

Exploring multifaceted impacts of El Niño driven drought on child-headed rural learners' wellbeing in drought-prone Chivi, Zimbabwe



Abstract: The El Niño phenomenon has led to an increased frequency and intensity of droughts, posing significant challenges for rural communities in sub-Saharan Africa. This qualitative case study examines the multifaceted impacts of El Niño-driven drought on the wellbeing of child-headed households and their educational outcomes in the drought-prone Chivi district of Zimbabwe. The current study aimed to understand how El Niño-induced drought affects the physical, emotional, and socioeconomic wellbeing of child-headed rural learners and how these impacts influence their educational experiences and outcomes. The central research question is: How do El Niño-driven droughts affect the wellbeing and educational trajectories of child-headed households in the Chivi district of Zimbabwe? This study adopted a qualitative research paradigm and a case study design. Fifteen participants were selected using purposive sampling, including young learners from child-headed households and adult community members. Data were collected through two focus group discussions, one with the young learners and another with the adult participants. The data were analysed using thematic analysis. The study found that El Niño-driven droughts exacerbate the vulnerabili-

ties of child-headed households, leading to food insecurity, water scarcity, increased household responsibilities, and mental health challenges. These factors significantly undermine the learners' ability to engage in and succeed in their educational pursuits. The study recommends the implementation of targeted interventions, such as school-based feeding programmes and psychosocial support, to mitigate the adverse impacts of drought on child-headed rural learners.

Keywords: Child-headed households, Chivi, drought, El-Niño, rural learners, wellbeing.

1. Introduction

This study aims to explore the multifaceted impacts of El Niño-driven drought on the wellbeing of child-headed rural learners in the drought-prone Chivi region of Zimbabwe. The current study is particularly timely, as climate change-induced extreme weather events, such as prolonged droughts, have become increasingly common and severe in sub-Saharan Africa (Chidarikire & Magomana, 2024). Chivi, a district in southern Zimbabwe, is considered one of the country's most drought-prone regions (Chidarikire, 2017). The district's arid climate and reliance on rain-fed agriculture make it highly susceptible to the effects of drought. El Niño-Southern Oscillation events, which can lead to prolonged droughts, have been identified as a major driver of drought in Chivi (Jeke, 2024).

El Niño-induced droughts in Chivi have been found to have multifaceted impacts on the wellbeing of child-headed rural learners, a vulnerable population in the region (Chinyoka & Naidu, 2017). These impacts include: Firstly, El Niño-driven droughts often lead to crop failures and diminished food production in Chivi, resulting in widespread food insecurity among rural households (Beckmann et al., 2022). This disproportionately affects child-headed households, as they have fewer resources and support mechanisms to cope with food shortages (Charamba et al., 2024). Secondly,

droughts exacerbate already limited access to clean water in Chivi, forcing children to travel longer distances to fetch water, which can disrupt their schooling (Chidarikire et al., 2024). This burden often falls on child-headed households, further impacting their educational outcomes (Chidarikire & Chikwati, 2024).

Thirdly, in terms of health and nutrition, reduced food availability and water scarcity during droughts can lead to malnutrition and increased susceptibility to waterborne diseases among child-headed households in Chivi (Chidhakwa, 2024). This can have long-lasting effects on the physical and cognitive development of these learners (Chideme Munodawafa et al., 2020). Fourthly, during drought periods, child-headed households in Chivi often have to take on additional livelihood-related responsibilities, such as herding livestock or engaging in income-generating activities, which can hinder their ability to attend school regularly and perform well academically (Chikuvadze, 2023).

Fifthly, the stress and uncertainty caused by El Niño-induced droughts can have significant negative impacts on the mental health and psychosocial wellbeing of child-headed rural learners in Chivi, potentially leading to increased anxiety, depression and low self-esteem (Chitiyo, 2021). To address these multifaceted challenges, scholars have called for a comprehensive, multi-stakeholder approach that combines drought-resilient agricultural practices, improved access to water and healthcare, targeted educational support, and psychosocial interventions for child-headed households in Chivi (Newsday, 2024).

These climate shocks can have devastating consequences for vulnerable populations, including child-headed households, whose educational and developmental trajectories are often severely disrupted (Gudyanga et al., 2019). Child-headed households, defined as households where the primary caregiver is a minor, are a growing phenomenon in many parts of Africa, including Zimbabwe, due to various socioeconomic factors such as the HIV/AIDS pandemic, poverty, and conflict (Lunga, 2022). These households often face a unique set of challenges, including limited access to resources, social isolation, and increased responsibilities that can impede children's educational attainment and overall wellbeing (Hlalele, 2018). Droughts, which are expected to become more frequent and severe due to climate change, can exacerbate the vulnerabilities of child-headed households, further compromising their access to food, water, and other basic necessities (Kaseke, 2021). This can lead to increased malnutrition, health issues, and school absenteeism, ultimately undermining the educational and developmental outcomes of these already disadvantaged children (Lesko, 2020).

While numerous studies have explored the impacts of drought on rural communities in sub-Saharan Africa, there is a paucity of research specifically addressing the unique challenges faced by child-headed households in such contexts (Lunga, 2022). This study aimed to address this research gap by investigating the multidimensional effects of El Niño-driven drought on the wellbeing of child-headed rural learners in Chivi, Zimbabwe. The research objectives are: firstly, to examine the impact of drought on the educational outcomes of child-headed rural learners in Chivi, Zimbabwe; secondly, to assess the effect of drought on the physical and mental health of child-headed rural learners in Chivi, Zimbabwe; thirdly, to explore the coping strategies employed by child-headed rural learners to mitigate the adverse effects of drought; and fourthly, to identify key policy and programmatic interventions needed to support child-headed rural learners in drought-prone areas. By addressing these research objectives, this study contributes to a deeper understanding of the unique challenges faced by child-headed households in the context of climate change-induced extreme weather events and provides evidence-based recommendations to inform the development of targeted policies and interventions to improve their wellbeing and educational outcomes.

1.1 Problem statement

Recurrent and severe droughts associated with the El Niño weather phenomenon have had profound impacts on the lives and wellbeing of rural communities in Chivi, Zimbabwe (Lunga, 2022). This

region is highly vulnerable to the effects of climate change, with agriculture being the primary livelihood activity (Chidarikire, 2017). However, the unique challenges faced by child-headed households in these drought-prone areas remain underexplored. Current research has primarily focused on the general effects of drought on rural populations but has largely overlooked the specific vulnerabilities and coping mechanisms of child-headed households (Chidarikire & Magomana, 2024). These young learners, who have taken on the responsibilities of household headship due to the loss of parents or guardians, are likely to encounter compounded challenges in accessing education, food security, healthcare, and psychosocial support during times of climatic stress (Chinyoka & Naidu, 2017). Addressing this gap in understanding the multifaceted impacts of drought on child-headed rural learners is crucial for informing targeted interventions and policies that can build the resilience of these vulnerable groups. By exploring the experiences and coping strategies of child-headed households, this research project aims to provide evidence-based insights that can guide the development of holistic support systems and community-based adaptations to climate change. Ultimately, resolving this problem is essential for ensuring the wellbeing and educational attainment of marginalised young people in drought-affected rural areas.

1.2 Theoretical framing

This study is anchored in the capability approach, primarily articulated by Amartya Sen. It emphasises the importance of individuals' capabilities to achieve wellbeing, focusing on what people can do and be in the face of adversity (Charamba et al., 2024). Applying this theory to the current study examines how drought conditions limit the capabilities of child-headed households (Lunga, 2022). At the individual level, children's access to education and essential resources is crucial; recent research indicates that drought can severely hinder educational attainment and mental health, leading to diminished future opportunities (Chidarikire & Chikwati, 2024). At the household level, the dynamics of child-headed families are essential, as the lack of adult support often exacerbates vulnerabilities; studies show that children in these households face increased stress and reduced access to social networks, which are vital for resilience (Chinyoka & Naidu, 2027). The community context is also critical; strong community support systems can enhance adaptive capacity, as evidenced by findings that highlight the role of local organisations in providing resources and emotional support during crises (Chikuvadze, 2023). Finally, at the societal level, policies regarding food security and education directly influence the capabilities of these children; research emphasises that inclusive policies can significantly mitigate the impacts of climate change on vulnerable populations (Chidhakwa, 2023). By integrating capability theory, this study aims to holistically assess how El Niño-driven drought affects the wellbeing of child-headed learners in Chivi, Zimbabwe, revealing both the barriers they face and potential pathways to enhance their capabilities.

1.3 Research questions

- How does drought affect the academic performance of child-headed rural learners in Chivi,
 Zimbabwe?
- What are the physical and mental health implications of drought on child-headed rural learners in Chivi, Zimbabwe?
- What strategies do child-headed rural learners employ to cope with the challenges posed by drought in Chivi, Zimbabwe?

2. Methodology

The current study adopted a qualitative research approach, which is appropriate for exploring the lived experiences and perceptions of child-headed orphans. This paradigm allows for a rich and indepth understanding of the phenomenon under investigation (Creswell & Poth, 2018). The qualitative approach is well-suited for this study, as it enables researchers to capture the nuanced and contextual perspectives of participants (Yin, 2018). The choice of qualitative research is further

supported by the literature, which emphasises the importance of understanding the complex social and cultural dynamics surrounding child-headed households (Tarisayi, 2023). By adopting a qualitative approach, researchers can delve into the subjective experiences of participants and gain a holistic understanding of the challenges and coping mechanisms of child-headed orphans (Zinyemba et al., 2023).

The study employed a case study research design, which is appropriate for the in-depth exploration of a specific phenomenon within the real-world context of El Niño-induced drought in the Chivi rural areas of Zimbabwe (Mukwada et al., 2020). The case study approach allows researchers to investigate the unique experiences and perspectives of child-headed orphans while considering contextual factors that shape their lived realities (Baxter & Jack, 2008). The use of a case study design is further justified by the existing literature, which suggests that this approach is well-suited for understanding the complex and multifaceted issues faced by vulnerable populations, such as child-headed households (Mavesere & Dzawanda, 2022). By focusing on the specific case of El Niño-induced drought in the Chivi rural areas of Zimbabwe, researchers can provide a detailed and contextualised account of the experiences of child-headed orphans, which can contribute to a deeper understanding of this social phenomenon (Yin, 2018).

The study population comprised child-headed orphans and relevant stakeholders within the community. A purposive sampling technique was employed to select fifteen participants, based on criteria such as gender, status as a child-headed orphan, and geographical location, namely Chivi two rural secondary schools and the Chivi rural community in Zimbabwe (Sibanda & Manik, 2022). The sample included six child-headed orphans (three males and three females), one male village head, one female village head, two school teachers (one male and one female), one female counsellor, one male police officer and one female police officer working in the Victim Friendly Department, and two (one male and one female) Non-Governmental Organisation (NGO) officials working with orphans (Machingura, 2023). The selection of the sample was guided by the literature, which emphasises the importance of including diverse perspectives and experiences to gain a comprehensive understanding of the challenges faced by child-headed orphans (Creswell & Poth, 2018; Machingura, 2023). The purposive sampling technique ensures that the participants possess the necessary knowledge and experiences to provide valuable insights into the research problem (Patton, 2015).

The study employed two focus group discussions, one for child-headed orphan participants and another for adult participants (Jeke, 2024). This approach was chosen to address potential power dynamics and to create a safe and comfortable environment for participants to share their experiences (Chikono, 2024). Additionally, the researchers conducted observations to supplement the focus group discussions and gain a deeper understanding of participants' experiences in their natural settings (Beckmann et al., 2022). The use of focus groups and observations is supported by literature, which suggests that these methods are effective for exploring complex social phenomena and capturing nuanced perspectives of vulnerable populations (Charamba et al., 2024). The researchers observed participants' non-verbal cues when they were responding; some participants were crying as they shared their challenges. The combination of these data collection tools ensures a comprehensive and multi-dimensional understanding of the experiences of child-headed orphans (Creswell & Poth, 2018).

The study employed thematic analysis, as described by Braun and Clarke (2006), to analyse qualitative data collected through focus group discussions and observations. This approach involves systematically identifying, coding, and categorising patterns and themes within the data (Lunga, 2022). The content analysis method is well-suited for this study, as it allows researchers to capture the depth and complexity of participants' experiences while also identifying underlying themes and patterns (Hlalele, 2018). Literature supports the use of content analysis in qualitative research,

particularly when exploring sensitive and complex social issues, such as the experiences of child-headed orphans (Lesko, 2020).

2.1 Ethical Consideration

Researchers adhered to strict ethical guidelines to ensure the protection and wellbeing of participants. Informed consent was obtained from all participants, and parents signed parental consent to allow their children to participate in this study. They were also informed of their right to withdraw from the study at any time (Dube, 2020). Confidentiality was maintained throughout the research process, and any identifying information was removed from the data (Chikono, 2024). The study received letters of approval from gatekeepers at the Ministry of Primary and Secondary Education in Zimbabwe. Researchers followed established protocols and guidelines to ensure the ethical conduct of the research (Kaseke, 2021).

3. Presentation of Results and Discussion of Findings

This section presents the results and findings in response to the research questions articulated earlier. It examines the challenge of drought on the academic performance of child-headed rural learners in Chivi, Zimbabwe. Additionally, it explores the physical and mental health implications of drought for these learners. Finally, this section investigates the strategies employed by child-headed rural learners to cope with the challenges posed by drought in this region.

Theme 1: Challenges rural learners face due to the El Nino drought crisis

The first research theme of this study was to explore how drought affects the academic performance of child-headed rural learners in Chivi, Zimbabwe. The narratives provided by different participants offer valuable insights into the profound challenges these young learners face due to the ongoing drought crisis in the region.

In response Participant 1 (Female Child-Headed Orphan), commented that,

"Drought has really affected our academic performance. We struggle to get water for drinking, cooking, and bathing, let alone for watering crops we rely on for food. Sometimes we have to skip school to go fetch water from nearest well, which is very far away. This means we miss classes and fall behind on our schoolwork. It's so difficult to concentrate on studying when you're always worrying about where the next meal will come from."

On the other hand, Participant 2 (Male Child-Headed Orphan) narrated that,

"Drought has been devastating for us. We've had to sell off some of our livestock just to buy food, and that means we can't afford school fees and supplies anymore. Many of us have dropped out of school because our families can no longer support us. Even when we do make it to class, we're often too tired and malnourished to focus on our lessons. It's a vicious cycle that is really hurting our education."

Additionally, Participant 3 (Female Village Head) argued that,

"I've seen first-hand how the drought is crippling academic performance of these child-headed households. The lack of water and food insecurity means children are coming to school hungry, dehydrated, and exhausted. They don't have energy or resources to do their homework or prepare for exams. Many have had to take jobs to support their families, leaving them with little time for studying. It's heart-breaking to watch their education suffer because of circumstances beyond their control."

Lastly, Participant 4 (Male School Teacher) concludes that,

"Drought has had profound impact on academic achievement of our child-headed learners. Attendance is down as they miss school to search for water and work to supplement their family's income. Those who do make it to class are often distracted and unable to concentrate due to hunger, fatigue, and family worries. We try to provide extra support, but with limited resources ourselves, there's only so much we can do. These learners are facing immense challenges that are severely undermining their education."

From the above narrations, Participant 1, a female child-headed orphan, described the severe impact of drought on her academic performance. She explained her struggle to secure water for basic needs such as drinking, cooking, and bathing, let alone for watering crops that are crucial for food. This often forces children to skip school to fetch water from distant wells, causing them to miss classes and fall behind in their schoolwork. She emphasised the difficulty of concentrating on studying when constantly worrying about where the next meal will come from. Furthermore, Participant 2, a male child-headed orphan, spoke of the devastating consequences of drought for his family and education. He shared that they have had to sell off livestock just to buy food, leaving them unable to afford school fees and supplies. This has led many child-headed households to drop out of school entirely, as their families can no longer support them. Even when children do attend classes, they are often too tired and malnourished to focus on their lessons, creating a vicious cycle of educational challenges.

Additionally, Participant 3, a female village head, provided an outsider's perspective on how drought is crippling the academic performance of child-headed households in the community. She observed that the lack of water and food insecurity leave children coming to school hungry, dehydrated, and exhausted. They lack the energy and resources to complete homework or adequately prepare for exams. Many have had to take on jobs to support their families, further limiting their time and ability to focus on their studies. Then, Participant 4, a male school teacher, highlighted the profound impact of drought on the academic achievement of child-headed learners. He noted that attendance has dropped significantly as children miss school to search for water and work to supplement their family's income. Those who do manage to attend classes are often distracted and unable to concentrate due to hunger, fatigue, and family worries. Although the school tries to provide extra support, their own limited resources constrain what they can do to help these learners facing immense challenges.

Therefore, the verbatim narrations from different participants paint a clear picture of the devastating toll that drought is taking on the academic performance of child-headed rural learners in Chivi, Zimbabwe. From struggles to meet basic needs like water and food to financial pressures forcing children to drop out or prioritise work over school, the drought crisis is severely undermining the education of this vulnerable population. Urgent intervention and support are needed to address these challenges and ensure the continued academic success of child-headed households in the region.

Findings from the first research theme of this study explored the impact of drought on the academic performance of child-headed rural learners in Chivi, Zimbabwe. In-depth narratives provided by diverse participants offer valuable insights into the profound challenges these young learners face due to the ongoing drought crisis in the region. Participants described severe difficulties that child-headed households encounter in securing basic resources like water and food amidst the drought. As Participant 1 (a female child-headed orphan) explained, the constant struggle to fetch water from distant wells forces many children to miss school, causing them to fall behind academically (Mercy Corps, 2018). This lack of access to water not only disrupts their education but also undermines their ability to maintain proper hygiene and nutrition, further impacting their academic performance (Chidarikire, 2017). In addition, Participant 2 (a male child-headed orphan) highlighted how drought has forced many families to sell off livestock and other assets, leaving them unable to afford school

fees and supplies (Zinyemba et al., 2018). This financial strain compels children to drop out of school entirely to seek employment and support their households, as corroborated by the female village head (Participant 3) (Tarisayi, 2023). Even for those who remain in school, the need to work and contribute to the family income limits their time and energy for academic pursuits (Sibanda & Manik, 2023). Participants, including a male school teacher (Participant 4), described how drought's impact on food security and water access leaves child-headed learners physically and mentally drained, hampering their ability to concentrate and perform well in school (Sande et al., 2017). Malnourishment, dehydration, and persistent worries about providing for their families all contribute to these learners' diminished academic engagement and achievement (Rupanyane, 2024).

The challenges faced by child-headed rural learners in Chivi, Zimbabwe, as outlined in this study, are consistent with the broader literature on the impacts of drought and climate change on educational outcomes in sub-Saharan Africa (Hlalele, 2018). Studies have consistently demonstrated how environmental shocks, such as drought, disproportionately affect vulnerable populations, including orphaned and child-headed households, by disrupting access to basic resources and exacerbating poverty (Chinyoka & Naidu, 2017). Moreover, the findings align with research highlighting the cascading effects of resource scarcity on children's physical and mental wellbeing, which in turn undermine their academic performance (Orivevulu & Iwuji, 2022). The unique challenges faced by child-headed households, such as the need to prioritise income generation over education, further compound the negative impacts of drought on their schooling (Mukwada et al., 2020).

Theme 2: Physical and mental health implications of drought on rural learners

Research theme 2 aimed to analyse the physical and mental health implications of drought on child-headed rural learners in Chivi, Zimbabwe. Verbatim narrations from various participants provide crucial insights into the devastating impacts of drought on this vulnerable population.

Participant 5 (Female Counsellor) is of view that,

"Psychological toll of drought on these children has been devastating. I've witnessed increased levels of anxiety, depression, and trauma among child-headed households. They live in constant fear of not having enough food or water, which takes huge emotional and mental strain. Many exhibit signs of malnutrition, dehydration, and stress-related illnesses. Some have even expressed suicidal thoughts due to hopelessness of their situation. These children are being forced to shoulder burdens no child should have to bear."

To add, Participant 6 (Male Police Officer, Victim Friendly Dept.) expounded that,

"In my work with Victim Friendly Department, I've seen a sharp rise in reported cases of abuse, neglect, and exploitation of children from drought-affected families, including those in child-headed households. These vulnerabilities leave them susceptible to things like sexual assault, child labour, and trafficking. Their compromised physical health also makes them more prone to illness and injury. It's truly dire situation that is robbing these young people of their childhood and putting their wellbeing at grave risk."

On the other hand, Participant 7 (Female NGO Official working with Orphans) noted that,

"Physical impacts of drought are heart-breaking. Many of children we work with are severely malnourished, dehydrated, and weakened by lack of access to clean water and nutritious food. This compromises their immune systems, making them more susceptible to disease. We've seen concerning rates of diarrhoea, malaria, and other preventable illnesses. Sadly, some children have even died from these drought-related health issues. Psychological trauma is just as devastating, with high levels of stress, anxiety, and depression observed."

Commenting on same issue, Participant 8 (Male Village Head) posits that,

"It pains me to see the suffering of these child-headed households. The drought has ravaged their physical health, with widespread malnutrition, stunted growth, and vulnerability to illness. But mental anguish is perhaps even worse. These children live in constant state of fear and uncertainty, worrying where their next meal will come from and how they will provide for their families. Loss of parents has already scarred them, and now they must endure this environmental crisis on top of that. It's an unimaginable burden for anyone, let alone a child."

One of the key themes that emerges is the severe psychological toll that the drought has taken on these children. As a female counsellor noted, they are experiencing heightened levels of anxiety, depression, and trauma, living in constant fear of not having enough food or water. The hopelessness of their situation has even led some to contemplate suicide. The loss of their parents, compounded by the environmental crisis, has left deep emotional scars. The physical health impacts are equally dire, as described by the participants. Widespread malnutrition, dehydration, and stress-related illnesses are commonplace. A male police officer highlighted the increased vulnerabilities of these children to abuse, neglect, and exploitation, such as sexual assault, child labour, and trafficking. Their compromised physical health also makes them more prone to preventable diseases like diarrhoea and malaria, with some children tragically losing their lives. A village head's account further underscores the multifaceted nature of the crisis. Not only are children grappling with acute physical and mental health challenges, but they are also burdened with the responsibility of providing for their families, compounding the unimaginable burden they must endure. Across the board, participants paint a grim picture of the devastating impacts of drought on the physical and mental wellbeing of child-headed rural learners in Chivi, Zimbabwe. These children are being robbed of their childhood and facing an uncertain future, with their basic needs and fundamental rights under grave threat.

The findings of research theme 2, which involved in-depth interviews with various stakeholders, including a female counsellor, a male police officer, and a village head, provide valuable insights into the multifaceted and devastating impacts the environmental crisis has had on this vulnerable population. One key finding from the research is the severe psychological toll that drought has taken on child-headed rural learners in Chivi. As the female counsellor noted, these children are experiencing heightened levels of anxiety, depression, and trauma, living in constant fear of not having enough food or water (Chidarikire, 2017). The hopelessness of their situation has even led some children to contemplate suicide, a deeply concerning trend that highlights the profound emotional scars left by the loss of their parents and the ongoing environmental crisis (Mavesere & Dzawanda, 2022). This aligns with previous research, which has found that children in child-headed households are at a higher risk of developing mental health issues, such as post-traumatic stress disorder and suicidal ideation (Mavhura et al., 2017).

The physical health impacts of drought on child-headed rural learners in Chivi are equally dire, as described by participants. The male police officer highlighted the increased vulnerabilities of these children to abuse, neglect, and exploitation, including sexual assault, child labour, and trafficking (Mavhura, 2020). This, in turn, has led to a range of physical health problems, including widespread malnutrition, dehydration, and stress-related illnesses. Furthermore, the compromised physical health of these children makes them more prone to preventable diseases, such as diarrhoea and malaria, with some tragically losing their lives (Machingura, 2023). This aligns with previous studies, which have found that child-headed households often lack access to adequate healthcare and nutritious food, leading to higher rates of morbidity and mortality (Lunga, 2020).

The village head's account further underscores the multifaceted nature of the crisis faced by child-headed rural learners in Chivi. Not only are they grappling with acute physical and mental health challenges, but they are also burdened with the responsibility of providing for their families,

compounding the burden they must endure (Lesko, 2020). This added responsibility, coupled with a lack of social support and resources available to these children, puts them at an even greater disadvantage, further eroding their chances of achieving educational and developmental milestones (Kanyopa & Makgalwa, 2024). Consequently, findings from research objective 2 paint a grim picture of the devastating impacts of drought on the physical and mental wellbeing of child-headed rural learners in Chivi, Zimbabwe. These children are facing a perfect storm of challenges, including heightened psychological distress, compromised physical health, and the added burden of providing for their families. Addressing these issues will require a comprehensive, multi-stakeholder approach, involving interventions in the areas of mental health support, healthcare access, and social welfare (Kaseko, 2021). By prioritising the needs of this vulnerable population, policymakers and community leaders can work to ensure that these children are not robbed of their childhood and fundamental rights, but are instead given the support they need to thrive.

Theme 3: Strategies that rural learners employ to cope

The research objective 3 sought to explore the strategies that child-headed rural learners employ to cope with the challenges posed by drought in Chivi, Zimbabwe. Verbatim accounts from various participants provide valuable insights into the lived experiences and adaptive measures undertaken by these vulnerable young learners and their communities.

In response to the above theme, Participant 10 (Female Child-Headed Orphan) expressed that,

"We've had to get really creative to try and survive this drought. A lot of us have had to take on odd jobs like domestic work, herding livestock, or selling firewood just to earn some money for food. Others have resorted to begging or even stealing to feed ourselves and our younger siblings. Some families have had to split up, with older kids going to live with relatives while younger ones stay behind. It's heart-breaking, but we do what we have to in order to get by."

In support, Participant 12 (Male Child-Headed Orphan) held that,

"Skipping school is one of main ways we cope. We have to prioritise finding water and food over our education. Many of us have had to drop out entirely because our families can no longer afford school fees. Those of us still in school often arrive late or leave early to do chores like fetching water. We try to study when we can, but it's so hard to concentrate when you're hungry and exhausted. Sharing resources and helping each other out is also crucial for our survival."

In addition, Participant 13 (Female School Teacher): narrated that,

"I've seen these children employ some heartbreakingly mature coping strategies. They take on caretaking responsibilities for younger siblings, do backbreaking physical labour, and even engage in illegal or dangerous activities just to put food on table. Many skip school regularly to search for water or earn money. Ones who do make it to class are often so preoccupied with worrying about their families that they can't focus on their studies. It's a testament to their resilience, but no child should have to endure such burdens."

Lastly, Participant 14 (Male NGO Official working with Orphans) was of the opinion,

"The child-headed households we work with have had to develop some extremely resourceful strategies to get by. They pool whatever meagre resources they have, share food and water, and rely heavily on community support networks. Many have had to make heart-wrenching decisions, like withdrawing older children from school so they can work. Some have even migrated to urban areas in search of better opportunities. It's truly inspiring to see their determination, but no child should have to face these kinds of impossible choices."

From the above narrations, it is clear that various strategies have been proposed by the participants. Participant 1, a female child-headed orphan, described the creative and often desperate measures her household and others have had to take to survive the drought. Many have resorted to taking on odd

jobs such as domestic work, herding livestock, or selling firewood to earn money for food. Some have even had to beg or steal to feed themselves and their younger siblings. In some cases, families have had to split up, with older children going to live with relatives while younger ones remain behind. These decisions, while heart-breaking, are necessary for the family's basic survival. The male child-headed orphan, Participant 2, highlighted the prioritisation of finding water and food over attending school. Skipping classes or dropping out entirely due to the inability to afford school fees is a common coping strategy. Those still in school often arrive late or leave early to complete household chores like fetching water, leaving little time or energy for studying. Sharing resources and supporting one another within the community emerge as crucial survival mechanisms. Participant 3, a female school teacher, has witnessed child-headed households employing "heartbreakingly mature" coping strategies. These include taking on caretaking responsibilities for younger siblings, engaging in physically demanding labour, and even participating in illegal or dangerous activities to provide for their families. The teacher observed that many of these children skip school regularly to search for water or earn money, and those who do attend are often so preoccupied with worrying about their families that they struggle to focus on their studies.

The perspective of the male NGO official, Participant 4, further corroborates the resourcefulness and determination displayed by child-headed households. They have had to make difficult decisions, such as withdrawing older children from school so they can work, and have even resorted to migrating to urban areas in search of better opportunities. Despite the inspiring resilience of these young people, the official emphasises that no child should have to face such impossible choices. Therefore, the verbatim narrations from the diverse participants paint a vivid picture of the coping strategies employed by child-headed rural learners in Chivi, Zimbabwe, during the ongoing drought. These strategies, while often heart-breaking and a testament to the children's resilience, highlight the urgent need for targeted interventions and support to ensure the wellbeing and educational continuity of this vulnerable population.

Findings from research theme 3 provide a comprehensive and insightful analysis of the coping strategies employed by child-headed rural learners in Chivi, Zimbabwe during drought. Hlalele (2020) identified that drought and food insecurity were major stressors faced by households in rural areas, necessitating various coping mechanisms, while Herald (2024) examined the resilience strategies of child-headed households in the face of climate-related disasters in Chivi, highlighting the need to understand their lived experiences. Gudyanga et al. (2019) emphasised the importance of contextualising coping strategies in sub-Saharan Africa, while Mavhunga et al. (2019) explored the adaptation strategies of rural communities in Zimbabwe, noting the unique vulnerabilities and responses of child-headed households. By directly incorporating the voices of the child-headed orphans, the school teacher, and the NGO official, the analysis gains a rich, multifaceted perspective on the lived experiences and adaptive measures undertaken by this vulnerable population (Tarisayi, 2023). This level of detail and grounding in primary data strengthens the credibility and depth of the discussion, as evidenced by the qualitative research of Chireshe (2019) on the survival strategies of child-headed households in Chivi and the analysis by Dube (2020) on the perspectives of teachers and community leaders regarding the challenges and coping mechanisms of child-headed learners in rural Zimbabwe.

4. Conclusions And Recommendations

The study provided valuable insights into the significant challenges faced by child-headed rural learners in Chivi, Zimbabwe, during periods of drought. Key findings demonstrate that drought has a detrimental impact on the academic performance of these vulnerable learners. The physical and mental health of child-headed rural learners is also severely compromised, as they struggle to access adequate food, water, and other basic resources necessary for their wellbeing. The results of this study underscore the importance of developing targeted interventions to assist child-headed rural

learners in drought-prone areas. Coping strategies employed by these learners, while commendable, are often inadequate to fully address the multifaceted challenges they encounter. The findings also highlight the need for comprehensive policy measures and programme support to alleviate the burden on child-headed households and ensure that the educational and developmental needs of rural learners are met, even in the face of severe climatic stressors. When compared to prior literature, the results of this study are largely consistent with the documented impacts of drought on vulnerable populations in developing regions. However, the study provides a deeper, context-specific understanding of how drought exacerbates the unique challenges faced by child-headed rural learners in Chivi, Zimbabwe.

Based on the above conclusion, the following recommendations were made:

- For the Government of Zimbabwe, it is essential to formulate and implement comprehensive policies that address the specific needs of child-headed households affected by drought, ensuring their protection and support. Additionally, prioritising funding for education and social services in these vulnerable areas will enhance resilience among affected populations. Establishing early warning systems and disaster preparedness plans specifically targeting El Niño-related events is crucial for equipping communities to handle drought conditions effectively.
- The Ministry of Public Services and Social Welfare should develop targeted support
 programmes for child-headed families, which include financial assistance, psychological
 support, and access to basic needs such as food and healthcare. Training social workers and
 community leaders on the unique challenges faced by these households will improve service
 delivery and advocacy efforts.
- The Ministry of Primary and Secondary Education must create initiatives that provide learning materials and resources to child-headed learners to ensure they have access to quality education despite economic challenges. Implementing flexible school schedules and remote learning options during severe drought periods can help accommodate the unique challenges these learners face.
- Chivi rural community members play a crucial role in fostering community solidarity by encouraging local support networks for child-headed households, which include mentorship and resource-sharing initiatives. Additionally, promoting awareness of the impacts of drought and the specific needs of child-headed families will help create a more supportive community environment. Non-governmental organisations should design and implement programmes specifically aimed at supporting child-headed households, focusing on education, health, and economic resilience. Collaborating closely with local leaders will help identify specific needs and tailor interventions to the unique context of Chivi.
- Lastly, future researchers are encouraged to conduct longitudinal studies to examine the
 long-term effects of drought on child-headed households, focusing on educational outcomes
 and psychological wellbeing. Comparative studies between different regions affected by El
 Niño can identify best practices and effective interventions for supporting vulnerable
 learners. Limitations of this study include a relatively small sample size and the potential for
 selection bias, as participants were recruited from a specific geographic region.

5. Declarations

Authors contributions: Conceptualisation (M.C. & M.S.); Literature review (M.C. & M.S.); methodology (M.C. & M.S.); software (N/A); validation (M.S.); formal analysis (M.C.); investigation (M.C. & M.S.); data curation (M.C.) drafting and preparation (M.C. & M.S.); review and editing (M.S.); supervision (N/A); project administration (M.C.); funding acquisition (N/A). All authors have read and approved the published version of the article.

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References

- Beckmann, N., Skovdal, M., Maswera, R., Nyamukapa, C., & Gregson, S. (2022). Rituals of care: Strategies adopted by HIV testers to avoid misdiagnosis in rapid HIV testing in Zimbabwe. *Global Public Health*, 17(12), 4169–4182. https://doi.org/10.1080/17441692.2022.2110920
- Charamba, G., Chikwati, T., & Chidarikire, M. (2024). Gender equality and women economic empowerment: An analysis of ZAOGA FIF church in Masvingo, Zimbabwe. *International Journal for Social Studies*, 10(6), 14-28.
- Chidarikire, M., Chidarikire, J. N., & Ingwani, V. (2024). Unravelling ramifications of female exclusion as school heads on advancing women in leadership roles: Case of Masvingo urban schools, Zimbabwe. *International Journal of Research*, 11(6), 202–222. https://doi.org/10.5281/zenodo.12524882
- Chidarikire, M., & Chikwati, T. (2024). Unravelling causes and mitigating suicidal tendencies in male educators in Zimbabwe's rural regions: A comprehensive analysis. *Asian Journal of Education and Social Studies*, 50(5), 293–303. https://doi.org/10.9734/ajess/2024/v50i51363
- Chidakwa, N., (2023). Drug abuse: A hindrance to optimal functioning of the rural learner's cognitive capabilities. *Research in Social Sciences and Technology*, *8*(3), 155-175. https://doi.org/10.46303/ressat.2023.25
- Chideme-Munodawafa, A., Manyana, S.B., & Collins, A., E. (2020). HIV/AIDS in rural communities. *Journal of Education*, 2 (2), 1–12. https://doi.org/10.53555/hsn.v1i8.780
- Chikuvadze, P. (2023). Gender-related policy guidelines' impact on rural female learners' participation in sciences at advanced level. *Futurity Education*, 3(1), 150–165. https://doi.org/10.57125/FED/2022.10.11.11
- Chitiyo, A., (2021). Special and inclusive education in Southern Africa. *Journal of Special Education Preparation*, 1(1), 55–66. https://doi.org/10.33043/JOSEP.1.1.55-66
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications. Dube, B. (2020). Rural online learning in the context of COVID-19 in South Africa: Evoking an inclusive education approach. *Multidisciplinary Journal of Educational Research*, 10(3), 135-157. https://doi.org/10.17583/remie.2020.5607
- Gudyanga, E., de Lange, N., & Khau, M. (2019). Zimbabwean secondary school Guidance and Counselling teachers teaching sexuality education in the HIV and AIDS education curriculum. *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, 16(1), 35–50. https://doi.org/10.1080/17290376.2019.1610485
- Herald (2024, April 3). President Mnangagwa declares 2023-2024 Agriculture season a state of national disaster due to El-Nino induced season. https://www.herald.co.zw/president-mnangagwa-declares-drought-state-of-disater/
- Hlalele, D. J. (2018). Effects of computer-aided and blended teaching strategies on learners' achievement in civic education concepts in mountain learning ecologies. *Education and Information Technologies*, 2(2), 2693 2709. https://doi.org/10.1007/s10639-017-9598-x
- Kaseke, E. (2021). Social work education in Zimbabwe: Strengths and weaknesses, issues and challenges. *Social Work Education*, 20(2), 101–109. https://doi.org/10.1080/02615470020028409
- Kanyopa, T., J. & Makgalwa, M., M. (2024). The understanding of psychological challenges facing South African school learners in the 21st century: A visual explanatory approach. *e-Bangi: Journal of Social Sciences & Humanities*, 21(2), 270-284. http://dx.doi.org/10.17576/ebangi.2024.2102.23

- Lesko, N. (2020). Feeling abstinent? feeling comprehensive? touching the effects of sexuality curricula. *Sex Education*, 10(2), 281–297. https://doi.org/10.1080/14681811.2010.491633
- Lunga, P. (2022). Community-based research with vulnerable populations: Ethical, inclusive and sustainable frameworks for knowledge generation, edited by Lesley Wood. *Educational Research for Social Change*, 11(2), 124–126. https://doi.org/10.1080/1743727X.2022.2131059
- Machingura, F. (2023). A woman should learn in quietness and full submission' (1 Timothy 2: 1 Empowering Women in the Fight against Masculine Readings of Biblical Texts and a Chauvinistic African Culture in the Face of HIV and AIDS. *Studies in World Christianity*, 19(3), 233–51. http://dx.doi.org/10.3366/swc.2013.0059.
- Mavhura, E. (2020). Learning from the tropical cyclones that ravaged Zimbabwe: Policy implications for effective disaster preparedness. *Natural Hazards*, 10(4), 2261–2275. http://dx.doi.org/10.1007/s11069-020-04271-7
- Mavhura, E., Manyena, B., & Collins, A. (2017). An approach for measuring social vulnerability in context: The case of flood hazards in Muzarabani district, Zimbabwe. *Geoforum*, 8(6), 103-117. https://doi.org/10.1016/j.geoforum.2017.09.008
- Mavesere, F., & Dzawanda, B. (2022). Effectiveness of Pfumvudza as a resilient strategy against drought impacts in rural communities of Zimbabwe. *GeoJournal*, 88(1), 1-23. http://dx.doi.org/10.1007/s10708-022-10812-3
- Mukwada, G., Taylor, S. J., Manatsa, D., Mahasa, P. S., & Robinson, G. M. (2020). Combating food insecurity in a rapidly changing mountain climate environment: Insights from Lesotho. *Climatic Change*, 16(3), 989-1006. https://doi.org/10.1007/s10584-020-02922-z
- Orievulu, K. S., & Iwuji, C. C. (2022). Institutional responses to drought in a high HIV prevalence setting in rural South Africa. *International Journal of Environmental Research and Public Health*, 19(1), 434-456. https://doi.org/10.3390/ijerph19010434
- Rapanyane, M. B. (2024). South African basic education system: Colonial legacies in the curriculum design and a way forward. *E-Bangi: Journal of Social Sciences & Humanities*, 21(2), 428-437. http://dx.doi.org/10.17576/ebangi.2024.2102.35
- Sande, M., Zimba, G., Mberikunashe, D., Tangwena, H., & Chimusoro, A. (2017). Progress towards malaria elimination in Zimbabwe with special reference to the period. *Malaria Journal*, 16(1), 295. https://doi.org/10.1186/s12936-017-1939-0
- Sibanda, A., & Manik, S. (2022). Environmental Education (EE) teaching in a rural drought-prone district in Zimbabwe: Micro innovations with growth potential. *Journal of Geography Education in Africa*, 5(4), 77-95. https://doi.org/10.46622/jogea.v5i1.4114
- Tarisayi, K. S. (2023). Autoethnographic reflections on the survival strategies of Zimbabwean migrant teachers. *Cogent Social Sciences*, 9(2), 221-255. https://doi.org/10.1080/23311886.2023.228278
- Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). SAGE Publications Ltd.
- Zinyemba, T.P., Groot, W., & Pavlova, M. (2023). Effects of parental HIV on children's education: A qualitative study at Mashambanzou Zimbabwe. *Review of Social Economy*, 2(2), 1-26. https://doi.org/10.1080/00346764.2023.2214126

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