

THE ROLE OF PARENTS IN FOSTERING ENVIRONMENTAL STEWARDSHIP IN CHILDREN

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Received 28 October 2024 Received in revised form 08 November 2024 Accepted 10 November 2024

Available Online 14 November 2024

ABSTRACT

The role of parents in fostering environmental stewardship in children is essential to addressing the pressing environmental challenges of the 21st century. Parents shape their children's attitudes toward the environment through modeling behavior, communication, and engaging them in outdoor activities. Environmental Socialization Theory explains how children learn environmental values through family interactions, and parental behaviors such as recycling or conservation strongly influence children's pro-environmental actions. By encouraging outdoor play, discussing sustainability at home, and integrating environmental practices into daily routines, parents can help develop environmental responsibility in children. Additionally, family participation in community clean-ups and collaboration with schools enriches children's environmental education. However, challenges such as socioeconomic constraints, time limitations, and urban lifestyles may hinder parental engagement in fostering environmental values. Case studies of successful programs, such as family nature clubs and eco-parenting initiatives, illustrate how structured activities and family involvement can significantly enhance children's environmental awareness and behavior, preparing them to contribute to a sustainable future.

Keywords: Environmental Stewardship; Parenting Practices; Environmental Socialization Theory; Parental Influence; Family Engagement; Environmental Education; Environmental Responsibility

I. INTRODUCTION

The 21st century presents a range of environmental challenges that threaten the sustainability of the planet. Issues such as climate change, deforestation, pollution, and loss of biodiversity are escalating at an alarming rate. According to the Intergovernmental Panel on Climate Change [1], the global average temperature has risen by approximately 1.1 degrees Celsius since the late 19th century, largely due to human activities. This warming is linked to extreme weather events, rising sea levels, and significant impacts on ecosystems and human health [1].

Amid these pressing challenges, the role of parents in fostering environmental awareness and responsibility in children is crucial. Research indicates that early childhood experiences and the values instilled by parents significantly shape children's attitudes towards the environment [2,3]. By cultivating a strong sense of environmental stewardship in the next generation, parents can play a pivotal role in developing informed, responsible citizens who are equipped to tackle these challenges.

Instilling environmental values in children is not only essential for fostering a sense of responsibility but also for encouraging active participation in sustainable practices. A study by Chawla [4] highlights that children who engage in environmental education and outdoor experiences are more likely to develop a lifelong commitment to environmental conservation. Furthermore, the United Nations Educational, Scientific and Cultural Organization [5] emphasizes the importance of education for sustainable development, which includes empowering young people to take action for a more sustainable future.

The aim of this paper is to explore the critical role of parents in shaping their children's environmental attitudes and behaviors. It will examine various parenting practices, the impact of parental modeling, and the importance of integrating environmental education into daily life. By highlighting these elements, this paper seeks to provide insights into how parents can effectively nurture the next generation of environmental stewards.

II. THEORETICAL FRAMEWORK

Understanding the dynamics of how children learn about environmental issues is crucial for recognizing the role of parents in fostering environmental stewardship. One key concept in this area is **Environmental Socialization Theory**, which posits that children learn environmental values and behaviors through social interactions and experiences within their family and community contexts.

Environmental Socialization Theory

Environmental Socialization Theory (EST) suggests that children's attitudes toward the environment are shaped through a combination of direct experiences, social interactions, and cultural influences. According to Hinds and Sparks [6], socialization occurs through both passive and active processes. Passive socialization involves children absorbing messages about the environment from their parents and community, while active socialization includes engaging children in discussions and activities related to environmental issues.

Research indicates that children who are actively involved in environmental activities—such as recycling, conservation efforts, or outdoor exploration—are more likely to develop a strong sense of environmental responsibility [4]. Furthermore, the concept of "nature deficit disorder" [7] highlights the importance of direct experiences in nature for healthy development. Children who spend time outdoors are more likely to cultivate an appreciation for the environment and become motivated to protect it.

The Role of Family Dynamics

Family dynamics play a significant role in shaping children's environmental attitudes and behaviors. The family serves as a primary socialization agent where values, beliefs, and norms are transmitted. Studies have shown that parental attitudes toward the environment significantly influence children's perceptions and actions. For example, when parents demonstrate pro-environmental behaviors—such as conserving energy, reducing waste, or participating in community clean-ups—children are more likely to adopt similar behaviors.

Moreover, the **Parenting Styles** framework, as proposed by Baumrind [8], offers insights into how different parenting approaches can affect children's

attitudes towards the environment. Authoritative parenting, characterized by warmth and responsiveness, tends to foster higher levels of environmental concern and pro-social behavior in children compared to authoritarian or permissive styles [9]. This suggests that a supportive and communicative family environment can enhance children's understanding and engagement with environmental issues.

Additionally, cultural and socioeconomic factors play a role in shaping family dynamics and, consequently, children's environmental education. Families from different backgrounds may have varying access to resources and opportunities for environmental engagement, which can influence how environmental values are transmitted [10].

III. PARENTING PRACTICES

Parents play a crucial role in shaping their children's environmental attitudes and behaviors through various practices. This section explores three key aspects: modeling behavior, effective communication, and encouraging outdoor activities.

Modeling Behavior

Modeling behavior is a fundamental aspect of parenting that significantly influences children's habits and attitudes. According to Bandura's Social Learning Theory [11], children learn by observing the actions of their parents and the consequences that follow. When parents actively engage in pro-environmental behaviors such as recycling, conserving energy, or reducing water usage children are likely to imitate these behaviors and adopt similar values.

Research shows that children whose parents demonstrate environmentally responsible behavior are more likely to engage in these practices themselves. For example, a study by Masykuroh et al. [9] found that children with parents who prioritize sustainability in daily activities were more inclined to develop environmentally friendly habits. Additionally, when parents explicitly discuss their choices explaining why they recycle or conserve resources children gain a deeper understanding of the importance of these actions [12].

Communication

Effective communication about environmental issues is essential for fostering awareness and responsibility in children. Parents can create a dialogue that encourages curiosity and critical thinking about environmental challenges. Discussing topics such as climate change, conservation, and biodiversity can help children understand the significance of these issues and their role in addressing them.

Research indicates that open discussions about environmental topics can enhance children's environmental literacy. For instance, a study by Bostrom et al. [13] found that when parents regularly talk about environmental issues, children not only become more informed but also express greater concern for environmental matters. Furthermore, integrating environmental themes into everyday conversations can help normalize these topics, making them a regular part of family life.

Encouragement of Outdoor Activities

Encouraging outdoor activities is another critical parenting practice that fosters a connection to nature and an appreciation for the environment. Outdoor experiences can range from family hikes and camping trips to gardening and nature walks. These activities not only provide children with direct experiences of the natural world but also serve as opportunities for parents to instill environmental values.

Research by Louv [7] emphasizes the importance of outdoor play and exploration in developing a sense of stewardship towards the environment. Children who spend time outdoors are more likely to develop a personal connection to nature, which can translate into a commitment to environmental conservation. A study by Collado and Corraliza [14] further supports this notion, showing that children with regular access to natural environments are more likely to engage in pro-environmental behaviors as they grow older.

In summary, modeling behavior, effective communication, and encouragement of outdoor activities are essential parenting practices that can significantly influence children's environmental attitudes and behaviors. By actively engaging in these practices, parents can nurture a generation of environmentally conscious individuals.

IV. EDUCATION AND AWARENESS

Education and awareness are critical components in equipping children with the knowledge and skills necessary to understand and address environmental challenges. This section discusses the importance of teaching children about sustainability and environmental issues at home, as well as integrating environmental education into daily life.

Teaching Children about Sustainability and Environmental Issues at Home

Parents can play a pivotal role in teaching their children about sustainability by discussing relevant topics and providing information on environmental issues. This informal education can take various forms, from casual conversations about recycling to structured lessons on climate change and conservation. Research by Masten and Shaffer [15] highlights that children who engage in discussions about environmental issues at home develop a stronger understanding and concern for sustainability.

Parents can also use age-appropriate resources, such as books, documentaries, and educational games, to enhance their children's understanding of environmental concepts. For instance, reading stories that incorporate themes of nature conservation can foster empathy and a sense of responsibility towards the environment. Additionally, hands-on activities, such as gardening or creating a compost bin, provide practical learning experiences that reinforce sustainable practices [16].

Importance of Integrating Environmental Education into Daily Life

Integrating environmental education into daily life is crucial for reinforcing the concepts children learn at home. Everyday activities provide numerous opportunities for parents to teach their children about sustainability. Simple practices, such as recycling, conserving water, and reducing energy consumption, can be taught as part of the family routine.

Research shows that children learn effectively when they see real-life applications of what they are taught. For example, a study by Miranda Carreño and Blanco Suárez [17] found that children who actively participated in recycling and conservation efforts at home were more likely to adopt these practices outside the home. By making sustainability a regular part of family life, parents can help children internalize these values and understand their importance.

Furthermore, integrating environmental education into daily routines can also foster critical thinking and problem-solving skills. When children are encouraged to think about how their actions impact the environment such as understanding the consequences of waste or the importance of biodiversity, they develop a sense of agency and responsibility [18]. This empowers them to make informed decisions and take action for the environment.

V. COMMUNITY INVOLVEMENT

Community involvement plays a vital role in fostering environmental awareness and action among children. This section discusses two key aspects: encouraging participation in community clean-ups and environmental initiatives, and collaborating with schools and organizations to promote environmental awareness.

Encouraging Participation in Community Clean-Ups and Environmental Initiatives

Engaging children in community clean-ups and environmental initiatives not only helps to enhance their understanding of environmental issues but also fosters a sense of responsibility and community spirit. Participation in such activities provides practical experience and reinforces the values of stewardship and collaboration.

Research by Federation[19] emphasizes that hands-on activities, such as community clean-ups, can significantly enhance children's connection to their environment. Children who actively participate in these initiatives are more likely to develop a sense of ownership over their local environment and a commitment to maintaining it. Moreover, these experiences can foster teamwork and social skills as children work alongside peers and adults towards a common goal.

Parents can facilitate their children's involvement by seeking out local events and organizations focused on environmental conservation. For example, many communities organize annual clean-up days, tree planting events, or nature restoration projects. Participating in these events as a family not only strengthens bonds but also instills a lasting commitment to environmental stewardship [20].

Collaborating with Schools and Organizations to Promote Environmental Awareness

Collaboration with schools and local organizations is crucial for creating a comprehensive approach to environmental education. Schools can serve as a platform for instilling environmental values and knowledge through curricula that emphasize sustainability and conservation.

Research indicates that partnerships between families, schools, and community organizations can enhance environmental education efforts[21]. For instance, when schools collaborate with environmental organizations, they can provide students with access to resources, expert knowledge, and hands-on learning opportunities, such as field trips to local parks or conservation areas.

Parents can play an active role in this collaboration by advocating for environmental education initiatives within their children's schools. They can also volunteer for school programs that focus on sustainability, such as school gardens, recycling programs, or environmental clubs. Involvement in these programs can help bridge the gap between home and school, reinforcing the importance of environmental stewardship across different contexts [22].

Additionally, local organizations often provide workshops and events that educate families about environmental issues and promote sustainable practices. By participating in these programs, parents and children can learn together, fostering a shared commitment to environmental responsibility.

VI. CHALLENGES AND BARRIERS

While parents play a crucial role in fostering environmental awareness and stewardship in their children, several challenges and barriers can hinder their efforts. This section explores the impact of socioeconomic factors and the effects of time constraints and urban lifestyles on parental engagement in environmental practices.

Socioeconomic Factors Affecting Parents' Ability to Engage in Environmental Practices

Socioeconomic status (SES) significantly influences families' ability to engage in environmentally friendly practices. Families with lower SES may face financial constraints that limit their access to resources and opportunities for environmental education and engagement. For instance, purchasing eco-friendly products, participating in outdoor activities, or investing in sustainable technologies can be cost-prohibitive for low-income families. Additionally, research shows that parents with higher levels of education tend to have more awareness and knowledge about environmental issues, which can lead to more proactive engagement in sustainable practices [23]. Conversely, parents with lower educational attainment may lack the information or resources needed to educate their children about environmental issues effectively. This gap can perpetuate cycles of disengagement from environmental stewardship across generations.

Furthermore, neighborhood characteristics can also play a role. Families living in areas with limited access to green spaces or community resources may find it more challenging to provide their children with meaningful outdoor experiences. These environmental disparities can lead to unequal opportunities for children to learn about and connect with nature.

Time Constraints and Urban Lifestyles

Modern urban lifestyles often impose significant time constraints on families, making it difficult for parents to prioritize environmental education and activities. Many parents juggle multiple responsibilities, including work, household tasks, and childcare, leaving limited time for outdoor activities or environmental discussions [24].

In urban settings, access to natural environments may also be restricted. Families living in densely populated areas may have fewer opportunities for outdoor experiences, which are essential for fostering a connection to nature [20]. This lack of access can limit children's exposure to environmental issues and hinder their understanding of sustainability.

Moreover, the prevalence of technology and screen-based activities can further reduce the time children spend outdoors. Parents may find it challenging to encourage outdoor play and exploration when screens dominate their children's attention [25]. This shift in focus can detract from opportunities for hands-on learning about the environment.

VII. CASE STUDIES

Case studies provide valuable insights into successful parental involvement in environmental education and the impact of family-based programs on children's environmental behaviors. This section highlights examples of effective initiatives and their outcomes.

Examples of Successful Parental Involvement in Environmental Education

1. **The Nature Conservancy's "Family Nature Clubs"** The Nature Conservancy has established "Family Nature Clubs" across various regions, encouraging families to explore local natural areas together. These clubs provide structured activities that foster environmental learning and engagement. Research by D'Amore [26] indicated that families participating in these clubs reported increased knowledge about local ecosystems and greater family cohesion, demonstrating how organized family activities can enhance environmental education.
2. **"Eco-Parenting" Initiatives** Many communities have developed "eco-parenting" initiatives that promote sustainable practices among families. For instance, the "EcoMom Alliance" in the U.S. provides resources and support for parents to adopt eco-friendly lifestyles. Participants in these programs reported adopting more sustainable practices at home, such as reducing waste and using green products [27]. This highlights the effectiveness of providing parents with tools and knowledge to foster environmentally responsible behaviors in their children.

Impact of Family-Based Programs on Children's Environmental Behaviors

1. **The "Green Schools" Program** The "Green Schools" initiative, which encourages schools to engage families in environmental education, has shown significant positive outcomes. Studies have found that schools implementing family-oriented environmental programs, such as recycling contests and garden projects, increased students' environmental knowledge and participation in sustainability practices at home[28]. This program effectively bridges the gap between school and home, fostering a culture of environmental responsibility.
2. **Family Nature Programs in Urban Areas** Urban family nature programs, such as those offered by the "Children & Nature Network," focus on connecting families with natural spaces in their communities. These programs often include guided outdoor experiences, workshops, and resources for families to engage with nature. A study by Mullenbach et al. [29]found that children who participated in these programs exhibited a higher degree of environmental concern and engaged more frequently in pro-environmental behaviors at home, such as recycling and conserving resources.
3. **Parent-Child Nature Camps** Programs that facilitate parent-child bonding through nature-based activities have also been successful. For example, the "Nature Adventures" camp integrates educational sessions with hands-on activities that parents and children can do together. Research has shown that participants in such camps demonstrate improved environmental attitudes and behaviors, with parents reporting greater confidence in discussing environmental issues with their children [7].

VIII.CONCLUSIONS

The findings from this paper emphasize the critical role that parents play in cultivating environmental awareness and stewardship in their children. As the planet faces escalating environmental challenges—such as climate change, biodiversity loss, and pollution, it is increasingly important for parents to act

as early influencers in shaping the next generation's environmental attitudes and behaviors.

Parental influence manifests through multiple dimensions, including modeling pro-environmental behaviors, fostering open communication, encouraging outdoor activities, and integrating environmental education into daily life. Research shows that when parents actively demonstrate sustainable practices, children are more likely to adopt these behaviors themselves, cultivating a lifelong commitment to environmental stewardship.

Moreover, environmental socialization within the family is vital. Family dynamics, socioeconomic factors, and access to resources all impact how environmental values are transmitted. Authoritative parenting, which combines support with clear guidance, fosters a stronger environmental ethic in children. Socioeconomic and urbanization barriers, however, present challenges that must be addressed through targeted interventions, such as community-based programs and equitable access to green spaces.

Successful case studies, such as family nature programs and school initiatives, demonstrate that parents who engage with community efforts and collaborate with educational institutions can significantly enhance their children's understanding and commitment to environmental conservation. These initiatives underscore the importance of a holistic, community-centered approach to environmental education that involves both the family and the wider society.

Ultimately, the research highlights that instilling environmental values in children requires not just awareness but also consistent engagement, whether through daily practices at home or participation in community and educational programs. By taking an active role, parents have the potential to raise environmentally conscious citizens who will lead the efforts toward a more sustainable future. The importance of nurturing this responsibility in children is paramount to addressing the environmental crises of the 21st century and beyond.

REFERENCES

- [1]Masson-Delmotte, V. P., Zhai, P., Pirani, S. L., Connors, C., Péan, S., Berger, N., ... & Scheel Monteiro, P. M. (2021). *Ippc, 2021: Summary for policymakers*. in: *Climate change 2021: The physical science basis. contribution of working group i to the sixth assessment report of the intergovernmental panel*

on climate change.

doi.org/10.1017/9781009157896.001

<https://www.ascib.ase.ro/mps/>

Bandura_SocialLearningTheory.pdf

[2] Kahn Jr, P. H. Developmental psychology and the biophilia hypothesis: Children's affiliation with nature. *Developmental review*, 17(1997)1-61.

doi.org/10.1006/drev.1996.0430

[12] Grønhøj, A., & Thøgersen, J. Action speaks louder than words: The effect of personal attitudes and family norms on adolescents' pro-environmental behaviour. *Journal of Economic Psychology*, 33(2012)292-302. doi.org/10.1016/j.joep.2011.10.001

[3] Rokeach, M. (1973). *The nature of human values*. Free Press.

[4] Chawla, L. 'Life paths into effective environmental action', *The Journal of environmental education*, 31(1999), 15-26. <https://doi.org/10.1080/00958969909598628>

[13] Bostrom, A., Morgan, M. G., Fischhoff, B., & Read, D. What do people know about global climate change? 1. Mental models. *Risk Analysis*, 14(1994) 959-970. <https://www.cmu.edu/epp/files/ra-bostrom-et-al-climate-mental-models-i-19941.pdf>

[5] Canton, H. (2021). United Nations Educational, Scientific and Cultural Organization—UNESCO. In *The Europa Directory of International Organizations 2021* (pp. 359-365). Routledge. doi.org/10.4324/9781003179900

[14] Collado, S., & Corraliza, J. A. Children's restorative experiences and self-reported environmental behaviors. *Environment and Behavior*, 47(2015)38-56. doi.org/10.1177/0013916513492417

[6] Hinds, J., & Sparks, P. Engaging with the natural environment: The role of affective connection and identity. *Journal of environmental psychology*, 28(2008), 109-120. doi.org/10.1016/j.jenvp.2007.11.001

[15] Masten, A. S., & Shaffer, A. (2017). How families matter in child development. *Child Development*.

[7] Louv, R. (2008). *Last child in the woods: Saving our children from nature-deficit disorder*. Algonquin books.

[16] Richardson, B. (1998). *Gardening with children*. Taunton Press.

[8] Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child development*, 37(1966), 887-907. doi.org/10.2307/1126611

[17] Miranda Carreño, R., & Blanco Suárez, Á. (2010). Environmental awareness and paper recycling. <https://hdl.handle.net/20.500.14352/41865>

[9] Masykuroh, K., Yetti, E., & Nurani, Y. The role of parents in raising children's environmental awareness and attitudes. *Educational Administration: Theory and Practice*, 28(2022), 133-142. doi.org/10.17762/kuey.v28i01.472

[18] Cincera, J., Simonova, P., Kroufek, R., & Johnson, B. 'Empowerment in outdoor environmental education: who shapes the programs?'. *Environmental Education Research*, 26(2020)1690-1706. doi.org/10.1080/13504622.2020.1814205

[10] Duarte, R., Escario, J. J., & Sanagustín, M. V. The influence of the family, the school, and the group on the environmental attitudes of European students. *Environmental Education Research*, 23(2017), 23-42. doi.org/10.1080/13504622.2015.1074660

[19] FEDERATION, L. (1988). National Wildlife Federation. In *Reauthorization of the Fish and Wildlife Conservation Act of 1980: Hearing Before the Subcommittee on Environmental Protection of the Committee on Environment and Public Works, United States Senate, One Hundredth Congress, Second Session, on S. 2272...* April 27, 1988 (Vol. 4, p. 57). US Government Printing Office.

[11] Bandura, A. (1977). *Social learning theory*. Englewood Cliffs.

[20] Worts, D., 'Fostering a culture of sustainability', *Museums & social issues*, 1(2006), 151-172. doi.org/10.1179/msi.2006.1.2.151

[21] Tali Tal, R. Community-based environmental education—a case study of teacher—

parent collaboration. Environmental Education Research,10(2004)523-543.

doi.org/10.1080/1350462042000291047

[22]Dyck, S. L.'Engaging families in environmental education: How action, critical thinking, and social learning can foster change.' Environmental Education Research, 19(2023)

254-255. doi.org/10.1080/13504622.2012.732039

[23]Hong, X., Zhu, W., Wu, D., & Li, H.' Are Parents Satisfied with Early Childhood Education Service in Urban China? Empirical Evidence from the Validation Study of the Parent Satisfaction with Educational Experiences Scale.' Early Education and Development,31(2020)200-217.

doi.org/10.1080/10409289.2019.1651163

[24]Larson, L. R., Cordell, H. K., Betz, C. J., & Green, G. T. (2011). Children's time outdoors: Results from a national-survey.

<https://hdl.handle.net/20.500.14394/37281>

[25]Larson, L. R., Szczytko, R., Bowers, E. P., Stephens, L. E., Stevenson, K. T., & Floyd, M.

F,'Outdoor time, screen time, and connection to nature: troubling trends among rural youth?'. Environment and Behavior, 51(2019),

966-991. <https://doi.org/10.1177/0013916518806686>

[26]D'Amore, C. 'Family nature clubs: An intergenerational opportunity to foster love of the natural world. Families', Relationships and Societies, 5(2016)431-446.

doi.org/10.1332/204674316X1475847123454_2

[27]Nche, G. C., Achunike, H. C., & Okoli, A. B.,'From climate change victims to climate change actors: The role of eco-parenting in building mitigation and adaptation capacities in children', The Journal of Environmental Education, 50(2019)

131-144. doi.org/10.1080/00958964.2018.1553839

[28]Tangen, D., & Fielding-Barnsley, R.,. Environmental education in a culturally diverse school. Australian Journal of Environmental Education,23(2007)23-30. [doi.org/10.1017/](https://doi.org/10.1017/S0814062600000689)

[S0814062600000689](https://doi.org/10.1017/S0814062600000689)

[29]Mullenbach, L. E., Andrejewski, R. G., & Mowen, A. J., 'Connecting children to nature through residential outdoor environmental education.'

Environmental Education Research, 25(2019), 365-374.doi.org/10.1080/13504622.2018.1458215