. Is Always Authoritative the Optimum Parenting Style? Evidence from Spanish Families. *Adolescence* **2009**, *44*, 101–131. Available online: <https://bit.ly/3fzFmF3> (accessed on 7 September 2022).
79. García, J.F.; Serra, E.; García, O.F.; Martínez, I.; Cruise, E. A third emerging stage for the current digital society? Optimal parenting styles in Spain, the United States, Germany, and Brazil. *Int. J. Environ. Res. Public Health* **2019**, *16*, 2333. [CrossRef] [PubMed]
80. Gouveia, V.V.; Clemente, M.; Espinosa, P. The horizontal and vertical attributes of individualism and collectivism in a Spanish population. *J. Soc. Psychol.* **2003**, *143*, 43–63. [CrossRef] [PubMed]
81. Gómez Espino, J.M. Two sides of intensive parenting: Present and future dimensions in contemporary relations between parents and children in Spain. *Childhood* **2012**, *20*, 22–36. [CrossRef]
82. Gil Calvo, E. Trayectorias y Transiciones. ¿Qué Rumbos? Trajectories and Transitions. What directions? *Rev. Estud. Juv.* **2009**, *87*, 15–29. Available online: <https://bit.ly/3c7xp7Y> (accessed on 7 September 2022).
83. Yankova, M. Rapid Assessment of COVID-19 Impact on Education in Bulgaria Deepening Learning Loss and Increasing Inequalities. 2020. Available online: <https://www.unicef.org/eca/rapid-assessment-COVID-19-impact-education-bulgaria> (accessed on 7 September 2022).
84. Jaffe-Hoffman, M. *Israel Shuttters Schools, Universities as Coronavirus Patients Top 100*; The Jerusalem Post: Jerusalem, Israel, 2020; Available online: <https://www.jpost.com/HEALTH-SCIENCE/Coronavirus-Teachers-Union-calls-on-Education-Ministry-to-shutter-schools-620688> (accessed on 12 March 2020).
85. Royal Decree 463/2020. Agencia Estatal Boletín Oficial del Estado. Gobierno de España. 2020. Available online: <https://bit.ly/33AAidQ> (accessed on 14 March 2020).
86. Economic.bg. Borisov Approved the Partial Lockdown Proposed by the Minister of Health. Available online: <https://www.economic.bg/bg/a/view/borisov-e-odobril-chastichniyat-lokdaun-predlojen-ot-zdravniya-ministryr> (accessed on 25 November 2020). (In Bulgarian).
87. Mediapool.bg. Bulgaria Enters a 10-Day Lockdown from Monday. Available online: <https://www.mediapool.bg/bulgaria-vliza-v-10-dneven-lokdaun-ot-ponedelnik-news319515.html> (accessed on 18 March 2021). (In Bulgarian).
88. Jeffay, N. As Israel’s COVID Restrictions End, Two Experts Offer Advice for Other Countries; Times of Israel: Jerusalem, Israel, 2021; Available online: <https://www.timesofisrael.com/no-more-daycare-restaurants-gyms-or-prayer-quorums-the-new-virus-regulations> (accessed on 2 June 2021).
89. El Mundo. New Covid Measures in Spain: Bar Hours, Capacity, Curfew, Closures. Available online: <https://www.elmundo.es/espana/2021/06/04/60ba132921efa0dd1d8b46ba.html> (accessed on 14 May 2021). (In Spanish).
90. Puranik, C.S.; Petscher, Y.; Lonigan, C.J. Learning to write letters: Examination of student and letter factors. *J. Exp. Child Psychol.* **2014**, *128*, 152–170. [CrossRef] [PubMed]
91. Guryan, J.; Hurst, E.; Kearney, M. Parental education and parental time with children. *J. Econ. Perspect.* **2008**, *22*, 23–46. [CrossRef]
92. Weinreb, A.; Chernichovsky, D.; Brill, A. Israel’s Exceptional Fertility. *State Nation Rep. Soc. Econ. Policy* **2018**, 271–307.
93. Aram, D.; Levin, I. Promoting early literacy: The differential effects of parent-child joint writing and joint storybook-reading interventions. In *Psychology Research Progress. Cognitive Development: Theories, Stages and Processes and Challenges*; Chen, R., Ed.; Nova Science Publishers: Hauppauge, NY, USA, 2014; pp. 189–212.
94. Meoded Karabanov, G.; Asaf, M.; Ziv, M.; Aram, D. Parental behaviors and involvement in children’s digital activities among Israeli Jewish and Arab families during the COVID-19 lockdown. *Early Educ. Dev.* **2021**, *32*, 881–902. [CrossRef]
95. Ilari, B.; Cho, E.; Li, J.; Bautista, A. Perceptions of parenting, parent-child activities and children’s extracurricular activities in times of COVID-19. *J. Child Fam. Stud.* **2022**, *31*, 409–420. [CrossRef]
96. Spinelli, M.; Lionetti, F.; Pastore, M.; Fasolo, M. Parents’ stress and children’s psychological problems in families facing the COVID-19 outbreak in Italy. *Front. Psychol.* **2020**, *11*, 1713. [CrossRef]
97. Meoded Karabanov, G.; Aram, D. Parental behaviors before, during the COVID-19 first lockdown, a year and two years later: Lessons and challenges. (Oral presentation). In Proceedings of the International Congress on Evidence-Based Parenting Support (I-CEPS). PARFA Parenting and Research Family Alliance, Virtual, Australia, 6–8 June 2023.

98. OECD Data. *Fertility Rates*; OECD: Paris, France, 2020. [CrossRef]
99. Pat-Horenczyk, R.; Schiff, M. Continuous traumatic stress and the life cycle: Exposure to repeated political violence in Israel. *Curr. Psychiatry Rep.* **2019**, *21*, 71. [CrossRef] [PubMed]
100. McArthur, B.A.; Racine, N.; Browne, D.; McDonald, S.; Tough, S.; Madigan, S. Recreational screen time before and during COVID-19 in school-aged children. *Acta Paediatr.* **2021**, *110*, 2805–2807. [CrossRef] [PubMed]
101. Toombs, E.; Mushquash, C.J.; Mah, L.; Short, K.; Young, N.L.; Cheng, C.; Zhu, L.; Strudwick, G.; Birken, C.; Hopkins, J.; et al. Increased screen time for children and youth during the COVID-19 pandemic. *Sci. Briefs Ont. COVID-19 Sci. Advis. Table* **2022**, *3*, 1–19. [CrossRef]
102. Elias, N.; Sulkin, I. Screen-assisted parenting: The relationship between toddlers' screen time and parents' use of media as a parenting tool. *J. Fam. Issues* **2019**, *40*, 2801–2822. [CrossRef]
103. Lee, S.J.; Ward, K.P.; Chang, O.D.; Downing, K.M. Parenting activities and the transition to home-based education during the COVID-19 pandemic. *Child. Youth Serv. Rev.* **2021**, *122*, 105585. [CrossRef] [PubMed]
104. El País. Spain's State of Alarm: The Key Measures That Are Now in Place. Available online: <https://elpais.com/especiales/coronavirus-COVID-19/spains-state-of-alarm-the-key-measures-that-are-now-in-place/> (accessed on 15 March 2020).
105. Cartanyà-Hueso, À.; Lidón-Moyano, C.; Martín-Sánchez, J.C.; González-Marrón, A.; Matilla-Santander, N.; Miró, Q.; Martínez-Sánchez, J.M. Association of screen time and sleep duration among Spanish 1-14 years old children. *Paediatr. Perinat. Epidemiol.* **2021**, *35*, 120–129. [CrossRef]
106. Hiniker, A.; Suh, H.; Cao, S.; Kientz, J.A. Screen time tantrums: How families manage screen media experiences for toddlers and preschoolers. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, San Jose, CA, USA, 7–12 May 2016; pp. 648–660. [CrossRef]
107. Strouse, G.A.; Newland, L.A.; Mourlam, D.J. Educational and fun? Parent versus preschooler perceptions and co-use of digital and print media. *AERA Open* **2019**, *5*, 2332858419861085. [CrossRef]
108. Burns, M.S.; Griffin, P.; Snow, C.E. Starting right: A guide to promoting children's reading success. In *Specific Recommendations from America's Leading Researchers on How to Help Children Become Successful Readers*; National Academy Press: Washington, DC, USA, 1999.
109. Cao, S.; Dong, C.; Li, H. Digital parenting during the COVID-19 lockdowns: How Chinese parents viewed and mediated young children's digital use. *Early Child Dev. Care* **2022**, *192*, 2401–2416. [CrossRef]
110. Sciacca, B.; Laffan, D.A.; Norman, J.O.H.; Milosevic, T. Parental mediation in pandemic: Predictors and relationship with children's digital skills and time spent online in Ireland. *Comput. Hum. Behav.* **2022**, *127*, 107081. [CrossRef]
111. Read, K.; Gaffney, G.; Chen, A.; Imran, A. The impact of COVID-19 on families' home literacy practices with young children. *Early Child. Educ. J.* **2021**, *50*, 1429–1438. [CrossRef]
112. Cliff, D.; Howard, S.; Radesky, J.; McNeill, J.; Vella, S. Early childhood media exposure and self-regulation: Bidirectional longitudinal associations. *Acad. Pediatr.* **2018**, *18*, 813–819. [CrossRef] [PubMed]
113. Pempek, T.; Kirkorian, H.; Anderson, D. The effects of background television on the quantity and quality of child-directed speech by parents. *J. Child. Media* **2014**, *8*, 211–222. [CrossRef]
114. Aram, D.; Bar-Am, O.C. Mothers helping their preschool children to spell words: A comparison between interactions using the computer vs. pencil and paper. *Int. J. Child-Comput. Interact.* **2016**, *7*, 15–21. [CrossRef]
115. Livingstone, S.; Mascheroni, G.; Dreier, M.; Chaudron, S.; Lagae, K. *How Parents of Young Children Manage Digital Devices at Home: The Role of Income, Education and Parental Style*; EU Kids Online, LSE: London, UK, 2015.
116. Sonnenschein, S.; Metzger, S.R.; Thompson, J.A. Low-income parents' socialization of their preschoolers' early reading and math skills. *Res. Hum. Dev.* **2016**, *13*, 207–224. [CrossRef]
117. Leichman, A.K. *Israeli Mom's School Program Raises Future Entrepreneurs*; Israel21c: San Francisco, CA, USA, 2018; Available online: <https://www.israel21c.org/israeli-moms-school-program-raises-future-entrepreneurs/> (accessed on 11 November 2018).
118. Ozery, B. *Start-Up Education Powers the Start-Up Nation*; Times of Israel: Jerusalem, Israel, 2022; Available online: <https://www.timesofisrael.com/spotlight/start-up-education-powers-the-start-up-nation/> (accessed on 6 October 2022).
119. Ewin, C.A.; Reupert, A.E.; McLean, L.A.; Ewin, C.J. The impact of joint media engagement on parent–child interactions: A systematic review. *Hum. Behav. Emerg. Technol.* **2021**, *3*, 230–254. [CrossRef]
120. Dworkin, J.; Hessel, H.; Gliske, K.; Rudi, J.H. A comparison of three online recruitment strategies for engaging parents. *Fam. Relat.* **2016**, *65*, 550–561. [CrossRef] [PubMed]
121. Keeter, S.; McGeeney, K. *Coverage Error in Internet Survey*; Pew Research Centre: Washington, DC, USA, 2015; Available online: <https://www.pewresearch.org/methods/2015/09/22/coverage-error-in-internet-surveys> (accessed on 1 July 2023).
122. Kogan, V.; Lavertu, S. *The COVID-19 Pandemic and Student Achievement on Ohio's Third-Grade English Language Arts Assessment*; Ohio State University: Columbus, OH, USA, 2021.
123. Shaul, S.; Katzir, T.; Lipka, O. The effect of the corona virus on the reading fluency and comprehension of Hebrew-speaking children in the second grade. In Proceedings of the Israeli Childhood Conference, Research on Education and Development in a Time of Crisis, Haifa, Israel, 6 October 2021.
124. American Psychological Association. *Stress in America 2020: Stress in the time of COVID-19*; American Psychological Association: Washington, DC, USA, 2020; Volume 1.

125. Patrick, S.W.; Henkhaus, L.E.; Zickafoose, J.S.; Lovell, K.; Halvorson, A.; Loch, S.; Letterie, M.; Davis, M.M. Well-being of parents and children during the COVID-19 pandemic: A national survey. *Pediatrics* **2020**, *146*, e2020016824. [CrossRef]
126. MacGillis, A. *What Can We Do About Pandemic-Related Learning Loss?* New York Times: New York, NY, USA, 2023; Available online: [https://www.propublica.org/article/pandemic-covid-education-test-scores-schools-students?utm\\_source=headtopics&utm\\_medium=news&utm\\_campaign=2023-06-19](https://www.propublica.org/article/pandemic-covid-education-test-scores-schools-students?utm_source=headtopics&utm_medium=news&utm_campaign=2023-06-19) (accessed on 19 June 2023).
127. Donnelly, R.; Patrinos, H.A. Learning loss during COVID-19: An early systematic review. *Prospects* **2021**, *51*, 601–609. [CrossRef]

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.