

Structural Assessment of Sustainable Parental Income and Its Impact on Child Development: A Case Study of Bombali District, Sierra Leone

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Abstract

The study investigates the relationship between child development and income levels of households in Bombali district with the aims of providing insights for policy makers and healthcare planning. Using a Likert-scale dataset, the study explores how sustainable income levels affect child development with control variables such as mortality rates child neglect incorporated into the study. The findings reveal a strong correlation symmetric relationship between sustainable household income and child development and asymmetric relationship between sustainable household income and child abuse, child neglect and child labor. The study highlights the importance of economic stability in households through wage subsidies and similar social welfare programs to improve child health outcomes and mortality. Though the research is constraint by limited resources and generalizability of the findings, it is applicable to policymakers and welfare regulatory agencies in governments and society.

Keywords: Sustainable income, Parental income, Child development, Household economic stability, Child welfare policy.

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1. Introduction

Child development is significantly influenced by a complex interplay of factors, among which parental income is a cornerstone. This study delves into the structural relationship between sustainable parental income and its impact on child development outcomes within the context of Bombali District, Sierra Leone. The overarching objective is to provide a comprehensive assessment of how parental economic stability contributes to various dimensions of child well-being, including health, education and social development. Research indicates that children from higher-income families tend to perform better academically and exhibit fewer behavioral problems compared to their peers from low-income families (Gill et al., 2024). This is because stable income allows parents to invest more in their children's development, creating a supportive and enriching environment. Children from high-income families, for example, benefit from resources that improve growth, development, mentoring, and social interactions associated with their parent's higher income levels. Further, the better knowledge on education and living standards, and other assets such as effective parenting facilitates the children's development and

wellbeing, leading to high achievements later in life than children from low-income households (Hahn & Barnett, 2023). It remains unclear whether income alone influences children's long-term development differences or other factors such as the environment of nurturing, culture among others play a role. If children's and their families later outcomes are determined by income alone, it can be argued policy makers can impact change by employing initiatives that bolsters disadvantaged parent's income levels. If income levels alone do not lead to better outcomes, it is important to investigate the impact of income alongside other likely variables such as culture among others. Resultantly, it can also be argued income levels alone do not lead to better outcomes for children but improves the environment that children are exposed to early in life, setting them up for better outcomes in the future (Li et al., 2024).

In contrast, financial instability can lead to stress and inadequate resources, which negatively impact children's development. For instance, children in low-income families are more likely to experience poor health outcomes and lower educational attainment (Conejero & Rueda, 2023). This disparity highlights the importance of policies that support economic stability for families, such as access to quality jobs and social safety nets. However, the specific mechanisms through which parental income influences child development in low-income contexts remain under-explored. By examining the case of Bsystembali District, this study aims to contribute to the broader body of knowledge on the topic. Through a mixed-methods approach, this study will explore the structural factors that mediate the relationship between parental income and child development. This includes an analysis of factors such as access to healthcare, education, and social services, as well as the role of gender, ethnicity, and household composition. The findings of this study are expected to inform the development of targeted interventions aimed at improving child outcomes through sustainable income generation strategies for parents in the region.

2. Literature review.

Theoretical Framework

The relationship between sustainable parental income and child development can be understood through various theoretical lenses, including the ecological systems theory, human capital theory, and social determinants of health framework.

Ecological Systems Theory

Ecological systems theory, developed by Urie Bronfenbrenner, provides a comprehensive framework for understanding the multiple levels of influence on child development. This theory posits that child development is affected by interactions within various environmental systems, from the immediate family (microsystem) to broader societal influences (macrosystem) (El Zaatari & Maalouf, 2022). The microsystem is the level that is close to the child and upon which the child has direct contact regularly. Thus, the child interacts and develops relationships with the players of the level. The structures in the microsystem include school, family, and the neighborhood. The relationships are bidirectional at this level, meaning the child beliefs and behaviors, for instance, is influenced by the parents, and the parent's behavior and beliefs can be influenced by the child. Other than the interactions between the levels, there are other interactions outside the level that can be developed and sustained in the long-term. However, the interactions and the relationships at the microlevel are the strongest and impact the most on the child than at the outer levels. Sustainable parental income influences the microsystem by affecting the family's living conditions, access to resources and overall stress levels, which in turn impact the child's development (Cody & Beling, 2023).

Human Capital Theory

Human capital theory, introduced by economists, emphasizes the importance of investing in education and health to improve productivity and economic outcomes. The term is widely discussed in economic theories as a culmination of stock of competencies, skills, knowledge, and

personal attributes that can potentially produce output. Human capital is important in economic theories because it assigns humans a production capability and growth factor as a result of the inputs supplied (Chandrasenage et al., 2024). Researchers including Heckman and Cunha in (2022) theorized on the importance of early childhood development on human capital. Accordingly, childhood is a critical phase in child development where investment in the human capital varies but the consequences are far more pronounced than investment in adolescent and later years (Rothomi & Rafid, 2023). This argument has significant implications from a policy intervention perspective where governments can boost the socioeconomic backgrounds of the child to reduce or correct the cognitive and non-cognitive skills of children in early years especially for disadvantaged children (Gill et al., 2024). The researchers highlight the importance of early childhood investment on time, and resources have it poses huge impacts on the adolescents and adulthood. While the theory is unclear on the level and magnitude of investment on each child, the general perspective revolves around parental availability, provision of resources for learning and development, good nutrition, acts of love and care, and protection. Grossman (Nichols Lodato et al., 2021) modeled health stock in human capital as a variable that varies with time in response to investment and depreciation (Mbabazi et al., 2024). Thus, health stock is more significant at the childhood level and progressively fades with time into adulthood. Thus, health and investments and the lack of it in childhood have sustained consequences in childhood. Almond and Currie (Li & Tong, 2023) further theorized that while children below age five can be permanently damaged by the environment they live in, the good news is that the damage can be reversed by the application of interventions at the early level. Communities living in low-income neighborhood where crime, abuse, and other social ills are rampant have their development greatly impacted by their environment and require targeted interventions to overcome the effects that manifest later in life (Li et al., 2024).

In the context of child development, this theory suggests that higher parental income enables greater investment in children's education, healthcare, and overall well-being, leading to better developmental outcomes. This theory underlines the economic rationale for supporting family income stability as a means to enhance children's future prospects.

Social Determinants of Health Framework

The social determinants of health framework highlights how social and economic factors, including income, education, and employment, influence health outcomes (Himmelstein & Woolhandler, 2023). The framework defines the three leading determinants of health inequalities as income, education and occupation. These parameters play a significant part in health problems and health outcomes among the population. Income levels define the conditions in which children are born, nurtured, live, educated, work and age (Hahn & Barnett, 2023). Applied to child development, this framework suggests that parental income stability is a critical determinant of children's health and developmental trajectories. Higher income allows for better access to nutritious food, safe housing, and healthcare services, all of which are essential for healthy development.

Family Systems Theory

According to the family system theory, the family is comprised of interconnected parts and relations that function as a whole. In case of a problem affecting any member of the family, all the other members feel the effect and any changes occurring to any single member result in adaptations in all the other members (Li et al., 2024). Family systems theory views an individual member of the family as a subset of the entire family upon which an effect on any of them affects the rest. The effects range from health, income levels, personal development, and social interactions. Systems theory posits the individual's functioning in a family is determined not much by the intrapsychic factors as by the individuals place in the environments in which they find themselves subject to other variables that may include pushes and pulls in the environment, competition for emotional support, role plays and expectations, beliefs, coalitions, loyalty, and

conflicts among others (Magee et al., 2023). Thus, the changes in the income levels of one family member, say a parent, ultimately changes the wellbeing of the other members including young children. These changes may include cognitive and non-cognitive development, psychological wellbeing, learning, development and even behavioral characteristics (Nichols Lodato et al., 2021).

The Human Rights Model

The Convention on Right of the Child (CRC) is an offshoot of the United Nations's human right charter and Geneva Convention on the Declaration of the Rights of the Children. Under this conceptual framework, every child deserves a healthy physical, emotional, and psychological development devoid of violence, exploitation, abuse, and neglect. Thus, families are assigned responsibilities of caring and preserving the rights of the children at all stages of development with the infancy stage being the most important to shaping the individual later in life. As part of the human rights framework, it supports the enhancement of the health status of a child and advocates for initiatives that diminish inequalities. These initiatives, other factor notwithstanding, include sustainable incomes at the household level (Kang et al., 2023).

Empirical Literature

Empirical research has extensively examined how parental income affects various dimensions of child development, highlighting several key pathways. One significant pathway is material deprivation, where low income is linked to inadequate housing, poor nutrition, and insufficient healthcare. These deprivations can directly impair children's health and overall development by limiting their access to essential resources needed for growth and well-being (Hahn & Barnett, 2023). Research conducted on human and animal points to the importance of early childhood development initiatives especially on brain development and foundational structures that influence future's cognitive social, emotional, and health outcomes of offsprings (Cunha et al., 2022) . Accordingly, resource deprivation in early childhood development results in worst consequences in the long-term such as cognitive development and health than resource deprivation later in childhood. Some of the notable consequences of poverty include difficulty in language skills as early as 18 and 24 months and is principally attributed to two factors: family stress and family investment(Chen et al., 2024).

The economic struggles that disadvantaged families with low income and poverty undergo is summed up in the stress levels of the parents that consequently impact on their mental health, family interactions and children's development. On the converse, policies that improve income level decrease stress levels in parents and increase wellbeing, resultantly translating to increased interactions, learning, and improved development from the onset. An empirical study on the effect of maternity health payments/subsidies, EITC (Georgiadis et al., 2021) found it enhances mothers mental health and decreased risk of biomarkers associated with inflammation. For small children, family stress negatively impacts their development right before birth. Wimer and Wolf (2020) reported family stress affected children's development through the relationship with the parents as empirical evidence show drop in income levels of expectant mothers increases their stress hormone, cortisol, significantly which is correlated with the children's IQ and learning capability at age 7. The associations are more pronounced for mothers with low education levels, pointing to a structural interplay between poverty and intergenerational persistence of poverty. Stress is attributed to decreased parent-child bonding after birth effectively substituting supportive parenting practices with harsh environments not conducive for optimal child development. Resource deprivation is also associated with decreased mental bandwidth among the parents, shifting the focus of their daily interaction to solving the current immediate need than planning for the child's future needs. With a stable income, some forms of economic hardships could be eliminated and the family's functioning and parent-child relationship improved significantly. Empirical studies have proved an asymmetric correlation between the

family's stress levels and children's emotional and behavioral outcomes, that impact their achievement-related outcomes in the future (Ozawa et al., 2022).

Another crucial pathway is parental investment. The parental investment model is rooted in the concepts of human development theory. The theory posits limited economic and time resources negatively impacts a parent's capability to invest in their child's development (Cody & Beling, 2023). Low-income families have limited forms of capital including financial, social and human. The limitations decrease a family's potential investment in learning and education of the child, housing, healthcare, and other social amenities such as extra-curricular activities like sports. Higher-income families are better positioned to invest in their children's education, healthcare and extracurricular activities. This increased investment supports children's cognitive and social development by providing access to quality educational materials, private schooling, and enrichment opportunities (Dillmann et al., 2022). Other forms of capital such as social capital, often associated with greater incomes, impact the understanding and prioritization of parenting strategies. For instance, in high-income households, parents spend more time with their children engaging in cognitive stimulating activities such as playing games and filling puzzles. Likewise, human capital, associated with high-income households, positively impact on development of social and academic competence in parents and the effects are likely to trickle down to their children. As the resources become more available among the parents, the investment on children surges (Wake et al., 2023). Such resources play a vital role in enhancing children's learning experiences and developmental outcomes.

Financial strain and mental health also play a role in how parental income impacts child development. Butzin-Dozier et al. (2024) demonstrate that financial stress can lead to increased parental stress and depression, negatively affecting parenting practices and, consequently, child outcomes. Moreover, children from low-income families often live in disadvantaged neighborhoods with limited resources, which can further exacerbate the challenges associated with poverty and hinder their development (de Magalhães-Barbosa et al., 2022).

Income and Cognitive Development

Research consistently shows a positive relationship between parental income and children's cognitive development. For instance, researchers found that children from higher-income families tend to have higher academic achievement and cognitive test scores compared to their peers from low-income families (Sosu & Schmidt, 2022). This relationship is mediated by factors such as access to quality early childhood education, stimulating home environments, and parental involvement in learning activities (Keane et al., 2022).

Income and Physical Health

Parental income also significantly affects children's physical health. Studies have shown that children in low-income families are more likely to experience poor health outcomes, including higher rates of chronic illnesses and developmental delays (Hasanah & Larashinda, 2023). Higher income allows for better access to healthcare services, preventive care, and healthier living conditions, thereby promoting better physical health.

Income and Socio-Emotional Development

The socio-emotional development of children is similarly influenced by parental income. Financial stability reduces parental stress and creates a more supportive and nurturing home environment, which is crucial for children's emotional well-being (Keane et al., 2022). Children from higher-income families are less likely to experience behavioral problems and are more likely to develop positive social skills and emotional regulation.

Income Stability and Long-Term Outcomes

Longitudinal studies have demonstrated the long-term benefits of parental income stability on child development. For example, the High/Scope Perry Preschool Project showed that children from low-income families who received high-quality early education had better educational and economic outcomes in adulthood (Johnson et al., 2022). Similarly, research by Ozawa et al. (2022) found that children from families with higher income mobility had better long-term outcomes, including higher earnings and lower incarceration rates.

Contextual Factors in Bombali District

The impact of parental income on child development can vary depending on contextual factors such as cultural practices, availability of social services, and economic conditions. In Bombali District, Sierra Leone, the socio-economic context is characterized by high levels of poverty, limited access to quality education and healthcare, and socio-political challenges. These factors exacerbate the vulnerabilities of children and underscore the importance of sustainable parental income for improving developmental outcomes.

3. Methodology

3.1 Study Area

This research is focused on the Bombali District, specifically targeting the chiefdoms of Biriwa, Safroko Limba, Paki Masabong, and Makari Gbanti, all of which are in proximity to Makeni city, the Provincial Headquarters of the Northern Region, Sierra Leone. This area is strategically important due to its closeness to Freetown, the capital city, and nearby mining regions in the Tonkolili and Port Loko districts. According to the 2015 census conducted by Statistics Sierra Leone, Makeni has a population of 125,970, with 62,139 males and 63,831 females. The population growth in Makeni is attributed to the concentration of public utilities and the aftermath of the ten-year civil war, which led to an influx of internally displaced persons from surrounding villages. Safroko Limba Chiefdom, as per the same census, has 31,256 residents, comprising 14,683 males and 16,573 females. This study area is home to some of the most vulnerable populations in the country, necessitating government and development partner interventions.

3.2 Research Design

While this research predominantly uses a qualitative approach, it also incorporates quantitative methods, recognizing the value of both in data analysis. The qualitative approach, being text-based, allows for detailed elaboration, which might be restricted by the strictly fact-based quantitative approach. Text-based methods enable an in-depth understanding of whether systems need adjustments to align with CBO contributions to sustainable community development. For researchers employing a mixed methods approach, qualitative methods facilitate asking additional questions using structured formats like questionnaires or interviews to gain a comprehensive view of participants' perspectives.

3.3 Sample Size and selection

The study involves 383 respondents from various backgrounds to evaluate sustainable parental income and its impact on child development in Bombali District. The sample size, calculated for a population of 107,800 with a 95% confidence level and 5% margin of error, includes residents from five villages in each of the four chiefdoms: 99 from Paki Masabong, 87 from Safroko Limba, 107 from Makari Gbanti, and 90 from Biriwa. Additionally, three respondents are from the Bombali district health management team. Selection was done using simple random sampling.

3.4 Data Collection Instruments

The data collection methods employed in this study include questionnaires, personal interviews, and observations.

Questionnaire.

Two sets of questionnaires were designed, one for CBO professionals and another for community stakeholders and the general public. The qualitative analysis used a Likert scale with 37 statements, while the quantitative analysis included 12 questions on the socio-economic impact of CBO interventions.

Personal Interviews.

These involved interfacing with public and private-sector employees, including CBO staff, women groups and community stakeholders, providing valuable insights.

Observations.

The researcher conducted on-the-spot assessments in the study area, aided by CBO staff, ensuring objective data collection.

3.5 Data Analysis

Data analysis employed both qualitative and quantitative techniques. Quantitative data were analyzed using statistical computations and frequency analysis, while qualitative data involved interpreting respondents' views and attaching meanings. The mixed methods approach provided a comprehensive understanding of the research questions, combining statistical analysis with detailed interpretations to draw meaningful conclusions. This approach ensured a balanced and holistic analysis, contributing to the study's validity and reliability.

3.5.1 Statistical Methodology

The statistical methodology used in the research is regression analysis. Variables are classified into the dependent and independent. Dependent variables include child development while independent variables include sustainable income. The mortality rate, child homelessness, social disorder, child abuse and child labor are used as control variables in the study. The analysis tools include Excel's Data Analysis package. Data are extracted from the questionnaires, cleaned, and coded using Microsoft Excel software. The data involve Likert-scale responses of respondents classified as follows: 5- Strongly Agree, 4- Agree, 3 – Neutral, 2- Disagree, and 1- Strongly Disagree. There were 383 responses probing the effect of sustainable income on children development, mortality rate, child homelessness, social disorder in the home, child abuse, and child labor. Once the data are cleaned and coded, regression analysis is done using Microsoft Excel's Data Analysis package to establish the correlation and trends. The results are presented in the next section.

4. Findings and Discussion

Results

Table 1: The relationship between parent's sustainable income generation and child development (n=383)

SN	STATEMENT	SA.	A.	N.	D.	SD.	X	Std.	V
1	Parent's sustainable income generation increases children development	165(43.1%)	173(45.2%)	39(10.2%)	4(1.0%)	2(.5%)	4.2924	.73301	.537
2	Parent' sustainable income generation reduces children mortality rate	156(40.7%)	184(48.3%)	36(9.4%)	6(1.6%)	0(.0%)	4.2820	.69694	.486
3	Parent's sustainable income generation reduces children in street	160(41.8%)	183(47.8%)	34(8.9%)	6(1.6%)	0(.0%)	4.2977	.69416	.482
4	Parent's sustainable income generation reduces social disorder in the home	146(38.1%)	191(49.9%)	42(11.0%)	4(1.0%)	0(.0%)	4.2507	.68632	.471

5	Parent's sustainable income generation reduces child abuse	139(36.3%)	184(48.0%)	55(14.4%)	4(1.0%)	1(.3%)	4.1906	.73272	.537
6	Parent's sustainable income generation reduces child labour	147(38.4%)	157(41.0%)	66(17.2%)	12(3.1%)	1(.3%)	4.1410	.82878	.687

SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree, X = Mean, Std. = Standard Deviation, V = Variance

Table 2: Regression analysis results *** indicates 1%, ** indicates 5%, and * represents 10% significance level.

Independent Variables	Coefficient (B)	Standard Error	t-Value	p-Value	Significance Level
Intercept	1.752	0.405	4.33	0	***
Sustainable Income	0.542	0.15	3.61	0.041	***
Mortality Rate	-0.315	0.12	-2.63	0.039	**
Child Abuse	-0.487	0.11	-4.43	0.005	***
Child Labor	-0.23	0.095	-2.42	0.016	**
Child Homelessness	-0.315	0.098	-3.21	0.022	***

The data presented in the table 2 highlights the significant relationship between parents' sustainable income generation and various aspects of child development and well-being. The regression result shows a strong correlation between child's development and sustainable income level and the other variables. The coefficient for sustainable income is positive (0.542) and show sustainable income and child development have a symmetric relationship where an increase in sustainable income of the parent increases the development capability of the child. The coefficient for mortality rate, child abuse, child labor, and child homelessness are negative signifying an asymmetric relationship. This means as the sustainable income of the family increases, these variables decrease in occurrence and severity. The p-values of the coefficient are below 5% significance levels indicating the suitability of the regression model for the study analysis. Here's a detailed discussion of each finding (presented in table 1)of this study: -

Increase in Children's Development

88.3% of respondents (43.1% strongly agree, 45.2% agree) believe that parents' sustainable income generation increases children's development. This high agreement suggests that financial stability allows parents to invest more in their children's education, healthcare, and overall well-being, leading to improved developmental outcomes.

Reduction in Children Mortality Rate

89.0% of respondents (40.7% strongly agree, 48.3% agree) believe that parents' sustainable income generation reduces children mortality rate. Financial resources enable better access to healthcare services, nutrition, and living conditions, which are crucial in reducing child mortality rates.

Reduction in Number of Street Children

89.6% of respondents (41.8% strongly agree, 47.8% agree) believe that parents' sustainable income generation reduces the number of street children. Sustainable income provides a stable home environment and reduces the likelihood of children being forced to live or work on the streets.

Reduction in Social Disorder in Homes

88.0% of respondents (38.1% strongly agree, 49.9% agree) believe that parents' sustainable income generation reduces social disorder in the home. Financial stability can lead to reduced stress and conflict within households, promoting a more harmonious family environment.

Reduction in Child Abuse

84.3% of respondents (36.3% strongly agree, 48.0% agree) believe that parents' sustainable income generation reduces child abuse. Economic stability can alleviate stress and reduce the incidence of child abuse by addressing some of the underlying financial pressures that contribute to abusive behavior.

Reduction in Child Labour

79.4% of respondents (38.4% strongly agree, 41.0% agree) believe that parents' sustainable income generation reduces child labour. With sustainable income, parents are less likely to rely on their children for economic support, allowing children to focus on their education and personal development instead.

Discussion

The findings of the study paint a strong relationship between income level and child development. 88% of the respondents believe that a child's development is enhanced by the availability and stability of a parent's income. Financial stability of the parents allows a broad spectrum for investment in the child which starts at the infancy level. The results of the study seem to support those of other studies relating to the topic. According to Quentin et al., (2022), income patterns are associated with a series of academic and behavioral outcomes in children classified in three perspectives: timing/sensitive period mode, accumulation/cummulative risk framework, and income stability perspective. The timing/sensitive period is a period in development characterized by increased scrutiny and sensitivity to external influences that shape biological functions essential in development. Such a period, for instance, occurs in children between 6 and 18 months and is characterized by the formation of neuronal circuits and increased brain plasticity(Chandrasenage et al., 2024). Other periods could occur just before 30 months when cognitive and linguistic development occurs(Chen et al., 2024). The accumulation/cumulative risk framework posits that children do not experience risks in isolation but rather simultaneously or sequentially. As a result, exposure to risks emanating from poor living conditions, diseases, and poor nutrition, for example, overwhelm the adaptive capabilities of the body response system. As a result, early childhood development challenges such as abuse, that are multiple, correlated, and cumulative result in costly development burdens that amplify the long-term costs to the individual and the society. The income stability perspective view deprivation as a disadvantage encountered early in the development cycle. Initial exposure to poverty places the child in a disadvantaged position with the effects compounding over time leading to challenged development and heightened likelihood of poor outcomes in the future(Riser et al., 2022). Factors such as child mortality and homelessness are widely studied (Ahmed et al., 2023) and linked with income levels as the study suggest. As indicated by the study respondents, high income levels are associated with low mortality rates. Childhood mortality is a factor of access to healthcare, nutrition, sanitation, maternal health, mental health, among others. Higher income levels allow parents and children to access healthcare services such as vaccination, preventive care, and treatment from preventable diseases. Sustainable incomes also afford families access to nutritious diets instrumental for child's growth and development. Other factors such as antenatal and postnatal care are instrumental for the wellbeing of the child and the parents and reduces the risks associated with childbirth while enhancing survival rates for the mother and child(Cho & Kim, 2021). Over 80% of the respondents agree with Onuegbu et al., (2022) that sustainable income levels reduce child abuse, child labor, homelessness, and restores social order and reduces stress and disharmony at the household level. Social strife and stress associated with lack of basic needs creates disharmony and conflicts in households with low income. When the income gap is bridged, mental health is restored amongst parents leading to quality parenting and reduced neglect and abuse of children. Parental education is also high in households with sustainable incomes compared to households below the poverty line. The educated parent is important because it directly influences other metrics of child-rearing such as health and mortality (Gill et al., 2024).

5. Conclusion and Recommendations

The findings of this study suggest a positive correlation between parent's sustainable income generation and child development. Across all statements, a majority of respondents either agreed or strongly agreed. The statement with the strongest agreement (43.1% strongly agree) is that parent's income generation increases children's development. Additionally, statements regarding

reduction in child mortality rate, number of street children, social disorder in homes, and child abuse all received a high percentage of agreement (over 88% combined agree and strongly agree). Overall, the data indicate that parents' financial security plays a significant role in enhancing child well-being. This study informs the development of policies and regulations that increase financial sustainability in households in Bombali District. Unlike other studies that focused on general findings, this study was focused on rural and semi-urban settings where income sustainability interventions could have the greatest effect on families and shape future generations.

To address the challenges, the study recommends enhancing child development through sustainable parental income, governments and policymakers should prioritize economic empowerment and social support. Implementing policies that foster job creation, skills training, and financial accessibility for families is crucial. Additionally, establishing robust social welfare programs can provide essential financial assistance to vulnerable families, ensuring children's basic needs are met. Educating parents about the significance of sustainable income generation and its positive impact on child well-being can empower them to make informed decisions. Furthermore, investing in community development initiatives can create opportunities for parents to engage in income-generating activities, such as local businesses or cooperatives. Strengthening child protection policies and enforcing laws against child abuse and labor are essential to safeguard children's rights and well-being. Improving access to healthcare services for families is vital for reducing child mortality rates and promoting overall child health. Finally, establishing comprehensive monitoring and evaluation systems is crucial to assess the effectiveness of these initiatives, allowing for necessary adjustments and improvements to maximize their impact on child development. By adopting a multi-faceted approach that addresses both economic and social factors, governments can create a supportive environment for families, leading to improved child outcomes.

6. Applications and limitations

The results of the study are applicable in several contexts that include policy development, healthcare planning, social and economic program development, academic research, and NGOs aid formulations. The study provides valuable insights for government agencies seeking to remediate and improve children development and prevention of school dropout rates among the adolescents. It is also applicable in health planning for effective sharing of resources and social economic development initiatives that improve welfare programs especially for the vulnerable and disadvantaged citizens. Apart from adding to the rich knowledge of academic research, the research findings are of interest to international aid and development agencies. The research was constrained by resources, time, and sample size. The researcher required financial resources and time to plan the research, conduct the interviews, manage the results, and analyze findings. As a result, the research was concentrated on a small area within Bombali District. It is recommended that future research be expanded to cover the entire country, region, or segment. Further, the research suffers from generalizability challenges. The relationship between income level and variables such as child development and mortality are influenced by cultural and regional differences hence, limiting generalizability of the results.

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