

The alliance of barriers in digital natives and the "Born to Read" project: a public health challenge

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INTRODUCTION

Media exposure has caused profound changes in family life, and because children's brains are extremely plastic in the early stages of development, the risks and benefits of any environmental stimulus are amplified (1,2,3). Therefore, the World Health Organisation (WHO) and the American Academy of Paediatrics (AAP) have implemented official recommendations on screen use, prohibiting exposure for children under one year of age and stating that children under five years of age should not spend more than one hour per day on screen-based activities (4,5). Although digital technology offers numerous advantages, from enhancing our capabilities to providing rapid access to large amounts of information, as is the case with distance learning, for example, it is also important to consider its possible negative effects. In fact, excessive and uncontrolled use of digital technology, and, above all, early exposure to screens, predisposes children to the risk of negative repercussions on both their physical and neurodevelopmental health, including attention, language, sleep and relational skills disorders, as well as an increased risk of childhood overweight and obesity (6,7,8,9,10,11,12,13). Despite this, technology, if used wisely and guided by adults, can be an educational resource, supporting learning and stimulating children's curiosity (6). In this context, parents are the main mediators of the relationship between children and digital technologies, diversifying their approach in restrictive, instructive or co-use modes (11,14,15). Therefore, as stated by the American Academy of Paediatrics, preventive interventions must be implemented in terms of effective media management, directing them towards cognitive-behavioural development strategies, such as dialogic reading (16,17,18,19,20,21,22,23). In this perspective, the educational role of nurses is becoming increasingly important in the face of new challenges posed by contemporary society, such as the abuse of technology in children, where they are not limited to identifying risks and problems, but become a point of reference in education and healthcare for children, adolescents and their families, providing tools for the balanced and safe use of digital devices (24). Nurses focus their actions on the well-being of individuals, families and the community in the areas of clinical practice, organisation and education, promoting healthy lifestyles and protecting the surrounding environment (25). Nursing education, supported by a clear and consolidated legislative framework, is therefore a fundamental tool for preventing digital addiction, promoting balanced behaviour and protecting the psychological and physical

well-being of minors. In fact, recent studies show that brief nursing education interventions can significantly reduce screen exposure in young children from an interdisciplinary perspective, mainly limited to paediatric oncohaematology settings (26,27,28,29). The "Born to Read" project, implemented at Desio Hospital in 2018 with the creation of a space dedicated to reading near the nurses' station, is still not very widespread. The institutions involved are few and far between, including the Brianza ASST, Vimercate Hospital, Trento Hospital, Rovereto Hospital, and the Lecco, Monza and Brianza ASST (30). The main objective of this study is to investigate the use of digital devices and awareness of early reading among parents of children aged between 4 and 36 months. Through a systematic analysis of the literature and comparison of data, the study aims to determine how the educational role of nurses towards parents is fundamental in preventing negative developmental outcomes, taking into consideration the Training Project promoted by the "Born to Read" Committee, which for the first time also involved Nursing Degree Courses, specifically at the University of Ascoli Piceno.

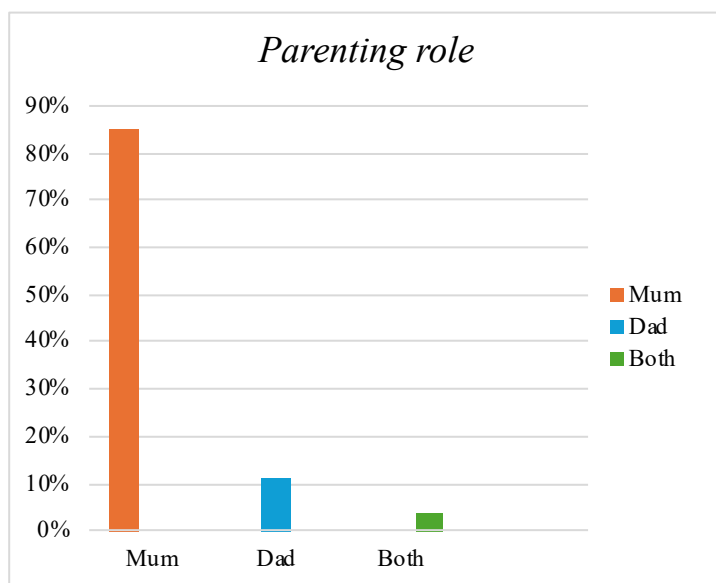
MATERIAL AND METHODS:

A multicentre, cross-sectional, observational exploratory study was conducted. Data collection took place between 12 March 2025 and 12 June 2025. The setting included nurseries in the province of Ascoli Piceno, "Scarabocchio" and "Sintonia", in Castel di Lama "Passerotto", in Offida "Baia di Peter Pan" and "Pollicino" in Montepiccolo and Folignano. The study included all parents of children aged between 4 and 36 months attending nurseries in the province of Ascoli Piceno who gave their consent. All parents outside the inclusion settings were excluded, including children not aged between 4 and 36 months, those who did not attend the following nurseries, due to illness or prolonged absence for other reasons, and those who did not give their consent. A convenience probability sampling method was used, consecutively enrolling all parents who, during the study period, met the inclusion criteria and agreed to participate. To carry out the study, an exploratory questionnaire was administered, consisting of 16 items, 4 of which were qualitative, open-ended questions, and 12 of which were multiple-choice questions on a Likert scale from 0 to 5: "Never", "Once a month", "Once a week", "Every day", "Several times a day" and partly dichotomous, "Yes" and "No". It is divided into two sections: the first section concerns personal and professional characteristics of the parent, including age, nationality, educational qualifications, profession, number of children and their ages, and nursery school attended; the second section concerns the use of digital devices and awareness of the "Born to Read" project (31) (Annex 1). Before the study began, the nursery settings for the research were selected, the educational coordinators were contacted and gave their consent to the survey, the representatives and parents were informed about the aims of the study, and the timing of the data collection was agreed with them, respectively in the period between 12 March 2025 and 12 June 2025. In each nursery included, the procedures and objectives of the study were explained and a validated paper questionnaire was distributed as a data collection tool, guaranteeing the anonymity of the participants. During the data collection period, two recalls were carried out by the coordinators to encourage greater adherence to the study. After the data collection deadline, all completed questionnaires were collected, and all responses were recorded and analysed using Microsoft Excel to create a database, in complete anonymity. The study was conducted in compliance with the confidentiality of personal data, as required by current legislation, adhering to the guidelines provided by the Good Clinical

Practice regulations (Ministry of Health Decree of 14 July 1997), as well as those for the protection of individuals and other subjects with regard to the processing of personal data (European Regulation EU No. 679/2016; D, Legislative Decree No. 101/2018). Data processing was carried out by creating a database using Microsoft Excel® spreadsheet software from Microsoft 365®, programming the structure of contingency tables, calculating the relative frequencies (n.) and the respective percentage values (%) of the categorical variables. Statistical analyses were conducted to explore the relationships between demographic variables (number of children, age of parents, gender of child, place of residence) and behavioural variables related to the use of digital devices and reading habits. Correlation tests (Pearson and Spearman), t-tests for independent samples and Chi-square tests were used to analyse the associations between categorical variables. The analyses were conducted with a significance level set at $p < 0.05$.

RESULTS:

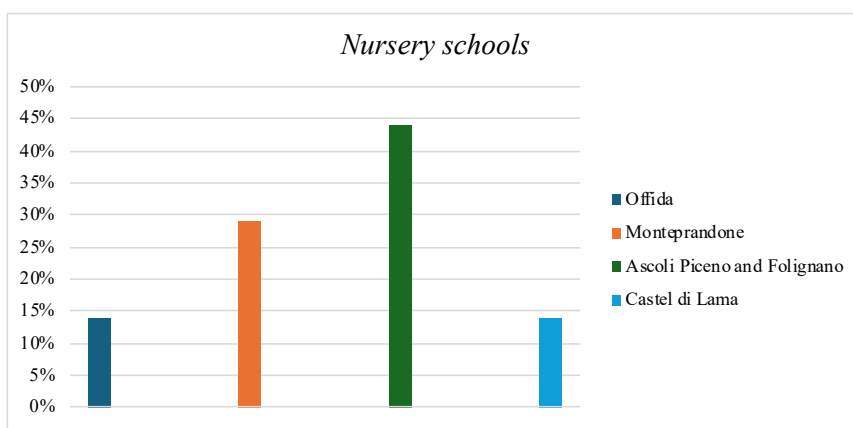
Statistical analysis of the data shows that the response rate (RR) is 99.12%. A total of 227 parents were involved, of whom 225 decided to participate in the study; therefore, it can be seen that 0.88% of the enrolled sample did not decide to participate in the survey. The majority of respondents were mothers, accounting for 85% of the sample (n=192), followed by fathers with 11% of the sample (n=25) and finally both parents with 4% (n=8) (Graph 1).



Graph 1: Parenting role

The results showed that 85% of the sample, i.e. mothers, had an average age of 35.44 with a standard deviation of 4.46, while 11% of the sample, i.e. fathers, had an average age of 39.14 with a standard deviation of 6.20. Ninety-three per cent (n=210) were Italian mothers, while 7% (n=15) were foreign; in contrast, 89% (n=201) of fathers were Italian and only 11% (n=24) were foreign. Thirty-nine per cent (n=87) of mothers report having a three-year degree, 38% (n=85) a high school diploma, 14% (n=31) a master's degree, 5% (n=11) a middle school diploma, 0% (n=1) a PhD, while 4% (n=10) did not answer the

question regarding their educational qualifications. In contrast, the majority of fathers, 51% (n=114), have a fifth-year secondary school diploma, 25% (n=57) have a three-year degree, 8% (n=19) have a middle school diploma, 6% (n=14) have a master's degree, 1% (n=2) have a PhD, while 8% (n=19) did not specify their educational qualification. The remaining 4% (n=8) stated that the questionnaire was completed by both parents. Most of the parents in the sample stated that they were employed, with an average of 1.62 children per parent and a standard deviation of 0.69. All nurseries included in the study in the province of Ascoli Piceno are public: 14% (n=31) of children attend the Offida nursery, 29% (n=65) attend the Montepandone nursery, the majority, 44% (n=98) attend the Ascoli Piceno and Folignano nursery, while 14% (n=31) attend the Castel Di Lama nursery (Graph 2).



Graph 2: Nursery Schools

Specifically analysing the children included in the study, the majority were male, 57% (n=129), while the remaining 43% (n=96) were female, with an average age of 24.72 months and a standard deviation of 7.95. Parents were asked, as a first item, which of the following technological devices listed they had at home. The average of the responses obtained was calculated with the respective standard deviation. The results showed in Table 1 below.

Items	Answers	Average	Standard Deviation
How many technological devices do you have at home?	Smartphone	2,22	0,76
	Non smartphone	0,22	0,85
	Tablet for adults	0,60	0,88
	Tablet for children	0,17	0,39
	PC desktop	0,29	0,56
	PC laptop	1,44	0,51

Table 1. Technological devices owned at home

The second item investigated was subscriptions to streaming services. 25% (n=57) stated that they only had one subscription, for example to Netflix, Prime Video, Disney Plus, YouTube or another service. 66% (n=147), on the other hand, had more than one subscription, while 9% (n=21) did not respond to this question. The third item investigated the frequency of use of technological devices: smartphones, tablets for adults, tablets for children, desktop PCs and laptops. Parents' responses ranged from "Never", "Once a month", "Once a week", "Every day" and "Several times a day". This shows that 51% (n=114) never use a smartphone, 7% (n=15) use it once a month, 18% (n=40) use it once a week, 18% (n=41) use it every day, 4% (n=10) use it several times a day, and 2% (n=5) did not respond to the question. Tablets for adults are never used by 89% (n=201), used once a month by 4% (n=8) of children, once a week by 3% (n=7), every day by 1% (n=3), several times a day by 1% (n=2), while 2% (n=4) did not respond to the question. The tablet for children is never used by 87% (n=196), is used once a month by 4% (n=8) of children, once a week by 3% (n=7), every day by 2% (n=5), several times a day by 0% (n=1), and 4% (n=8) did not respond to the item. Analysing the responses relating to desktop PCs, 96% (n=216) never use them, 0% (n=1) use them once a month, no children use them once a week, every day or several times a day, and 4% (n=8) did not respond to the item. Finally, 94% (n=212) never use a laptop, 1% (n=3) use it once a month, only 2% (n=4) use it once a week, no children use it every day or several times a day, and 3% (n=6) did not respond to this question. In the fourth and fifth items, parents are asked about the time spent using smartphones and tablets on a scale ranging from "never", "less than 1 hour per day", "1-2 hours", "more than three hours". Smartphones are never used by 65% (n=147) of children, less than 1 hour per day by 29% (n=66), 1-2 hours by 5% (n=12), and no parents report that their child uses a smartphone for more than three hours per day. Tablets are never used by 89% of children (n=201), less than 1 hour per day by 8% (n=17), 1-2 hours by 3% (n=7), and no parents report that their child uses a tablet for more than three hours per day (Table 2).

Items		Answers	Frequency Absolute	Frequency Percentage
How often does your child use the following devices?	Smartphone	Never	n.114	51%
		Once a month	n.15	7%
		Once a week	n.40	18%
		Every day	n.41	18%
		Several times a day	n.10	4%
		No response	n.5	2%
	Tablet for adults	Never	n.201	89%
		Once a month	n.8	4%
		Once a week	n.7	3%
		Every day	n.3	1%
		Several times a day	n.2	1%
		No response	n.4	2%
	Tablet for children	Never	n.196	87%
		Once a month	n.8	4%
		Once a week	n.7	3%

Items		Answers	Frequency Absolute	Frequency Percentage
How often does your child use the following devices?	Tablet for children	Never	n.196	87%
		Once a month	n.8	4%
		Once a week	n.7	3%
		Every day	n.5	2%
		Several times a day	n.1	0%
		No response	n.8	4%
	Pc desktop	Never	n.216	96%
		Once a month	n.1	0%
		Once a week	n.0	0%
		Every day	n.0	0%
		Several times a day	n.0	0%
		No response	n.8	4%
	Pc laptop	Never	n.212	94%
		Once a month	n.3	1%
		Once a week	n.4	2%
		Every day	n.0	0%
		Several times a day	n.0	0%
		No response	n.6	3%
If your child uses their smartphone and tablet continuously every day, for how long?	Smartphone	Never	n.147	65%
		Less than 1 hour a day	n.66	29%
		1-2 hours	n.12	5%
		More than 3 hours	n.0	0%
	Tablet	Never	n.201	89%
		Less than 1 hour a day	n.17	8%
		1-2 hours	n.7	3%
		More than 3 hours	n.0	0%

Table 2. Frequency of Digital Device Use

When asked, “When does your child usually use a smartphone or tablet?”, 3% (n=7) of parents say that their child is alone, 44% (n=98), which is the largest percentage, say that they use it together with their child, 4% (n=9) say that their child uses it with older siblings, while 7% (n=16) answer “other.” Thirty-five percent (n=78) abstained from answering, while 7% (n=17) answered using multiple answer options. Parents were then asked what they considered to be the main advantages and disadvantages of using touchscreen devices. Among the main advantages they mentioned were: calming in difficult situations as a form of entertainment, development of learning skills, creativity, curiosity, intuitive and cognitive abilities. Some of the parents, about 18%, said that touch devices had no advantages. Among the disadvantages, they mainly mentioned addiction and isolation, illiteracy, sleep and visual disorders. When asked, “Have you noticed any changes in your child's behavior in relation to the use of technology?”, the majority, 66% (n=149), said they had not noticed any changes, while 34% (n=76) said they had noticed behavioral changes in relation to the use of technology. Those who said they had noticed

changes were asked to describe them, and the answers revealed the disadvantages mentioned in the previous question. Item 12 investigates parents' awareness of the "Born to Read" project. The majority, 78% (n=175), say they are aware of it, while 22% (n=50) say they are not aware of it. Item 13 asks parents about the time they spend reading with their children on a scale ranging from "Never," "Less than 1 hour per day," "1-2 hours," to "More than three hours." Nine percent (n=20) say they never spend time reading together, 64% (n=143) say they spend less than 1 hour per day, 25% (n=57) 1-2 hours, and finally 1% (n=3) devote more than three hours a day, while 1% (n=2) did not answer the question. On the other hand, with regard to independent reading, it emerges that on average children devote 0.61 hours a day to it, with a standard deviation of 0.67. The third-to-last question asked in which healthcare settings parents shared reading moments with their children (Table 3).

Items	Answers	Frequency Absolute	Frequency Percentage
In which of these healthcare settings have you ever shared moments of reading?	Vaccination Center	n.32	14%
	Pediatrician	n.25	11%
	Counseling center	n.0	0%
	Pediatric emergency room waiting room	n.2	1%
	Hospitalization - Pediatric Ward	n.15	7%
	Other	n.66	29%
	No response	n.46	20%

Table 3: Shared Reading in Healthcare Settings

84% of parents (n=188) believe that sharing reading moments in the healthcare settings described above is useful, while a small but significant percentage, 16% (n=37), believe that shared reading in healthcare settings is not useful. Finally, parents who answered affirmatively to the previous question were asked what and how they would encourage such shared reading activities in hospital and non-hospital settings. The responses reveal their desire to create and set up reading areas with bookcases equipped with Montessori tables and chairs and books related to children's medicine in order to build a favorable environment between the child and the healthcare setting. They also request the promotion of reading events and appointments for children, such as the "Born to Read" project. The analysis shows the significance in terms of Pearson's correlations for the items involved that are numerical variables. As can be seen from Table 4, the number of children has a medium/moderate significance for the number of smartphones (p-value: 2.805e-07) and children's tablets (p-value: 0.0003484) and maternal age (p-value: 3.006e-06), while it has a weak significance for non-smartphone cell phones (p-value: 0.003241) and paternal age (p-value: 0.000171). However, in terms of Spearman's correlation, for categorical and numerical variables, there is weak significance for the number of months of the child associated with smartphone use (p-value: 0.01795) and for children's tablets (p-value: 0.01121); The significance between the time the child spends

reading and the usefulness of reading in healthcare settings is also weak (p-value: 0.01354) (Table 4).

Variable	Variable	Test	p-value	R
Number of Children	Number of smartphones	Pearson	2,805E-04	0.334364
Number of Children	Non smartphone	Pearson	0.003241	0.1954519
Number of Children	Tablet for adults	Pearson	0.2803	
Number of Children	Tablet for children	Pearson	0.0003484	0.2363523
Number of Children	PC desktop	Pearson	-0.0518	
Number of Children	PC laptop	Pearson	-0.0476	
Number of Children	Time spent reading	Pearson	-0.0255	
Number of Children	Father's age	Pearson	0.000171	0.2559397
Number of Children	Mother's age	Pearson	3,006E-03	0.30958
Baby's months	Smartphone	Pearson	0.1845	
Baby's months	Non smartphone	Pearson	0.8564	
Baby's months	Tablet for adults	Pearson	0.3653	
Baby's months	How much do you use your smartphone?	Spearman	0.01795	0.1594415
Baby's months	Tablet for adults	Spearman	0.5131	
Baby's months	How much do you use the tablet for children?	Spearman	0.01121	0.1718676
Baby's months	PC desktop	Spearman	0.1193	
Baby's months	PC laptop	Spearman	114	
Baby's months	Time spent reading	Spearman	0.0630	
How much time does your child spend reading?	Do you think reading is useful in healthcare settings?	Spearman	0.01354	0.1644157

Table 4. Pearson and Spearman correlations

The independent samples t-test evaluated a marginal association between the item “How much time does your child spend reading?” and the gender of the child, with a marginal value suggesting that females have a greater association with reading in preschool age. On the other hand, the use of tablets by children also appears to be associated, albeit borderline, with males, who use them twice as often. Analysis of the standardized residuals of the Chi-square test shows that awareness of the “Nati per Leggere” project varies significantly between areas. In particular, Offida has a higher than expected awareness of the project (residual = +2.27), while Castel di Lama has a significantly lower awareness (residual = -2.38). The other municipalities show no significant deviations from expectations. The Chi-square test shows a significant relationship between the level of smartphone use and place of residence ($X^2(15) = 29.45$, $p = 0.014$). However, the accuracy warning suggests caution in interpretation, as some cells have low frequencies. Analysis of the standardized residuals reveals that in Monteprandone there are more people than expected who do not use smartphones (residual = +2.37) and fewer who use them at level 2 (-2.52). Conversely, in Offida, level 2 is more frequent than expected (+2.27). In Castel di Lama, there are more missing responses. In Castel di Lama, there

were more missing or invalid responses than expected (+3.03) and more frequent use at level 1 (+2.27). The Chi-square test showed a statistically significant relationship between place of residence and the daily and continuous use of smartphones by children ($X^2(6) = 13.86$, $p = 0.031$). This suggests that children's digital habits vary significantly between different municipalities. However, there is a warning related to cells with low expected frequencies, which advises caution in interpreting the result. The Chi-square test showed a statistically significant relationship between those completing the questionnaire and their perception of the usefulness of reading in healthcare settings ($\chi^2(2) = 14.85$, $p < 0.001$). In particular, mothers were more likely to be in favor, while fathers and other respondents were more likely to consider it useless.

DISCUSSION:

This survey shows that the phenomenon of technology among digital natives is now a highly topical issue of fundamental importance for prevention and health promotion in children, as demonstrated by the percentage of responses received from the sample analyzed, which was 99.12%. The survey shows that a significant proportion of parents (51%) report that their children never use smartphones, and an equally high percentage (89%) say that their children never use tablets. The key element is parents' awareness of the potential risks of early use of technology, such as addiction and social isolation, issues that also emerged from parents' responses regarding the disadvantages of technological devices. However, although most children do not use these tools on a daily basis, a small percentage of parents (18%) say that their children use smartphones every day. Another 18% report weekly use, while a minority (4%) indicated more frequent use ("Several times a day"). This suggests a variable distribution of technology use, where a small proportion of children are exposed to it on a daily basis, while the majority have a much more moderate approach, which is extremely positive. An important aspect that emerged from the study is the perception of behavioral changes in relation to the use of technology. An important finding that emerged from the study is the perception of behavioral changes in relation to technology use. Although most parents (66%) say they have not noticed any changes in their children's behavior, about one-third (34%) report having observed changes. This data deserves attention, as it may suggest that even if parents do not immediately perceive the effects, the use of technology may still have an impact on behavior. Among the changes observed, parents reported issues such as difficulty concentrating, restlessness, and an increasing dependence on devices. These symptoms are consistent with scientific studies that link excessive use of technology to psychophysical disorders in children, such as obesity, osteoarticular and cardiovascular diseases, type II diabetes, sleep disorders, and socio-emotional disorders (9,11,14). Another interesting aspect concerns parents' opinions on the advantages and disadvantages of using technological devices. Among the main benefits cited are the development of cognitive skills, curiosity, and entertainment in difficult situations, suggesting that some parents see technology as an educational support tool. However, among the disadvantages, concerns about addiction, social isolation, and health problems such as sleep and vision disorders prevail. Another significant dimension concerns shared reading, which seems to be an activity appreciated and recognized by parents as fundamental for child development. In fact, another key element is the percentage of parents (84%) who consider sharing reading moments in healthcare facilities to be useful, suggesting that it could be an antidote to the problems associated with the use of

technology. Furthermore, the interest in creating spaces dedicated to reading, both in hospital and non-hospital settings, such as libraries equipped with Montessori tables and chairs, responds to the need to stimulate a balanced approach to children's education, encouraging activities that promote cognitive development and thus reducing the negative effects of digital devices. From a nursing perspective, the results of this study offer significant insights for everyday practice. First and foremost, nurses, as healthcare professionals guided by a code of ethics, are in a privileged position to educate parents about the potential risks of early technology use and to raise awareness of the need to balance screen time with more traditional activities such as reading, both independently and together. Nurses, particularly those working in pediatrics and healthcare facilities, could implement educational programs that promote responsible use of technology, encouraging, as parents themselves suggest, activities that stimulate children in a positive and interactive way with projects, events, and reading appointments for children, such as "Born to Read". This study highlights some limitations that must be considered when interpreting the results. The first limitation is the study itself, which is cross-sectional and analyzes exposure and outcome at the same time. Consequently, it is not possible to assess any changes or developments in digital usage habits or reading skills during development. Secondly, the study is based on self-reported data from a self-completed questionnaire, which is susceptible to subjective bias that may have influenced the accuracy of the responses. The third limitation to highlight is selection bias, as the research specifically involved parents of children attending selected nurseries in the province of Ascoli Piceno. The fourth limitation is the lack of adherence to the study by a portion of the parents, as it was not possible to analyze the responses of the entire sample included. Finally, given the scarcity of similar studies conducted, it was not possible to compare the data.

CONCLUSIONS:

The use of technology in children is a topic of growing interest, especially in relation to the effects that devices such as smartphones, tablets, and computers can have on children's physical and mental development. In this study, conducted on a multicenter sample of parents of children attending nurseries in the province of Ascoli Piceno, it emerged that children's use of technology is mostly limited, although not without implications. The majority of parents reported that their children used technological devices infrequently or not at all, suggesting a rather cautious attitude towards technology in preschool children. As the results themselves show, almost the entire sample considered shared reading to be a valid alternative to digital technology. "Born to Read" is a valuable initiative promoted by families in both school and healthcare settings. As the project itself states, reading is a fundamental pillar in the cognitive, emotional, and relational development of children. In an age where early exposure to technology is increasingly widespread, promoting shared reading moments takes on a central role. Reading together with children not only strengthens the emotional bond with parents, but also stimulates language, concentration, imagination, and the ability to understand emotions. The creation of spaces dedicated to reading, both in healthcare and education, is therefore a concrete strategy for counteracting the negative effects of technological abuse, promoting harmonious and conscious growth. In this context, the role of healthcare professionals, and nurses in particular, becomes crucial in promoting and supporting initiatives that value reading from early childhood as an educational, preventive, and overall wellness tool for children.

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ATTACHMENTS

Survey on the use of digital devices in children

Pediatrics

My name is Alessia Bejani and I am a third-year student in the Nursing program at the Polytechnic University of Marche in Ascoli Piceno. I kindly ask for your cooperation and a few minutes of your time to answer some questions that will help me complete my thesis.

The questionnaire is aimed at parents of children aged 4-36 months. The study aims to conduct a survey on the use of digital devices and awareness of early reading in children aged 4-36 months.

The data provided when completing the questionnaire will be processed in accordance with current privacy regulations. The data and information provided will be processed anonymously, using computerized/paper-based systems and limited to this project. Statistical data may be processed in anonymous and aggregate form. The results may be disclosed anonymously and for the purposes of communicating the project.

Participation in the survey is voluntary and refusal to participate will not have any consequences. You may also withdraw from the survey at any time by abandoning or not completing the questionnaire.

By completing this form, I consent to the processing of my data for research purposes only, in aggregate and anonymous form, in compliance with the Personal Data Protection Code, EU Regulation No. 679/2016 (GDPR), and Italian regulations on personal data protection.

Thank you for your cooperation.

1. Who is completing the questionnaire?

- Mother
- Father

2. Mother:

- Age: _____
- Nationality: _____
- Educational qualification: _____
- Profession: _____

3. Father:

- Age: _____
- Nationality: _____
- Education: _____
- Profession: _____

4. The nursery attended by your child is:

- Public
- Private

5. It is located in the city of: _____

6. It is located in the province of: _____

7. How many children?

- 1
- 2
- 3
- 4
- 5
- More than 5

8. Age of child attending nursery (in months): _____

9. Gender

- M
- F

10. How many of the following technological devices do you have at home?

Smartphone:

- 0
- 1
- 2
- 3
- More than 3

Non-smartphone cell phone:

- 0
- 1
- 2

3

More than 3

Tablet for adults:

0

1

2

3

More than 3

Tablet for children:

0

1

2

3

More than 3

Desktop computer:

0

1

2

3

More than 3

Laptop:

0

1

2

3

More than 3

11. Do you have any of the following subscriptions?

Netflix

Prime Video

Disney Plus

YouTube

Other: _____

12. If you do not own a tablet and/or smartphone, please explain why:

13. How often does your child use the following devices:

14. If your child uses their smartphone CONTINUOUSLY every day, how long do they use it for?

No use

- Up to 15 minutes
- Up to 30 minutes
- Up to 1 hour
- More than 1 hour

15. If they use it for more than an hour, indicate how long they use it for:

16. If your child uses a tablet CONTINUOUSLY every day, how long do they use it?

- No use
- Up to 15 minutes
- Up to 30 minutes
- Up to 1 hour
- More than 1 hour

17. If they use it for more than an hour, indicate how long they use it:

18. When your child uses their smartphone or tablet, they are usually:

- Alone
- With me
- With older siblings
- With other family members: _____

19. Thinking about your child, what are the main advantages of using touchscreen devices?

20. Still thinking about your child, what are the main disadvantages of using touchscreen devices?

21. Have you noticed any changes in your child's behavior in relation to the use of technology? (e.g., increased irritability, difficulty concentrating, social isolation, etc.)?

- Yes
- No

22. If yes, briefly describe the changes you have observed:

23. Are you aware of the "BORN TO READ" project?

- Yes
- No

24. How much time do you spend reading with your child every day?

- Never
- Less than an hour a day
- 1-2 hours
- More than 3 hours

25. How much time does your child spend reading independently every day?

- Never
- Less than an hour a day
- 1-2 hours
- More than 3 hours

26. In which of these healthcare settings have you ever shared moments of reading?

- Vaccination center
- Pediatrician's office
- Counseling center
- Pediatric waiting room in the emergency room
- Hospitalization - Pediatrics
- Other

27. Based on your personal experience, do you think it is useful to share moments of reading in the healthcare settings listed above?

- Yes
- No

28. If yes, what would you do to encourage this activity and how?
