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Practices and Parental Perspectives on Children's Play in Portugal: A Cross-Sectional Survey

Práticas e Perspetivas Parentais no Brincar das Crianças em Portugal: Um Inquérito Transversal

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ABSTRACT

Introduction: Play is recognized as a fundamental right and an essential component of healthy development. However, modern lifestyles and digital media use have transformed children's play patterns. The aim of this study was to describe families' perceptions, practices, and limitations regarding play and parent-child co-play in Portugal.

Methods: An analytical cross-sectional study was conducted through an online questionnaire distributed to parents of children aged three to 10 years across Portugal. The survey addressed demographic data, structured activities, digital media use, general play characteristics, co-playing with parents, and parental opinions on play. Data were analyzed using SPSS® v.28.0.

Results: A total of 4637 valid responses were obtained. The median child age was six years, and 53% were boys. Seventy-five percent of children participated in extracurricular activities, and television was the most frequently used digital medium (69%). The most common duration of co-playing during weekdays was less than one hour (46%) and of one to three hours during weekends (43%). Nearly half (46%) reported playing while simultaneously performing household tasks. The main barriers to co-playing were household duties (87%) and work-related constraints (58%). Children with siblings showed less co-playing time during weekdays and weekends. Additionally, children with extracurricular activities showed less co-playing time during the week. Male sex, rural living environment and lower parental education level were associated with increased outdoor play. Parents valued play highly: 100% agreed it supports development, 99% saw it as essential for socialization, and 93% disagreed that school play could replace home play.

Conclusion: Parents in Portugal acknowledge the vital role of play but face time and environmental barriers that restrict opportunities for free, high-quality play. Promoting distraction-free co-play and facilitating safe, outdoor play environments should be a priority in pediatric and public health strategies.

Keywords: Child Development; Parent-Child Relations; Parents; Play and Playthings; Portugal; Recreation

RESUMO

Introdução: Brincar é reconhecido como um direito fundamental e um componente essencial do desenvolvimento saudável. Contudo, os estilos de vida modernos e o uso de meios digitais transformaram os padrões de brincadeira das crianças. O objetivo deste estudo foi descrever as perceções, práticas e limitações das famílias em Portugal relativamente ao brincar e ao brincar entre pais e filhos.

Métodos: Conduziu-se um estudo analítico transversal através de um questionário *online* distribuído a pais de crianças entre os três e os 10 anos em todo o território nacional. O inquérito abordou dados demográficos, atividades estruturadas, utilização de meios digitais, características gerais do brincar, brincar com os pais e opiniões parentais sobre o brincar. A análise estatística foi desenvolvida com recurso ao SPSS® v.28.0.

Resultados: Foram obtidas 4637 respostas válidas. A idade mediana das crianças foi de seis anos, 53% do sexo masculino. Setenta e cinco por cento das crianças participavam em atividades extracurriculares, e a televisão foi o meio digital mais frequentemente utilizado (69%). A duração mais comum de brincar entre pais e filhos durante a semana foi inferior a uma hora (46%) e entre uma a três horas ao fim de semana (43%). Quase metade (46%) referiu brincar enquanto realizava tarefas domésticas. As principais barreiras ao brincar com os filhos foram as tarefas domésticas (87%) e as limitações relacionadas com o trabalho (58%). O tempo de brincar entre pais e filhos durante a semana e fins de semana foi inferior para as crianças com irmãos. Além disso, também se verificou uma duração reduzida do tempo de brincar durante a semana em crianças com atividades extracurriculares. Ser do sexo masculino, viver em ambiente rural e habilitações parentais inferiores associaram-se a mais tempo a brincar no exterior. Os pais atribuíram grande importância ao brincar: 100% concordaram que promove o desenvolvimento, 99% consideraram-no essencial para a socialização e 93% discordaram de que o brincar na escola pudesse substituir o brincar em casa.

Conclusão: Os pais em Portugal reconhecem o papel vital do brincar, mas enfrentam barreiras de tempo e ambientais que limitam as oportunidades de brincadeira livre e de qualidade. Promover momentos de brincadeira com os pais sem distrações e facilitar ambientes seguros para brincar ao ar livre devem ser prioridades nas estratégias pediátricas e de saúde pública.

Palavras-chave: Brincadeiras e Brinquedos; Desenvolvimento da Criança; Lazer; Pais; Portugal; Relações Pais-Filho

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KEY MESSAGES

- Play is fundamental for healthy child neurodevelopment, with parent-child play offering unique opportunities for bonding.
- Most families report less than one hour of daily play during weekdays and one to three hours during weekends.
- Household duties and work-related constraints are identified as the main barriers to parent-child play.
- Parents note reduced outdoor activities and increased digital media use as key changes in contemporary play.
- Strategies are needed to promote healthy play and to strengthen parents' skills and confidence engaging in developmentally supportive play.

INTRODUCTION

Play is essential for children and is recognized as a fundamental right by the United Nations Convention on the Rights of the Child, which highlights its central role in children's well-being and holistic development.[1] Research consistently demonstrates that play supports cognitive flexibility, socio-emotional development, creativity, problem-solving, and physical health.[2,3]

Developmentally appropriate play between children and parents is a key tool for promoting social-emotional, cognitive, language, and self-regulation skills. It also fosters the formation of safe, stable, and nurturing relationships, contributing to child development and overall health.[3,4] Parents benefit as well, as play enables them to better understand their child's perspective and communicate more effectively.[3] Conversely, studies have shown that limited parental involvement in play is associated with lower-quality parent-child interactions.[5]

In today's modern world, factors such as working parents, hurried lifestyles, digital media, and an increased emphasis on academic achievement have altered children's daily experiences. Significant changes have occurred in both the environment where children play and the resources they use. Play settings have shifted from informal, nature-based environments to more structured playgrounds and home-based play, largely driven by parental safety concerns and increased access to technological devices. Similarly, play materials have evolved from improvised, homemade toys to commercially manufactured, educational, and electronic toys. Changes have also been observed in social play patterns, with children increasingly engaging in solitary play and having reduced free playtime due to participation in structured extracurricular activities.[6,7]

Cross-cultural differences are also evident, not only in parental attitudes but also in children's perception of play. For instance, parents in Sweden tend to value open-ended, creative activities as vital for development, whereas parents in the United States often prioritize early childhood education as preparation for academic competition.[8] Children's perspectives also differ across cultural contexts. A comparative study conducted in five countries (United States of America, United Kingdom, China, Denmark and Argentina) identified several distinctions. These include greater acceptance of solitary play among children in Denmark and Hong Kong, greater recognition of play that does not involve physical activity associated in these same regions (as well as in Argentina), and the perception that toys are necessary for play among children in Denmark, Hong Kong and the United Kingdom.[9]

Despite the growing international evidence on changes in children's play and parental attitudes, data characterizing these patterns in Portugal remain limited. Given these diverse perspectives and the limited available data regarding families in Portugal, the present study aimed to characterize children's play patterns, quantify parent-child co-playing time, and explore parental beliefs regarding the importance and benefits of play in Portugal.

METHODS

An analytical, cross-sectional study was conducted using an anonymous online questionnaire (Google Forms®) distributed to parents of children aged three to 10 years living in Portugal.

Data collection took place between May and December 2024. The questionnaire was disseminated nationwide through public and private schools. All schools with publicly available email contacts were invited to participate. Schools that agreed to collaborate were asked to distribute the survey link within their educational communities. As confirmation of dissemination and the number of eligible children was not consistently provided by participating schools, it was not possible to calculate a response rate. A non-probabilistic convenience sampling strategy was used. No claims of national representativeness were assumed. As the questionnaire was anonymous and did not require login authentication, technical restrictions to prevent duplicate submissions were not implemented.

The questionnaire was developed specifically for this study by three members of the research team. A pre-test was conducted with 15 healthcare professionals (physicians, nurses, and pediatric technical staff) to assess

clarity, comprehensibility, and completion time. Minor wording adjustments were made accordingly. No formal psychometric validation was performed. The full questionnaire is available in Appendix 1 (Appendix 1: https://www.actamedicaportuguesa.com/revista/index.php/amp/article/view/24268/15957). The final instrument included mostly multiple-choice questions (some allowing multiple answers) and a limited number of open-ended items. It was divided into four sections: demographic characterization, structured activities and use of digital media, general play characteristics and co-playing with parents, and parental opinion on differences in play over time and agreement with several play-related statements.

Statistical analysis was performed using SPSS® version 28.0. Categorical variables were expressed as absolute and relative frequencies, and quantitative data as mean±standard deviation (SD) or median (interquartile range, IQR), depending on data distribution. Normality was assessed using the Shapiro-Wilk test. Comparative analyses were conducted using chi-square for categorical variables and Mann-Whitney U Test with Bonferroni correction for continuous variables. A *p*-value < 0.05 was considered statistically significant.

This study was approved by the Ethics Committee of Baixo Mondego Local Health Unit (approval number: 02.OBS.2024) and its distribution among schools was authorized by the Ministry of Education. Before accessing the questionnaire, participants were provided with detailed information regarding the study objectives, voluntary participation, anonymity, and data protection measures. Informed consent was obtained electronically before survey completion. The study complied with the principles of the Declaration of Helsinki and the European General Data Protection Regulation (GDPR).

RESULTS

A total of 4637 valid responses were collected, of which 4064 questionnaires (88%) were completed by mothers.

Demographic characterization:

There was a slight predominance of male children (2434, 53%) and the median age was six years (IQR 3.5). Responses were received from all districts of Portugal, with the most represented being Lisbon (1173, 25%), Porto (732, 16%) and Aveiro (668, 14%). The majority of respondents lived in urban areas (3285, 71%). The median age of mothers was 39 years (IQR 8), and of fathers 41 years (IQR 8). A university degree was the most common education level among parents (mothers 2859, 62%; fathers 1964, 42%). A total of 1511 children (33%) did not have siblings. Table 1 presents the sociodemographic characterization.

Structured activities and digital media:

The median time spent at school was eight hours (IQR 2). A total of 3464 children (75%) participated in extracurricular activities, most commonly for one to two hours per week (1231, 36%).

On weekdays, the most frequent daily screen time was one to two hours (2158, 47%), followed by less than one hour (1848, 40%). On weekends, daily screen time most often ranged between one to two hours (1955, 42%), followed by two to four hours (1681, 36%). Television was the most frequently reported as the digital medium most used by children (3170, 69%). When asked about the recommended daily screen time for children (open-ended question), most parents suggested less than one hour (1725, 42%) or one to two hours (1631, 40%).

General play characteristics and co-playing with parents

Regarding play characteristics, the most frequently reported play companions (multiple answers allowed) were the mother or father (1774, 51%), followed by siblings (1739, 50%) and the child playing alone (837, 24%). The most common setting for play was inside the home (3033, 72%), followed by the backyard or terrace (828, 20%).

During weekdays, co-playing with parents most often lasted less than one hour per day (2116, 46%). On weekends, co-playing lasted more frequently between one to three hours (1970, 43%). Figure 1 illustrates weekday *versus* weekend co-playing duration. During these periods, 2139 parents reported being exclusively dedicated to play

Table 1 – Sociodemographic and contextual characteristics of the sample (n = 4637)

	n (%) or median (IQR)
Child characteristics	
Child sex (male)	2434 (53%)
Child age (years)	6 (3.5)
Only child	1511 (33%)
Family characteristics	
Urban residence	3285 (71%)
Maternal age (years)	39 (8)
Paternal age (years)	41 (8)
Highest parental education	
≤ 9 years of schooling	305 (7%)
Secondary education (12 years)	1296 (28%)
University degree	3036 (65%)
School and extracurricular context	
School time (hours/day)	8 (2)
Extracurricular activities	3464 (75%)

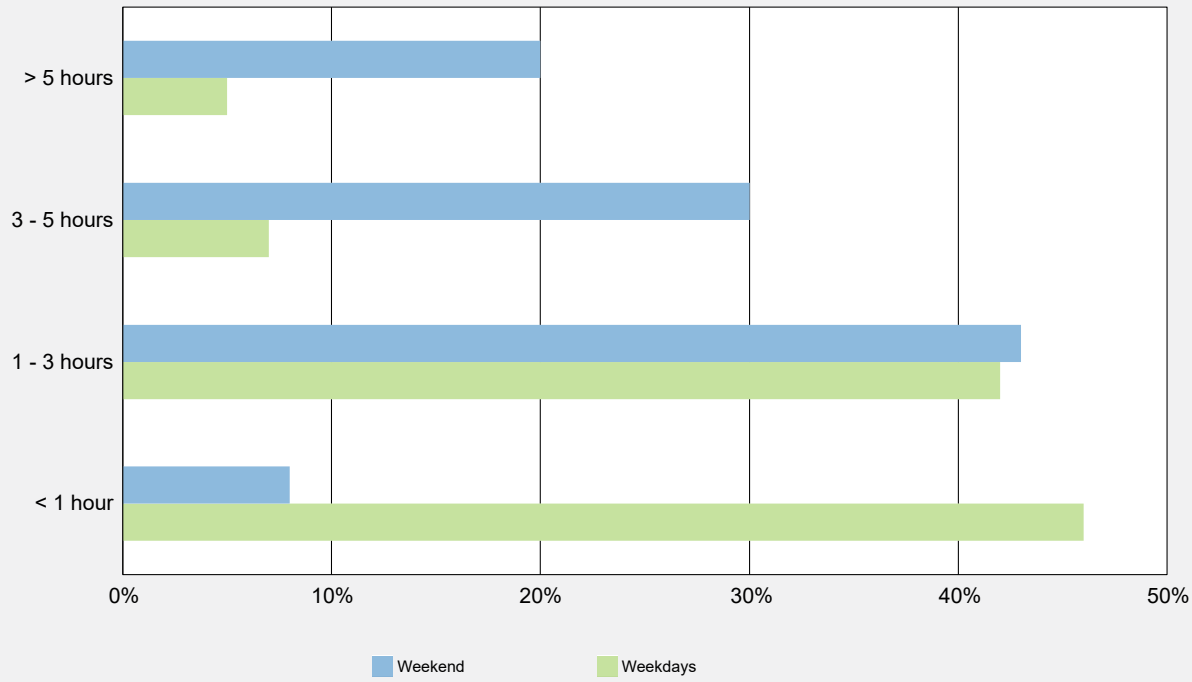

Figure 1 – Daily co-playing duration on weekdays and weekends

activities (46%), while 2118 reported performing household tasks simultaneously (46%). The main limitations to co-playing identified by parents (multiple responses allowed) were household tasks (3976, 87%), work-related issues (2654, 58%), and belief that playing with children of the same age is more beneficial (358, 8%). Table 2 presents co-playing characteristics and associated limitations.

Exploratory analysis

Co-playing time on weekdays

No statistically significant association was found between weekday co-playing time and the child's sex (p = 0.858) or living environment (urban *versus* rural, p = 0.076).

A significant association was observed between weekday co-playing time and sibling status (p < 0.001), with lower frequency of reported co-playing for less than one hour per day for children without siblings [40% *vs* 48%; adjusted standardized residual (ASR): -5.4] and more frequently for one to three hours [46% *vs* 40%; ASR: 3.9] and three to five hours (8% *vs* 6%; ASR: 2.8), compared to children with siblings.

Extracurricular activities were also associated with weekday co-playing (p < 0.001), with children with extracurricular activities being overrepresented in the less than one hour category (40% *vs* 47%, ASR: -4.3) and underrepresented in the one to three and three to five hours categories (46% *vs* 51%, ASR: 3 and 8% *vs* 6%, ASR: 2, respectively).

Parental educational level was also associated with weekday co-playing time (p = 0.026). Parents with nine or less years of schooling were underrepresented in the category of less than one hour (37% *vs* 46% in secondary schooling and 47% in university degree; ASR: -3.2) and overrepresented in one to three hours (49% *vs* 43% in secondary schooling and 41% in university degree; ASR: 2.3).

Child age differed significantly across weekday co-playing categories (p < 0.001). *Post hoc* pairwise comparisons

Table 2 – Tasks performed during co-playing and limitations

	n (%)
Other activities during co-playing	
Exclusively dedicated to play	2139 (46%)
Household tasks	2118 (46%)
Use of digital media	227 (5%)
Work-related tasks	153 (3%)
Limitations for co-playing	
Household tasks	3976 (87%)
Work-related issues	2654 (58%)
Belief that playing with children is more beneficial	358 (8%)
Belief that should learn to play alone	334 (7%)
Lack of children's free time	202 (4%)
Not knowing how to play with the child	143 (3%)
Tiredness/lack of patience	63 (1%)

with Bonferroni correction showed that children who played with parents for less than one hour per weekday had a significantly higher median age compared to all other duration groups, with no significant differences between the remaining categories.

Co-playing time on weekends

Weekend co-playing time was not significantly associated with the child's sex ($p = 0.234$), with parental educational level ($p = 0.051$), and with the involvement in extracurricular activities ($p = 0.164$).

A significant association was found between weekend co-playing time and sibling status ($p < 0.001$). Children without siblings were less frequently reported in less than one hour (5% *vs* 9%; ASR: -5.3) and one to three hours (38% *vs* 44%; ASR: -3.9) categories, and more frequently in the above five hours category (26% *vs* 17%; ASR: 7.1), compared to children with siblings.

Living environment was also associated with weekend co-playing time ($p = 0.027$). Rural residence was positively associated with one to three hours of co-playing (45% *vs* 41%; ASR: 2.2) and negatively associated with three to five hours (27% *vs* 31%; ASR = -2.6), compared to urban residence.

Child age differed significantly across weekend co-playing duration categories ($p < 0.001$). *Post-hoc* comparisons with Bonferroni correction showed a gradual increase in median age across decreasing co-playing durations, with older children more frequently represented in the shorter co-playing categories.

Usual play setting (indoors *versus* outdoors)

The most common play setting was significantly associated with the child's sex ($p < 0.001$), with boys being more likely to play outdoors (30% *vs* 24%). No association was found between play setting and sibling status ($p = 0.327$), child age ($p = 0.882$) or extracurricular activities ($p = 0.319$).

A significant association was observed between living environment and play setting ($p < 0.001$), with children living in rural areas more frequently reported to play outdoors compared to those living in urban areas (40% *vs* 23%).

Parental educational level was also associated with play setting ($p < 0.001$). Parents with nine or less years of schooling and secondary education were overrepresented in the outdoor play category (35% and 32% with ASR: 2.7 and 3.8, respectively) *versus* 27% in university degree (ASR: -5).

Parents' opinions and perspectives

When asked about differences between play during their own childhood and today (open-ended question), parents most frequently reported that nowadays there is less outdoor play (1771, 45%), increased use of digital media (1514, 38%), and less play with other children (537, 14%). Additional differences included increased use of physical toys (437; 11%), less creativity (309; 8%), less security (235; 6%), less free time (160; 3%), less physical activity (101; 3%), increased parental involvement (70; 2%), and decreased ability to handle frustration (57; 1%).

Parental opinion (agreement, neutrality, or disagreement) on several statements about play is summarized in Fig. 2.

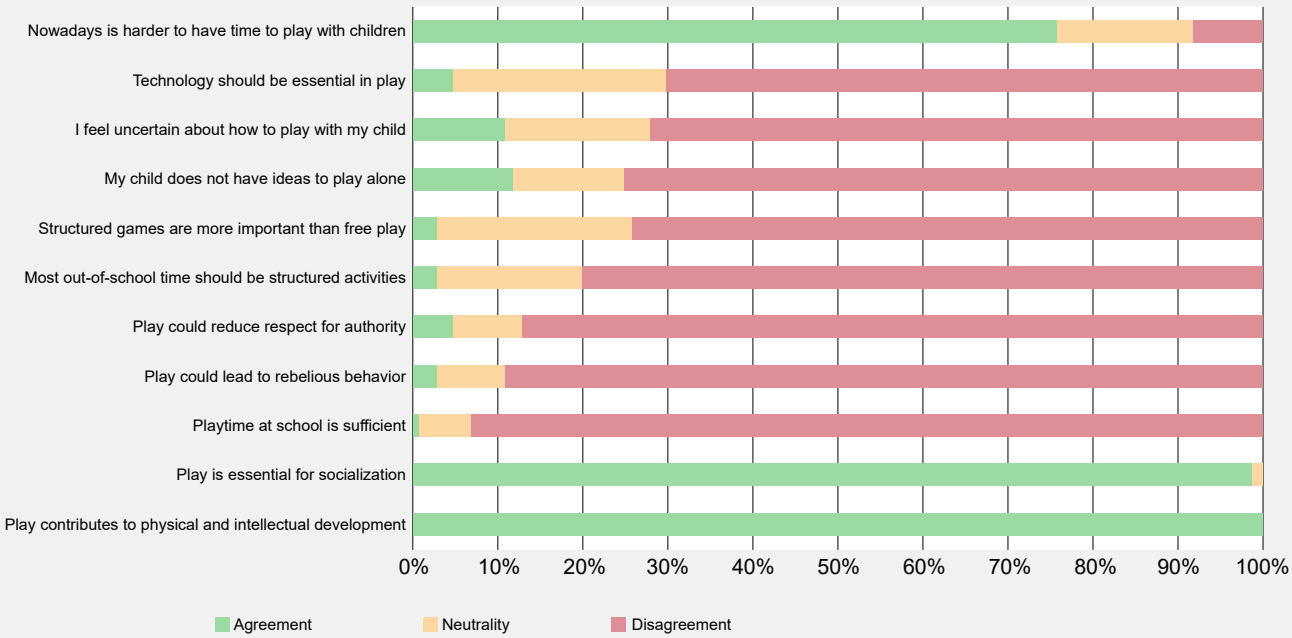

Figure 2 – Parental opinions regarding importance and benefits of playing

DISCUSSION

The present study offers a comprehensive view of families' perceptions and practices regarding play and parent-child co-play in our sample from Portugal. Overall, the findings reveal that, although parents recognize the importance of play for development, daily playtime, especially during the week, remains limited. These data align with international trends indicating that contemporary families face increasing constraints on free play due to demanding work schedules, academic pressures, and the presence of digital media.[3]

Exploratory analyses revealed that co-playing duration varied according to child age, sibling status, parental education, and residential environment. Older children tended to engage in shorter co-playing periods during both weekdays and weekends, suggesting developmental shifts in play preferences and autonomy. Children without siblings spend more time co-playing with parents, possibly reflecting a shift towards playing with other children in the presence of siblings. Additionally, children living in rural settings were more likely to play outdoors and to spend longer periods co-playing during the weekend compared to urban peers, highlighting a possible influence of the home environment and access to outdoor spaces. These findings underscore how sociodemographic and contextual factors shape children's play patterns and opportunities for meaningful parent-child interactions.

Although parental involvement in play is frequent, it is often concurrent with household tasks, which may lead to a decreased quality of co-playing. Prior research emphasizes that the quality of interaction during play, rather than its duration alone, is essential for children's socio-emotional and behavioral development.[4] This multitasking during co-playing may compromise the achievement of the potential benefits of these moments.

The predominance of indoor play observed in our sample mirrors international trends, associated with safety concerns, urban environments and lack of outdoor spaces. Although limited, supervised screen use may offer certain educational benefits, real-time, unstructured social interaction remains superior for cognitive, emotional and linguistic growth.[3] These patterns highlight the risk of substituting free play with structured or digital activities.

Cross-cultural comparisons suggest that parental beliefs about play vary substantially. Scandinavian parents tend to emphasize creativity and child-centered activities, whereas American and Asian parents often view play as preparation for academic achievement.[8,10,11] The high proportion of parents in our sample with university education level may partly explain the positive valuation of play, despite facing time scarcity and competing responsibilities.

These findings have practical relevance for healthcare and educational professionals. Pediatricians and primary care providers can promote awareness of the importance of structured and unstructured play, encouraging families to schedule dedicated, distraction-free playtime. Educators and community organizations can support play-friendly environments through school-based initiatives, urban planning that provides safe outdoor spaces, and programs that integrate parent-child activities. Interventions tailored to families without siblings, or those in urban settings, may be particularly impactful, as suggested by the exploratory analyses.

There are several limitations to this work that should be acknowledged. The study employed a cross-sectional design, preventing causal inferences. The questionnaire, although pre-tested for clarity, lacks formal psychometric validation, which may affect reliability and cause measurement bias. Self-reporting may introduce social desirability and recall bias, and the high proportion of answers by mothers and parents with university-level education limits generalizability. Additionally, non-probabilistic convenience sampling and inconsistent reporting of school participation preclude calculation of a response rate and duplication submission prevention mechanisms were not possible to use, with associated risk of frequency bias. Finally, our exploratory analyses, while informative, are hypothesis-generating and should be interpreted cautiously.

Future research should investigate play practices using longitudinal designs**,** probabilistic sampling, and objective measures of play and screen time. Studies could examine interventions that facilitate outdoor, creative, and co-play activities, and assess their impact on developmental outcomes. Urban planning initiatives that create child-friendly public spaces, school programs emphasizing daily play, and guidance from primary care providers represent promising strategies for enhancing play opportunities at the population level.

CONCLUSION

This survey suggests that the parents included in our sample value play as crucial for children's cognitive, social, and emotional growth, yet everyday routines limit both independent and shared playtime. Co-playing is common, but often combined with household or work-related tasks, diminishing its developmental potential.

Healthcare professionals, educators, and policymakers should promote awareness of the benefits of unstructured play and provide families with practical ways to integrate meaningful, screen-free play into daily life. Tailored strategies addressing family structure, residential context, and parental workload may optimize the quality and quantity of play, ultimately promoting children's holistic development.

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The authors declare that no AI tools were used during the preparation of this work.

AUTHOR CONTRIBUTIONS

MMC: Conceptualization, methodology, data acquisition, formal analysis, writing – original draft.

JFN, AR: Data acquisition, formal analysis, writing – review & editing.

MF: Conceptualization, writing – review & editing.

FIC: Writing – review & editing, supervision.

All authors approved the final version to be published.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in October 2024.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

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