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SPECIAL ISSUE:

Global Perspectives on Poverty and Youth Development: Impact and Outcomes

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Introduction to the Special Section: Global Perspectives on Poverty and Youth Development: Impact and Outcomes

Poverty continues to affect millions of individuals worldwide, with children and adolescents among the most vulnerable. Growing up in economically disadvantaged contexts can significantly hinder developmental pathways and long-term well-being. The recent intensification of economic crises, alongside political and social instability in many regions, has only deepened these challenges—making it more urgent than ever to prioritize the well-being and future prospects of young people.

As developmental scientists, we have a crucial role to play in understanding and addressing the multifaceted impact of poverty. This includes investigating individual experiences, responses, and developmental outcomes, and translating this knowledge into effective policies and interventions. In response to these pressing issues, and in collaboration with the *ISSBD Global Policy Committee*, chaired by Ingrid Schoon, we have conceptualized two special sections of the *ISSBD Bulletin* focused on poverty and its effects on children and youth.

These thematic issues bring together cutting-edge basic and applied research from around the world, conducted by members of the ISSBD community. The overarching goal of the *ISSBD Global Policy Committee* is to leverage scientific evidence to inform and improve policies that support human development and well-being globally. The essays featured in these sections represent a critical step toward achieving this vision.

In the current issue, we feature contributions that explore individual responses to poverty from three continents. The papers, authored by Janet Surum (Kenya), Jullyana Silva Rosa (Brazil), Qinyang Liu (USA), Elisabeth Olowookere (Nigeria), and Zena Mello (USA), offer diverse and insightful perspectives. These contributions are discussed by members of the *ISSBD Global Policy Committee*—Ingrid Schoon, Geertjan Overbeek, and Valentin Ngalim—who provide a broader analysis of the global impact and developmental consequences of poverty in childhood and adolescence.

We are deeply grateful for the productive collaboration between the *ISSBD Global Policy Committee* and the *ISSBD Bulletin* editorial team in making this important publication project a reality.

Besides the special section, this issue also includes notes from our president, Tina Malti and a report and review of the Jacobs Foundation-ISSBD Doctoral Fellowship Program in Cote d'Ivoire, West Africa.

We hope that the readers enjoy the collection of articles in this issue of the *ISSBD Bulletin*!

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Class Counts Too: Advancing Research on Social Class Discrimination Among Adolescents

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“The [adolescent] wore really old shoes that were like breaking apart, and all the kids would make fun of them (Mello et al., 2025a).” In this quote from a qualitative study in the United States, an adolescent describes witnessing a friend being treated unfairly due to the condition of their clothing. Such experiences highlight the social exclusion and stigma tied to economic disparities, particularly among young people. Understanding the impact of such occurrences on development is critically important given the prevalence of individuals who are disadvantaged in social class worldwide (Salmeron-Gomez et al., 2023). Economic inequality is at historically unprecedented levels (Haider, 2021; Salmeron-Gomez et al., 2023). Notably, children are twice as likely to experience extreme poverty compared to adults (Salmeron-Gomez et al., 2023). Poverty, income, education, occupation, and prestige are subsumed in the term social class (Currie et al., 1997; Diemer et al., 2013; Entwisle & Astone, 1994; Goodman et al., 2001; Johnston et al., 2020; Liberatos et al., 1988). Research has long established a strong connection between social class and human development (Bourdieu, 1986; Willis, 1977). Studies have shown how social class is associated with academic outcomes, risk-taking, and even life expectancy (Brooks-Gunn et al., 1997; Conger & Donnellan, 2007; Hummer & Hernandez, 2013; McLoyd, 1990; Reardon, 2018; Sirin, 2005). However, much less is known about the bias one experiences because they are disadvantaged in social class.

Social class discrimination refers to the overt and subtle ways that individuals are treated differently interpersonally because they are disadvantaged in social class (Langhout et al., 2009; Liu et al., 2004; Lott, 2002; Mello, 2024; Ostrove & Cole, 2003). Most research on this topic has focused on adults revealing meaningful associations between social class discrimination in numerous domains, including academic and psychological outcomes (Langhout et al., 2009). However, there is an emerging body of research that has shown how social class discrimination is associated with adolescent development in particular (Bucchianeri et al.,

2013; Fuller-Rowell et al., 2012; Fuller-Rowell et al., 2023; Mello et al., 2025a; Mello et al., 2025b; Mello et al., 2025c; Mello et al., 2025d; Mello et al., 2025; Sartor et al., 2021; Song et al., 2020). To engender more research on this topic, this article will discuss the conceptualization of social class discrimination, its intersection with the unique developmental period of adolescence, and how it relates to key areas of adolescent development.

Conceptualization of Social Class Discrimination

For adolescents, social class is inherited by their family and includes objective (poverty, income, education, and occupation) and subjective (prestige) factors (Currie et al., 1997; Diemer et al., 2013; Entwisle & Astone, 1994; Goodman et al., 2001; Liberatos et al., 1988). The term social class is preferred over socioeconomic status because it is a broader construct and captures multiple dimensions (Diemer et al., 2013). *Social class discrimination* is operationalized as the differential interpersonal treatment that individuals experience because they are disadvantaged in social class (Langhout et al., 2009; Liu et al., 2004; Lott, 2002; Mello, 2024; Ostrove & Cole, 2003). Theoretical perspectives have described how individuals can experience social class discrimination regardless of their precise social class position (Liu et al., 2004). Individuals can be treated differently by others if they are advantaged in social class (“upward”) or disadvantaged in social class (“downward”). Although the effects of such differential treatment will likely vary. However, research has shown that social class discrimination primarily occurs among individuals who are disadvantaged in social class (Bucchianeri et al., 2013; Cavalhieri & Chwalisz, 2020; Gonul et al., 2023; Langhout et al., 2009).

In this paper, the focus is on the interpersonal qualities of social class discrimination, as relationships are important for adolescents. However, social class discrimination exists at multiple levels, including institutional, societal, and national (Langhout et al., 2009; Liu et al., 2004; Lott, 2002). In a broader context, disparities in the economic resources between some schools and neighborhoods illustrate how individuals are treated differently by society because of their social class (Langhout et al., 2009; Liu et al., 2004; Lott, 2002). It is important to note that in the literature, classism has been used to denote social class discrimination when it refers to a multilevel construct ranging from individual to societal levels (Langhout et al., 2009; Liu et al., 2004; Lott, 2002). Although social class discrimination is conceptually akin to classism, here I use the term social class discrimination



to refer to its interpersonal aspects and to distinguish it from the broader term classism. This shift in terminology has been used in research with adolescents (Fuller-Rowell et al., 2023; Mello, 2024; Sartor et al., 2021).

Recently, Mello (2024) proposed a new model of social class discrimination specifically for adolescents. Social class discrimination was conceptualized as a multidimensional construct. Dimensions included multiple forms (overt and subtle) and sources, such as peers, teachers, and adults in the community. While adolescents are the primary direct targets, they can also experience discrimination indirectly via their friends and family. For example, when a friend is teased due to the condition of their clothing, adolescents are likely to be impacted. The model integrated theories about social class discrimination developed for adults (Langhout et al., 2009; Liu et al., 2004) with theories about discrimination based on race/ethnicity for adolescents (Brown & Bigler, 2005; García Coll et al., 1996; Spencer, 1995). Drawing from seminal studies about the influence of economic crises and disadvantages on adolescent development (Conger et al., 1994; McLoyd, 1990), the model illustrated how social class is embedded in families for adolescents.

Another key contribution of Mello's (2024) conceptual model is the articulation of the mechanisms linking social class discrimination with developmental outcomes among adolescents. Mello theorized that the specific mechanism connecting social class discrimination with adolescent development would depend on the outcome. For substance use, stress may explain the link between social class discrimination and substance use, given prior research on stress, sexual orientation, and substance use (Meyer, 2003). Whereas for academic achievement, school belonging may be the mechanism that connects social class discrimination with academic outcomes. This is based on prior research showing how school belonging impacts academic outcomes (Roeser et al., 1996). However, empirical research is needed to determine the mechanisms that connect social class discrimination to developmental outcomes.

Intersectional perspectives are important to consider when examining social class discrimination (Cole, 2009). Scholars have discussed how adolescent identities based on social class and race/ethnicity develop in an intertwined fashion (Velez & Spencer, 2018). Social class shares some qualities with other marginalized identities, such as race/ethnicity, given that both are the subject of oppression. Yet, there are also important distinctions. While racial/ethnic discrimination is rooted in physical characteristics and historical legacies of exclusion, social class disadvantage can be more fluid, influenced by contextual factors such as education, employment, and economic mobility. Further, social class and race/ethnicity are confounded in some places. For example, in the United States, racial/ethnic minority groups comprise a disproportionate number of individuals disadvantaged in social class (U.S. Census Bureau, 2024). Drawing from an intersectional perspective, a recent study examined how race/ethnicity moderated the association between social class discrimination and tobacco use (Mello et al., 2025). Findings indicated that the association between social class discrimination and tobacco use was stronger for European Americans than for other racial/ethnic groups. More empirical research is needed to understand how social class and race/ethnic

identities together shape experiences of social class discrimination.

Social Class Discrimination and Age

Adolescence is a unique period of development to examine social class discrimination. Identity formation is the hallmark of this stage, and it includes integrating social identities, such as one's social class (Erikson, 1968; Thomas & Azmitia, 2014; Velez & Spencer, 2018). Adolescents who are disadvantaged in social class must also come to terms with the understanding that their family has limited resources and/or less prestige than others. In support, research on subjective social status has indicated how the construct of social class is relative by showing how adolescents compare their own social class to that of others in their school and their community (Goodman et al., 2001; Zhang et al., 2021).

Developmentally, adolescents are advancing in cognitive abilities and acquiring the capacity to think more abstractly (Blakemore & Choudhury, 2006; Keating, 2012; Steinberg, 2008). Scholars have outlined how advances in cognitive development correspond with age-related changes in discrimination (Brown & Bigler, 2005). Studies with children have shown that with age, they have an increased perception of social class and inequality (Elenbaas et al., 2020). Other research on adolescents demonstrates how individuals in this age group perceive economic inequality and wealth (Flanagan et al., 2014; McLoyd, 2019).

Combined, changes in identity formation and cognitive development enable adolescents to experience and understand social class discrimination in a distinct way from childhood and adulthood. Although longitudinal studies do not exist on social class discrimination during adolescence, the research and theory to date suggest that with age, adolescents will experience more social class discrimination. This increase is partly due to the greater likelihood that adolescents will understand social class discrimination around them because of their advancing cognitive abilities but also because adolescents generally have more independence than they did in childhood. As adolescents gain independence and spend more time in public spaces such as malls, parks, etc., without their families, they are likely to have more experiences of social class discrimination.

An additional developmental quality of adolescents to consider with regard to social class discrimination is body image and appearance. It may be particularly harmful for adolescents to experience social class discrimination because of the heightened emphasis on one's appearance during this period of the lifespan (Fabris & Longobardi, 2024; Gordon, 2024). At this age, adolescents go through tremendous development via puberty (Fabris & Longobardi, 2024; Gordon, 2024). The adolescent pubertal process includes dramatic physical and hormonal changes, such as the development of primary and secondary sexual characteristics (Fabris & Longobardi, 2024; Gordon, 2024). Consequently, compared to children, adolescents are much more sensitive to their appearance, including their physical attractiveness, body image, and physical self-concept (Gordon, 2024). Body image is an important component of adolescents' self-concept, as appearance-related concerns peak during adolescence (Francis & Longobardi, 2023; Gordon, 2024; Wang et al., 2019).

Research has shown how stereotypes about social class include one's physical appearance, such as the quality of clothing and cleanliness (Elenbaas, 2019; Mistry et al., 2015; Oh et al., 2020; Rauscher et al., 2017; Sunsay & Ceyhun, 2024). Mistry et al. (2015) indicated that early adolescents aged 10-12 deemed individuals who were poor as more likely to hold negative attributes, such as being dirty, and less likely to hold positive attributes, such as being clean. Studies with children also show this stereotype. Elenbaas (2019) demonstrated that wealth could be depicted with images that included backpacks among children aged 5 to 8 years old. Experimental studies also show that individuals who wore clothes that were perceived to be "rich" were deemed more competent than their counterparts who wore clothes that were deemed "poor" (Oh et al., 2020). Adolescents from disadvantaged social class backgrounds may face more scrutiny or exclusion due to their inability to afford branded/trendy clothing, electronics, possessions, or other markers of social class. Thus, appearance-based social class stereotypes, economic disadvantage, and adolescent development make social class discrimination a particularly impactful form of discrimination for adolescents.

Empirical Research on Social Class Discrimination Among Adolescents

Qualitative research from the United States has documented social class discrimination among adolescents (Ayres, 2009; Brantlinger, 1993; Kuriloff & Reichert, 2003; Weinger, 1998). These studies have highlighted how, for adolescents, in particular, social class discrimination occurs in educational settings. In fact, research has shown that adolescents have encountered social class discrimination at school more than in other settings, such as in the community (Ayres, 2009). In a study of adolescents at academically elite schools, a study demonstrated that teachers made derogatory comments about students disadvantaged in social class and were perceived by adolescents to give preference to students who were advantaged in social class (Kuriloff & Reichert, 2003). In a study of college students, researchers determined that social class was a prominent identity for participants (Thomas & Azmitia, 2014).

Recently, another qualitative study about social class discrimination among adolescents in the United States indicated three overarching themes: multidimensionality, uniqueness, and intersectionality (Mello et al., 2025a). This study was conducted in two public high schools in the United States and included interviews with 33 adolescents and eight adults. Findings showed how social class discrimination was multidimensional and included both overt and subtle forms. An overt example came from a teacher who questioned if an adolescent would be able to afford an expensive private college. The adolescent recounted, "One of my top choices is a private school, and it's really expensive. I talked about that in front of the teacher, who isn't really supportive. He said, 'Oh, how [are] you going to pay for it.'" In contrast, a more subtle example came from an adolescent who described how a student was mocked for wearing the same clothes repeatedly: "[Students said], 'Don't you wash them?'" In fact, findings indicated that the vast majority of experiences with social class discrimination were subtle in nature. A second theme,

named uniqueness, captured the qualities of social class discrimination that were specific to social class, such as possessions, familial occupations, education, and housing. As an adolescent described: "My parents own a gas station. . . students assume I live on top. I was offering to have over some of my friends. They [said] 'We can't be cramped up in the top of your teeny gas station.'" A third theme called intersectionality conveyed the multiple identities for which adolescents experienced discrimination, such as race/ethnicity, skin color, and gender, and provided support for intersectional perspectives (Cole, 2009; Crenshaw, 1991). This particular theme is consistent with findings from other studies that have shown how social class discrimination intersects with gender (Ayres, 2009) and race/ethnicity (Kuriloff & Reichert, 2003).

Social Class Discrimination and Developmental Outcomes Among Adolescents

Social class discrimination has been associated with developmental outcomes among adolescents. Key areas have included academic achievement, substance use, and physical health. A pervasive stereotype about individuals who are disadvantaged in social class is that they are not intelligent (Heberle & Carter, 2020; Mistry et al., 2015). Children as young as 3-9 years old endorsed stereotypes about social class that included beliefs that individuals who were advantaged were smart and good at math and reading (Heberle & Carter, 2020). Similarly, early adolescents aged 10-12 deemed individuals who were poor as "dumb" and those who were rich as "smart" (Mistry et al., 2015). Further, a study with college students showed how the social class stereotype about intelligence produced the stereotype threat effect (Croizet & Claire, 1998).

Consequently, there is emerging evidence that adolescents who experience social class discrimination have worse academic outcomes than their counterparts. In a survey study of 1,678 adolescents attending two public schools in the United States, Mello et al. (2025b) showed that social class discrimination was negatively associated with academic achievement, even after controlling for maternal education, a common indicator of social class. Further, analyses indicated that the effects were more pronounced for younger than older adolescents. These results suggest that early adolescents may be particularly vulnerable to social class discrimination. In this particular study, an adapted measure of social class discrimination was employed.

More recently, researchers created a new scale of social class discrimination that included multiple sources, such as classmates and teachers (Mello et al., 2025c). The scale was developed based on interview responses, exploratory and confirmatory factor analyses, and item response theory (Mello et al., 2025c). In turn, sources were negatively associated with academic outcomes, including academic achievement and school belonging (Mello et al., 2025d). These findings with adolescents are consistent with studies on social class discrimination and academic outcomes that have been conducted with adults on college campuses in the United States (Cattaneo et al., 2019; Langhout et al., 2009; Thompson & Subich, 2013). However, other research has not found associations between social class discrimination and academic outcomes



(Fernandez & Benner, 2022; Pargas, 2020). These inconsistent results may be due to differences in sample composition, measurement of social class discrimination, or contextual factors such as school resources and peer support.

Substance use is an additional key area of development for adolescents, as risk-taking at this age can have lifelong implications (Johnston et al., 2023). In one study, adolescents reported an increased risk of smoking cigarettes when their mothers reported experiencing social class discrimination (Sartor et al., 2021). Another study on cannabis use among African American adolescents indicated that social class discrimination was linked to cannabis use disorder (Ahuja et al., 2022). A study also showed that social class discrimination was positively associated with combustible tobacco use, nicotine vaping, and the dual use of both combustible tobacco use and nicotine vaping among adolescents (Mello et al., 2025). Notably, these effects remained even after controlling maternal education, a common indicator of social class. In this study, participants were recruited from two public high schools to complete an anonymous survey. More recently, researchers used a new scale of social class discrimination that included multiple sources, such as friends, classmates, teenagers, teachers, and adults in the community, to examine associations with tobacco use among adolescents in the United States (Mello et al., 2025c). Findings indicated that the sources were all positively associated with both combustible tobacco and nicotine vaping use among adolescents (Mello et al., 2025c).

Social class discrimination has been examined in association with physical health among adolescents. Fuller-Rowell et al. (2012) showed that perceived discrimination mediated the effect of disadvantaged social class on allostatic load in a longitudinal study of adolescents. In this particular study, perceived discrimination was measured by several items that addressed experiences based on one's background, although background was not operationalized to be social class specifically. Rather, it was conceptualized as a general form of discrimination. More recently, Fuller-Rowell et al. (2023) developed a new scale of social class discrimination for adolescents and showed how it was negatively associated with sleep. The scale addressed social class discrimination as well as social status, making it unclear about the distinct effects of social class discrimination on sleep. Future research should refine measurement tools to disentangle social class discrimination from broader perceptions of social status.

Although most research on social class discrimination has been conducted with adolescents in the United States, some research on this topic has been conducted around the globe. In a study of adolescents in Turkey, Gonul (2023) demonstrated that adolescents who were disadvantaged in social class were more likely to interpret being excluded as a form of discrimination than their counterparts who were more advantaged in social class. In China, researchers showed that social class discrimination was positively associated with internalizing and externalizing problems in a study with children and adolescents (Song et al., 2020). In this particular study, social class discrimination was measured with items that referenced Beijing as a place where individuals who were advantaged resided. Thus, these studies show how social class discrimination is relevant across cultures.

Conclusions and Future Directions

Social class discrimination is emerging as a new and potentially powerful modifiable mechanism that can disrupt the strong association between social class and developmental outcomes among adolescents. In this article, the primary conceptualizations of the construct were described and its multiple dimensions were outlined, including the forms and sources. The unique developmental period of adolescence was discussed in relation to experiencing social class discrimination, especially with regard to identity formation, cognitive development, and body image. Then, extant empirical research was presented about key areas of adolescent development, including academic achievement, substance use, and physical health.

Despite the evolving body of research, there remain several areas for future research. First, more research is needed globally to examine cultural variations in the meaning, prevalence, and developmental consequences of social class discrimination among adolescents. It is important to understand how being disadvantaged in social class shapes the experiences of adolescents around the globe. Investigating cross-cultural differences will help identify universal versus context-specific patterns. Already, research has begun globally with studies in China (Song et al., 2020), Germany (Fischer-Neumann & Böhnke, 2022), and Türkiye (Gonul et al., 2023).

Second, new measures are needed to examine social class discrimination explicitly among adolescents. Researchers will benefit from building on the recent efforts in this area (Fuller-Rowell et al., 2023; Mello et al., 2025c). Third, longitudinal evidence is critical for determining the extent to which social class discrimination influences adolescent development and for identifying the specific ages that should be targeted for interventions. Longitudinal studies will also be useful for determining the mediating factors and mechanisms that connect social class discrimination with developmental outcomes. Lastly, the role that social media has in perpetuating social class stereotypes and as a source of vicarious social class discrimination is an important line of inquiry, given the significant impact this domain has on adolescent development.

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Poverty and Coping Strategies Among Rural Youths in Ogun State, Nigeria

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Background

Poverty is mostly defined in terms of social, political, economic, and infrastructural deprivations that impact the living standards of the affected persons. However, some scholars viewed it as a state of mind, an individual's subjective interpretation and response to life situations, and the way they perceive themselves in relation to others (Hoyt et al., 2023; Throop, 2009; Torimiro & Kolawole, 2005). Based on this assertion, effective poverty alleviation strategies must incorporate the peculiarities in the ways different people interpret and respond to their poverty experiences. Nigeria is one of the countries with the highest rate of poverty, and the majority of these poor people are young residents in rural areas (Boye et al., 2024; Okunola & Ojo, 2019; Oxfam in Africa, 2024; UNICEF Nigeria, 2024). Therefore, it has become imperative to understand the subjective interpretations and ways these rural youths cope with poverty. This will have implications for effective intervention programs among the target population.

World's Struggle with Poverty

The first Sustainable Development Goal is focused on freeing the world from all forms of poverty by the year 2030. Despite global efforts to alleviate poverty, Africa remains the poorest continent, and the effects of poverty continue to permeate most rural areas of sub-Saharan Africa and South East Asia (Ume & Ochiaka, 2016). There are at least 429 million people in Africa living below the extreme poverty level in 2024, and Nigeria has been reported to be home to 11.3% of the world population living in extreme poverty, below the poverty line of 2.15 U.S. dollars per day (Galal, 2024). The majority of these Nigerians are youths who are less than 24 years of age (Virk et al., 2023).

Life Chances and Youth Development in Rural Nigeria

Life chances are the opportunities that individuals' current socioeconomic status presents to them to improve their

quality of life and those of their families (Aldridge, 2004). These refer to people's access to opportunities for educational attainment, good health, material reward, and status mobility (Scott & Marshall, 2009). Although access to all the basic opportunities needed to grow into a successful adult is the right of every child (UNICEF, 2016), most young people in rural Nigeria do not enjoy this right as a result of the low socioeconomic status of their parents. They are especially vulnerable to the scourge of poverty because their parents cannot afford the much-needed access to opportunities for skill development that guarantee a brighter future (Lile & MacTavish, 2020). Similarly, Uzoh (2015) observed that youth development in Nigeria has been greatly hampered by the country's high rate of poverty. Furthermore, the (American Psychological Association, 2024) noted that poor children suffer a lot of deprivations, which not only affect the quality of their lives as children but also determine their outcomes as adults.

Empirical Evidence from Rural Youths in Nigeria

The phenomenological approach was used to explore the idiosyncratic struggles with poverty and the diverse coping strategies among rural youths in Ota and surrounding rural areas. Using the purposive sampling technique, the participants of this study included a total of 23 adolescents and young adults between the ages of 15-25 years. This age range was chosen based on the classification of Nigerian youths as ranging between 15-29 years (Federal Ministry of Youth and Sports Development & UNFPA Nigeria, 2019) and the observation of Virk et al. (2023) that most Nigerians are below 24 years old. Many studies in Nigeria support the use of parents' socioeconomic status as a measure of poverty among rural youths (Alemu, 2019; Chaudry & Wimer, 2016; Jerumeh, 2024; Torimiro & Kolawole, 2005). Consequently, the eligibility criteria for participation in this study are an age range of 15-25 years, rural residency, poor socioeconomic background, and the willingness to participate.

The first set of participants consisted of 11 consenting young adults between the ages of 20 and 25, who were recruited through group memberships, peer identification, and house calls. They were duly briefed about the objectives of the study, their rights as participants, and assurance of utmost confidentiality. Data collection was done through the use of semi-structured interviews and Focus Group Discussions (FGD). The semi-structured interviews were conducted through face-to-face interactions and Zoom meetings, which lasted an average of 20-25 minutes. Participants were asked 10 open-ended questions, four guided prompts, and follow-up questions.

The second set of participants were 12 teenagers recruited for the FGD from a youth church within the Ota community.

The researcher obtained permission and support from the church administrator after a thorough debriefing and scrutiny to ensure that the rights and well-being of the participants were in no way undermined in the course of the research. The number of participants in each set was supported by Lewis (2015) as perfect for ensuring the validity and reliability of results. All responses were recorded, transcribed, and analyzed.

Although several studies have been conducted on the coping strategies of Nigerian youths (Adegboyega et al., 2016; Oblitne et al., 2009; Torimiro & Kolawole, 2005), they were done years ago. There is a need for an update in the literature to explore current trends, using a phenomenological approach as supported by Kamruzzaman, (2021) who asserted that the best insights into the phenomenon of poverty can only be obtained in the words of those who actually experienced it. Hence, this study aimed to examine the subjective definitions of poverty among Nigerian youths, as well as their lived experiences and coping strategies. Three research questions were raised and adequately answered through thematic analysis.

Thematic Analysis of Data

The data collected were analyzed and reported following the six steps delineated by Braun and Clarke (2006). The researcher read and made notes on transcribed audio recordings and texts (step 1: familiarizing herself with the data). The entire dataset was read twice, and parts of the data considered to have potential relevance to the research questions were underlined (Braun & Clarke, 2012). These underlined words and short phrases were labelled as codes (step 2: generating initial codes). Data credibility and inter-coder reliability were established through the use of simple percentage agreement (Araujo & Born, 1985) between the researcher and her colleague as independent coders. This was calculated using the formula:

$$PA = \frac{NA}{NA + ND} \times 100$$

Where PA represents the percentage of agreement, NA is the number of agreements, and ND is the number of disagreements. After deleting 24 repeated and redundant codes from the initial list of 37 codes generated from the 12 transcripts analyzed, both coders agreed on 11 out of the remaining 13 codes. Thus:

$$PA = \frac{11}{11 + 2} \times 100 = 84.6\%$$

Related codes that formed a pattern were then grouped together as themes (step 3: searching for themes). The themes were checked against existing codes and datasets to ascertain quality, boundaries, thickness, and coherence (step 4: reviewing potential themes). In the process of recoding, three sub-themes emerged within an existing theme, resulting in a total of three main themes and three sub-themes. The themes were named and adequately defined (step 5: defining and naming the themes), and the findings were then reported (step 6 actual reporting of findings) as follows:

RQ1: How do Nigerian Youths Define Poverty?

Theme 1: Poverty as the Absence of the Basic Necessities of Life

Poverty is multidimensional and may mean different things to different people depending on their personal experiences and observations. Most of the participants defined poverty in terms of the inability to afford the basic necessities of life. One participant defined poverty as “A state of economic deprivation, where an individual or community lacks access to basic necessities like food, water, shelter, education, and healthcare, hindering their well-being and dignity”. In the words of another participant, “Poverty is a state of not having enough financial resources to afford a decent standard of living”.

The FGD with the teenagers on the meaning of poverty also revealed a recurring definition of the concept as the lack of access to the basic needs of life. These teenagers concluded that poverty is a condition in which an individual or family experiences poor nutrition, lack of good clothing, shelter, and funds for educational pursuit and other development purposes.

In line with the findings of this study, Ramphoma (2014) defined poverty as not having enough resources to afford a socially acceptable minimum standard of living. He suggested that an understanding of the meaning of poverty will provide insight into the formulation of the right alleviation strategies. Similarly, the 2019 grouping of Nigerian youths into low-risk, especially vulnerable, and most at-risk categories showed that the Federal Ministry of Youth and Sports Development had an understanding of what poverty meant to different categories of the youth population. Supporting the categorization, Jerumeh (2024) conceived poverty as a deprivation of basic capabilities and not just a lack of resources. Suggesting that poverty is multidimensional, in levels, and experienced differently.

RQ2: What are the Subjective Experiences of Rural Youths in Nigeria?

Theme 2: Personal Experiences with Poverty

The participants narrated their personal struggles with poverty as occasioned by their family backgrounds and socioeconomic statuses. They talked about their limitations, lost opportunities, family dynamics, resilience, and the possibility of social mobility. Three sub-themes emerged that capture the lived experiences of the participants.

Sub-Theme 1: Poor Living Standards. This sub-theme captures participants' lived experiences with regard to access to basic necessities of life such as food, clothing, and decent accommodation. The majority of the participants said they had difficulty feeding; in most cases, they managed whatever was available, not minding the nutritional benefits, and often skipped meals. Many of them explained how they and their families had to manage in overcrowded accommodations, with parents struggling to pay



rent and sometimes resorting to borrowing and selling personal belongings.

One Participant confessed to be currently struggling with poverty, as he is in debt and repaying loans. He blurted, *"I have loans that I'm yet to pay, and every amount feels like a whole lot of money, regardless of how small the money is."* Similarly, another participant recalled how he struggled with basic physiological needs, such as food and decent accommodation. He narrated how he shared a room apartment with a family of six and would not dare to sleep when it rains. In his words, *"I couldn't sleep when it rains because the roof would be leaking and water coming out from the ground."* In the same vein, a third participant recounted his struggles with poverty, how he could barely feed and wear decent clothes. In his words, *"I remember struggling to make ends meet, wearing hand-me-down clothes, and often going hungry. There was a time I needed a new pair of shoes for school, but my parents could not afford them. I had to wear worn-out shoes with holes, feeling embarrassed and self-conscious among my peers"*. These findings are at variance with children's rights to a standard of living that supports their physical, mental, spiritual, moral, and social development as recognized by the United Nations Convention on the Rights of the Child, Article 27 (Carter, 2014).

Sub-Theme 2: Goal Constraints and Lost Opportunities. This sub-theme covers participants' experiences of delayed education, lost opportunities, and constraints in the pursuit of their dreams. Some of the participants experienced delays in their education due to lack of finances. They narrated how they missed the opportunity to acquire important skills because they could not afford the training fees. A participant recalled how he missed a chance to change his life; in his words, *"I lost a scholarship opportunity to study abroad because I couldn't afford the application fees and travel documents."* Also, he claimed that poverty deprived him of access to quality education, healthcare, and other resources, which had serious negative consequences on his career and skill acquisition plans. Likewise, another participant claimed that poverty caused him to miss out on self/career development opportunities. He said, *"Poverty has robbed me of the chance to discover my talents, purpose, and attend a good standard college."* He believed that he would have had a better outcome if he had gone to a proper basic school and college. These findings were supported by Oblitne et al. (2009), who asserted that the inability of poor people to access basic needs hinders them from realizing their full potential and making meaningful contributions to national development. Nam (2020) also observed that studies labelled individuals as poor when they lacked the basic capabilities needed to make the most of practical opportunities that come their way. In response to some of these challenges, the National Youth Policy (2019-2023) committed to ensuring that all public secondary schools and tertiary institutions are adequately equipped for computer science and ICT training.

Sub-Theme 3: Inferiority Complex and Low Morale. This sub-theme captures the emotions, mindset, and level of morale expressed by the participants. Some of the participants voiced feeling inadequate among their peers, hopeless, and having no sense of purpose in life. A participant confessed to feeling embarrassed around his friends; he said, *"I feel embarrassed*

hanging out with my friends who seemed not to have a care in this world, while I was mostly hungry and could not get a meal to sustain me in class." Another participant complained about feeling stressed and frustrated as a result of poverty. He admitted, *"The constant stress and financial struggles also drained my energy and motivation, making it challenging to stay focused on my objectives."* He also believed that breaking the cycle of poverty for him will be a challenging and difficult journey because poverty has a way of frustrating a person's efforts. Yet, he expressed optimism in the possibility of changing his financial status through resilience and dedication.

Corroborating these findings, Carter (2014) reported that a child affirmed that being poor is rubbish and makes people feel like rubbish. Correspondingly, Hile (2018) affirmed the psychological effects of poverty to include negative emotions such as shame and lack of self-worth. According to the General Strain Theory (GST), negative emotions are caused by certain stressors that pressure individuals to take corrective actions (Agnew, 1992). To this end, Okeke et al. (2018) suggested the involvement of mental health officers in poverty alleviation strategies.

RQ3: What are the Coping Strategies for Poverty Among Nigerian Youths?

Theme 3: Coping with Poverty

The participants explained the different ways they cope with the issues of poverty in their lives and what they observed among their peers. Most of the participants stated that they cut down on their expenditures, took on different jobs and businesses, craftsmanship, took loans, engaged in the social media space, and developed good saving habits, among others. All of these are acceptable strategies, but when asked about what they observed in their peers, positive and negative strategies were mentioned. These included drugs, entrepreneurship, trading cryptocurrency, ritual killing, excessive gambling and sports betting, prostitution, craftsmanship, theft, cultism, digital marketing, cyber fraud, support from family and friends, etc.

One participant admitted difficulty in coping with poverty and claimed to focus on his studies, seeking support from loved ones and finding ways to help others in similar situations. He said, *"I cope by focusing on my studies, seeking support from loved ones, and finding ways to help others in similar situations."* Another participant claimed to have accepted his fate and looked forward to some miraculous intervention while he continued working and schooling to be able to afford his basic needs. A female participant said, *"My parents support me and I augment with the proceeds from my gele tying business,"* She observed that many decent Ota youths are casual workers in neighbouring factories, and some others are artisans, but a large percentage are motor park touts, armed robbers, fraudsters, and prostitutes. She also mentioned that many rural youths lack exposure, which has limited their dreams and aspirations in life.

The FGD revealed that the internet has a lot of influence on the choices that young people make these days. As difficult as they claimed their family situations are, they still manage to get Android phones with which they connect

Table 1. Poverty and Coping Strategies in Rural Nigeria.

Research Questions	Recurrent Responses
RQ1: How do Nigerian youths define poverty?	1. Inability to afford basic needs of life 2. Loss or lack of access to necessary opportunities for growth and development
RQ2: What are the subjective experiences of rural youths in Nigeria?	1. Difficulty in meeting their basic needs like food, clothes, and shelter 2. Loss of valuable opportunities 3. Development of learned helplessness 4. Self-determination and a will to fight
RQ3: What are the coping strategies for poverty among Nigerian youths?	1. Adapting to the situation 2. Prioritizing needs 3. Managing available resources 4. Support from family and friends 5. Fraudulent activities 6. Remote jobs 7. Menial labours 8. Entertainment/use of social media 9. Trading cryptocurrency 10. Entrepreneurship 11. Faith in God 12. Drugs 13. Rituals and crimes 14. Prostitution 15. Theft 16. Gambling

with peers and find ways to adapt to their situations. Some of the identified coping strategies include skill acquisition, cryptocurrency, education, menial jobs, drugs, rebellion, faith in God, yahoo-yahoo, prostitution, music, TikTok, ritual killing, cultism, burglary, sports betting, petty trading, and support from parents among others. The results are summarized in Table 1.

In line with these findings, Torimiro and Kolawole (2005) noted that most rural youths in Kwara, Osun, and Ogun states depend on their parents for financial support, and others engage in trading and street hawking, daily paid casual labour, motor-park garage touting, mounting of roadblocks, armed robbery, prostitution and blood touting as their survival strategies. Similarly, Adegboyega et al. (2016) confirmed that the coping strategies of unemployed youths in Kwara state include parental support, vocational training workshops, and casual labour. Likewise, Nwakanma and Igbe (2020) listed street begging, menial jobs, prostitution, drugs, theft, cyber fraud, and aggressive behaviours as the coping strategies of unemployed youths in Cross River state. These studies reveal a similar trend in the coping strategies of youths.

Conclusion

The coping strategies employed by rural youths have long-term consequences for the growth and development of the nation. While positive coping strategies may produce consequences like character development, creativity, economic growth, peace, and security, negative coping strategies can have devastating consequences like imprisonment, premature

death, sexually transmitted diseases, unwanted pregnancies, and mental breakdown, among others. The overarching consequence for the nation is the colossal loss of manpower and future leaders.

Several policies and strategies have been formulated in Nigeria to combat poverty and prevent the associated consequences (Okeke et al., 2018). For instance, the National Youth Policy aims to develop Nigerian youths with equal opportunities to realize their dreams and aspirations, irrespective of their backgrounds (Federal Ministry of Youth and Sports Development & UNFPA Nigeria, 2019). No doubt, this initiative aligns with the findings of the current study; the target beneficiaries are young people 15-29 years old at the secondary and tertiary educational levels. However, many young people traced the source of their limitations to poor elementary education. In fact, a participant concluded that at age 25, it was too late for him to make meaningful progress because he missed the opportunity for self-discovery due to the poor standard of his elementary education.

Nigerian government did not leave out elementary schools in the poverty alleviation programmes, it initiated the Home-Grown School Feeding Programme (HGSF) to meet the most basic needs of school children at the elementary level (Akujuru & Enyioko, 2019). But, beyond this basic need, children in rural areas need access to well-resourced schools and good-quality education at this level. The vision of the National Youth Policy to equip public secondary and tertiary institutions should be replicated at the elementary school level to further reduce existing inequalities between the privileged and the poor children.

Furthermore, Egbe (2014) noted that the elitist approach to policy implementation impedes the success of rural development policies. There is a need to adapt the policies to the needs of the different categories of Nigerian youths, as identified by the Federal Ministry of Youth and Sports Development (2019). Most rural youths are not in touch with civilization and maybe laid back in their approach to life. Government policies need to focus on how to rescue these youths from the clutches of mediocrity. This study suggests classroom rotation or teacher exchange programs between prestigious, well-equipped elementary and secondary schools and their rural counterparts; student exchange programs will also provide a platform for poor rural children to interact with other pupils from privileged backgrounds, which will have positive effects on their outlook on life. Lastly, periodic sponsored excursions should be undertaken by the government to afford poor rural youths the chance to experience the world beyond their normal limitations.

Limitations and Future Research Directions

The non-probabilistic properties of the purposive sampling technique limited the generalizability of the findings of this study. Also, the scope of the study was restricted due to insufficient funds. Therefore, this study suggests that future



research employ a mixed-method and probabilistic sampling technique for more robust findings that can be widely generalized. Likewise, longitudinal studies will provide greater insights into the long-term effects of coping strategies and the role of maturation.

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Beyond Income Poverty: Recognizing Material Hardship Influences on the Development of Self-Regulation Across Childhood

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In the United States, more than one in three children experiences at least one form of material hardship annually (Maternal and Child Health Bureau, 2023; Rodems & Shaefer, 2020). Material hardship, while related to but distinct from income poverty, has profound and far-reaching implications for child and youth development. Emerging research has documented that material hardship is linked to increased aggression, externalizing behavioral problems, reduced social-emotional competence, and heightened anxiety and depression in children (Bellair et al., 2021; Edmunds & Alcaraz, 2021; Zilanawala & Pilkauskas, 2012). One of the foundational developmental indicators for adaptive functioning and long-term well-being is self-regulation (Robson et al., 2020), which is particularly susceptible to adverse economic contexts (Blair & Raver, 2012; Evans & Kim, 2013; Palacios-Barrios & Hanson, 2019). While extensive literature has documented the detrimental effects of poverty exposure on self-regulation across cognitive (Raver et al., 2013; Taylor & Barch, 2022), behavioral (Liu et al., 2024; Yu et al., 2020), and emotional domains (Kim et al., 2013; Liberzon et al., 2015), relatively little attention has been given to understanding how material hardship specifically influences these developmental trajectories. This critical review examines the conceptual frameworks, theoretical mechanisms, and empirical evidence of how material hardship influences self-regulation domains. It further identifies conceptualization and measurement challenges and outlines future research directions.

Material Hardship and Self-Regulation: Conceptual Frameworks

Material hardship refers to the direct experiences of inability to meet basic economic needs, such as food insecurity, housing instability, and medical hardship (Campbell et al., 2022;

Heflin et al., 2009; Iceland et al., 2021). Unlike income poverty, which measures household earnings relative to a fixed federal poverty line, material hardship captures the concrete deprivations in daily life, providing a more tangible measure of economic adversity (Iceland et al., 2021; Sullivan et al., 2008). Material hardship indicators are conceptually and empirically distinct from both objective income-based measures (e.g., income-to-needs-ratio) and subjective financial strain (e.g., caregivers' perception of difficulty making ends meet) (Gershoff et al., 2007; Iceland et al., 2021; Schenck-Fontaine & Panico, 2019; Sullivan et al., 2008). Prior studies have shown that material hardship indicators demonstrate acceptable internal consistency, are only moderately correlated with income, and uniquely predict child and family outcomes (Campbell et al., 2022; Schenck-Fontaine & Panico, 2019). Indeed, the experience of material hardship does not uniformly correspond to income poverty. Nationally representative data from the Survey of Income and Program Participation showed that 45% of families below 100% of the federal poverty line experienced three or more types of material hardship, while 21% of households with incomes above 200% of the poverty line also encountered three or more types of material hardship (Rodems & Shaefer, 2020). Clarifying these differences strengthens the methodological approach by positioning material hardship as a distinct, empirically supported construct that reflects families' lived economic conditions.

Throughout childhood, material hardship manifests across multiple domains, including bill, housing, food, utility, and medical hardships (Heflin et al., 2009; Thomas, 2022). These material hardships evolve over time, varying in duration, rate of change, and severity (Bellair et al., 2021; Daundasekara et al., 2020, 2021; Liu et al., 2024). Families could experience persistent, chronic hardship and transient fluctuations of hardship at different levels (Bellair et al., 2019; Schenck-Fontaine & Panico, 2019). Notably, racial disparities in material hardship exist, such that Black, Latinx, and Native American children are disproportionately exposed to material hardship at higher rates compared to their White and Asian peers (Maternal and Child Health Bureau, 2023; Wildsmith et al., 2024). Additionally, family structures, such as single-parent households, face higher risks of experiencing material hardship (Heflin, 2017), highlighting the intersection of economic and social factors in shaping children's developmental contexts. Given its direct impact on daily living conditions, material hardship has been increasingly recognized as a critical factor

influencing children's self-regulation development, highlighting the need to move beyond income poverty in understanding economic deprivation.

Self-regulation is an individual's ability to control behavior, attention, and emotions in response to environmental demands, enabling them to engage in goal-directed actions (Kopp, 1982; McClelland et al., 2010; Nigg, 2017). While diverse conceptualizations of self-regulation exist within developmental science, a widely accepted theoretical framework is the bidirectional psychobiological model, which integrates both top-down and bottom-up processes (Blair, 2016; Blair & Ku, 2022). Top-down processes involve higher-order executive functions that support sustained attention, inhibitory control, working memory, and cognitive flexibility (Diamond, 2013; Petersen & Posner, 2012). These top-down processes are associated with the prefrontal cortex, enabling individuals to regulate attention, suppress impulsive responses, and flexibly adapt to changing cognitive demands (Blair, 2016; Garon et al., 2008). In contrast, bottom-up processes reflect automatic, reactive, and unconscious reactions involved in emotional reactivity and physiological arousal in response to environmental stimuli (Blair, 2016).

For this paper, I specifically focused on cognitive self-regulation and behavioral self-regulation, as these two self-regulatory processes are reciprocally interconnected but are differentially shaped by poverty-related adversity (Liu et al., 2024; Loomis, 2021). Originating from temperament literature (Rothbart et al., 2004), behavioral self-regulation involves multiple processes, including effortful control, impulse control, and emotional regulation (Nigg, 2017), which are essential for long-term school readiness, psychological health, and reduced engagement in risky behaviors (Robson et al., 2020; Sawyer et al., 2015; Schmitt et al., 2014). Grounded in developmental neuroscience (Diamond, 2013), cognitive self-regulation involves higher-order processes that enable individuals to monitor, plan, and adjust cognitive strategies to meet task demands and achieve long-term objectives, contributing to academic achievement, social-emotional competence, and adaptive behaviors (Best et al., 2011; Blair & Razza, 2007; Murphy et al., 2022).

Theoretical Mechanisms Linking Material Hardship and Self-Regulation

Several development theories offer insight into how material hardship influences children's self-regulation development across cognitive and behavioral domains. Grounded in the metatheory of the developmental systems framework (Lerner, 1996; Lerner et al., 2006) and the relational developmental systems perspective (Lerner et al., 2018; McClelland et al., 2015), this approach emphasizes developmental plasticity and the dynamic interactions between individuals and their changing contexts over time. From this perspective, self-regulation development is profoundly shaped by the broader ecological context in which children are embedded, including economic conditions that fluctuate across childhood (McClelland et al., 2015). Material hardship manifests as a specific form of economic adversity that disrupts stability, predictability, and the relational and contextual conditions necessary to support self-regulation development. Exposure to material hardship can be experienced as resource deprivation, household instability, and

unpredictable home environments, which collectively shape children's physiological and behavioral responses to stress. These environmental disruptions could differently influence self-regulation domains. For example, chronic instability and reduced access to cognitively enriching experiences, such as structured routines, learning materials, and language-rich interactions, could hinder the development of cognitive self-regulation (Finegood & Blair, 2017; Gershoff et al., 2007; Hackman et al., 2015; Selman & Dilworth-Bart, 2024). Comparatively, behavioral self-regulation could be disrupted when children experience heightened emotional arousal and inconsistent parent-child interactions, which interfere with co-regulation processes and limit consistent emotional modeling that children rely on to develop impulse control (Evans & Kim, 2013; Olson & Lunkenheimer, 2009).

From a biological stress perspective, material hardship functions as a chronic contextual stressor that activates children's physiological stress response systems. Prolonged exposure to hardship-induced stress can lead to physiological dysregulation, including increased allostatic load, disruption of the hypothalamic-pituitary-adrenal (HPA) axis, and elevated cortisol levels (Blair, 2010; Blair et al., 2011; Evans & Kim, 2007). These biological changes can impair the structure and function of the prefrontal cortex, a brain region critical for developing executive function, including working memory, inhibitory control, and attentional flexibility, which underlie cognitive self-regulation (Blair & Raver, 2012; McLaughlin et al., 2014; Palacios-Barrios & Hanson, 2019). As a result, children exposed to chronic material hardship may struggle to sustain attention, adapt flexibly to demands, and engage in goal-directed thinking and behavior, which patterns well documented in the poverty research (Brandes-Aitken et al., 2019; Hackman et al., 2015; Raver et al., 2013; Taylor & Barch, 2022) but less frequently examined in relation to material hardship specifically. At the same time, HPA axis dysregulation heightens emotional reactivity and sensitivity to threats, placing children in a persistent state of hyperarousal and vigilance (Evans & Kim, 2013; Loman & Gunnar, 2010; Wesarg et al., 2020). This heightened reactivity can undermine behavioral self-regulation by making it more difficult for children to inhibit impulses, tolerate frustration, and modulate emotional responses in challenging situations (Blair & Raver, 2016; Liu et al., 2024; Loman & Gunnar, 2010). Over time, prolonged exposure to economic stressors associated with material hardship can become biologically embedded, that is, "under the skin," manifesting as chronic physiological dysregulation that constrains cognitive and behavioral self-regulatory capacity (Schmidt et al., 2021).

Beyond contextual and biological pathways, material hardship also influences children's self-regulation through family dynamics, as conceptualized in the family stress model (Conger et al., 2010) and family investment model (Donnellan et al., 2013; Yeung et al., 2002). The family stress model posits that economic hardship increases parental stress, which in turn disrupts parenting practices, reducing warmth, emotional availability, and consistency while increasing harsh discipline (Conger et al., 2010). Exposure to material hardship can, therefore, undermine the development of behavioral self-regulation, which initially emerges through co-regulation with caregivers and gradually transitions into independent self-regulation through consistent emotional modeling to support (Calkins, 2004; Olson & Lunkenheimer,



2009). In contrast, the family investment model highlights that economic hardship limits parents' capacity to invest in cognitively enriching resources, such as learning materials, adequate nutrition, and educational enrichment, that are essential for the development of cognitive self-regulation (Conger & Donnellan, 2007). When families experience chronic material hardship, parents may have reduced capacity to engage in developmentally supportive interactions and could face challenges in providing cognitively stimulating environments. These material limitations could hinder children's opportunities to practice planning, attentional control, and goal-directed problem-solving (Blair & Raver, 2012; Yeung et al., 2002). Together, these models highlight distinct but complementary family-level mechanisms through which material hardship influences both behavioral and cognitive aspects of children's self-regulation.

Material Hardship and Self-Regulation: Empirical Evidence

To examine how material hardship affects self-regulation development, researchers have primarily adopted variable-centered and person-centered approaches to conceptualize and measure economic adversity. The variable-centered approach investigates the associations between levels or specific domains of material hardship and self-regulation outcomes, assuming homogeneity in these relationships across individuals (Laursen & Hoff, 2006). Within this framework, some studies adopt a cumulative risk approach (Evans et al., 2013), also referred to as a domain-general variable-centered approach, which aggregates multiple hardship indicators into a single composite score. Studies using this approach have consistently shown that greater cumulative exposure to material hardship predicts children's weaker executive function (DeJoseph et al., 2021; Gershoff et al., 2007; Kokosi et al., 2021; Raver et al., 2013), lower effortful control (Fuller et al., 2018; Taylor et al., 2018), and greater behavioral dysregulation as evidenced by increased behavioral problems (Bellair et al., 2019; Liu et al., 2022; Schenck-Fontaine & Ryan, 2022; Zilanawala & Pilkauskas, 2012). However, while this approach is useful for identifying children most at risk due to higher levels of material hardship, it fails to differentiate between distinct types of hardship. Instead, it assumes that all forms of hardship influence children's self-regulation through the same mechanisms, which overlooks the distinct developmental pathways that may result from specific hardship experiences.

Alternatively, a domain-specific variable-centered approach examines how distinct types of material hardship uniquely affect cognitive and behavioral self-regulation. For example, housing hardship, including housing instability, eviction, and residential mobility, has been linked to greater cognitive and behavioral dysregulation (Roy et al., 2014), lower effortful control (McCoy & Raver, 2014), poorer cognitive development (Schwartz et al., 2022), diminished inhibitory control (Schmitt et al., 2015) and increased behavioral problems (Schmitt et al., 2017). Food hardship, referring to the inability to afford sufficient or nutritionally adequate food, is associated with weaker executive functioning (Grineski et al., 2018; Hobbs & King, 2018), lower behavioral self-regulation (Encinger et al., 2020), and increased behavioral problems (Johnson & Markowitz, 2018; King,

2018; Shankar et al., 2017; Slack & Yoo, 2005). Bill hardship, often overlooked in income-based poverty measures, has also been linked to deficits in executive function and behavioral self-regulation (Evans & Kim, 2013; Taylor & Barch, 2022; Yu et al., 2020). Utility hardship, defined as the experience of heat, electricity, or telephone disconnections, is linked to greater behavioral problems (Fernández et al., 2018) and poorer health status in toddlers (Cook et al., 2008). Medical hardship, referring to the inability to access healthcare or health insurance, is associated with children's worst health (Sarathy et al., 2020). However, limited research has directly examined the impact of utility or medical hardship on children's self-regulation. While this approach offers greater specificity in capturing the unique effects of different hardships on self-regulation, it does not account for co-occurring material hardship (Heflin et al., 2009; Rodems & Shaefer, 2020; Wildsmith et al., 2024). By isolating singular hardship domains, this approach may overlook the cumulative and interactive effects of multiple economic adversities on self-regulation development.

In contrast, the person-centered approach (Howard & Hoffman, 2018; Magnusson, 2003) has been increasingly used to capture heterogeneity in material hardship by identifying distinct subgroups of families with shared exposure patterns over time. Limited but growing research has adopted a domain-general person-centered approach, using Growth Mixture Modeling with cumulative hardship scores to identify distinct hardship trajectories across early childhood. For example, Daundasekara et al. (2020, 2021) identified four hardship trajectories in early childhood, including *high-increasing*, *high-decreasing*, *low-increasing*, and *low-stable*, and found that children in the high-increasing hardship trajectory were more likely to develop overweight or obesity in adolescence compared to those in the low-stable trajectory. Similarly, Bellair et al. (2021) identified *high*, *moderate*, and *low* hardship trajectories across childhood and found that children in the high hardship trajectory were three times more likely to exhibit externalizing behaviors in middle childhood than those in the low hardship trajectory. These findings capture heterogeneous patterns in the chronicity and severity of families' material hardship experiences. However, this approach has not directly applied to examine how self-regulation changes in response to exposure to different material hardship trajectories, and it often overlooks the multidimensional and co-occurring nature of material hardship domains (Heflin et al., 2009).

More recently, a domain-specific person-centered approach has emerged to examine co-occurrence, continuity, and change of multiple hardship domains (i.e., housing, food, utility, medical, and bill hardship) and how distinct hardship patterns influence children's behavioral well-being. Unlike the domain-general person-centered approach, this approach captures the severity and persistence of co-occurring hardships within families. For example, Liu et al. (2023) identified four hardship patterns in infancy, including *low hardship*, *bill hardship*, *bill & utility hardship*, and *food, bill, & utility hardship*, and found that children in the food, bill, & utility hardship class had the highest likelihood of developing the low, increasing behavioral self-regulation trajectory from early to middle childhood. Similarly, Thomas (2024) identified six longitudinal hardship patterns from early childhood to adolescence, including *mostly limited*, *mostly moderate*, *mostly severe*, *improving*, *worsening*, and *inconsistent*, showing that more

intense hardship profiles were linked to poorer adolescent health and behavioral outcomes. Liu et al. (2024) also uncovered four conjoint hardship trajectories in early childhood, including *low stable*, *increasing bill and utility hardship*, *high infancy bill hardship*, and *persistent and pervasive*, and found that children in the persistent and pervasive trajectory showed the lowest behavioral self-regulation in middle childhood. Collectively, this approach offers nuanced insights into how stability, fluctuation, and co-occurrence of material hardship domains shape behavioral self-regulation, although more research is needed to explore impacts on cognitive regulation outcomes.

Challenges and Future Directions

Despite their multidimensionality, material hardship, and self-regulation are often examined as singular constructs, limiting our understanding of how specific hardship patterns differentially impact self-regulation domains. To the best of my knowledge, only a few empirical studies examine distinct co-occurring types of material hardship linked to children's behavioral self-regulation (Liu et al., 2023, 2024) and behavioral dysregulation manifesting as behavioral problems (Thomas, 2024; Zilanawala & Pilkauskas, 2012). However, it remains unclear how the co-occurring hardship patterns relate to cognitive self-regulation development. Considering that self-regulation domains could be differentially impacted by specific or co-occurring material hardship experiences (Blair, 2010; Blair & Raver, 2012; Palacios-Barrios & Hanson, 2019), a person-centered domain-specific approach is recommended. This approach would assess whether particular hardship patterns (e.g., persistent co-occurring hardships vs. singular specific hardship) have distinct effects on specific self-regulation domains (e.g., executive function vs. behavioral self-regulation). Future research should apply longitudinal mixture modeling (Grimm & Ram, 2009; Jung & Wickrama, 2008) to identify patterns of co-occurring hardships and explore which co-occurring patterns, types, and severities are more predictive of self-regulation in specific domains. The person-centered domain-specific approach would allow researchers to design targeted interventions to support children's exposure to specific material hardship at critical developmental time points that are most disruptive to self-regulatory development.

The impact of material hardship on self-regulation also varies across developmental stages; yet, previous studies do not capture the co-development of these factors across different ages, focusing instead on specific developmental stages such as infancy or early childhood (Liu et al., 2023, 2024). In early childhood, the rapid development of the prefrontal cortex heightens preschoolers' sensitivity and malleability to hardship exposure (Diamond, 2013; Iruka, 2025; McClelland et al., 2015), impacting their cognitive and behavioral self-regulatory development (Palacios-Barrios & Hanson, 2019). As children transition into middle to late childhood, chronic exposure to material hardship can prolong stress activation, placing children in a persistent state of hypervigilance (Blair, 2010; Masten & Cicchetti, 2010), which can be maladaptive for their self-regulation development over time. Thus, future research could employ advanced person-centered methodologies, such as parallel process growth mixture modeling, to examine the evolving contexts of material hardship and

children's self-regulation developmental adaptation (Grimm & Ram, 2009). This approach would allow researchers to capture whether changes in material hardship trajectories correspond with recovery or decline in self-regulation and to determine whether sensitive periods (e.g., early childhood vs. preadolescence) represent key windows for intervention. Addressing these questions would clarify the timing and developmental dynamics of material hardship's impact on self-regulation, helping to identify whether types of material hardship exert disproportionate effects on self-regulation domains at specific developmental stages.

Additionally, parenting and household dynamics play a critical role in shaping how material hardship influences children's self-regulation, yet further research is needed to disentangle the specific mechanisms through which these processes operate. For example, parenting stress, harsh discipline, and parental warmth are well-documented pathways through which material hardship impacts children's self-regulation development (Gershoff et al., 2007; Lee et al., 2024; Neppel et al., 2016; Schenck-Fontaine et al., 2020). Additionally, context factors, such as household chaos (Brown et al., 2019; Evans et al., 2005; Evans & Kim, 2013) and relational processes, such as marital conflict (Conger & Donnellan, 2007), may serve as mechanisms that amplify the risk by creating unpredictable and stressful home environments. Furthermore, parenting processes could also function as moderators, shaping the extent to which material hardship influences children's self-regulation. Parents with higher self-regulation, stronger emotion regulation, or lower impulsivity may demonstrate greater resilience and employ effective coping strategies in response to financial stress (Bridgett et al., 2015), thereby buffering their children from its negative developmental consequences. In contrast, parental depression may result in harsher parental discipline in response to material hardship (Magnuson & Duncan, 2019), exacerbating its adverse effects on children's self-regulation development. Thus, future research should explore mediated moderation and moderated mediation models to better capture these complex dynamics. Identifying these specific pathways at varying levels would advance our theoretical understanding of how economic adversity operates within family systems and inform targeted interventions that enhance parental self-regulation and stress-coping mechanisms to improve child outcomes.

In addition to individual and family-level processes, future research should consider broader social-ecological contexts that may moderate the relationship between material hardship and children's self-regulation. For example, neighborhood collective efficacy and access to community educational resources, such as day-care centers, afterschool programs, libraries, and community centers, may offer structured opportunities for cognitive engagement and social interaction, potentially buffering the adverse effects of hardship on self-regulatory development (Ursache et al., 2022). School environments are also critical as burgeoning research has documented that social-emotional learning programs, such as Tools of Mind (Barnett et al., 2008; Diamond, 2013), the Promoting Alternative Thinking Strategies Curriculum (Fishbein et al., 2016; Humphrey et al., 2016; Stanley, 2019), and Mindfulness-based intervention (Lemberger-Truelove et al., 2018; Segal et al., 2021), could foster both cognitive and behavioral self-regulation, with particular benefits for children from economically disadvantaged backgrounds.



Peer relationships may also serve as another important moderator such that positive peer interactions could strengthen self-regulation, while peer rejection or exclusion could exacerbate self-regulatory difficulties (Choi et al., 2018; Pahigiannis & Glos, 2020). Examining these multi-level moderators would provide a more holistic and ecologically grounded understanding of how children develop self-regulation in the context of experiencing material hardship.

Furthermore, to date, most studies on material hardship and self-regulation have relied on urban or national representative samples, such as samples from the Future of Family and Child Wellbeing Study (e.g., Liu et al., 2024; Thomas, 2024; Zilanawala & Pilkauskas, 2012) or Panel Study of Income Dynamics (e.g., Schenck-Fontaine & Ryan, 2022)), raising questions about whether these findings can be generalized to rural poverty contexts. Rural families with distinct characteristics, such as spatially concentrated poverty, persistent poverty, and growth of the working poor, may experience different patterns of material hardship (Lichter & Schafft, 2017). For example, a study among Midwestern-dwelling households found that rurality decreased the odds of experiencing all types of hardship (e.g., food, transportation, and healthcare access) compared to non-rural families (Conrad & Ronnenberg, 2022). Similarly, another study among a low-income tax filer sample found that rural households had a lower risk for food insecurity and no significant difference in housing hardship compared to urban households (Despard et al., 2022). Thus, future studies should incorporate geographic variation and rurality into consideration to examine co-occurring material hardship patterns and explore how these distinct patterns shape self-regulation outcomes differently than those in urban populations.

Lastly, to inform the design of the intervention and policies that mitigate the negative effects of material hardship on children's self-regulation, this review highlights the importance of providing financial support during early sensitive developmental windows. Although unconditional cash transfer programs, such as *Baby's First Years*, which provide monthly cash payments to low-income mothers, have not yet found significant impacts on children's health, sleep, or social-emotional development (Hart et al., 2024; Sperber et al., 2023), these findings do not suggest that financial support is ineffective. Rather, future interventions should explore mechanisms that more directly address multiple, co-occurring domains of material hardship through targeted and tangible financial support with increasing cash flows that may better promote low-income children's self-regulation development. From a policy perspective, this review highlights the critical need to maintain and expand access to social welfare and safety net programs. Programs such as Temporary Assistance for Needy Families (TANF) and Supplemental Nutrition Assistance Program (SNAP) play essential roles in stabilizing family finances and mitigating acute disruptions by offering immediate economic relief (McKernan et al., 2021; Ratcliffe et al., 2011). In parallel, housing assistance and housing vouchers help reduce chronic hardship by providing families with stable and affordable living environments (Cai, 2024; Shamsuddin & Campbell, 2022), which is essential for fostering a secure environment children need to develop self-regulation.

Conclusions

This critical review underscores the need to move beyond income-based poverty measures to examine the distinct, co-occurring, and dynamic dimensions of material hardship that shape cognitive and behavioral self-regulation development. By adopting person-centered domain-specific and longitudinal approaches, future research can identify heterogeneous material hardship trajectories across developmental transitions and clarify how the timing, persistence, and severity of hardship lead to self-regulatory adaptation or disruption across childhood. Expanding research beyond urban samples to include rural contexts will provide a more comprehensive understanding of how geographic variations in material hardship patterns influence children's self-regulation development. Addressing these gaps is essential for advancing developmental science and informing the design of targeted interventions that mitigate the adverse effects of material hardship on children and families.

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“And What About Us?”: Poverty and Social Inequality from the Perspective of Brazilian Adolescents

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Introduction

Adolescence is a period of intense biological, psychological, and social changes. Socioeconomic variables, considering the territory in which adolescents live, can serve as a risk factor for their full development. Social inequality affects adolescents and can result in social exclusion, as well as bring a range of potential stressors such as scarcity of social resources, violence, weakened family and community relationships, and lack of social and familial support (Oliveira et al., 2020). Social vulnerability during adolescence also implies a lack of guaranteed rights and opportunities in areas such as education, health, and social protection and can expose adolescents, for example, to child labor (Araujo De Moraes et al., 2012).

In the Brazilian context, many young people experience adolescence in conditions of vulnerability due to the country's deep socioeconomic inequalities. About 27.4% of the 216.4 million inhabitants live below the poverty line (IBGE, 2023). The number of children and adolescents in poverty in the country reached 28.8 million in 2023 (UNICEF, 2025). More than half of the population aged 0 to 17 years (55.9%) still faces deprivations in various dimensions, such as income, education, access to information, water, sanitation, housing, and protection against child labor (UNICEF, 2025). Previous studies have shown that non-white adolescents from low socioeconomic status backgrounds, whose parents have low levels of education and live in large families, tend to face greater academic difficulties (Triaca et al., 2020) and mental distress (Barros et al., 2022).

Social inequality not only limits access to essential resources but also restricts opportunities that could foster the development of skills and expand future possibilities (Arruda & Arruda, 2007). These limitations become even more apparent during adolescence, a stage in which socioeconomic inequality stands out as one of the primary obstacles to accessing fundamental rights, such as education, leisure, culture, and health. The precarious living conditions and the

fragility of collective bonds intensify social exclusion, hindering developmental opportunities (Gomes et al., 2020). Moreover, the consumer culture reinforces this inequality by creating pressure to acquire material goods as a form of social recognition (Gomes et al., 2020).

In this way, adolescents still experience the negative expectations placed upon them. These expectations are fueled by a culture marked by stereotypes, prejudices, and stigmas associated with their socioeconomic status (SES). As a result, youth undergo a process of social invisibility that excludes them from public policies, limits their participation, and restricts their access to collective spaces (Arruda & Arruda, 2007).

Adolescence in the national context is shaped by complex dynamics of inequality, especially regarding differences in the maturation and development processes among different races/ethnicities. Furthermore, there is the intersection of racism and sexism, which frequently leads to the early inclusion of non-white girls in low-paying and low-prestige job occupations, such as domestic labor, limiting their educational and developmental opportunities (Carneiro, 2011).

In this context, we follow the proposal of an intersectional analytical model, connecting social inequality to aspects of gender and race/ethnicity oppression (Cho et al., 2013). The intersectional analytical model reveals how oppressions and privileges overlap, making inequalities interconnected. Thus, the adopted model reinforces its political commitment and contributes to understanding systems of oppression (Pereira, 2022).

Given this, the question arises: how does poverty impact adolescence in a country marked by social inequality? To deepen the understanding of how adolescents experience this phase in contexts of social vulnerability, this research included the participation of low-income adolescents residing in a Brazilian city. Data collection was conducted through focus groups using a semi-structured guide and a sociodemographic questionnaire to characterize the participants. The data analysis followed all the steps outlined by thematic analysis (Braun & Clarke, 2006). Initially, the research team conducted a thorough reading of the focus group transcript, identifying the main themes and grouping them into three categories: Interrupted Adolescence, Meanings of Social Inequality, and Possible Futures in Poverty.

Results

This research was conducted in partnership with the Youth Training, Advisory, and Research Center (CAJUEIRO), a philanthropic organization based in the state of Goiás, Brazil. This

institution focuses on promoting the rights of children, adolescents, and young people, with an emphasis on civic education, supporting social projects, and producing knowledge about youth. Among its initiatives, CAJUEIRO runs the program "Na Trilha da Universidade" (On the Path to University), which provides educational support and academic guidance to adolescents and young people in vulnerable situations, thereby expanding their opportunities for access to higher education.

In Brazil, higher education can be accessed privately or through public, tuition-free universities. Access to public and free universities, at a national level, primarily occurs through entrance exams, whether nationwide, regional or in the form of specific entrance exams administered by individual universities. The scores obtained in these exams are crucial for gaining access to these opportunities.

Historically, universities have been occupied by families from higher socioeconomic backgrounds, reflecting and deepening social and economic inequalities. This is because students from higher SES families who attended private basic education generally achieved higher scores. As a result, access to universities has been dominated by wealthier students who occupy the majority of spots in public, free universities (Trevisol & Nierotka, 2016).

There has been an attempt to democratize higher education in recent years through policies such as financing and scholarship programs for access to the private higher education system. Additionally, the Quotas Law (Law No. 12.711/2012) was created, a public policy that reserves spots in federal public universities and institutes for students from public schools, aiming to reduce inequalities in access to higher education. Of the total spots available, 50% are reserved for students who completed their entire high school education in the public school system, leading to a significant increase in enrollments. However, these initiatives remain insufficient in the face of the large demand from low-income populations.

Preparatory courses, such as CAJUEIRO's "Na Trilha da Universidade," play a critical role in preparing students for entrance exams to higher education, particularly for public universities. Through the strategic selection of exam content and specialized pedagogical support, these courses assist young people in vulnerable situations in preparing for exams, thus increasing their chances of accessing public and free higher education.

In the context of this research, 11 adolescents participated, all of whom were students in the "Na Trilha da Universidade" program. The selection of participants was based on criteria of representativeness of the target population served by the organization, ensuring diversity of perspectives and relevance of the collected data. All participants are 17 years old, and to preserve their identities, their names were replaced with pseudonyms. Among them, seven identify as non-white, and three as white. In terms of socioeconomic status, all come from families with an income ranging from one to three minimum wages. The group consisted of nine women and three men, all of whom had completed elementary school. The central themes of the discussions will be presented next.

Interrupted Adolescence

For the research participants, adolescence can be a time of self-discovery and identity development, as well as a period filled with external pressures and the confusion of

being neither an adult nor a child. In this sense, the thematic category "interrupted adolescence" describes the phenomenon where young people are forced to abandon or postpone important aspects of this stage, primarily the positive ones, due to socioeconomic conditions. Many young people describe being deprived of leisure, socialization, and self-discovery due to the need to work, which increases the sense of overload and pressure. One participant's statement illustrates this reality: *"We end up losing our adolescence because we have to be adults, because we have to do things, we have to help at home [. . .]. And we end up losing our adolescence because we don't go out, we don't hang out, we don't have fun."* (A1).

Adolescents face multiple frustrated expectations that stem from an idealization of how adolescence should be. They collectively express indignation over the interruption of one of the stages of their lives. The group agrees that financial conditions lead to a "shortened adolescence." This situation is understood by all as intrinsic to their reality, and their frustration is directed toward societal stratification and poverty. One adolescent exclaims: *"We're becoming adults too quickly; instead of being adolescents, we're not adolescents anymore, that's it!"* (A3). Thus, the interruption of adolescence and the consequent premature entry into adulthood, imposed by the circumstances of social vulnerability, are pivotal experiences that affect the trajectories of these young people.

Meanings of Social Inequality

From the reflections on adolescence, it was observed that adolescents perceive the social reality as unjust due to social inequality. In this sense, the category "meanings of social inequality" was developed to deepen the understanding of this aspect reported by the youth. In their perspectives, social inequality is understood as a "division of layers, which many people say today is not as apparent, but as time passes, it's becoming more and more apparent" (A2) or even as a scenario where *"the rich get richer, and the poor get poorer"* (A4).

Moreover, the perception of poverty is something that structures the experience of the participants from childhood onward, meaning that *"those who are born with a lower financial condition don't discover it, we are born and already know it's different, and we only detect the problem, we ask ourselves why, 'oh, why is that person like that?', 'what's wrong with that?', 'why isn't everyone the same?', 'what happens?', we who are born like this, we already know, the only difference between us and them is that we ask ourselves and look for the problem, and they don't, they don't care"* (A4).

The perception of these contradictions comes from living with different realities. In this way, the frustration and sense of powerlessness in the face of social stratification often emerge when comparing their limited opportunities with those of other young people who have similar desires and feelings but many more possibilities.

Possible Futures in Poverty

The final thematic category, "Possible Futures in Poverty," addresses the adolescents' plans and the concrete feasibility of their realization. Although they maintain hope for a better future through education, dedicating their Saturdays to preparatory courses for university, they face the uncertainties



imposed by social inequality. This reality directly affects their daily lives, making their opportunities increasingly limited.

Thus, it was possible to observe a sense of hopelessness in the statements of some youth. For example, when asked what adolescence is, one participant responds: *"It's the time when only adolescents suffer, when they get screwed"* (A6). Another adolescent points out: *"I think that we who don't have good finances, we have two options, either we work or we work"* (A2). This same adolescent also adds: *"You're so tired, both mentally and physically, so we no longer have the balance of, let's say, relaxing, having fun, working, and studying; it doesn't exist. It's either work and school, and that's it, or just work."* (A2).

The decision-making processes of these adolescents regarding their futures are influenced by multiple layers that interact and often conflict. On the one hand, there is the desire for achievement, which may be associated with vocations, personal interests, and subjective projections about an idealized life. Socioeconomic conditions thus become one of the main factors that either restrict or broaden the horizon of choices, determining access to opportunities and even the ability to imagine other possible futures.

Furthermore, one participant emphasizes: *"We who are poor have to fight a lot to get into a [federal university]"* (A2), highlighting that entering a public university is a difficult challenge. The verb "fight" expresses the perception that, for those in poverty, access to public university demands a disproportionate effort compared to adolescents who enjoy good conditions in adolescence, such as access to leisure, health, and quality education throughout childhood.

Given these restrictions, the possible futures for vulnerable adolescents imply the decision to work and study, the mediation of career choice influenced primarily by financial returns, and the heavy pressure of not studying or working enough. As a result, persevering and trying to focus solely on studies becomes an act of resistance, continuing to "fight" despite the social and economic context.

Discussion

The participants of this study reflect on the limitations imposed by poverty in their lives, conceptualizing poverty not only as a social inequality but also as a state of inertia reinforced by the perpetuation of inequalities on an ever-growing scale. Considering this reality, their future possibilities become restricted and strongly conditioned by financial factors, leading many to forgo a full adolescence in order to work prematurely and assume economic responsibilities at home while pursuing the dream of entering a university.

The experiences shared in this study highlight how social inequality in the Brazilian context impacts the lived experience of adolescence. The pressure to enter the labor market prematurely aligns with data from Instituto Brasileiro de Geografia e Estatística (IBGE) (2023), which warns of the lack of guaranteed rights for youth. Moreover, the composition of our sample, predominantly composed of Black and Brown adolescents, reinforces the intersectionality of multiple vulnerabilities, showing how socioeconomic and racial factors deepen inequalities and shape the experience of growing up and becoming an adult in this context.

The data gathered in this study converge with previous research (Arruda & Arruda, 2007; Gomes et al., 2020; Rizzo

& Chamon, 2010), reinforcing the idea that the experience of poverty imposes significant harm on human formation and development, especially considering your race and gender. Adolescence understood as a singular and decisive period in the construction of identity, reveals itself as a privilege shaped by issues of socioeconomic status, gender, and race-ethnicity. However, for many adolescents in vulnerable situations, this ideal remains out of reach, intensifying frustrations and challenges.

Regarding the specific relationship between work and poverty in adolescence, unlike the study by Rizzo and Chamon (2010), our participants do not recognize work as an effective mechanism for addressing social inequality. This can be explained by the fact that the participants in this study are part of a group that invests in education as the primary means of social ascension. Thus, the difficult balance between work and study leads to the prioritization of education despite intense internal and external pressures. In this way, an unequal struggle persists, where the national incentives aimed at democratizing access to higher education are insufficient to guarantee these adolescents' access to and retention in universities, hindering their social and economic ascension.

The majority of the sample in this study is composed of cisgender female adolescents. As Carneiro (2011) points out, women, especially racialized women, face disproportionately greater workloads shaped by inequality. In this sense, the relationship between adolescence and various social pressures, with an emphasis on the "interrupted adolescence" context, cannot be dissociated from the factors of gender and race oppression, which intersect with economic inequality and intensify the vulnerabilities faced by our participants.

This intersectional perspective emphasizes the need to broaden the understanding of social inequality, which is often reduced to economic resources. However, this inequality is directly linked to the barriers that hinder the social ascension of non-white women. As a result, this affects their future plans and their relationship with work, which may be experienced as a form of resistance to the imposition and pressure for early labor. For these young women, remaining in school becomes an act of resistance; as they said, "they are struggling."

In light of this scenario, it is urgent to expand incentives for the entry and retention of vulnerable adolescents in tuition-free universities. However, this measure is insufficient, serving merely as a temporary solution to the complexity of social inequality among youth. To ensure full and equitable development, it is also essential to promote a fairer redistribution of socially produced wealth, ensuring not only access to education but also leisure and experiences that enable a fully lived adolescence, contributing to a fairer and more inclusive social development.

This study presents certain limitations, including the lack of a comparison between the experience of adolescence in different socioeconomic and racial contexts, as well as the absence of a deeper analysis of gender implications. These intersections make the understanding of this process even more complex. Therefore, it is suggested that future research explore comparisons between different adolescent groups, investigating how factors such as social class, race, and gender influence the lived experience of adolescence. The conclusion that social pressures are significantly greater for adolescents in poverty, considering race and gender, underscores the urgency of public policies that effectively guarantee and protect the rights of youth.

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Turning Struggles into Strengths: The Dual Impact of Parental Socio-Economic Status and Education Level on Academic Resilience Among Public High School Students in Turkana County, Kenya

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Introduction

The family is a key agent of the socialization of children and is envisioned in Bronfenbrenner's Theory of Bioecological Systems (Bronfenbrenner, 2005) as a component of the meso-system, exosystem, and macrosystem and, therefore forms an element worthy of study. Family is also considered the provider of the first patterns of how to cope with stress, adversities, and failures (Pieronkiewicz & Szczygiel, 2020). Parental involvement in their children's lives academically, physically, socially, emotionally, and financially as communication of expectations while playing supervisory roles, is important in the development of resilience. Poverty is known to be one of the most common indicators of early adversity experienced by children. Poverty is a powerful correlate of multiple risk factors that act in concert to thwart positive development (Council on Community Pediatrics et al., 2016).

Masten and Barnes (2018) advocate for the prevention and mitigation of harm from adverse experiences as one of the most important approaches within a resilience framework, which formed the basis of the inquiry of this study as it will identify the parental factors bolstering academic resilience among students in Turkana County and form a part of a scholarly work that will inform the resilience framework in Kenya.

Turkana County was the most suitable location for conducting the study, being the most marginalized county in Kenya, and resilience is a trait that is best measured in adverse conditions. González-Torres and Artuch-Garde (2014) also concluded through empirical research that there are three significant conditions in the conceptualization of resilience specifically; growing up in or finding oneself in an adverse situation, the availability of protective factors, both internal

and external, and managing to adapt positively notwithstanding the experience of adversity.

Research Objectives

This study was guided by the following research objectives:

- a) To explore the relationship between parent employment status and academic resilience among secondary school students of Turkana County.
- b) To determine the relationship between parent education level and academic resilience among secondary school students of Turkana County.

Research Questions

This study was guided by the following research questions:

- a) What is the relationship between parent employment status and academic resilience among secondary school students of Turkana County?
- b) What is the relationship between parent education level and academic resilience among secondary school students of Turkana County?

Respondents Demographic Characteristics

Demographic information on the parents' level of education and employment status was investigated. Parents' Level of Education: Participants were requested to respond to a questionnaire indicating their parent's or guardian's highest level of education—whether primary, secondary, college, university or no formal education. The survey results indicated that 48.15% (N=182) of the mothers had no formal education. This was followed by 22.75% (N=86) who had attained primary school education. These findings suggest that the level of literacy among mothers in the study area is considerably low and points to the need for affirmative action to support the education of the girl child. Similarly, 38.36% (N=145) of the fathers had no formal education, followed by 17.72% (N=67) who had attained primary education. These findings justify the need to

examine the factors that promote academic resilience among the participants, given the educational background of their parents or guardians.

Parents' Employment Status: Participants were asked to respond to questions regarding their parent's or guardian's current level of employment status. The survey results indicated that the majority of mothers ($N = 251$; 66.40%) were not engaged in any form of formal employment. This was followed by 21.69% ($N = 82$) of participants who reported being unaware of their mothers' employment status. This lack of awareness may be attributed to factors such as orphanhood, with participants possibly residing with guardians. The implication of these findings is that many mothers may lack the economic capacity to provide consistent financial support for their children's education. Additionally, the data revealed that 42.59% ($N = 161$) of fathers were in formal employment, while 30.69% ($N = 116$) were not formally employed. A further 26.72% ($N = 101$) of participants were unable to specify the employment status of their fathers, which may suggest that they come from single-parent households, are orphaned, or are under the care of benefactors.

Methodology

This study employed a quantitative approach using a correlational design. The findings are presented in the results and discussion section below. According to the information obtained from the Turkana County Education Office, Turkana County has 52 public secondary schools. The target population of the study consisted of 52 public secondary schools with 16444 students and 392 teachers. The study targeted four secondary school students because, unlike young children and pre-teens, adolescents are more likely to develop some patterns of behavior and their own repertoires for coping. The accessible population was 4039 from four students; this group of students was considered for this study as they had already spent a considerable duration of time in secondary school, so they were likely to have registered a consistent level of academic resilience. The questionnaires on parental employment status and educational level were constructed by the researcher. The parental employment scale was a close-ended questionnaire that contained items on the employment status of the mother/father independently. The parental educational level scale was a close-ended questionnaire indicating the level of education in terms of primary, secondary, college, university, and no education at all. The academic resilience scale for high school students by Martin and Marsh (2006) was adapted to suit the current study. The language was modified for easy comprehension of the questions. For example, item 1, 'I believe I am mentally tough when it comes to exams,' was changed to 'I believe I am able to perform well in exams.' Item 2, 'I do not let study pressure get on top of me,' was changed to 'I know how to deal with too much school work'.

Sampling Procedure and Sample Size

The study adopted stage random sampling techniques. The first stage in the sampling process was random sampling. This technique was used in the selection of the schools. Out of the 52 public secondary schools in Turkana County, 16

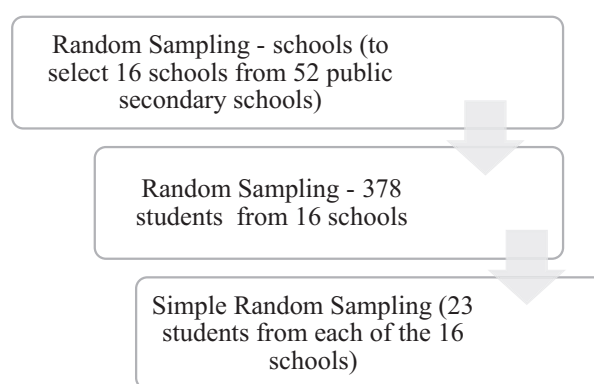


Figure 1. Study Sampling Procedure.

public secondary schools were selected as guided by the aforementioned scope of this study. From the selected schools, random sampling was employed to arrive at the 378 students who responded to the questionnaires. After obtaining the proportion meant for the school in the 16 sampled schools, simple random sampling was used to arrive at 23 students in each school. Refer to Figure 1 for a summary of the sampling procedures used in this study.

Data Collection Instruments

The instruments that were employed in data collection were questionnaires. The scores for the whole sample were computed based on the number of respondents in the sample or sub-group. To ensure the validity and reliability of the questionnaires, the researcher considered the content, construct, and criterion-related validity and the internal consistency test of reliability, which was established through a computation of the Cronbach Alpha Coefficient. The Cronbach's Alpha for the student questionnaires revealed that the instruments had adequate reliability for the study of 0.775 against the Cronbach alpha standardized items 0.786.

Results and Discussion

The study sought to investigate the demographic characteristics of the respondents. This information comprised the biodata regarding the respondent's characteristics in terms of the parent's education level and employment status, as it was critical in answering the objectives of the study.

Influence of Parental Socio-Economic Status on Academic Resilience

Parents' education level and employment status biodata were investigated against academic resilience. Table 1 below shows the influence of the mother's educational level on academic resilience.

The results of Table 1 indicate that students who were unable to indicate their mother's employment had a higher mean $x=39.63$. This was followed by students whose mothers were employed $x=39.67$. Analysis of variance was used to determine whether the mean scores were significantly different. The inferential statistics are given in Table 2 below.

**Table 1.** Mean Scores on Mother's Employment Status and Academic Resilience.

Employment Status	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Yes	45	39.27	5.01	.75	37.76	40.77	29.00	45.00
No	251	38.37	5.33	.34	37.71	39.04	18.00	45.00
N/A	82	39.63	4.06	.45	38.74	40.53	30.00	45.00
Total	378	38.75	5.06	.26	38.24	39.27	18.00	45.00

Table 2. Analysis of Variance on Mother's Employment Status.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	111.498	2	55.749	2.189	.113
Within Groups	9548.621	375	25.463		
Total	9660.119	377			

Table 3. Mean Scores of Father's Employment Status and Academic Resilience.

Employment Status	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Yes	116	38.92	5.12	.48	37.98	39.86	20.00	45.00
No	161	38.12	5.48	.43	37.26	38.97	18.00	45.00
N/A	101	39.57	4.12	.41	38.76	40.39	28.00	45.00
Total	378	38.75	5.06	.26	38.24	39.27	18.00	45.00

Table 4. Analysis of Variance on Father Employment Status.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	136.366	2	68.183	2.685	.070
Within Groups	9523.753	375	25.397		
Total	9660.119	377			

The results revealed that the mean scores were not statistically different: $F(2,375) = 2.189, P > 0.05$. This suggests that the effect size is small or negligible. It was then concluded that the mother's employment had no effect on academic resilience. The findings of this study corroborate the findings of another study by Kim and Honig (1998), who conducted a study on maternal employment status and children's resilience among Korean immigrant families in the USA and established that maternal employment status did not have a significant effect reported children's resilience. Further, the study investigated the relationship between fathers' employment status and academic resilience. Table 3 below shows the mean scores of the father's employment status and academic resilience.

Table 3 reveals that students who were unable to indicate their father's employment had a higher mean $x=39.57$. This was followed by students whose fathers were employed $x=38.92$. Analysis of variance was used to determine whether the mean scores were significantly different. The inferential statistics are presented in Table 4 below.

The results revealed that the mean scores were not statistically different: $F(2,375) = 2.685, P > 0.05$. With $\eta^2 \approx 0.0141$, the effect size is small, and this implies that the father's employment status explains only about 1.4% of the variance

in academic resilience. Since the p-value is greater than 0.05, the effect is not statistically significant, meaning the father's employment status does not have a meaningful impact on academic resilience. It was concluded that the father's employment had no effect on academic resilience. The findings of the study concur with the findings of Bacikova-Sleskova et al. (2014), who found that fathers' unemployment or non-employment was negatively associated with adolescent health, while mothers' employment status had no significant effect.

Influence of Parental Education Level on Academic Resilience

In the parental factors, this study also sought to find out the influence of parents' education level and academic resilience. The education level was analyzed for both mothers and fathers based on primary education, secondary education, college, university, or no formal education. Table 5 below shows the mean scores of the mother's education level and academic resilience.

The results of Table 5 indicate that students whose mothers had acquired primary school education had the highest mean score of $x=39.407$. This was followed by students

Table 5. Mean Scores of Mother's Education Level and Academic Resilience.

Education Level	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Primary	86	39.41	4.14	.45	38.52	40.29	28.00	45.00
Secondary	57	38.75	4.60	.61	37.53	39.98	26.00	45.00
College	38	37.74	5.86	.95	35.81	39.66	18.00	45.00
University	15	36.13	7.41	1.91	32.02	40.24	18.00	44.00
No formal education	182	38.87	5.15	.38	38.12	39.63	20.00	45.00
Total	378	38.75	5.06	.26	38.24	39.27	18.00	45.00

Table 6. Analysis of Variance on Mother's Education Level.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	181.607	4	45.402	1.787	.131
Within Groups	9523.753	373	25.412		
Total	9660.119	377			

Table 7. Mean Scores of Father's Education Level and Academic Resilience.

Education Level	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Primary	67	38.91	3.93	.48	37.95	39.87	31.00	45.00
Secondary	44	39.52	4.49	.68	38.15	40.89	29.00	45.00
College	56	38.39	6.09	.81	36.76	40.02	18.00	45.00
University	66	37.83	5.81	.72	36.40	39.26	18.00	45.00
No formal education	145	39.01	4.89	.41	38.20	39.81	21.00	45.00
Total	378	38.75	5.06	.26	38.24	39.27	18.00	45.00

Table 8. Analysis of Variance on Father's Education Level.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	100.162	4	25.041	0.977	.420
Within Groups	9559.957	373	25.630		
Total	9660.119	377			

whose mothers had no formal education $x = 38.87$. The lowest mean score was for the students whose mothers had acquired a university education $x = 36.133$. A one-way Analysis of Variance was used to find out if the differences among the mean scores were statistically significant. Table 6 below shows the results of the one-way ANOVA.

This one-way Analysis of Variance shows that the difference among the mean scores was not statistically different, $F(4,373) = 1.787$, $P > 0.05$. With $\eta^2 \approx 0.019$, the effect size is small, and it was therefore concluded that the mother's education level has no significant effect on academic resilience. Similarly, the study sought to find out the influence of a father's education level on academic resilience. The results are shown in table 7 below.

The results reveal that students whose fathers had acquired secondary school education had the highest mean score of $x = 39.52$. This was followed by students whose

fathers had no formal education $x = 39.00$. The lowest mean score was for the students whose fathers had acquired university education $x = 37.8333$. Analysis of Variance was used to find out if the differences among the mean scores were statistically significant. Table 8 shows the results of the one-way ANOVA.

The results revealed that the difference among the mean scores was not statistically different, $F(4,373) = 0.977$, $P > 0.05$. The results revealed $\eta^2 \approx 0.0104$ ($\approx 1.04\%$), which was considered a small effect. It was concluded that the father's education level had no significant effect on academic resilience. This study contradicts the findings of a longitudinal study by Kong (2020) to determine the association between parental socioeconomic status and academic resilience. The findings of the study revealed that children from low socioeconomic backgrounds showed high academic resilience.



Limitations

Despite the strengths of this study, the following limitations may hinder the generalization of the results. The study was conducted in Kenya, Africa and therefore the findings may not be applicable to other contexts. The study targeted secondary school students because, unlike young children and pre-teens, adolescents are more likely to develop some patterns of behavior and their repertoires for coping. This means that the findings cannot be generalized to other populations. This study considered only two parent characteristics –socio-economic status and level of education. Notably there are many other parental factors that may predict the academic resilience of learners, such as parenting expectations and the family types. Future studies could analyze academic resilience by considering other factors. This study also utilized a quantitative approach, hence limiting the depiction of the complex social world from the perspective of the participant. Future studies could incorporate the qualitative aspect, especially using interview schedules and focus groups to provide a richer understanding of resilience.

Conclusions and Recommendation

Regarding parental employment status, the study showed that a mother's employment status has no significant effect on academic resilience ($F(2,375) = 2.189, P > 0.05$). Similarly, a father's employment status has no significant effect on academic resilience ($F(2,375) = 2.685, P > 0.05$). Further, concerning the education level of a parent, the study showed that a mother's education level had no significant effect on academic resilience ($F(4,373) = 1.787, P > 0.050$), on the same note the study revealed that a father's education level had no significant effect on academic resilience ($F(4,373) = 0.977, P > 0.05$). This study recommended that parent employment status is not an inhibitor of academic resilience; therefore, whether the mother/father is employed or not should not affect the academic resilience of learners. In addition, parent education level is not an inhibitor of the academic resilience of their children, whether educated and at whatever level- primary, secondary, college, university, or no formal education. This study concluded that poverty, which is a risk factor for resilience, may inadvertently serve as a motivation for students in Turkana County, hence increasing their academic resilience levels.

Declaration of conflicting interests

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Ethical Considerations

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Global Perspectives on the Impact and Outcomes of Poverty in Children and Youth

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Child poverty is a global issue, which occurs in low-, middle-, and high-income countries. Roughly 1 billion children and adolescents worldwide experience multi-dimensional poverty – meaning they lack necessities like food, water, shelter, education, and health care (*Child Poverty* | UNICEF, n.d.). Around the world, children and young people are more likely to live in poverty than adults. They are also more vulnerable to its effects. Poverty affects families in multiple ways and is a persistent predictor of negative outcomes for children and youth. Poverty reduces the material, social, and emotional resources available to parents (Conger et al., 2010; Schoon et al., 2012) and can undermine their children's social, emotional, cognitive, and also physiological development. The current global context, characterized by economic, political, and social upheaval, combined with climate change, calls for a wider discussion around how we conceptualize poverty and how, as a research community, we can examine both the outcomes and experiences of young people living in poverty in a culturally relevant way. The aim of this special section of the ISSBD Bulletin was to learn more about novel research from ISSBD members on these issues. From Africa to Brazil and to the United States - connecting knowledge from studies conducted around the world to the perspective of youths in specific geographical locations, this special section provides a global perspective on the mechanisms of impact and outcomes of poverty in children and youth.

One of the main conclusions, reflected in each of the separate contributions, is that poverty is a multi-dimensional and 'intersectional' phenomenon. That is, poverty can entail material hardship associated with housing instability as well as limited and uncertain access to food, to medical and educational support, ability to pay bills, or having access to utilities such as heat, electricity, telephone or the internet (Liu, 2025; Rosa et al., 2025). Young people exposed to poverty also report limited and uncertain opportunities, goal constraints and reduced aspirations (Olowookere, 2025). Moreover, poverty is unevenly spread across different socio-demographic dimensions—related (but not limited) to gender, ethnicity and cultural background, age, and urban living conditions (Mello, 2025; Olowookere, 2025; Rosa et al., 2025).

Because poverty is known to be a maintaining factor in the etiological processes towards health problems, psychopathology, and harmful interpersonal dynamics (Liu, 2025), it is imperative that poverty is first-and-foremost prevented, or otherwise targeted, as, for example, through early life intervention. In addition, the studies in the special section make clear that outcomes of poverty are not only disastrous for children and young people themselves—they are downright disastrous, with wider societal implications regarding engagement in drug abuse, prostitution, violent crime, and murder. Poverty thus matters for societies at large. As Olowookere (2025) indicates, when youths grow up in poverty, societies squander talent, waste resources, lose productivity, and incur higher costs to upkeep their judicial, health, and welfare systems and/or policies.

Importantly, what poverty 'is' and how it is perceived may be something different than what is usually captured by government-based, officially established objective indicators and poverty lines. As indicated by Liu (2025), nationally representative data from the US showed that not all, but just 45% of families below the official poverty line experienced three or more types of hardship (e.g., not being able to pay medical bills, buy food, or afford housing), while 21% of families with incomes 2× above the poverty line still reported to experience three or more types of material hardship. What is this telling us? First, in addition to objective indicators, as used in official poverty data, we also have to consider the subjective experience of poverty, that is, the lived experience and the way individuals make sense of experiences of material hardship, and associated discrimination. Secondly, although official poverty lines matter, they do not capture everyone's lived reality. For example, even families just at or well above the poverty line may experience hardship. Moreover, there can be multiple reasons why not all individuals or families living under the poverty line experience hardships in all domains. They may have different standards or expectations of what is required to lead a satisfactory life, or they can manage to live within their means. In addition, there might be differences regarding the wider social context in which they live. For example, there are differences in the proportion of families within one's neighborhood that live in poverty - or in the available access to necessary resources such as education, work, health care, and transport. More generally, the characteristics of one's community matter—in particular regarding the available and accessible support structures that can buffer the negative effects of material hardship. This can refer to differences in welfare systems, or support through participation in a broader community in which individuals encourage and help each other, or join forces to overcome unfair and oppressive systems.

But how does poverty impact the lives of children and youth? The set of excellent papers in this special section, based on a variety of different quantitative and qualitative studies, identifies different mechanisms and associated outcomes that appear to be universally valid. Regarding the



'impact mechanisms of poverty', the papers help to identify two connected sets of mechanisms, some of which are internal and others external to the individual. Internal impact mechanisms relate to the emotions and cognitions that individuals experience, such as feeling ashamed, feeling unfairly disadvantaged, or thinking of oneself as less worthy (Olowookere, 2025; Rosa et al., 2025). Poverty may also suppress an individual's ability to self-regulate their moods and behaviors effectively (Liu, 2025). External impact mechanisms relate to what happens in the social contexts of individuals in poverty: the doors of economic and educational opportunities close (Olowookere, 2025; Rosa et al., 2025), and there is 'classism' and social discrimination (Mello, 2025). Many of these mechanisms may co-occur, leading to not only (mental) health consequences, but also to a lack of social mobility, low self-actualization, and loss of dignity.

The papers in this special issue also speak to the developmental nature of the phenomenon of poverty. Specifically, the paper by Rosa et al. (2025), based on qualitative interviews with Brazilian adolescents, indicates that young people experience their adolescence to be shortened by their financial and socio-economic situation, they feel that they have to become adults early in their lives and take on adult responsibilities, in particular regarding work and making a living. The findings show that adolescence is a social construction, unlike puberty, which marks biological changes. The assumption of adolescence as a period between childhood and adulthood, that allows for prolonged experimentation and exploration of life choices, before definitive commitments and responsibilities have to be taken on, might apply to some socio-cultural contexts, but not others. Although many studies implicitly assume that adolescence is a universal phenomenon, findings reported in this special section clearly show it is not. In some of the poorer parts of the world, there is no extended adolescence, but rather just a quick move from childhood to adulthood, born out of financial necessity.

As the review papers by Liu (2025) and Mello (2025) and the study by Rosa (2025) make clear, there is another developmental aspect, in that adolescence marks a period in which some of the impacts of poverty start to be perceived more clearly. For instance, the exploration and establishing of one's identity is a hallmark of adolescence. Yet, the awareness of 'being poor' can become clearer and lead to a painful understanding of one's precarious situation in this crucial life stage. Similarly, adolescence marks an expansion of cognitive ability, that allows individuals to 'read' social standing by the way one behaves, talks, and dresses—social categories of rich versus poor, and the different norms and values attached to being more or less affluent—become clearer in adolescence with an increased ability for abstract thought and perspective taking (Mello, 2025). Finally, adolescence marks the period in which individuals experience a peak in their desire to conform to others, with non-conformity to others becoming more distinct, as well as more clearly sanctioned.

In addition, the paper by Surum (2025) provides an important perspective in this special section, showing that it is important to not only turn our heads towards the negative. Instead, Surum's analysis shows that it may not necessarily, or in all samples, be so that poverty negatively impacts an outcome—in this case, academic resilience. Indeed, in her analysis based on a sample of form four secondary students in Turkana County in Kenya, no difference could be observed in the academic resilience of youths whose parents had either lower or higher socio-economic status and educational levels.

Although, of course, such findings deserve further scrutiny and replication, it does help us to wonder: what are the specific skills and resiliencies that youths from adverse backgrounds have developed? In an interview study of 15-25 year olds in Nigeria by Olowookere (2025) could identify a number of coping strategies young people used to deal with issues of poverty in their lives, including socially accepted strategies, such as cutting back one's expenditures, developing saving strategies, trying to find better work, use of social media, entrepreneurship but also negative strategies such as engagement with gambling, drugs, prostitution or theft.

To protect children and young people from the ill effects of poverty and to enable them – and society at large – to have a better future, it is vital to eradicate poverty and its ill effects. This requires policies to consider the impact of poverty on children and young people, and to target poverty prevention at early life stages and key transition points, such as the period of completing compulsory education and the entry into employment. Notably, it is crucial to not only target risk factors but also harness the power of protective factors in the lives of young people from poorer backgrounds and to prevent the emergence of negative strategies used for survival. Children and young people are the future of our society and they need adequate safeguards, protection, and support for survival. We need to listen to their voices to find the right measures and strategies to address poverty effectively, on a global scale, and in a culturally relevant and sensitive way.

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Note from the ISSBD President

Dear ISSBD Members,

I hope you remain well and safe.

In this letter, I wish to share both new and ongoing exciting developments within the ISSBD.

We will be holding two ISSBD Regional Workshops this year. The first will take place in South Africa in August as part of our African Regional Workshop series on the topic “Cultural Resilience and Responsive Interventions: Bridging Modernity and Indigenous Wisdom in Addressing Africa’s Challenges”. I wish to thank the organizers, Professors Mkhuma and Muhati-Nyakundi, wholeheartedly for their stellar work. Our second Regional Workshop will take place in Lebanon in September and will focus on the important topic “Strengthening Life Course Research on Mental Health and Trauma Among Displaced Populations in the Arab Region”. My gratitude goes to the organizers, Professors Abdulrahim and Elbejjani, for their fantastic work.

I am also delighted to announce that we have identified the 2nd round of the ISSBD 2x2 grantees. Please visit our website to find out more about the 2025 awardees and their outstanding research projects here. In addition, I am excited to announce that the ISSBD Care Everywhere Grants, supported by the Templeton World Charity Foundation, have been awarded. You can read more about the awardees here.

In collaboration with the Membership and Communications Committee, our Early Career Scholar (ECS) Committee has developed a mentoring initiative. The program will provide ECSs access to a dedicated webpage on the ISSBD website, which will provide mentoring resources. The program is currently being launched as a pilot program, please visit our website soon to find out more!

We have also launched a new ISSBD-Jacobs Partnership to support the Learning Variability Network Exchange (LEVANTE) called *Nurturing Learning Mind*, and we are currently preparing a series of international networking opportunities to nurture LEARN scholars in Colombia and Ghana.

In addition, the ISSBD has created a new partnership with *Child and Family Global Outreach (CF-GO)*, i.e., formerly the Child and Family Blog. Together, we will hold open webinars on disseminating developmental science starting in the

fall. CF-GO is also working with our journal, the *International Journal of Behavioral Development (IJBD)* to publish blog posts based on their published articles. (read the first about parents and teens here.

This marks the 3-year term of my presidency, and I must say that it has been a true privilege to work alongside all of you and to learn from – and with – you in the ISSBD community over these years – thank you! Over this time, I have come to realize how precious the ISSBD is in this time, characterized by conflict, disarray, and war. It is a community that shows through action its deep care for one another, for international developmental science and its application to practical solutions, and for the betterment of humankind across the lifespan. I am deeply indebted to all Executive Committee Members, all Committee Members, our Staff, and all scholars who contribute to our publications as editors, reviewers, and authors for their exceptional work. My deep gratitude extends to all our members for your engagement, commitment, and wonderful research.

We have much to look forward to at this year’s activities, including regional workshops, webinars, and networking opportunities. We are equally excited about next year’s prospects, including our fantastic 2026 Biennial in Songdo, South Korea, and I am enthusiastic about continuing our joint journey of advancing an international developmental science that cares.

Warmest wishes,



Tina Malti
ISSBD President



Jacobs Foundation-ISSBD Doctoral Fellowship Program in Cote d'Ivoire, West Africa: Summary and Review

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Objectives

The Jacobs Foundation is one of the world's leading charitable foundations dedicated to promoting innovations for children and youth (Holding, 2025). For more than 30 years, it has partnered with the International Society for the Study of Behavioural Development (ISSBD) on a variety of initiatives aimed at achieving our shared goals. In 2019, ISSBD entered an innovative extension of its longstanding partnership with the Jacobs Foundation to provide six doctoral fellowships. The Foundation's objective was to strengthen Côte d'Ivoire's capacity to develop and evaluate interventions designed to improve:

- School readiness and/or social and emotional skills among children under 5 years of age;
- Literacy and/or numeracy skills among primary school children;
- Vocational skills among youth.

The doctoral fellowship program was one component in the Jacobs Foundation's strategic plan for improving women's

empowerment, child protection, and the educational opportunities available to young people in rural cocoa-producing communities. This focus reflects the Jacobs family's long history of involvement in the cocoa industry in Côte d'Ivoire.

For ISSBD, the fellowships program aligned with the goal of supporting early career researchers in developmental science around the world. Although approximately one-quarter of ISSBD members are located in Africa, and an ISSBD African Regional Workshop was hosted by Côte d'Ivoire in 1994, for the past 25 years, there has been little or no representation from Francophone West Africa. Thus, the doctoral fellowship program marked a significant step toward the reintroduction of ISSBD in Francophone Africa.

ISSBD's goal of harnessing the perspectives of multiple disciplines to achieve a holistic understanding of human development was reflected in the diversity of disciplines from which the doctoral fellows were drawn: Franck Adjé DJALEGA (Nutrition), Venance TOKPA (Linguistics), Abenin Mathieu BROU (Biological Anthropology), Edy Constant Gbala SERI (Psychology), Apie Léa Fabienne ANOUA (Anthropology of Education), and Marie Josiane KOUAME (Sociology of Education).

Components of the Fellowship Program

Activities in the program were designed to:

- Increase our research capacity
 - We continued to receive training from our research supervisors and other members of the research laboratories and institutes where we were based.
 - Mentorship, research advice, and training seminars were also provided by a coordination team composed of members of ISSBD and the Jacobs Foundation. This team included, among others:
 - Prof. Toni Claudette ANTONUCCI, Institute for Social Research, University of Michigan, USA; and past president of ISSBD.
 - Prof. Anne Cheryl PETERSEN, Gerald R. Ford School of Public Policy, University of Michigan, USA; Founder and President, Global Philanthropy Alliance; and past president of ISSBD.
 - Dr. Julie Ann ROBINSON, College of Education, Psychology and Social Work, Flinders University, Australia; and past ISSBD Executive Committee member.

- Mr. Sosthène GUEI, the representative of the Jacobs Foundation and the local coordinator of the program.
- Guest presenters.
- A short course in statistical analysis, funded by the fellowship program, was provided by the National School of Statistics and Applied Economics (ENSEA) in Abidjan, Côte d'Ivoire.
- Training in the English language, provided by Update Consulting in Abidjan and Eagle Vision Institute in Accra, Ghana, was also funded by the fellowship program.
- Production of a group-authored article, which was accepted by *Frontiers in Public Health* (2024 Impact factor 5.18) (<https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2022.1035488/full>)
- Mentorship from members of ISSBD located in other African countries.
- Participation in pre-conference workshops at ISSBD biennial meetings.
- Provide material resources
 - Fellows received a quarterly stipend over four years (extended from three years due to the disruption to research activities caused by COVID-19), a contribution towards their doctoral research expenses, and funding to attend

two ISSBD Biennial Meetings and ISSBD African Regional Workshops.

- Support the creation of ongoing professional networks
 - Mentorship by other scholars in Africa, and participation in the 14th and 15th ISSBD African Regional Workshops (online in 2021; in person in 2023), a workshop sponsored by the Jacobs Foundation (Abidjan, Côte d'Ivoire, in 2023), and the 26th and 27th Biennial Meetings of ISSBD, all helped us identify other scholars who share our research interests.



Figure 1. The six doctoral fellows with Prof. Toni Antonucci (left) and Prof. Anne Petersen (far right). *Photo courtesy of the authors.*

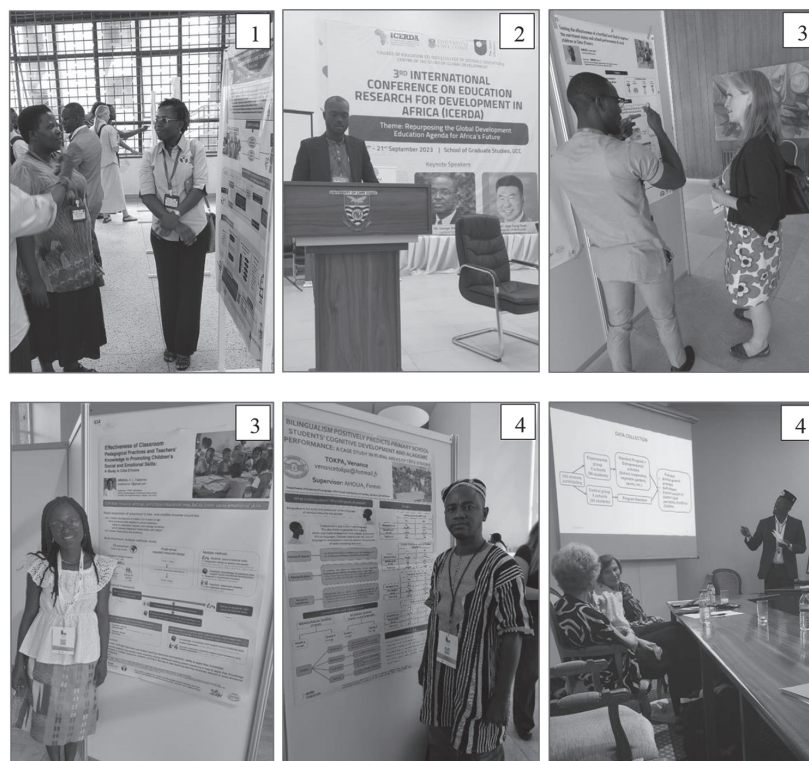


Figure 2. Doctoral Fellows' Presentations at Workshops and Conferences. *Photo courtesy of the authors.*

1. 15th ISSBD African Regional Workshop, Kampala, Uganda.
2. 3rd International Conference on Education Research for Development in Africa (ICERDA), Cape Coast, Ghana.
3. 26th Biennial Meeting of ISSBD, Rhodes, Greece.
4. 27th Biennial Meeting of ISSBD, Lisbon, Portugal.

Doctoral fellows' research



Franck Adjé DJALEGA

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Thesis supervisor Prof. Grodji Albarin GBOGOURI (Nutrition and Biochemistry, University of Nangui Abrogoua)

ISSBD mentor Emeritus Prof. Kofi MARFO (Ghana) (Aga Khan University, East Africa)

(Photo courtesy of the authors)

Effect of micronutrient fortification of a staple food on children's nutritional status and academic performance

Micronutrient deficiencies, which are widespread among children in rural communities in Côte d'Ivoire, have adverse effects on physical growth, brain development, and cognitive performance. My research involved four stages. First, a survey identified cassava semolina as a staple food that could serve as a vehicle for micronutrient fortification in rural areas with a high prevalence of micronutrient deficiencies. Second, we developed a method of fortifying cassava semolina so that it dramatically increased iron, zinc, and folic acid content, satisfactory microbiological quality, no pathogens, and low levels of spoilage microorganisms. Third, in-vivo trials in mice showed that the fortified cassava semolina increased body mass and blood's ability to transport oxygen. The final phase examined whether the integration of fortified cassava semolina into the school lunch program for children ($n = 460$; ages 5 to 15 years) in six rural villages with a high prevalence of anaemia had a beneficial effect. Children who consumed fortified semolina had higher haemoglobin levels than those who did not, resulting in a reduction in the prevalence of anaemia. However, the intervention did not improve students' memory performance or their average academic grades in literature or mathematics. Thus, cassava semolina is an effective vehicle for improving the nutritional status of schoolchildren. However, because of the latency between improvements in nutrition and subsequent catch-up in brain development and cognitive performance, studies over a longer period than were feasible in the current research are needed to determine the effect of fortification on students' academic performance.



Venance TOKPA

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Thesis supervisors Prof. Firmin AHOUE (Linguistics, UFHB); Emeritus Prof. Thomas BEARTH, (University of Zurich, Switzerland)

ISSBD mentor Emeritus Prof. Robert SERPELL (University of Zambia)

(Photo courtesy of the authors)

Overcoming the challenges of teaching literacy in a language in which meaning is communicated through tones

When children in rural Côte d'Ivoire enter school, they often have no familiarity with French, the language of instruction. To ease this transition and improve school performance, policies that promote bilingual education during the first years of schooling have been implemented in some regions. This study explored the integration of the Toura language, one of Africa's many tonal languages, into primary schools. Tonal languages present a special challenge for the development of literacy skills because the meaning of a word is conveyed by the tone with which it is uttered. Thus, words that have the same spelling have multiple unrelated meanings. This research examined how the tonal system of Toura functions and how it can be effectively analysed and taught. The methodological approach combined linguistic theories with experimental methods. It identified four main tones that influence both the lexical and grammatical meaning of words, developed an adapted orthography to represent these tones in text, and demonstrated the pedagogical benefits of their integration, particularly its ability to both facilitate students' transition to French and preserve the cultural and linguistic heritage of their communities.



Gbala Edy Constant SERI

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ISSBD mentor Dr. Ijang Bih NGYAH-ETCHUTAMBE (University of Buea, Cameroon)

(Photo courtesy of the authors)

Association between participation in an entrepreneurial education program and primary school students' self-esteem and academic performance

As a strategy to increase students' school attendance and engagement, Côte d'Ivoire implemented a pilot program in entrepreneurial education. My research evaluated whether participation in this program was effective in achieving the aim of improving students' academic performance and whether any improvements were associated with an increase in students' self-esteem. Students in eight elementary schools who participated in the program had higher academic achievement and higher self-esteem than those who did not. The difference in academic performance was partially mediated by self-esteem. These results support further investigation of entrepreneurial education as a model for school-based interventions to alleviate "learning poverty" in rural areas.



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Thesis supervisor Prof. Blé Marcel YORO (Socio-Anthropology of Health, UFHB)

ISSBD mentor Dr. Pamela WADENDE (Kisii University, Kenya)

(Photo courtesy of the authors)

The association between preschool students' acquisition of socio-emotional skills and the parenting styles and pedagogical practices to which they are exposed

Preschool education has been promoted as one means of increasing young children's school readiness, including their socio-emotional skills. My research adopted a mixed methods approach to evaluate the effectiveness of current preschool programs in improving the socio-emotional skills of young children in rural communities with low educational attainment. A qualitative study validated measures, gained parents' (n = 38; 50% fathers) and preschool teachers' (n = 22) perspectives on young children's socio-emotional development, and provided insights into the challenges faced by preschool teachers. The quantitative study examined whether preschool attendance was associated with an improvement in students' socio-emotional skills, how any improvement was related to their parents' caregiving style and their teachers' knowledge, and observed the use of pedagogical practices that can support socio-emotional development. Parents (n = 138) and teachers (n = 23) rated the socio-emotional skills of a random sample of six students from each class on two occasions: 2 months after the school year began and again five months later. Surprisingly, neither parents' nor teachers' ratings of skills showed any improvement. However, teachers' knowledge of pedagogical practices that support socio-emotional development was positively associated with improvements in their assessment of their students' socio-emotional skills. Teachers' use of supportive, sensitive pedagogical practices and parents' use of authoritative parenting practices were positively associated with changes in parents' assessments of their children's socio-emotional skills. There was no interaction between these variables. A thematic analysis of the qualitative data suggested that teachers' ability to apply their knowledge in their classrooms was constrained by structural limitations (e.g., large, multi-age classes; absence of relevant teaching and learning materials). In conclusion, ongoing international initiatives aimed at rapidly expanding preschool education in low- and middle-income countries must consider the scale of the investment in the education system, teacher training, and classroom conditions required for preschool education to achieve its objectives.



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Thesis supervisor Prof. Dali LIDA (Sociology, UFHB)

ISSBD mentor Dr. Pamela WADENDE (Kisii University, Kenya)

(Photo courtesy of the authors)

A guided games intervention to improve mathematics achievement among school students in rural Côte d'Ivoire

My research evaluates whether training teachers to introduce playful learning activities in their classrooms is effective in increasing the mathematics performance of students in rural cocoa-producing communities and whether this increase is mediated by improvements in student-teacher relationships and student engagement. The procedure involves collecting pre- and post-test measures from Grade 2 classes (n = 200 students) that have been randomly assigned to the intervention and comparison groups. The study also examines heterogeneity in the effectiveness of the intervention. The findings may show how play-based pedagogies may help to overcome low levels of academic achievement in rural areas in many African countries.



(Photo courtesy of the authors)

The sixth doctoral fellow was Abenin Mathieu BROU (mathieubrou401@gmail.com), a student in biological anthropology at UFHB. His research found that primary school students whose biological and psychological rhythms had adequate or strong functional synchronization with environmental and cultural time cues showed better academic performance than their peers whose rhythms showed poor entrainment. The same pattern as seen among students from ethnic backgrounds that were indigenous to their school's location, within-country migrants, and international immigrants. Abenin was supported by his thesis supervisor, Dr. Kouakou Jérôme KOUADIO (Biological Anthropology, UFHB), and his ISSBD mentor, Assoc. Prof. Missaye Mulatie MENGSTIE (University of Gondar, Ethiopia).

Benefits of the Jacobs Foundation-ISSBD Doctoral Fellowship Program

Participation in this doctoral fellowship program represents far more than an academic opportunity for individual students. It provided us with the skills and knowledge necessary to participate in international collaborations that have the

potential to be a catalyst for strengthening national, regional, and international research capacity, the evolution of evidence-informed public policies, and, through these, contribute to the political and economic empowerment of our countries.

The knowledge and skills we obtained during our fellowships can be leveraged to:

Improve policymaking within Côte d'Ivoire	Improve policymaking within Côte d'Ivoire by proposing solutions that integrate an understanding of the local context with research evidence and international best practices.
Contribute to a more inclusive developmental science	Increase the diversity of the knowledge base in developmental science by contributing distinctive African perspectives.
Promote sustainable development policies	Contribute towards achieving the Sustainable Development Goals (SDGs), which address critical issues in Africa, including poverty, malnutrition, poor quality education, and inequality.
Strengthen the autonomy of African countries	Strengthen the scientific independence of our country by sharing our knowledge and skills and participating in international collaborations that provide local scholars with research opportunities and access to expertise.
Contribute to the reduction of inequalities	Using our research to identify and promote more inclusive policies aimed at reducing disparities in access to developmental opportunities.
Increase awareness of and engagement in ISSBD in Francophone Africa	Strengthen the integration of ISSBD in Francophone Africa by promoting our research and building a regional network of developmental scientists.
Facilitate South-South research partnerships	Through learning to work effectively with our mentors from other African countries, we gained the skills needed to build collaborative research networks with other countries in the Global South that share similar challenges and contexts.

The future

Although we are all passionate about establishing careers as researchers, our future is currently unclear. Local research positions are scarce. University departments in Côte d'Ivoire and other Francophone African countries are small because only a very small percentage of the population has the opportunity to complete tertiary education. In addition, many academic programs are offered at only a single university in Côte d'Ivoire (e.g., the University of Nangui Abrogoua is the only university to offer programs in Nutrition). As a result, new positions are very rare. Although the public sector is large and several non-government organizations operate in Côte d'Ivoire, research is rarely their focus.

We are keen to continue as members of ISSBD and would welcome opportunities to form research collaborations with other members or to learn about wider training or research opportunities they may be aware of. We are also looking for ways that we can expand connections between

developmental scientists in Francophone Africa by serving as ambassadors for ISSBD, sharing the skills we have gained with students and other early-career scholars in our region, and applying our knowledge and skills to the urgent problems confronting children and young adults in our country. Although we are drawn from many academic disciplines and conducted our doctoral research on diverse topics, we all share a motivation to produce evidence that can inform initiatives to improve the developmental opportunities of young people in our region.

Acknowledgements

This doctoral fellowship program was successfully completed thanks to the scientific contributions and the moral and financial support of several individuals and institutions, to whom we would like to express our gratitude. We wish to thank Nangui Abrogoua University and Félix Houphouët-Boigny University, along with their entire

faculty, for hosting our research and facilitating the public defense of our doctoral theses. We express our deepest gratitude to ISSBD, especially to Professors Tina MALTI (current President), Toni ANTONUCCI (past President), Anne PETERSEN (past President), and Julie ROBINSON (member). Despite the language barrier, you trained, guided, and supported us throughout our fellowships. We would also like to thank the Jacobs Foundation, especially Mrs. Sabina VIGANI (Country Director) and Mr. Sosthène GUEI (Local Coordinator), for the funding and support they provided. Finally, we express our deepest gratitude to our thesis supervisors, mentors, and members of ISSBD in Africa. Through your guidance and dedication, we were able to complete this fellowship program successfully. May God continue to support you all.

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MAJOR CONFERENCES OF INTEREST

June 23 – June 26, 2025

The Creativity Workshop in Florence

Location: Florence, Italy

Web: <https://creativityworkshop.com/creativity-workshop-in-florence>

July 01 – July 04, 2025

19th European Congress of Psychology (ECP 2025)

Location: Paphos, Cyprus

Web: <https://ecp2025.eu/ecp2025.eu>

August 07 – August 09, 2025

APA Annual Convention 2025

Location: Denver, Colorado, United States

Web: <https://convention.apa.org/2025>

August 25 – August 29, 2025

European Conference on Developmental Psychology (ECDP 2025)

Location: Vilnius, Lithuania

Web: <https://www.ecdp2025vilnius.eu/ecdp2025vilnius.eu>

October 24 – October 26, 2025

3rd Global Conference on Psychology

Location: Oxford, United Kingdom

Web: <https://www.psychologyconference.org/3rd-Global-Conference-on-Psychology>

November 12 – November 14, 2025

58th Annual Meeting of the International Society for Developmental Psychobiology (ISDP 2025)

Location: San Diego, United States

Web: <https://isdp.org/current/isdp.org>

