

Fathers and Gender: Key Factors Shaping the Resilience of Children After the Cianjur Earthquake

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Abstract

The November 2022 earthquake in Cianjur had both adverse and beneficial psychological effects, with children being among the most susceptible groups. This aims the factors influencing the resilience of child disaster survivors, focusing on paternal factors such as educational background, income, and the children's gender. The study employed a quantitative approach with an explanatory research design. Participants were 196 students from grades 4 to 6 residing in Cijedil Village, Cugenang District, Cianjur Regency. The sampling technique used in this research is purposive sampling, and Spearman's correlation was applied to analyze the results. The findings revealed a significant positive relationship between fathers' education and income and the resilience of child earthquake survivors in Cianjur, with the father's education emerging as the most influential factor. While girls demonstrated a higher average resilience score compared to boys, the difference was not statistically significant. This research contributes to understanding children's resilience after disasters and offers insights to strengthen children's resilience against the psychological impact of such events. The research proposes practical recommendations for improving child resilience in disaster-prone areas like Cianjur, focusing on strengthening economic support for families, promoting parental education, enhancing access to education and mental health services, and developing community-based resilience programs.

Keywords: child resilience, earthquake, father education, father income, gender differences

Abstrak

Gempa bumi yang terjadi pada November 2022 di Cianjur memiliki dampak psikologis yang merugikan dan menguntungkan, dengan anak-anak sebagai salah satu kelompok yang paling rentan. Penelitian ini bertujuan untuk mengkaji faktor-faktor yang mempengaruhi resiliensi anak-anak penyintas bencana, dengan fokus pada faktor paternal seperti latar belakang pendidikan dan pendapatan, serta jenis kelamin anak. Penelitian ini menggunakan pendekatan kuantitatif dengan desain penelitian eksplanatori. Partisipan penelitian ini adalah 196 siswa kelas 4 hingga 6 yang tinggal di Desa Cijedil, Kecamatan Cugenang, Kabupaten Cianjur. Teknik sampling yang digunakan adalah purposive sampling, dan korelasi Spearman digunakan untuk menganalisis hasil penelitian. Temuan penelitian menunjukkan adanya hubungan positif yang signifikan antara pendidikan dan pendapatan ayah dengan resiliensi anak penyintas gempa bumi di Cianjur, di mana pendidikan ayah menjadi faktor yang paling berpengaruh. Meskipun anak perempuan menunjukkan skor resiliensi rata-rata yang lebih tinggi dibandingkan anak laki-laki, perbedaannya tidak signifikan secara statistik. Penelitian ini memberikan kontribusi terhadap pemahaman tentang resiliensi anak pasca bencana dan menawarkan wawasan untuk memperkuat resiliensi anak terhadap dampak psikologis dari peristiwa semacam itu. Penelitian ini juga mengajukan rekomendasi praktis untuk meningkatkan resiliensi anak di daerah rawan bencana seperti Cianjur, dengan fokus pada penguatan dukungan ekonomi untuk keluarga, mempromosikan pendidikan bagi orang tua, meningkatkan akses terhadap layanan pendidikan dan kesehatan mental, serta mengembangkan program resiliensi berbasis komunitas.

Kata kunci: gempa bumi, pendapatan ayah, pendidikan ayah, perbedaan jenis kelamin, resiliensi anak

Introduction

As commonly defined in psychology, resilience is the capacity to adapt successfully despite adversity, trauma, or significant stress. This concept is especially vital in children affected by natural disasters, as it helps them navigate and recover from disruptions caused by such events. Resilience in this domain spans multiple systems, including family support, community resources, and individual coping mechanisms. Resilience, broadly defined as the ability to adapt positively in the face of adversity, is a critical factor in disaster recovery, particularly for vulnerable populations such as children (Reivich & Shatte, 2002).

Globally, researchers emphasize that several key factors, such as socio-economic status, access to education, community support, and family stability, influence a child's resilience. Disasters like hurricanes, earthquakes, and tsunamis impact children's immediate safety and long-term emotional health. Studies show that interventions fostering emotional security and offering structured community support can significantly bolster resilience in young survivors. For instance, studies have found that consistent caregiver support and structured routines are pivotal in stabilizing children post-disaster (Masten & Cicchetti, 2016).

In the Indonesian context, local studies also reveal that socio-economic factors, particularly household income and education, significantly affect resilience levels among children. These factors are especially critical in areas like Cianjur, where the 2022 earthquake severely disrupted local families and schools. Research has highlighted that resilience in these children can be strengthened through robust community support systems and access to psychological services, but gaps in these areas remain a challenge, especially in economically vulnerable communities (McDonald-Harker et al., 2021; McEwen, 2020).

Efforts to promote resilience in disaster-affected children increasingly focus on community-based interventions and support systems tailored to the cultural and socio-economic contexts of each region. Programs that integrate psychological support with educational and peer activities show promising results in enhancing resilience and long-term well-being in young disaster survivors (Sackey et al., 2023).

The concept of resilience has been explored globally and locally, with a growing focus on post-traumatic growth (PTG) as a transformative process that fosters resilience beyond mere survival, allowing individuals to develop and find meaning following trauma (Tazkiyah, 2019). In disaster-prone areas like Indonesia, where earthquakes are recurrent, resilience becomes essential for immediate recovery and long-term adaptation to such unpredictable threats (Cadamuro et al., 2021; Ungar & Theron, 2020).

Family characteristics such as income level, parental support, and educational background are fundamental in shaping children's resilience in disaster contexts. Empirical evidence suggests that income stability, especially the father's income, is crucial in fostering resilience, as it directly affects the family's ability to provide stability, structure, and essential resources (Sunarti et al., 2017; Sari & Alfiasari, 2024). Families with limited income often face reduced self-reliance and struggle to meet basic needs, particularly post-disaster when external support is limited (Fahlia et al., 2019). Thus,

socio-economic factors play a pivotal role in recovery, as children from low-income families often experience lower resilience due to reduced access to recovery resources and support.

Based on the studies above, this research selects paternal factors, such as fathers' income and educational background, as key variables. In the Indonesian context, fathers typically serve as the primary breadwinners, exerting a significant influence on their children's socio-economic status, which, in turn, may impact their resilience levels. This study addresses a pressing gap in understanding the factors impacting child resilience in disaster-prone areas, particularly focusing on the effects of the Cianjur earthquake. By examining variables such as the father's income, educational background, and gender, this research aims to identify which factors most significantly correlate with resilience in affected children, thereby informing future disaster preparedness and mitigation strategies. Given the high prevalence of natural disasters in Indonesia, this research is timely and crucial for shaping policies and interventions that support children's psychological recovery and resilience in disaster contexts.

On November 21, 2022, a significant earthquake struck Cianjur, West Java, displacing approximately 108,720 people and severely impacting local families and infrastructure (Meteorology, Climatology, and Geophysics Agency, 2023; The National Disaster Management Agency, 2022). This disaster has highlighted critical challenges for affected communities, particularly the psychological toll on children who face heightened anxiety, persistent fears, and behavioral changes due to the trauma (Heanoy et al., 2024; Powell et al., 2021). Studies have shown that children exposed to disasters are at risk of developing PTSD, anxiety, and depression, which hinder their development and daily functioning (Erviana et al., 2023; Agustine et al., 2018).

This research aims to see the correlation between father's income, father's education, gender, and child resilience to help investigate which factor significantly correlates with child resilience so it can be considered for future disaster mitigation.

Methods

Participants

This quantitative research with explanatory design was conducted in Cijedil Village, Cugenang District, Cianjur Regency, where an earthquake occurred in November 2022. Data collection took place from January to April 2024. The selection of the research location was based on the study by Banurea and Wibowo (2023), which analyzed the impact of earthquake damage on elementary schools in Cugenang District. Elementary schools that experienced severe damage yet were situated in areas with a moderate earthquake risk level are located in Cijedil Village. The study used purposive sampling, targeting upper elementary school children (grades 4 to 6) who were earthquake victims. The decision to select participants from grades 4 to 6 of elementary school was based on the consideration that, at this age, participants are still classified as children but have developed sufficient cognitive abilities to provide self-reports through questionnaires, as they possess adequate reading and writing skills. Due to the young age of respondents, questionnaires were administered with guided assistance, and responses were self-reported. Using the Lemeshow formula with a 95% confidence level, 5% margin of error, and 85% maximum estimation, the required sample size was determined to be 196 individuals.

Measurement

The characteristics of the sample families, including parents' income and education levels, were gathered through a biodata form attached to the parental consent sheet provided before the study. Additionally, data on the participants' gender was collected from their biodata. Child resilience was measured using a modified version of the Child and Youth Resilience Measure (CYRM) (Borualogo & Jefferies, 2019), adapted to the context and age of the sample in Indonesia (Cronbach alpha = 0.902). It measures child and youth resilience based on three dimensions: individual, social, and community. This questionnaire contains 15 questions, with responses recorded on a 4-point Likert scale (SS = Very Appropriate, S = Appropriate, TS = Inappropriate, STS = Very Inappropriate).

Analysis

The data collected were processed using Microsoft Excel for input, coding, scoring, and re-verification. The processed data then underwent descriptive analysis and correlation analysis using SPSS 25. In this study, descriptive analysis was employed to identify family characteristics (father's income and education), child characteristics (age and gender), and child resilience. Spearman's correlation analysis was used to examine the relationship between the father's educational background and income, as well as the child's gender, with the resilience of child earthquake survivors in Cianjur. This study used Spearman's correlation because most of the variables used in this study are ordinal, measured on a ranked scale, or have unclear linear relationships.

Findings

Participant Characteristics

Table 1 provides a detailed overview of the participant characteristics for this study, encompassing a total of 196 individuals. Of this group, 51% (100 participants) were male, while 49% (96 participants) were female, indicating a relatively balanced gender distribution. This balance is important as it allows for a more comprehensive understanding of resilience across different genders, enabling the analysis to explore potential variations in how male and female participants respond to adversity, particularly in the context of the Cianjur earthquake.

In terms of academic grade levels, the data reveals that fifth-grade students constituted the largest subgroup at 44.4% (87 participants), making them the predominant age group in the study. This finding highlights the significance of the fifth grade as a transitional phase for children, where they may begin to develop more complex coping mechanisms and resilience strategies. Fourth-grade students accounted for 37.2% (73 participants), reflecting a solid representation that allows for comparisons between younger and slightly older peers. Meanwhile, sixth-grade students represented the smallest group at 18.4% (36 participants). The lower participation rate among sixth graders can be attributed to various factors, including the increased academic pressures they face as they prepare for final exams.

Table 1. Description analysis of participant characteristics based on gender and grade

Characteristics	Category	Distribution	
		n	%
Gender	Male	100	51
	Female	96	49
	Total	196	100
Grade	4	73	37.2
	5	87	44.4
	6	36	18.4
	Total	196	100

Family Background of Participants

Table 2 presents a comprehensive overview of the participants' family backgrounds, focusing on the parents of the 196 respondents involved in the study. Understanding the family context is crucial, as it can significantly influence children's resilience and their ability to cope with the aftermath of traumatic events, such as the Cianjur earthquake. The analysis encompasses several key aspects, including parental age, educational attainment, job type, and income, which together paint a vivid picture of the socio-economics environment in which the children are being raised.

Among the fathers, the data indicates that a substantial portion falls within the age range of 41 to 50 years, representing 39.3% of the group. This age demographic is noteworthy because it typically encompasses individuals who have gained considerable personal and professional life experience. They may possess valuable skills and insights that can contribute positively to their families, yet they may also face unique challenges, such as managing the pressures of supporting a family in a fluctuating economy. Understanding fathers' age distribution helps contextualize the potential life experiences they bring to parenting, which can ultimately influence their children's emotional and psychological development.

Educational attainment is another critical factor examined in this study, revealing that a significant portion of the parents—38.3%—have only completed elementary school. This finding highlights a concerning trend regarding the educational opportunities available to parents in Cianjur, which can have long-lasting implications for their children. Lower levels of educational attainment among parents often correlate with limited employment prospects and lower socio-economic status, which may hinder their ability to provide the necessary support and resources for their children's development. Moreover, this educational gap may contribute to a cycle of disadvantage, where children inherit not only their parents' socio-economic challenges but also their educational limitations.

In terms of employment, the data shows that a majority of fathers—35.7%—are engaged as freelance laborers. This employment type is often characterized by job insecurity and inconsistent income, which can exacerbate stress within the family unit. The reliance on freelance work may limit fathers' ability to provide stable financial support, further impacting the family's overall well-being. The precarious nature of freelance labor can also influence parents' availability for emotional support, as their work may require them to spend long hours away from home or lead to irregular working hours. This dynamic could affect the quality of parent-child interactions, which are vital for fostering resilience in children.

Furthermore, the financial situation of these families is underscored by the finding that many fathers earn less than IDR 2,900,000, which is notably below the minimum wage established for Cianjur Regency. This low income level indicates a significant

economic strain as families struggle to meet their basic needs, such as food, shelter, and education. The financial challenges parents face can create a stressful environment for children, potentially hindering their emotional and psychological development. Children growing up in economically disadvantaged settings are at a higher risk of experiencing various negative outcomes, including difficulties in coping with stress and trauma.

Table 2. Description analysis of family background based on age, education level, job, and income

Category	n	%
Age		
26-30 years	4	2
31-40 years	72	36.7
41-50 years	77	39.3
51-60 years	33	16.8
Deceased	10	5.1
Education level		
Elementary school	75	38.3
Junior high school	45	23
Senior high school	46	23.5
University	20	10.2
Deceased	10	5.1
Job		
Unemployed	18	9.2
Freelance labor	70	35.7
Farmer	7	3.6
Government employee/ Police officer/ Soldier	7	3.6
Private employee	34	17.3
Entrepreneur/ trader	35	17.9
Contract/	6	3.1
Others	5	2.6
Deceased	14	7.1
Income		
None at all	18	9.2
< IDR 2,900,000	136	69.4
IDR 2,900,001 – IDR 5,800,000	32	16.3
IDR 5,800,001 – IDR 8,700,000	7	3.6
> IDR 8,700,001	3	1.5

Resilience based on gender

The analysis of the questionnaire results, as detailed in Table 3, reveals that the average resilience index for girls is 78.98, which is slightly higher than the average index of 75.57 for boys. This finding indicates a modest difference in resilience levels between the genders, suggesting that girls may possess somewhat more effective coping mechanisms or emotional resources when faced with challenges. However, it is essential to interpret this difference with caution, as the overall scores for both girls and boys fall within the moderate resilience category. Despite the observed numerical disparity, this classification signifies that both genders demonstrate comparable abilities to adapt and respond to stressors, reflecting a fundamental capacity to cope with adversity.

The moderate resilience categorization implies that while there may be slight variations in resilience indices, both groups are equipped with similar foundational skills to manage difficulties, such as those experienced during the Cianjur earthquake. This underscores the importance of recognizing the differences in average scores and understanding the overall resilience framework that both genders share. By highlighting

that both boys and girls possess moderate levels of resilience, we can appreciate the commonalities in their responses to adversity, even as we acknowledge the nuances that might influence their resilience capacities.

Table 3. Descriptive statistics for child’s resilience based on gender

Variable		Min	Max	Mean	SD
Child’s resilience	Boys	51.11	100	75.57	8.36
	Girls	60	87.78	78.98	7.26

Table 4 presents the findings from the Spearman correlation test, shedding light on the relationships between children's resilience and key demographic factors, specifically the father's income, the father's educational background, and the children's gender. The analysis reveals a positive and significant correlation between resilience and both father's income ($r = 0.21, p < 0.001$) and father's education ($r = 0.18, p < 0.05$). This suggests that as a father's income increases, there is a corresponding increase in the resilience exhibited by their children.

This correlation reinforces the notion that economic stability and the educational attainment of parents play a crucial role in enhancing children's capacity to cope with adversity and bounce back from challenging experiences. In contexts such as the aftermath of the Cianjur earthquake, where families may face significant challenges, the income and education levels of fathers may provide children with better emotional and psychological resources to navigate the effects of such traumatic events.

Conversely, the results show no significant correlation between children’s gender and resilience, with a correlation coefficient of $r = 0.09$. This finding indicates that, within the scope of this study, boys and girls display similar levels of resilience regardless of their gender. Such a result is noteworthy, particularly in discussions about gender roles and expectations following traumatic events like the Cianjur earthquake. It suggests that resilience may be more influenced by socio-economic factors rather than inherent differences between genders.

Overall, the insights from Table 4 highlight the critical role that fathers' economic socio status plays in shaping the resilience of their children while also indicating that gender may not be a determining factor in this context. These findings underscore the importance of considering the economic socio background of families when addressing the psychological and emotional needs of children in recovery programs. By focusing on enhancing parental income and education, community support initiatives can better promote resilience among children, ultimately leading to more effective strategies for recovery and growth after traumatic events.

Table 4. Spearman correlation test examining father's income, father's education, and child's gender in relation to child resilience

Variable	Child’s resilience
Father’s income	0.21**
Father’s education	0.18*
Children’s gender	0.090

Note: ** $p < 0.001$

The data analysis across the four tables provides significant insights into the characteristics and resilience of the participants in this study. Table 1 reveals a balanced gender distribution among the 196 participants, with a predominant representation of

fifth-grade students, highlighting a critical developmental stage for coping mechanisms. Table 2 underscores the socio-economic backgrounds of the participants, showing that a significant percentage of fathers are in the age range of 41 to 50 years, with many having only completed elementary education and relying on unstable freelance employment. This context of low income, with many fathers earning below the regional minimum wage, illustrates the economic challenges these families face, which can adversely affect children's emotional and psychological development. Table 3 indicates a slight yet noteworthy difference in resilience levels between genders, with girls averaging a resilience index of 78.98 compared to 75.57 for boys, both within a moderate resilience range. Table 4 further elucidates the connections between resilience and key demographic factors, revealing significant positive correlations between children's resilience and their fathers' income and education while showing no notable difference based on gender. Collectively, these findings highlight the profound influence of socio-economic factors on children's resilience in the aftermath of the Cianjur earthquake and emphasize the need for targeted recovery initiatives that address the emotional and psychological support required for these children.

Discussion

Based on the research findings, most respondents exhibited moderate resilience levels, with most fathers earning below the average minimum wage in Cianjur Regency. This economic backdrop highlights a critical relationship between financial stability and child resilience, as income influences not only the material conditions of the household but also the psychological environment in which a child develops. In socioeconomically disadvantaged families, stress related to financial insecurity permeates daily life, affecting parental involvement, emotional support, and the overall well-being of the child. Families experiencing financial strain are often unable to provide adequate resources for their children's education, extracurricular activities, or healthcare, all of which play pivotal roles in fostering resilience. Moreover, economic instability may lead to increased household stress, negatively impacting the emotional atmosphere at home. These factors, in turn, inhibit a child's capacity to develop coping mechanisms and emotional regulation skills, which are fundamental components of resilience (Lara & Saracosti, 2019; Nabors et al., 2021; Oyarzun-Farias et al., 2021; Zhang et al., 2024)

The role of a father's income in this context cannot be overstated. In Cianjur Regency, where the research was conducted, fathers are typically the primary breadwinners, and their financial contributions significantly impact the household's ability to provide a stable environment for their children. When income is insufficient, children are more likely to experience disruptions in their education and social life, both of which are critical to building resilience. Research highlights the complex effects of educational disruptions on children's cognitive, emotional, and problem-solving development, especially when compounded by financial instability. Educational disruptions, such as those seen during the COVID-19 pandemic, have impacted children's socioemotional skills and cognitive development. For instance, children exposed to prolonged pandemic conditions demonstrated variations in skills such as problem-solving and memory, influenced by limited socialization and increased time with caregivers. However, those from financially stable households sometimes displayed resilience due to supportive learning environments at home. This underscores the role of socio-economic

stability in providing children with cognitive and emotional support during challenging times (Cole et al., 2017; Masten & Motti-Stefanidi, 2020)

Economic hardship also creates additional barriers to accessing resources that can help children develop resilience. In low-income families, access to mental health services, educational support, and community resources may be limited, further exacerbating the negative impact of financial instability on a child's emotional and psychological development (Howard, 2019; Han, 2021; Monahan, 2020). For example, children from low-income households may lack access to quality educational materials, extracurricular activities, and peer support networks, which are crucial for building emotional resilience. Additionally, financial insecurity often leads to increased parental stress, which can negatively affect the quality of parent-child interactions. Parents who are overwhelmed by financial worries may be less emotionally available to their children, limiting the emotional support that is essential for building resilience. This underscores the critical role that a father's income plays not only in providing for the family's material needs but also in creating an emotionally supportive environment in which children can develop resilience (Latifah & Hasanah, 2021; Masten, 2021; McEwen, 2020).

More studies showed that higher family income is often associated with better access to resources that promote resilience in children. Families with greater financial means are more likely to afford quality education, healthcare, and extracurricular activities, all of which contribute to a child's cognitive, social, and emotional development. Access to these resources helps children build the skills they need to navigate life's challenges, such as problem-solving, emotional regulation, and social competence. Moreover, children from higher-income families are more likely to have access to supportive networks, including teachers, mentors, and counselors, who can provide additional emotional and psychological support. These external resources can buffer the negative effects of stress and trauma, helping children develop the resilience they need to cope with adversity. Therefore, a father's income is a key factor in shaping the resources available to children and, by extension, their ability to develop resilience in the face of challenges (Dollar et al., 2020; Es, 2019; Greenberg, 2020).

The connection between a father's education and child resilience is another critical aspect of resilience development highlighted in recent research. Fathers with higher levels of education tend to be more knowledgeable about child development and are better equipped to provide emotional and cognitive support to their children. They are more likely to engage in activities promoting their children's cognitive development, such as reading, problem-solving tasks, and discussing emotions and coping strategies. This intellectual engagement fosters critical thinking skills and emotional regulation, which are essential to resilience. Additionally, fathers with higher education levels often have higher expectations for their children's academic performance, which can motivate children to develop the perseverance and problem-solving skills needed to overcome obstacles (Abraham & Feldman, 2022; Feldman, 2020).

Fathers' educational level is particularly significant in rural and low-income settings, where access to formal education and learning resources may be limited. In such environments, fathers who have attained higher education levels often become role models for their children and others in the community. Their involvement in educational activities, such as participating in school functions or helping with homework, can inspire other families to prioritize education and foster a learning culture. This can have a spillover effect, where the benefits of one family's emphasis on education spread to others in the community, contributing to a broader increase in child resilience within the region

(Dong et al., 2019). In this way, educated fathers play a dual role: they directly support their children's resilience while promoting resilience within the wider community by advocating for education and emotional development.

Research also suggests that the benefits of a father's education extend beyond intellectual and emotional support to influence broader social and economic outcomes. Educated fathers are more likely to be involved in their communities, advocating for policies and resources that benefit children's education and development. Their involvement in local schools, community organizations, and social networks can create a supportive environment for all children, not just their own, fostering collective resilience. In this context, resilience is not only an individual trait but also a communal asset that is reinforced by social networks, shared values, and access to resources. The presence of educated fathers in a community can, therefore, act as a protective factor for children, helping to buffer the effects of adversity and promote positive developmental outcomes (Fruehwirth & Gagete-Miranda, 2019).

The research also shows that gender does not significantly correlate with resilience in children. To expand on why gender does not significantly correlate with resilience in children, additional perspectives from recent research highlight the roles of cultural, educational, and family support in resilience outcomes across genders. First, a growing body of literature explores how social and cultural factors, rather than biological sex, shape resilience by influencing expectations and coping mechanisms from a young age. In many cultures, both boys and girls are taught different ways of handling stress and adversity, yet studies show that both genders develop resilience when encouraged to utilize diverse coping strategies. For instance, cultures that support open emotional expression and problem-solving enable both boys and girls to develop the adaptive skills necessary for resilience (Masten & Barnes, 2018). Furthermore, exposure to supportive cultural values, such as collective problem-solving and empathy, bolsters resilience across genders by providing models of behavior that promote perseverance and adaptability.

Family structure and dynamics also play a crucial role in resilience, often overriding any potential gender-based differences. Children who grow up in families that foster open communication, mutual respect, and emotional support tend to demonstrate higher resilience regardless of gender (Afifi & MacMillan, 2011). Studies also indicate that when families encourage both sons and daughters equally in their academic, emotional, and social growth, resilience capacities between genders show no significant difference. This finding emphasizes that resilience is rooted more in family attitudes and behaviors than in gender-specific attributes. For instance, families encouraging boys and girls to discuss challenges, share responsibilities, and practice self-regulation contribute to resilience development, reducing gender disparities in resilience outcomes (Southwick et al., 2017).

Educational settings and access to resources are other significant contributors to resilience that impact children across gender lines. Schools that foster a supportive environment through peer support systems, mentorship programs, and access to counseling services create a foundation for resilience in both male and female students. Research has shown that when educational institutions provide resources that nurture self-efficacy and encourage emotional resilience, both boys and girls benefit equally (Betancourt et al., 2019). Programs emphasizing social-emotional learning (SEL) help children of all genders develop critical coping skills, such as empathy, self-regulation, and collaborative problem-solving, essential components of resilience. The impact of SEL on resilience has been observed consistently across genders, demonstrating that

educational supports mitigate any differences that might otherwise appear between boys and girls in their ability to handle stress and adversity.

Additionally, mental health and access to psychological support are critical aspects of resilience that do not correlate with gender. Access to mental health services and resilience training programs emphasizing adaptive coping skills, like emotional regulation and mindfulness, benefit both boys and girls (Ungar, 2021). These interventions target universal psychological needs, helping all children to develop resilience skills, regardless of gender. Moreover, the availability of mental health support mitigates the impact of trauma, abuse, or other adversities, suggesting that resilience is highly flexible and largely shaped by accessible psychological resources rather than gendered differences in coping mechanisms.

Furthermore, recent studies on childhood trauma and resilience indicate that both boys and girls who experience significant stressors benefit equally from intervention and support programs. For example, trauma-informed care programs that focus on providing stable, supportive relationships and emotional safety have demonstrated success in fostering resilience across genders. These programs emphasize relational and emotional skills that are not gender-specific, showing that resilience can be cultivated universally through approaches that focus on stability, trust, and secure attachment (Bonanno et al., 2015). In cases where children have experienced severe adversities, interventions that offer consistent support from caregivers, mentors, and mental health professionals help both boys and girls to navigate and recover from their experiences with similar levels of resilience.

Despite these findings, the study has notable limitations that must be addressed in future research. One major limitation is the relatively small and homogeneous sample size, which was drawn from three public elementary schools in the Cugenang District. The socio-economic characteristics of the respondents were relatively uniform, with most participants coming from low-income families. This homogeneity limits the generalizability of the findings to other populations, particularly those from more diverse socio-economic backgrounds. For example, children attending private schools or living in more affluent areas may have access to different resources, such as higher-quality education, psychological support services, and social networks, all of which could influence their levels of resilience. The exclusion of these groups from the study means that the findings may not fully capture the factors contributing to child resilience in different socio-economic contexts. Therefore, this study's findings may not fully represent disaster survivors from other regions, primarily due to socio-economic and cultural variations.

Conclusion and Recommendation

Conclusion

This study underscores the critical role of financial stability and parental support, particularly fathers' income and education, in shaping children's resilience. Resilience, defined as the ability to adapt and thrive amid adversity, is profoundly influenced by the emotional and material environments in which children are raised. Financial hardship, especially in socioeconomically disadvantaged families, imposes significant limitations on access to essential resources such as nutritious food, quality education, and healthcare—factors that are crucial for fostering resilience. Beyond material deprivation, financial instability often heightens stress within the household, reducing the emotional

availability of parents, particularly fathers, who may be preoccupied with financial concerns. This stress can hinder their ability to provide consistent emotional support and positive reinforcement, essential elements for children to develop coping mechanisms and problem-solving skills. Consequently, children in low-income households often lack the foundational support required to navigate challenges, leaving them more vulnerable to emotional and psychological difficulties. Addressing these economic disparities is vital, as financial stability directly enhances a family's capacity to create nurturing environments where children can thrive, even in adverse circumstances.

Fathers' education plays an equally significant role in fostering resilience, particularly through its impact on children's cognitive, emotional, and social development. Fathers with higher levels of education are more likely to understand and engage in effective parenting strategies that promote their children's growth. Activities such as reading together, problem-solving, and discussions on emotions improve children's skills and strengthen the family's emotional bond. In rural and low-income areas, such as Cianjur Regency, where educational opportunities are often limited, fathers with higher education levels serve as role models, advocating for the importance of learning and emotional support within the community. This creates a ripple effect, fostering a culture of resilience that extends beyond individual households. The findings are particularly relevant in disaster-affected areas, such as those impacted by the 2022 Cianjur earthquake, where financial stability and education interplay become even more pronounced. Families with greater financial and educational resources were better equipped to meet their children's immediate needs and support their emotional recovery. In contrast, children from families facing financial hardship experienced heightened vulnerability due to the lack of access to critical resources like healthcare and education. This study emphasizes that resilience is not just an individual trait but a collective asset shaped by family and community support. Policies addressing economic and educational disparities are essential to creating environments where children can develop the resilience needed to overcome challenges. By investing in financial stability and educational opportunities, particularly for disadvantaged communities, we can foster a culture of resilience that benefits individuals and the broader society.

Recommendation

The research findings propose several practical recommendations to enhance child resilience in Indonesia's Cianjur and other disaster-prone regions. These recommendations focus on strengthening economic support for affected families, particularly fathers, who play a crucial role in family stability. Providing targeted vocational training programs, such as skills in construction, agriculture, or other in-demand local industries, can help fathers increase their earning potential. Microcredit programs and small business grants can offer immediate financial support, allowing families to rebuild their livelihoods while reducing stress levels that affect children's emotional well-being.

Additionally, practical parental education programs should be implemented to equip fathers and mothers with skills to support their children emotionally and cognitively after a disaster. For instance, workshops on stress management and effective communication can empower parents to create a nurturing environment at home. Schools can play a vital role by integrating mental health support services, such as counseling, into the education system while prioritizing the rapid reconstruction of educational facilities. Community-based initiatives, such as youth clubs for emotional well-being,

peer support groups, and disaster preparedness training, can further strengthen resilience. Encouraging collaboration among local leaders, educators, and families can ensure that these programs address the unique needs of each community while building a culture of resilience. These focused, actionable steps provide a roadmap for helping children and families recover and thrive in the aftermath of disasters.

Implementing practical, community-based resilience programs can create a supportive environment for families. These programs should involve collaboration among local leaders, educators, and parents to establish initiatives such as neighborhood support groups, parent training sessions on emotional well-being, and community disaster preparedness workshops. For example, creating peer-support groups for children and organizing regular community-building activities like sports or art therapy can foster emotional recovery. These programs can be tailored to meet local needs, ensuring that families in disaster-affected areas like Cianjur have access to resources and a network that supports their recovery and long-term resilience.

Finally, future research should focus on actionable socio-economic and educational factors influencing child resilience in disaster-prone areas. For instance, studies could explore how to improve access to mental health services for low-income families through affordable or community-based interventions. Longitudinal research could evaluate the lasting effects of resilience programs and identify the most impactful strategies. Comparative studies between urban and rural settings could provide insights into cultural and contextual differences in resilience-building. Further investigation into the role of schools and peer support systems could reveal practical, child-centered approaches, offering specific recommendations for creating effective recovery programs tailored to the unique needs of post-disaster communities.

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