

# Exploring the Influence of Environmental Systems on Street Children in Aceh: A Qualitative Study

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## ABSTRACT

**OBJECTIVE:** To investigate how environmental systems influence the experiences, well-being, and development of street children in Aceh, Indonesia.

**METHODOLOGY:** An exploratory qualitative case study design was employed, involving 41 participants comprising street-living children, shelter residents, caregivers, and parents. Data were collected through in-depth interviews, participant observation, and document analysis. The data were analyzed using the framework method, aided of NVivo software, to identify key themes and patterns.

**RESULTS:** Four major themes: 1) The economic hardship and survival adaptation, 2) Experiencing abuse and family violence, 3) Social isolation and street community and 4) Street life as a survival strategy.

**CONCLUSION:** The study highlights that holistic and context-sensitive interventions are required to address the complex needs of street children. Strengthening cross-sectoral collaboration in social welfare, education, and healthcare is crucial to improving their long-term well-being and social reintegration.

**KEYWORDS:** Aceh, Environmental Influence, Qualitative, Street Children, Support

## INTRODUCTION

The issue of street children is an alarming global concern, with an estimated 10–15 million children worldwide living on the streets<sup>1</sup>. Street children face abuse, neglect, exploitation, violence, and poor health outcomes<sup>2,3</sup>. Poverty, family conflict, natural disasters, and socioeconomic hardship are major causes of this phenomenon<sup>4</sup>. In Asia and Africa, limited education, economic hardship, and family coercion further exacerbate the problem<sup>5</sup>.

In Indonesia, approximately 4.1 million street children have been recorded, with Jakarta and West Java showing the highest numbers<sup>6</sup>. The COVID-19 pandemic worsened the situation, as the number of street children increased from 8,320 in October to 67,368 by December 2020<sup>7</sup>. These children experience multiple vulnerabilities, including physical violence, sexual exploitation, malnutrition, and psychological distress<sup>8,10</sup>.

In Aceh Province, poverty, family breakdown, and social pressures are the primary drivers pushing children onto the streets<sup>1,13</sup>. Despite various

government and community-based rehabilitation programs, such as those initiated by local shelters (Panti Asuhan) and the Social Service Agency, many children eventually return to the streets, suggesting limited long-term effectiveness<sup>11,14</sup>. Therefore, research exploring the lived experiences, challenges, and support needs of street children in Aceh is urgently required to inform sustainable interventions and policy reforms. According to the Aceh Social Service (2023), approximately 182 street children and homeless individuals were recorded in Banda Aceh during the COVID-19 pandemic, while unofficial community estimates suggest the number has now exceeded 300 across the province. These figures highlight that the issue remains a significant social concern requiring urgent intervention. However, limited qualitative research has explored how environmental systems affect street children's adaptation and resilience in Aceh. This study aimed to explore the influence of environmental systems on the experiences, coping mechanisms, and social adaptation of street children in Aceh, Indonesia, using Bronfenbrenner's Ecological Systems Theory.

## METHODOLOGY

### Study Design

This study adopted a qualitative research design employing purposive sampling with maximum variation<sup>15</sup>, to capture diverse perspectives among street children, parents, and caregivers. The approach aimed to explore the lived experiences, coping strategies, and support systems that influence children's development and well-being. Data were collected through in-depth interviews, non-participant observations, and document analysis conducted

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between November 2023 and January 2024. Observations were conducted in orphanages and on the streets, focusing on daily routines, interactions, and coping mechanisms. Field notes were used to record both verbal and non-verbal behaviors. The process of data triangulation (interviews, observations, and documents) enhanced validity and provided a comprehensive understanding of the phenomenon. Data triangulation was ensured through the integration of three sources: in-depth interviews, non-participant observations, and document analysis. Trustworthiness of the data was maintained through prolonged field engagement, peer debriefing and member checking, and a clear audit trail throughout the analysis process. Participants were recruited through local shelters (Panti Asuhan), social service agencies, and community recommendations to ensure diverse representation. All data were transcribed and coded using NVivo 12 software for qualitative analysis consistency.

#### *Population and Sample*

All participants were street children and individuals directly involved in their care and support in Banda Aceh and the surrounding areas. The study population included street children living both inside and outside institutional care, along with their parents or guardians and caregivers/social workers. Participants were selected using purposive sampling to capture diverse experiences and backgrounds. The inclusion criteria were: (1) currently or previously living as street children or directly engaged in their care, (2) age between 10 and 60 years, (3) able to communicate effectively, (4) physically and mentally healthy, and (5) willing to participate voluntarily. Exclusion criteria included children who were temporarily accommodated in shelters for less than two weeks, or those who declined to participate or were unable to provide informed consent. Based on these criteria, a total of 41 participants were selected, comprising street children in panti asuhan (n = 11), street children outside panti asuhan (n = 10), parents or guardians (n = 10), and caregivers or shelter staff (n = 10).

#### *Instrument*

The instruments of this study consisted of three primary tools. The first was a semi-structured interview guide developed based on Bronfenbrenner's Ecological Systems Theory to explore participants' experiences, challenges, coping mechanisms, and sources of support. The questions were open-ended and pilot-tested for clarity and relevance. The second instrument was an observation checklist used to document behavioural patterns, social interactions, and contextual factors observed in shelters and street environments. The third was a document review protocol applied to analyze institutional records, social service reports, and rehabilitation program documents to support data triangulation. Field notes were also maintained to capture non-verbal cues, environmental contexts, and researchers' reflections throughout the data collection process.

#### *Data Collection*

Before conducting the interviews and observations, the researchers informed participants about the study's purpose, duration, confidentiality, and potential benefits and risks of participation. Participants were assured that they had equal opportunities to express their views and experiences freely. Data collection was conducted between March and May 2024 through in-depth semi-structured interviews, observations, and document reviews. Each interview lasted approximately 45–60 minutes and was conducted in a private, comfortable setting to foster openness and trust. All interviews were audio-recorded with participants' consent and transcribed verbatim into Microsoft Word files. Field observations were conducted in both panti asuhan (institutional care) and street environments to capture daily routines, behavioural patterns, and social interactions. Institutional documents and social service records were reviewed to complement and verify the interview findings.

The data were manually analyzed using thematic analysis to identify meaning units, codes, sub-themes, and themes. To ensure credibility, member checking was conducted by sharing the summarized findings with participants for validation. In addition, peer debriefing with qualitative research experts from the Faculty of Nursing, International Islamic University Malaysia, was carried out to cross-check interpretations and enhance data trustworthiness. Researchers repeatedly read the transcripts to obtain a comprehensive understanding before condensing data into codes, sub-themes, and final themes.

#### *Data Analysis*

Thematic analysis followed the standard qualitative steps of familiarization with data, coding, theme generation, and validation. N-Vivo 12 software facilitated the coding process, while credibility, dependability, conformability, and transferability were maintained through member checking and peer debriefing. The thematic analysis section has been revised for clarity and conciseness per the reviewer's suggestion.

Data analysis was performed manually after data saturation was achieved. The interview transcripts, field notes, observation records, and institutional documents were read several times to gain a comprehensive understanding. Meaning units were identified and transformed into codes, which were then grouped into sub-themes and main themes based on similarities and patterns that emerged across participants.

Throughout the process, researchers interpreted both verbal and nonverbal expressions, such as tone, gestures, and emotional cues, recorded in field notes to enrich the analysis. The emerging themes were validated through member checking with participants to confirm accuracy and ensure that the interpretations reflected their perspectives. In addition, peer review by qualitative research experts was

conducted to maintain the credibility and dependability of the findings.

### Ethical Considerations

This qualitative study was conducted in accordance with ethical principles for research involving human participants. Before data collection, ethical clearance was obtained from the Research Ethics Committee of the Faculty of Nursing at the International Islamic University Malaysia. All participants were provided with detailed information about the study's purpose, procedures, potential risks, and benefits. Written informed consent was obtained from each participant before participation, ensuring voluntary involvement, confidentiality, and the right to withdraw at any stage of the study.

### RESULTS

The participants in this study consisted of 41 street children in Aceh Province, Indonesia, including those living in orphanages and those who lived independently on the streets. The participants' experiences reflected various social, economic, and emotional dimensions of street life. **Table I** presents the process of qualitative analysis, including meaning units, coding, sub-themes, and the main themes that emerged from the participants' narratives. The analysis revealed four major themes representing the lived experiences of street children:

#### Economic Hardship and Survival Adaptation

Economic difficulty emerged as a fundamental reason for children's involvement in street life. Many participants expressed that financial instability forced them to seek alternative means of survival, such as busking or begging. They emphasized the importance of adapting to harsh economic conditions and maintaining resilience to survive daily life on the street, as one participant stated, "Working as a

construction worker, now busking to survive... Insha Allah that is enough" (P1).

This finding reflects that poverty is not only a background condition but also a driving force that shapes children's behavior and coping strategies. The street becomes an arena for economic survival where children negotiate their dignity through self-reliant acts, often distinguishing between "halal" and "haram" sources of income.

#### Experiencing Abuse and Family Violence

Another dominant theme was the experience of abuse and family disintegration. Several participants revealed that family conflict, parental divorce, and domestic violence were the primary factors pushing them to the streets. For instance, a participant explained, "Father and mother were separated... I ran to the street" (P5), while another shared, "I was often hit... beaten by my stepmother, experienced sexual violence" (P10).

These findings indicate that the street was perceived as both an escape and a refuge from the pain and trauma of home. The breakdown of family structures created emotional wounds and deprived the children of protection and affection. This aligns with prior studies highlighting that child neglect and family violence are among the strongest predictors of street involvement.

#### Social Isolation and Street Community

Despite their marginalization, the children found a sense of belonging and emotional support among their peers on the street. The street community functioned as a substitute "family," providing companionship, solidarity, and shared understanding. As one participant mentioned, "We eat together, share a pack of rice, help each other... we are comfortable here; we have the same fate" (P9).

This theme illustrates the paradox of street life, where

**Table I: Example of the analysis of the experiences of street children in Aceh (n = 41)**

Meaning unit	Code	Sub-theme	Theme
Worker, now busking to survive... Insha Allah, that is enough." (p1) His family is a family of beggars... grandfather was the coordinator of beggars in Aceh." (P3)	Economic hardship and survival adaptation	Social and economic problems	1. Economic hardship and survival adaptation
Father and mother were separated... I ran to the street." (p5) "I was often hit... beaten by my stepmother... experienced sexual violence." (P10)	Parental divorce and family breakdown	Family disintegration	2. Experiencing Abuse and Family Violence
"We eat together, share a pack of rice, help ea other." (p13) "They cannot easily accept others outside their street group." (p5)	Mutual support and solidarity among street peers	Peer bonding and solidarity	3. Social Isolation and Street Community
We kept busking... sometimes do not get money... prefer busking to stealing."(p1) "Children are dropped off at intersections and must give money to coordinators."(p3) "Parents ask children to beg and monitor them from afar." Government agencies work separately... need cooperation to handle beggars (p5)	Street work as survival and perceived 'halal work'	Occupation and survival on the street	4. Street Life as a Survival Strategy

isolation from broader society coexists with the creation of intimate peer networks. Through this solidarity, children developed coping mechanisms to face daily insecurity, discrimination, and public stigma.

### **Street Life as a Survival Strategy**

The final theme describes street life as a deliberate survival strategy. Participants emphasized that street work, such as busking or selling small goods, was considered a more moral and dignified option than stealing. One participant stated, "We kept busking... sometimes do not get money, but we prefer busking to stealing" (P1).

This indicates the existence of an internal moral framework guiding children's behavior, reflecting their awareness of right and wrong despite limited life opportunities. The street was not only a site of vulnerability but also a space where children constructed agency and moral reasoning in the midst of hardship.

Overall, the findings highlight the multifaceted realities of street children's lives in Aceh. Poverty, family breakdown, and social exclusion intertwine to push children into the streets, while peer solidarity and moral survival strategies help them endure. Understanding these dynamics is essential for developing social interventions that address not only economic deprivation but also emotional and familial rehabilitation for street children.

## **DISCUSSION**

The findings of this study provide a comprehensive understanding of the complex realities of street children's lives in Aceh, Indonesia. The four main themes, economic hardship and survival adaptation, experiencing abuse and family violence, social isolation and street community, and street life as a survival strategy, reveal the multilayered interactions between individual, family, and environmental systems that shape their experiences. These results align with Bronfenbrenner's Ecological Systems Theory, which explains that a child's development is influenced by interactions within and across multiple environmental systems, including the microsystem (family), mesosystem (peer and community relations), ecosystem (economic and institutional factors), and macro system (socio-cultural context)<sup>16</sup>.

Economic deprivation emerged as a structural driver of street involvement. Participants described financial instability as the main reason for seeking income through busking or begging. This finding is consistent with studies in India and Nigeria, which reported that children engage in informal labor to support themselves and their families<sup>17,18</sup>. According to the ecosystems of Bronfenbrenner's ecological systems theory, economic instability in the broader environment indirectly affects children's immediate lives, forcing them to adapt through survival strategies.

In Aceh, participants emphasized the importance of "halal" work as a moral and spiritual value,

differentiating it from stealing or begging. This moral distinction reflects how religious norms within the macro system influence behavior. A similar pattern was found among street children in Kenya, who associated survival work with dignity and ethical responsibility<sup>19</sup>.

The theme of family disintegration and violence demonstrates a breakdown within the microsystem. Many participants experienced parental divorce, neglect, or abuse, prompting them to seek safety on the streets. Comparable findings were reported in Ethiopia and Brazil, where child neglect and domestic violence were the strongest predictors of street migration<sup>20,21</sup>.

These experiences can also be interpreted through Attachment Theory, which suggests that children deprived of secure emotional bonds often seek alternative attachments outside the family<sup>22</sup>. In this study, the street served both as a refuge and a coping mechanism for children who suffered trauma at home. Despite marginalization, the children developed peer solidarity on the streets, which functioned as a surrogate family. They formed social networks grounded in mutual support, empathy, and shared experiences. This phenomenon has also been observed in the Philippines and Tanzania, where peer groups among street children provide emotional stability and a sense of belonging<sup>23,24</sup>.

This finding reflects how the mesosystem operates, linking individual and peer environments. However, while these social ties foster resilience, they also deepen social isolation from mainstream society. This paradox of solidarity within exclusion illustrates the dual nature of the street environment: protective yet marginalizing.

Street life was portrayed not merely as a condition of deprivation but as a strategic adaptation to systemic failure. Participants viewed street work as an honorable alternative to crime, emphasizing moral agency in their own survival. This aligns with Resilience Theory, which emphasizes the human ability to adapt and develop competencies under adverse circumstances<sup>25</sup>.

Similar forms of adaptive resilience have been identified in Uganda and Bangladesh, where street children engage in informal economies while maintaining moral awareness<sup>26,27</sup>. In Aceh, these strategies were further influenced by local Islamic norms, demonstrating how the macro system's cultural and religious values shape survival ethics.

The four themes illustrate the interconnectedness of ecological systems in shaping street children's lives. Economic hardship (ecosystems) interacts with family breakdown (microsystem), leading children to form supportive peer communities (mesosystem) within broader cultural and religious contexts (macro system). These dynamics align with the ecological perspective, which emphasizes that child behavior cannot be understood without considering its environmental layers<sup>28</sup>.

The findings also underscore the importance of multi-sectoral interventions. Programs must address both structural and relational dimensions, combining poverty reduction, family rehabilitation, and social reintegration. Similar integrated interventions in Brazil and South Africa have been shown to reduce street child populations through coordinated social services and child protection mechanisms<sup>29</sup>.

## CONCLUSION

Overall, the study reinforces that street children's experiences in Aceh cannot be viewed solely through the lens of poverty or deviance. Instead, they represent complex adaptive responses to overlapping ecological pressures. The integration of cultural values, peer support, and moral reasoning demonstrates both vulnerability and resilience. Future interventions must therefore adopt an ecological and culturally grounded approach to empower street children and rebuild supportive family and community environments. These findings underscore the need for integrated social welfare systems and culturally grounded, family-based interventions to ensure sustainable rehabilitation and social reintegration.

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## Ethical permission

This study followed ethical principles for research involving human participants. Ethical approval was obtained from the Research Ethics Committee at the International Islamic University Malaysia (IIUM/504/14/11/2/IREC 2022-126). Additional permission was granted by the Aceh Provincial Office (Kesbangpol) (Ref: 170/DPMPSTSP/541-2023). Written informed consent was obtained from all participants, ensuring voluntary participation, confidentiality, and the right to withdraw at any stage.

**Conflict of interest:** Authors declare no competing interests in the study.

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**Data Sharing Statement:** The corresponding author can provide the data proving the findings of this study on request. Privacy or ethical restrictions bound us from sharing the data publicly.

## AUTHOR CONTRIBUTION

Fitriani L: Wrote the research protocol, monitored the data collection, performed the data analysis, and drafted the initial manuscript.

Saidi S: Contributed to the development of the research protocol, supervised the data collection process, and critically reviewed.

Susanti SS: Supervised the data collection process, and critically reviewed and revised the manuscript.

Febriana D: Conducted the data collection, participated in the data analysis, and contributed to the manuscript's critical review and final approval.

## REFERENCES

1. Organization WH. Child protection: Every child has the right to live free from violence, exploitation and abuse. UNICEF; 2020. Available from: <https://www.unicef.org/protection>
2. Darma D, Malawat M, Mahdi, Ridwan. Delineating subjective experiences in the Mardika Market: Self-management of beggars' identities in Moluccas, Indonesia. *Technium Social Sciences Journal*. 2021; 26: 607–615.
3. UNICEF-Indonesia. The state of children in Indonesia: Trends, opportunities and challenges for realizing children's rights. 2020. Available from: <https://www.unicef.org/indonesia/sites/unicef.org>.
4. Embleton L, Lee H, Gunn J, Ayuku D, Braitstein P. Causes of child and youth homelessness in developed and developing countries: A systematic review and meta-analysis. *JAMA Pediatr*. 2016; 170(5): 435–444.
5. Ginting MS, Shofwan I. Life survival strategy of street children and accompaniment. *Edukasi*. 2021; 15(2): 147–158.
6. Kusumaningrum S, Siagian C, Sari WL, Adhi AA, Wandasari W, Febrianto R et al. The Situation of Children and Young People in Indonesian Cities. Jakarta: UNICEF; 2021. Available from: <https://www.unicef.org/indonesia/media/12166/file>.
7. ANTARA News. Banda Aceh bina 182 gepeng dan anak jalanan di tengah pandemi. ANTARA Aceh. 2021 Aug 2. Available from: <https://aceh.antaranews.com/berita/224074/banda-aceh-bina-182-gepeng-dan-anak-jalanan-di-tengah-pandemi>.
8. Obimakinde AM. Physical, mental and healthcare issues of children on the street: a systematic review. *PubMed Central (PMC)*. 2023. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10605535>
9. Vameghi M, Roshanfekar P, Ghaedamini Harouni G, Takaffoli M, Bahrami G. Street children in Iran: What are their living and working conditions? *Int J Environ Res Public Health*. 2023; 20(5): 4503. <https://doi.org/10.3390/ijerph20054503>.
10. Christmas SK, Anisyaputri, Mahoro JCG. Enhancing access to justice for street children through a rights-based perspective on Sustainable Development Goals. *JJR Proceedings*. 2023. Available from: <https://www.semanticscholar.org/paper/Enhancing-Access-to-Justice-for-Street-Children-SDGs-Christmas-Anisyaputri/>.

11. Hazimsyah M. Rehabilitasi tuna sosial di UPTD Rumoh Seujahtera Beujroh Meukarya, Aceh Besar. *Jurnal Ar-Raniry on Social Work*. 2024. Available from: <https://jurnal.ar-raniry.ac.id/index.php/jarow/article/view/7545>.
12. Ismi D. Fenomena sosial pengemis anak di Kota Banda Aceh. *Jurnal Ar-Raniry on Social Work*. 2023. Available from: <https://jurnal.ar-raniry.ac.id/index.php/jarow/article/view/6322>
13. Husna A, Sukandar D, Fitri SMS, Siregar S, Fera D. Analysis of poverty rate and stunting prevalence in Aceh Province. *Malaysian J Public Health Med*. 2023. Available from: <https://mjphm.org/index.php/mjphm/article/view/1785>
14. Fitriani L, Saidi S, Susanti SS, Febriana D. Menjelajahi pengalaman dan dukungan anak jalanan di Aceh, Indonesia: Studi kasus. *J Language and Health*. 2024; 5(3): 1195–1200.
15. Patton MQ. *Qualitative research & evaluation methods: Integrating theory and practice*. 4th ed. Thousand Oaks (CA): Sage Publications; 2014
16. Graneheim U, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today*. 2004; 24(1): 105-12.
17. Bronfenbrenner U. *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press; 1979.
18. Behera D. Street children in India: Causes and rehabilitation strategies. *Child Youth Serv Rev*. 2019; 98: 23-30.
19. Alemika EO. Child labour and street children in Nigeria. *Soc Indic Res*. 2020; 150(2): 441-459.
20. Manda C, Mutuku A, Mwangi J. Moral survival and street life in Nairobi, Kenya. *Afr J Psychol Stud Soc Issues*. 2016; 19(1): 55-67.
21. Gudeta A. Family violence and child street migration in Addis Ababa. *Ethiop J Soc Sci*. 2018; 14(2): 71-85.
22. Aptekar L. Street children in contemporary Brazil: Understanding family breakdown and resilience. *Child Abuse Negl*. 2016; 62: 32-43.
23. Bowlby J. *A secure base: Clinical applications of attachment theory*. London: Routledge; 1988.
24. Benítez ST. *State of the world's street children: Research*. Consortium for Street Children. London, 2011.
25. Mwangi F, Kimani P. Social belonging and resilience among street children in Tanzania. *Afr J Child Youth Stud*. 2019; 6(3): 101-118.
26. Masten AS. *Ordinary magic: Resilience in development*. New York: Guilford Press; 2014.
27. Abebe T. Street livelihoods and resilience among homeless youth in Uganda. *Child Youth Serv Rev*. 2019; 102: 117-126.
28. Rahman M. Informal economy and survival ethics among street children in Dhaka, Bangladesh. *Int J Soc Dev*. 2020; 7(2): 45-58.
29. Thomas de Benítez S. *State of the world's street children: Brazil case study*. London: Consortium for Street Children; 2011.
30. Richter LM. Strengthening child protection systems in South Africa. *Child Abuse Negl*. 2019; 92: 160-169.

