UNIVERSITY OF GHANA

DEPARTMENT OF PSYCHOLOLGY

EXPLORING THE EXPERIENCES AND WELL-BEING OF ADOLESCENTS AND PARENTS IN ILLEGAL MINING (GALAMSEY) COMMUNITIES: THE CASE OF ADANSI NORTH DISTRICT ASSEMBLY IN THE ASHANTI REGION OF GHANA

BY

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MPHIL SOCIAL PSYCHOLOGY

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This thesis is submitted to the University of Ghana, Legon in partial fulfilment of the requirement for the award of MPHIL PSYCHOLOGY DEGREE

DECLARATION

I, Bernice Ama Kafui Botchway, hereby declare that this thesis is the result of my own original research effort and that it has not been submitted in whole or in part for any academic award at this university or any other institution. All references to other works have also been properly acknowledged and cited.

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DEDICATION

I humbly dedicate this work to the Only Wise God for wisdom, strength and resilience throughout this journey.

To my family

Mom and Dad.

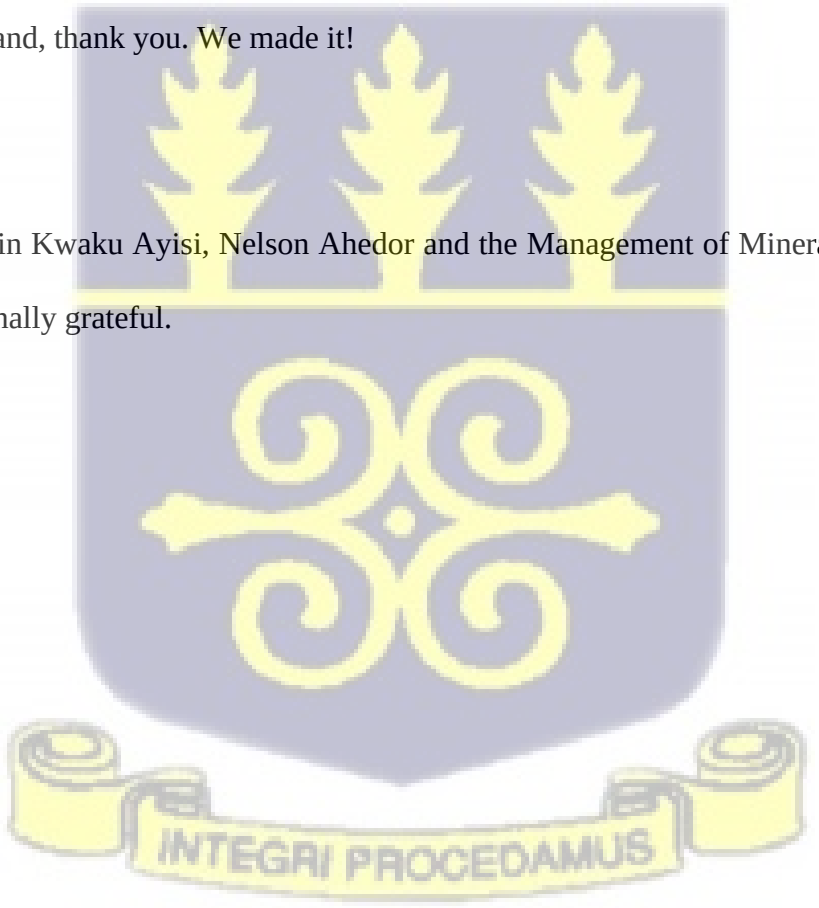
Evans, Etornam and Collins, my siblings.

My children, Rosalyn and Foreson.

My husband, thank you. We made it!

To my sponsors

Mr. Martin Kwaku Ayisi, Nelson Ahedor and the Management of Minerals Commission, I am eternally grateful.



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ABSTRACT

The involvement of adolescents in labour intensive economic activities such as mining poses serious threats to their health and well-being both physically and psychologically and harms their educational progression and general quality of life. Yet, in contexts like Ghana, increasing numbers of adolescents are involved in illegal mining activities known in local areas as "Galamsey" for economic gain. This study explored the lived experiences and well-being outcomes of such adolescents in six (6) local communities in Ghana where illegal mining is prevalent. Using qualitative humanistic techniques, data was collected from a total of 60 participants (30 adolescents and 30 parents) through in-depth interviews. The data collection was conducted in two parts with the first part focusing on interviews with adolescents directly involved in illegal mining and the second part focusing on parents who had adolescents involved in illegal mining. The collected data were analyzed using reflexive thematic analyses and findings from the adolescents' data set revealed that family structure, educational aspirations, lack of parental control, and peer pressure were reasons for adolescents' involvement in illegal mining. Significant issues or themes of psychological and emotional struggles, health risks, environmental degradation, and social stigma emerged to capture the adolescents' reported experiences. Results for part two also revealed factors like economic hardship as motivations for adolescents' involvement in mining. Further, mining impacts on adolescents included educational disruption, health issues, and societal changes. These findings provide important insights for policymakers, educators, and social welfare practitioners in creating comprehensive interventions to safeguard vulnerable adolescents and families from the negative effects of mining activities. It is recommended that policymakers should promote sustainable income for adults and reintegrate adolescents into education to reduce child labour and its associated stigma.

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CHAPTER ONE

INTRODUCTION

Background

Global literature has extensively documented the involvement of adolescents in both paid and unpaid forms of labour (Hindman, 2016). Notably, approximately 79 million adolescents worldwide are engaged in hazardous work, and one in four children aged five to seven is employed in perilous conditions in the least developed countries (ILO, 2023). In Ghana, child labour is widespread across multiple sectors, particularly in cocoa production, illegal mining, fishing, and street vending (Tweneboah-Koduah & Adams, 2020). The activities draw attention to the diverse implications of child labour, which serve as the primary focus of the pertinent literature (Thevenon & Edmonds, 2019). While particular forms of light family labour may be considered permissible, particularly when they contribute to family income or provide children with pocket money, hazardous labour involving individuals under the age of 18 is both unlawful and concerning (ILO, 2023).

The International Labour Organization (ILO) defines child labour as work that impairs children's physical and mental development, depriving them of their childhood, potential, and dignity (ILO, 2023). Such labour often disrupts academic progress by compelling children to leave school prematurely, hindering school attendance, or requiring them to juggle education with excessive work demands. The classification of an activity as child labour is contingent upon factors such as the child's age, the nature and intensity of the work, working conditions, and national policies (Amoo & Edekor, 2003; Weldeyesus & Alemu, 2024).

Hazardous work, particularly in artisanal and small-scale mining (ASM), exposes children to explicit risks to their health, safety, and moral development (ILO, 2015). According

to Section 83(b) of the Minerals and Mining Act 703 of Ghana, individuals under the age of 18 are ineligible for small-scale mining licenses. Similarly, the African Child Policy Forum (2021) defines a child as any person below the age of 18, thereby reinforcing the legal prohibition against the involvement of minors in mining operations. Despite this, child labour remains widespread, contributing to intergenerational cycle of poverty by impeding access to education and diminishing human capital development (ILO, 2023).

Poverty is a key driver of child labour, with adolescents often contributing economically to household survival. Mining, alongside agriculture, constitutes a significant source of livelihood in Ghana. Prior to the COVID-19 pandemic, mining sustained numerous households; however, the pandemic exacerbated socioeconomic vulnerabilities, leading to an increase in the number of minors participating in labour-intensive activities, including ASM (Perks & Schneck, 2021). Artisanal Small Scale Mining (ASM) is inherently labour-intensive, relying on rudimentary tools such as picks and shovels to extract accessible mineral resources like gold, diamonds, and cobalt (Hilson et al., 2017).

The environmental and health implications in ASM are considerable. Ghana's Minerals and Mining Act 703 mandates adherence to health, safety, and environmental standards; however, these regulations are frequently violated. Key environmental concerns include mercury use in gold processing, contamination of water bodies, and extensive land degradation (Wireko-Gyebi et al., 2020). Mercury exposure, in particular, presents severe health risks to child miners, prompting critical questions about the effectiveness of existing legal safeguards. Additional illegal practices, such as mining in close proximity to water bodies and neglecting land rehabilitation, exacerbating environmental and public health risks.

Illegal mining, colloquially referred to as galamsey, remains a persistent challenge in Ghana. It involves unauthorized mineral extraction using rudimentary equipment and unsafe techniques. Despite governmental interventions, including the "Operation Vanguard" military initiative and the Multilateral Mining Integrated Project (MMIP), illegal mining continues to proliferate (Aziabah & Ayelazuno, 2024; Wireko-Gyebi et al., 2020). This persistence is attributed mainly to systemic corruption, ineffective enforcement, and inefficiencies in the licensing regime (Asamoah & Osei-Kojo, 2016). Consequently, adolescents engaged in galamsey are exposed to extreme health and environmental hazards, including toxic substances and physically demanding working conditions.

While significant research has focused on the physical risks associated with child labour in mining, the psychological effects remain underexplored. Children exposed to hazardous mining environments frequently suffer from adverse mental health outcomes, including anxiety, low self-esteem, and depression (Feeny et al., 2021; ILO, 2023). The psychological burden is further compounded by the social stigma surrounding child labour, potentially resulting in long-term consequences for children's cognitive, emotional, academic, and socio-economic development.

In retrospect to the earlier points, it is quite obvious that Ghana's legal framework unequivocally prohibits the engagement of children in hazardous labour, including activities within the mining sector. However, enforcement of these legal provisions remains inconsistent and often ineffective. While artisanal and small-scale mining (ASM) and illegal mining operations, commonly referred to as galamsey, may yield short-term economic gains for vulnerable households, these practices primarily exist outside formal regulatory oversight. Addressing this complex issue requires a dual approach: implementing more robust policy enforcement mechanisms and providing targeted social support systems. Equally important is

the advancement of empirical research, particularly in the understudied area of the psychological impacts of child labour in the mining sector. Such efforts are essential to disrupting the intergenerational cycle of poverty and ensuring the protection and development of Ghana's youth.

Problem Statement

Unlawful small-scale mining, commonly known as galamsey, has become a significant concern for scholars, mining regulators, and governments in developing countries, including Ghana. Characterized by its labour-intensive and low-technology operations, *galamsey* has had widespread socio-economic and environmental impacts (Afriyie et al., 2016; 2023). In Ghana, particularly in areas such as the Adansi North District of the Ashanti Region, *galamsey* continues to threaten biodiversity, pollute air and water bodies, degrade land, and contribute to child labour (Afriyie et al., 2023).

Despite calls for comprehensive government interventions, illegal mining persists and has evolved into a major livelihood alternative for displaced and impoverished rural populations. It is estimated that the sector directly employs over one million Ghanaians and indirectly supports an additional 4.5 million (McQuilken & Hilson, 2016). However, this economic dependency comes at a high cost. Environmental damage, including water pollution and deforestation, has led to health crises, resulting in fatal illnesses and deaths (Iddriss, 2022).

Adolescents involved in illegal mining are among the most affected, frequently involved in hazardous activities such as breaking mineral-bearing rocks, washing ores, and handling mercury-laden materials (Eshun et al., 2021). Economic hardship and limited parental care force many adolescents to abandon school and participate in *galamsey* to support their families (Jonah & Abebe, 2019). Beyond physical risks, these children are exposed to emotional and psychological trauma, abuse and exploitation. While existing literature has documented the

environmental and health impacts of *galamsey*, there is limited empirical research especially in the context of Ghana on the specific lived experiences and mental health outcomes particularly of adolescents living and working in illegal mining communities.

Although some studies touch on child labour and violence in mining contexts (Slaves et al., 2013; Schwartz et al., 2021), few have examined the lived experiences and mental health challenges faced by both adolescents and their parents in such settings.

This study aims to fill this gap by examining the experiences and well-being of adolescents and parents in communities affected by illegal mining, using the Adansi North District in Ghana's Ashanti Region as a case study. This study will also assess how mining disrupts the schooling of adolescents as well as connecting socioeconomic, cultural, and policy factors. The findings aim to inform policy formulation and interventions targeted at improving the welfare of children and families affected by illegal mining activities.

Aims and Objectives

The primary objective of this study is to investigate the experiences and well-being of adolescents involved in illegal mining (galamsey) activities in the Adansi North District of the Ashanti Region, Ghana. The specific objectives of the study include the following:

i. To explore adolescents' working experiences in illegal mining
ii. To understand parents' perception of their adolescents' involvement in illegal mining in these communities.
iii. To explore adolescents' psychological/mental well-being associated with illegal mining.
iv. To explore the aspirations (dreams) of adolescents engaged in illegal mining.
v. To establish the push and pull factors drawing adolescents into early work.

Relevance of the Study

This study builds upon existing literature on child labour in Ghana, with a specific focus on galamsey (illegal artisanal mining), to contribute to the broader discourse on adolescents' mental and psychological well-being. While the environmental and ecological consequences of illegal mining have been extensively examined, particularly among adult male and female populations (Allan-Blitz et al., 2022), there remains a notable paucity of research addressing the psychological effects of galamsey on adolescents. This gap in the Ghanaian mental health literature leaves a significant segment of the population underrepresented, hindering the development of informed psychological interventions and limiting the ability of mental health professionals to support affected youth effectively.

Protecting adolescents involved in hazardous labour is not only a moral imperative but also a strategic investment in the nation's future. This study aims to enhance the understanding of the psychological well-being of Ghanaian adolescents involved in illegal mining, providing insights that may guide health, education, and psychological professionals in developing and implementing adolescent-centred interventions. Establishing such a knowledge base is vital to promoting mental health campaigns, particularly in mining-affected communities where adolescents are frequently exposed to elevated psychological risks.

The findings of this study are intended to support advocacy for increased mental health resources and services tailored to adolescents, including school-based interventions and broader community support mechanisms. Ensuring that mental health specialists are accessible to all adolescents, especially those in vulnerable and underserved communities, is essential. This includes integrating mental health education into school curricula to raise awareness among students and empowering parents to recognize signs of psychological distress and seek professional care for their children.

The research also seeks to address critical policy gaps in Ghana's efforts to combat illegal mining (galamsey), particularly the lack of child-focused strategies. Over the past several years, governmental responses have primarily relied on enforcement through military, police, and immigration services to apprehend perpetrators (Wireko-Gyebi et al., 2020). However, these approaches have not sufficiently addressed the underlying social and psychological dimensions of adolescent involvement in illegal mining. Current policy frameworks lack comprehensive measures to prevent child labour in hazardous conditions or to promote the psychological well-being of affected youth.

By providing empirical data, this study aims to bridge the gap between policy and practice in the realm of child and adolescent mental health. The findings advocate for the inclusion of mental health as a central element in public policy, with appropriate budgetary allocations and funding structures to ensure equitable access to care. It is recommended that mental health education be integrated into formal curricula and that public awareness initiatives be expanded to raise awareness among communities, caregivers, and stakeholders about the importance of adolescent mental health.

The study further supports the implementation of school-based counselling and mental health programs to equip adolescents with essential life skills, including emotional regulation, problem-solving, and stress management techniques. These interventions are critical for fostering resilience and reducing the incidence of anxiety, depression, and other psychological challenges associated with hazardous labour environments. Ensuring mental health care is accessible to all, regardless of income or social status, is fundamental to building an inclusive and supportive system for marginalized youth.

The research will also explore the impact of galamsey on adolescents' self-esteem and self-worth, and propose targeted mental health interventions that promote self-awareness,

confidence, and interpersonal communication. These competencies are essential for helping adolescents manage current psychological stressors and build long-term emotional resilience.

Given the logistical barriers that often prevent social work services from reaching remote rural communities, the study underscores the importance of mobile and community-based mental health services. Expanding the reach and capacity of social work interventions can reduce stigma, improve early identification of psychological issues, and foster supportive environments for adolescents who are engaged in or who are at risk of hazardous child labour in mining communities.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter begins with a presentation of the theoretical framework for the study, followed by a discussion of the concepts of illegal mining, child labour, and child mental health. Related studies are reviewed, and research gaps identified. Research that the study aims to respond to are presented at the end of the chapter.

Theoretical Framework

Two theories underpin the theoretical foundation of the study. They are Ryff's theory of psychological well-being (Ryff, 1982**)** and the Ecological systems theory (Bronfenbrenner, 1977)

Ryff's (1982) Theory of Psychological Well-Being

One of the theoretical foundations of the study is the theory of psychological well-being. The Ryff Psychological Well-Being Theory is commonly used in psychological and mental health research around the world. Developed by Ryff (1982), the theory conceptualizes psychological well-being as a multidimensional concept encompassing core factors that interact to determine an individual's psychological well-being (Ryff, 1982).

Psychological well-being (PWB) is a multifaceted concept; however, Bozek et al (2020) cited that Ryff and Keyes (1995) categorized PWB into six dimensions, which include self-acceptance, personal growth, purpose in life, positive relations with others, environmental mastery, and autonomy. Autonomy, which is self-acceptance, refers to one's ability to embrace one's past, whilst personal growth refers to having an overall sense of individual thought of development and progress (Bozek et al., 2020). PWB dimension also includes finding one's

purpose in life and deriving pleasure from finding such a sense of purpose to live for. Forming positive relationships with others also marks important aspects of PWB because your ability to find balance and live peacefully with others is critical in developing a deep sense of stability and joy. How a person connects with the environment and develops a sense of mastery to take charge of the overall environment in which they find his or herself is also another dimension of PWB. Finally, self-determination indicates the sense of internal resources and motivation a person possesses.

Adopting PWB theory to explain adolescents' involvement in illegal mining and child labour postulates that such adolescents will score lower on Ryff's six dimensions of PWB (Bozek et al., 2020; Jesse, 2023). Adolescents in Galamsey operations are exposed to dangerous and often hostile environments, which leave them with poorer psychological resources to feel safe and develop a sense of direction and focus on life. Adolescents who join mining operations do not have supportive parents and do so to survive on their own volition.

Figure 1: Diagram representation of Psychological Well-Being Theory

Ecological Systems Theory

Bronfenbrenner's (1977) ecological systems theory provides a thorough framework for comprehending the impact of different environmental layers on human development, particularly in relation to child labour in illicit mining operations, or "galamsey" (Egan & Cowan, 1979, p. 82; Rus et al., 2020). The idea delineates society as a set of hierarchical structures: micro, meso, exo, and macrosystems that influence individual development throughout the lifetime (Bronfenbrenner, 1977; Rus et al., 2020). The microsystem, in Bronfenbrenner's ecological systems theory, refers to the direct environments and relationships a child interacts with daily, including family, school, and peer groups (Bronfenbrenner, 1977). These proximal processes are fundamental to child development, rather than being characterized as 'immediate effects' (Rus et al., 2020). The mesosystem links several microsystems, including family-school interactions, influencing a child's development (Rus et al., 2020).

The exosystem includes external factors that indirectly affect the child, such as neighbourhood circumstances, educational systems, and parental work situations. These variables may influence a child's prospects and experiences even in the absence of direct engagement (Rus et al., 2020). When both educational funding and community support systems are lacking, adolescents may turn to mining work as a survival strategy (Ashraf et al., 2022). The macrosystem includes extensive cultural, economic, and legal standards that influence society expectations, hence determining the policies and social norms that either promote or disregard child safety (Bronfenbrenner, 1977; Rus et al., 2020). Insufficient enforcement of child labour regulations and poor educational and social services in mining towns, for instance, sustain child work by not offering viable alternatives (Ashraf et al., 2022; Rus et al., 2020).

Review of Related Studies

Factors that influence Mining

Despite several warnings about the dangers of illegal mining, the problem persists. The reasons behind such widespread continued participation remain understudied. According to Ofosu-Mensah and Ababio (2011), gold mining is an enticing profession, especially for those who are interested in creating wealth in a short period of time. The mines attract young people from surrounding districts seeking employment due to persistently high unemployment rates. Due to limited education and work experience, most young people involved in illegal mining turn to this activity because alternative employment opportunities are virtually inaccessible to them. (Akabzaa, 2000).

Child mining is inextricably linked to the breakdown of family structures and the absence of robust social support systems. The findings of the study conducted by Bryceson and Jønsson (2010) reveal that children who were homeless in Tanzanian mining districts frequently engage in mining labour. The researchers further revealed divorce as a significant factor contributing to adolescents' withdrawal from formal education and subsequent transition to street life. Consequently, adolescents displaced onto the streets often resort to mining labour as a means of subsistence. Does this imply that adolescents should be prohibited from employment, or does it instead emphasize the need for instilling proper work ethics within appropriate labour frameworks? One should not consider all the work that adolescents perform to be child labour. Generally, it is considered beneficial when adolescents above the minimum working age engage in employment that complements rather than competes with education, while preserving well-being and fostering personal development. Activities like helping in a family business or earning pocket money that take place outside of school hours and during school breaks are included in this category. In addition to contributing to the development of adolescents and the

well-being of their families, these sorts of activities also assist to equip adolescents with the knowledge and experience they need to become productive members of society when they reach adulthood (International Labour Organization, 1996-2024).

Some miners can achieve a high social status, which allows them to exert influence on their contemporaries and adds to their opulent lifestyle, which is another key factor that attracts young people. Miners are usually looked up to because of their achievements in the mining industry, as stated by Ofosu-Mensah and Ababio (2011). A daily wage of one hundred dollars is supposedly earned by gold miners, which provides them with a substantial amount of discretionary cash to enjoy the more luxurious aspects of life. The constant daily revenue that illegal mining provides makes it more appealing to engage in this activity. According to Ofosu-Mensah (1999), the longstanding cultural significance of gold mining in affluent communities, combined with challenges in enforcing anti-illegal-mining laws, contributes to widespread disregard for government regulations. Financial pressures lead many adolescents to abandon schooling to support their families, while rural households increasingly rely on mining to supplement incomes, particularly in multi-earner families struggling to meet basic needs. When parents face unemployment, they often resort to employing children as young as eight to secure essentials like food and clothing. As a result, a substantial proportion of these young miners forgo education in favour of income generation. Bloeman (2009) adds that some parents view mining as a means to foster financial independence in their children, further incentivizing their involvement in the profession.

Rimm (2010) argues that peers significantly influence individuals across age groups, though children remain especially susceptible to negative influences due to their immature moral development. While parents invest effort in teaching their young children how to form and maintain friendships during childhood, they simultaneously establish a foundation for moral

decision-making in later years. However, Bryceson and Jønsson's (2010) research reveals a contrasting reality in mining districts, where peer pressure emerges as a primary driver of child labour. This finding aligns with existing literature on peer influence. Notably, the study documents cases where adolescents engaged in mining work out of envy for their peers perceived better lifestyles, seeking similar material benefits for themselves (Bryceson & Jønsson, 2010).

Effects of Mining on the Well-Being of Adolescents

The negative impacts of mining are becoming increasingly apparent, which raises worries regarding the health and safety of minors who are involved in mining activities that are unlawful. According to Cossa et al. (2022) on the "impacts of mining on infant mortality and health in Sub-Saharan Africa", mining operations did not have a significant influence on the overall death rate for infants who suffered from ailments such as diarrhoea and cough, nor did they seem to have any effect on growth indices. On the other hand, infants who were born in mining districts had a mortality risk that was 43 percent lower during their first month of life. Furthermore, mining was associated with a 32% reduction in the incidence of diarrhoea in adolescents. Within four years prior to extraction, early mining operations, such as building and prospecting, were linked to a significant reduction in the incidence of diarrhoea in adolescents and a 28% increase in the height-for-age scores of adolescents, indicating that adolescents' nutrition has improved over the long term. Neither the weight-for-height ratio nor the short-term diet, nor respiratory issues were significantly affected by the intervention. The findings indicate that mining has both positive and negative effects on the health of adolescents, with certain areas showing no change.

Even though most of the world's data on displacement are based on wars, natural disasters, and resettlements caused by development, mining operations are nonetheless responsible for producing an underestimated number of displaced people. Bozzoli et al. (2011)

demonstrate that the number of people who were displaced throughout the world increased from 17 million in 1997 to 21.8 million in 2002; the most current estimates put the number at 70.8 million in 2019 (UNHCR, 2019). Even though mining is only partially responsible for forced relocation, most of this rise may be attributed to displacement caused by conflict and natural disasters.

Sahu and Kumbhar (2020) demonstrate that people have suffered because of mining operations in a region of India that is rich in minerals, even though these activities have resulted in large economic gains. Open-pit copper mines in Papua New Guinea, coal mines in Germany, diamond mines in Zimbabwe, and gold and manganese mines in Ghana are just some of the examples of mining activities that have been expanding all over the world and causing significant displacement of people and disruption of livelihoods (Terminski, 2012). Taking into consideration these results, experts emphasize the significance of a comprehensive understanding of the effects that mining has on the psychological well-being of communities and the minimization of such effects.

Mining-induced displacement represents a distinct form of relocation, one that is typically involuntary and is directly connected to the requirements of mining operations. Although there are laws in place to offer compensation and promote social fairness for those who have been displaced, the policies that are in place largely concentrate on more general categories such as development-induced displacement and resettlement (DIDR) or disaster-induced displacement. As a result of this concentration, there is a huge information vacuum about the unique experiences of people who have been displaced because of mining activities. As Downing (2002) points out, many policies restrict the scope of study on displacement and resettlement to DIDR, so ignoring the specific issues that communities that have been harmed by mining confront. In addition, Owen and Kemp (2015a) highlight the fact that, in comparison

to studies on DIDR, research on Mining-Induced Displacement and Resettlement (MIDR) has gotten much less attention over the course of the previous few decades. Because of this concentrated focus on MIDR, the difficulties that displaced individuals have in maintaining their livelihoods and maintaining their well-being are brought to light.

As a result of individuals experiencing significant challenges such as social isolation, anxiety, separation from family, and the dissolution of communities, researchers such as Owen and Kemp (2015), Wilson (2019), and Mandishekwa and Mutenheri (2020) contribute to bringing attention to the damage that is caused by forced displacement in mining communities. Moreover, Gyan et al. (2023) highlight the fact that individuals who have been displaced face several challenges, including the loss of their conventional means of subsistence, poor circumstances for resettlement, and difficulties in adapting to new environments. Although mining results in significant economic benefits, such as the acquisition of foreign currency in Ghana, where it accounts for around 37 percent of the country's total exports (Owusu-Koranteng, 2008), it also results in the displacement of people and produces social and economic challenges. According to Opoku (2020), companies often provide monetary compensation in agricultural regions that are damaged by mining; nevertheless, they typically disregard the demand of alternative farmland, which results in the disruption of primary livelihoods.

Parental perceptions of child labour and illegal mining

It is not always easy to discriminate between what constitutes child labour (which is harmful and not allowed) and what constitutes child work (which may be allowed) in artisanal activities. This may be a point of contention. Because of this, some pieces of artisanal labour may be considered potentially harmful. To teach their adolescents a feeling of responsibility and work ethics, parents commonly include their adolescents in the profession, according to the findings of the study that was carried out by Adonteng-Kissi (2018). At the same time as this is

considered as advantageous for society, it is also beneficial for adolescents. It would seem, on the other hand, that parents who have a greater understanding of human rights are more committed to ensuring that their adolescents are healthy and full of happiness. The research concludes that it is vital to take into consideration both economic and cultural elements while addressing the problem of child labour and adopting international child rights standards, such as those defined by the United Nations Convention on the Rights of the Child. The formulation of policies that are, for the most part, in the adolescents' best interest is an important contribution that this makes. There is a widespread assumption among the parents of adolescents who live in rural regions that the nature of child labour is cultural in character. Rather than working because of the requirement of economics, adolescents are working for cultural reasons. Adolescents in urban regions, on the other hand, are forced to participate in child labour since it is a need for the expansion of the economy. Therefore, this is because the presence of child labour is a very substantial component of the economic climate in the region.

The Ghana National Commission on Children (2000), indicates that some parents justify sending their children to work by noting that the money gained helps fulfill necessities such as the cost of food and school fees using the money obtained. This is contrary to the United Nations (2005), which states that some parents justify putting their children to work. As a result of the fact that having a job may have a detrimental influence on schooling in a variety of different ways, the idea that education is a priority for children who are working is called into question by the results Keehn found (2010). There are some adolescents who are unable to attend school because their parents work long hours, and there are other adolescents who do attend school but are sometimes too weary to focus.

Both situations are equally frustrating for adolescents. Ubajaka et al. (2010) discovered that most parents believe child labour is harmful, while some believe it has some favourable elements.

In addition to the risk of getting sexually transmitted diseases, sexual harassment, adolescent pregnancy, and dropping out of school are some of the negative consequences that have been brought to the attention of parents by organizations that work with adolescents. Included among these unfavourable outcomes is the occurrence of sexual harassment.

Health and Psychological Effects of Adolescents Labour and Illegal Mining on Well-being and Development

To explore the negative consequences that child labour has on health, several studies have been carried out in a range of nations. According to the findings of this research, there is a very strong correlation between the employment of adolescents and the occurrence of adverse health effects. In Pakistan, Rahmat et al. (2023) found that prevalent health concerns among working adolescents included watery eyes, chronic cough, diarrhoea, history of significant injuries, permanent loss of an organ, hearing loss, bone fractures, and total incapacity were among the ailments that were sustained. Khan (2007) discovered that children in India who were working had a higher likelihood of suffering from several health diseases with a high frequency of those illnesses. These conditions included malnutrition, anaemia, gastrointestinal infections, vitamin deficiencies, respiratory infections, and skin abnormalities. Furthermore, Banerjee (2008) conducted research in India, which found that children who worked in labour intensive jobs had a higher prevalence of infectious illnesses compared to those who did not work. This was shown by the fact that the prevalence of infectious diseases was higher among children who were employed. The quality of the research, on the other hand, was regarded as being below ordinary. Research undertaken in Brazil by Hatakeyama and colleagues (Hatakeyama et al.,

2024) compared the levels of musculoskeletal pain reported by children who were working to those who were not working. Adolescents who were working had a greater incidence of discomfort in areas such as the neck, knee, wrist, hands, and upper back, according to the results of the research as well as other areas. There was also a significant rise in the likelihood of musculoskeletal and back pain among workers in the industrial sector. It was determined in 2010 that these problems were caused by a variety of factors, including uncomfortable posture, excessive physical exertion, and repetitive responsibilities.

Children who work in agriculture in Nicaragua are subject to several health risks, the most serious of which is the possibility of experiencing acute pesticide poisoning, as stated by Corriols and Aragón (2010). Due to this, the major health concerns that are linked with the employment of children in agricultural labour were brought to light. These risks are especially concerned with the exposure of children to hazardous chemicals. The results of these studies, taken as a whole, shed light on the significant and widespread dangers to adolescents' health that are posed by their participation in occupational activities across a variety of sectors.

According to a study conducted by Kanu et al. (2018), child labour is associated with a variety of adverse health effects. These include, but are not limited to, stunted development, malnutrition, an increased prevalence of infectious and system-specific disorders, behavioural and mental issues, and a worse ability to cope with stressful situations. Children's employment was shown to be linked to a lot of these adverse health consequences, as was discovered. There is a correlation between child labour and low birth weight, stunting, and chronic malnutrition, as shown by the conclusions of research that was carried out by Ali et al. (2004).

Research Gaps

Adolescent and or child labour in illicit mining remains a persistent issue in Ghana, despite existing legal frameworks and interventions. While prior research has identified key

drivers such as poverty, unemployment, and lack of education, there are critical gaps which remain in understanding the full scope of this problem.

First, existing studies fail to adequately explain why adolescents continue to engage in illicit mining despite known dangers. While economic incentives and unemployment are frequently cited, deeper social, cultural, and psychological motivations remain underexplored. For example, how do community norms or familial pressures sustain child participation in mining? Without this knowledge, interventions may overlook root causes.

Second, research on the educational impacts of illicit mining, such as that by Tindan and Noonoo (2024), tends to focus on localized contexts, limiting generalizability. Broader investigations are needed to assess how mining disrupts schooling across different regions and demographics. Additionally, the role of local governance and community attitudes in enabling or discouraging child labour remains poorly examined.

Third, while some studies (e.g., Khan, 2007; Mohammed et al., 2014) document health risks for child miners, most lack longitudinal data to track long-term physical and psychological effects. Contradictory findings such as those by Cossa et al. (2022) and Sahu and Kumbhar (2020) suggest outcomes vary by mining type and location, yet no comprehensive framework exists to explain these disparities.

Finally, few studies adopt an integrated approach that connects socioeconomic, cultural, and policy factors. For instance, how do displacement and livelihood loss (often studied in isolation) interact with mental health and community resilience? Addressing these gaps requires longitudinal and interdisciplinary research to inform targeted solutions.

Study Significance

The research examines and emphasizes the complexity as well as the numerous consequences of child labour, especially, in the mining sector on persons and communities. Numerous studies have examined illicit mining elements such as the desire for rapid cash, lack of education, and peer pressure. Ofosu-Mensah and Ababio (2011) stated that gold mining attracts young people, particularly in high-unemployment areas. Miners' high incomes and social prestige add to their appeal. Bryceson and Jønsson (2010) found that family structure and cultural norms, such as divorces and peer pressure, can drive adolescents into mining, perpetuating the cycle of child labour.

Several studies also show that mining harms adolescents' education and well-being. Tindan and Noono (2024) indicate that child work, particularly in illicit mining, affects adolescents' education, forcing many to leave out owing to economic and family pressures. Other studies show that child work in mining causes chronic diseases, injuries, and malnutrition (Khan, 2007; Mohammed et al., 2014). Mining hazards worsens these health difficulties. Mining brings economic advantages, as demonstrated in Ghana's exports, but it also has high social consequences. Communities impacted by mining displacement generally lose livelihoods, relocate poorly, and suffer psychological anguish (Bozzoli et al., 2011; Sahu & Kumbhar, 2020). The specific issues encountered by mining-displaced individuals are largely overlooked in global displacement statistics, which primarily focus on war or natural disasters.

The psychological and physiological impacts of child labour, especially in mining, are well-known. Studies reveal that adolescents who mine suffer from musculoskeletal discomfort, respiratory disorders, and pesticide toxicity (Corriols & Aragón, 2010). These health conditions may hinder adolescents' growth, disrupt their development, and impair their long-term learning and development (Ali et al., 2004; Ibrahim et al., 2018). There is therefore the necessity to

understand the perceptions of child labour in mining, taking into consideration the various economic, cultural, and social variables that force adolescents into these dangerous circumstances. It also advocates more comprehensive measures to safeguard adolescents, encourage education, and reduce mining and illegal labour health risks.

CHAPTER THREE

METHODOLOGY

Research Design

This study employed a qualitative research design to examine variables within their natural contexts and explore their interactions. This approach is particularly suited for understanding how individuals perceive, interpret, and respond to their lived experiences (Institute for Work and Health, 2011). Adopting a phenomenological framework, the study focused on uncovering the shared meanings and essential structures of participants' experiences related to adolescents' labour in illegal mining. Phenomenology emphasizes the distillation of individual encounters into a universal description of the phenomenon's essence (Creswell & Poth, 2018, p. 121; Moustakas, 1994).

Sample Selection

The six study communities were systematically selected from Ghana's Adansi North District through a rigorous purposive sampling methodology. In the process of deciding which communities to carry out the research in, a social welfare officer at the Fomena District Assembly was contacted and these communities were recommended because their records stated that the community was actively engaging in galamsey and had several children involved in the activity. This approach was specifically designed to identify areas with verified high prevalence of illegal small-scale mining (galamsey) operations and documented adolescent participation. This study used a dual sampling approach combining simple random sampling and snowball techniques. Simple random sampling ensured each potential participant had an equal selection probability, minimizing bias and enhancing the reliability of the results. A total number of 60 participants (participants made up of 30 adolescents and 30 Parents) were selected from six communities; they were sampled and interviewed for the study using purposive and convenience

sampling. Purposive and convenient sampling were used because they involved selecting participants who met the study's particular criteria. Thus, participants who fit the inclusion criteria were directly contacted and asked to participate in the study. Snowball sampling was used in addition to purposive sampling because it involved identifying potential participants among current participants. After the interviews, participants were asked if they knew other people who fit the criteria or shared similar or identical characteristics relevant to the study and would be willing to be interviewed for the study. Some school heads and teachers within the selected communities helped with the sampling exercise They were able to provide information on the correct home addresses of the students as well as contact information of their parents. Due to the sensitive nature of the study, this approach was necessary and also proved time efficient. A total sample size of 30 adolescents and 30 parents comprised of thirty (30) females, and thirty (30) males.

Research Setting

This study was conducted in the Adansi-North District of Ghana's Ashanti Region, a hotspot for illegal mining (galamsey) and child labour (ILO, 2020). The district, with a population of 54,155 (Ghana Statistical Service, 2021) and its administrative capital at Fomena, was selected due to documented cases of child labour in galamsey and ongoing remediation efforts by the ILO, including the CARING Gold Mining Project. These factors prompted the researcher to investigate adolescents' reasons for involvement in galamsey, the outcomes of ILO-led withdrawals, and the impact on their future aspirations.

Population

The study's population consisted of both males and females residing in six selected communities out of the thirty-three in the Adansi North District of the Ashanti Region. The study included participants from two age groups: adolescents aged 10 to 19 years and parents aged 20

to 70 years. **Table 1** presents the demographic data of adolescent participants while **Table 2** presents the demographic data of parent participants. The adolescent age range was selected based on the understanding that adolescents above 10 years of age can better articulate their experiences compared to those below 10 years. The sample comprised school-aged adolescents who had dropped out of school, and parents both employed and unemployed.

Table 1
Demographic Characteristics of Participants: Adolescents

Serial Number	Gender	Age	Education	Region	District	Community	Religion
CM1	Female	17years	SHS 2	Ashanti	Fomena	Fomena	Christianity
CM2	Male	14years	JHS 1	Ashanti	Fomena	Dinkyie	Christianity
CM3	Female	16years	JHS 2	Ashanti	Fomena	Achiase	Christianity
CM4	Male	13years	JHS 1	Ashanti	Fomena	Abedwum	Muslim
CM5	Female	11years	P5	Ashanti	Fomena	Dinkyie	Muslim
CM6	Male	16years	JHS 3	Ashanti	Fomena	Achiase	Christianity
CM7	Male	16 years	JHS 3	Ashanti	Fomena	Ahinsan	Christianity
CM8	Female	16years	SHS 2	Ashanti	Fomena	Fomena	Christianity
CM9	Male	17years	SHS 2	Ashanti	Fomena	Fomena	Muslim
CM10	Female	16years	SHS 2	Ashanti	Fomena	Ahinsan	Christianity
CM11	Male	17years	JHS 3	Ashanti	Fomena	Adokwai	Christianity
CM12	Male	15years	JHS 3	Ashanti	Fomena	Adokwai	Christianity
CM13	Female	15years	JHS 3	Ashanti	Fomena	Adokwai	Christianity
CM14	Female	11years	P5	Ashanti	Fomena	Adomanum	Christianity
CM15	Male	10years	P4	Ashanti	Fomena	Adomanum	Christianity
CM16	Male	13years	P6	Ashanti	Fomena	Dinkyie	Christianity
CM17	Male	12years	P6	Ashanti	Fomena	Dinkyie	Christianity
CM18	Male	16years	JHS 1	Ashanti	Fomena	Adokwai	Christianity
CM19	Male	15years	JHS 3	Ashanti	Fomena	Adokwai	Christianity
CM20	Male	14years	P6	Ashanti	Fomena	Dinkyie	Christianity
CM21	Male	15years	JHS 2	Ashanti	Fomena	Dinkyie	Christianity
CM22	Male	17years	SHS 2	Ashanti	Fomena	Adomanum	Christianity
CM23	Female	17years	SHS 2	Ashanti	Fomena	Adokwai	Christianity
CM24	Male	14years	JHS 1	Ashanti	Fomena	Adokwai	Christianity
CM25	Female	19years	SHS 2	Ashanti	Fomena	Fomena	Christianity
CM26	Male	15years	JHS 2	Ashanti	Fomena	Adokwai	Christianity
CM27	Male	14years	JHS 1	Ashanti	Fomena	Adomanum	Christianity
CM28	Male	12years	P6	Ashanti	Fomena	Adomanum	Christianity
CM29	Female	14years	P6	Ashanti	Fomena	Adomanum	Christianity
CM30	Male	15years	JHS 3	Ashanti	Fomena	Adokwai	Christianity

Abbreviations:

- **SHS** – Senior High School
- **JHS** – Junior High School
- **P4** – Primary 4
- **P5** – Primary 5
- **P6** – Primary 6

Table 2
Demographic Characteristics of Participants- Parents

Serial Number	Gender	Age	Occupation	Region	District	Community	Religion
1	Male	50years	Teacher	Ashanti	Fomena	Dinkyie	Christianity
2	Female	64years	Farmer	Ashanti	Fomena	Ahinsan	Christianity
3	Male	64years	Former Headmaster	Ashanti	Fomena	Achiase	Christianity
4	Male	48years	Carpenter	Ashanti	Fomena	Abedwum	Christianity
5	Female	69years	Farmer	Ashanti	Fomena	Dinkyie	Muslim
6	Male	56years	Farmer	Ashanti	Fomena	Achiase	Christianity
7	Male	57years	Farmer	Ashanti	Fomena	Ahinsan	Christianity
8	Male	55years	Farmer	Ashanti	Fomena	Fomena	Christianity
9	Male	58years	Farmer	Ashanti	Fomena	Fomena	Muslim
10	Female	52years	farmer and Petty trader	Ashanti	Fomena	Ahinsan	Christianity
11	Female	58years	Farmer	Ashanti	Fomena	Adokwai	Christianity
12	Female	52years	farmer and Petty trader	Ashanti	Fomena	Adokwai	Christianity
13	Female	59years	farmer and Petty trader	Ashanti	Fomena	Adokwai	Christianity
14	Female	48years	Farmer	Ashanti	Fomena	Adomanum	Christianity
15	Female	51years	Farmer	Ashanti	Fomena	Adomanum	Christianity
16	Female	61years	Farmer	Ashanti	Fomena	Dinkyie	Christianity
17	Female	57years	Farmer	Ashanti	Fomena	Dinkyie	Christianity
18	Female	52years	farmer (widow)	Ashanti	Fomena	Adokwai	Christianity
19	Female	32years	Hairdresser	Ashanti	Fomena	Adokwai	Christianity
20	Female	50years	Farmer	Ashanti	Fomena	Dinkyie	Christianity
21	Female	39years	Farmer	Ashanti	Fomena	Dinkyie	Christianity
22	Female	45years	Unemployed	Ashanti	Fomena	Adomanum	Christianity
23	Female	34years	Unemployed	Ashanti	Fomena	Adokwai	Christianity
24	Female	68years	Farmer	Ashanti	Fomena	Adokwai	Christianity
25	Female	50years	Farmer	Ashanti	Fomena	Fomena	Christianity
26	Female	38years	Police Officer	Ashanti	Fomena	Ahinsan	Christianity
27	Female	42years	Farmer	Ashanti	Fomena	Adomanum	Christianity
28	Female	44years	Farmer	Ashanti	Fomena	Adomanum	Christianity
29	Female	42years	Food Vendor	Ashanti	Fomena	Adomanum	Christianity
30	Female	50years	Farmer	Ashanti	Fomena	Adokwai	Christianity

Abbreviations:

- **SHS** – Senior High School
- **JHS** – Junior High School
- **P4** – Primary 4
- **P5** – Primary 5
- **P6** – Primary 6

Inclusion Criteria

The sample consisted of two groups: adolescents (ages 10–19, both male and female) and their parents (ages 20–70). The study's inclusion criteria required participants to be: (1) adolescents aged 10–17 working in illegal mining operations within the selected communities, or (2) their parents, caregivers, or guardians residing in the same communities. The research timeframe was designed to capture both short-term and long-term experiences of participants.

Exclusion Criteria

Adolescents younger than 9 years who were found on galamsey sites were excluded from the study because the researcher found them too young to accurately express themselves during interviews. Parents, carers and or guardians who were sick or bedridden were excluded for future study.

Data Collection

Learning from the previous data collections, the population for this study was focused on sixty participants (adolescents and parents were the main target) with the help of education service, the community schools in these six communities assisted in tracing the parents of the adolescents sampled. Ten (10) participants (five parents and five adolescents) from each of the six selected communities took part in the study after reaching the point of consent. Consent forms details were thoroughly discussed with participants before the interviews. Data was collected by the researcher together with two research assistants, trained to understand the purpose and aim of the study.

Research Instrument

A semi-structured interview guide was developed for this study due to its capacity to merge structure with flexibility. It guided the researcher to approach the interview with flexibility and modified questions as required based on the participants' feedback and gathered more data. Valuable data was gathered by the researcher's adjustments and follow-up probes when necessary. When clarification was required, respondents asked for it, and follow-up questions were also integrated into the interview. Respondents raised questions during the interview that the researcher had not considered beforehand.

The interview guide included questions concerning factors that influenced child mining, effects and the psychological/mental well-being. The interviews explored both adolescents' and Parents' perspectives on adolescents' involvement in mining and adolescents' future. For adolescent' miners, their lived experiences in the mines, and their future aspirations were explored. Each participant's interview lasted between 15-40minutes. Interviews with parents were longer (averagely 30 to 40 minutes) than those held with adolescents (averagely 15 to 20 minutes). Semi-structured interviews were held at a venue and time of convenience for the participant, in the school headmaster's office. Interviews were conducted in English. The questionnaire included the following items: "Are you (always) happy being involved in mining activities?." Second, it evaluated occupational impacts via the question "How will you describe your health, safety, and well-being about your involvement in mining activities?"

For parents and guardians, the questions were translated into Twi (Akan), the standard dialect spoken by both indigenous residents and settlers in the selected communities. This approach facilitated a natural flow of thought during the interviews. The translation was handled by a professional at the District Assembly of Fomena. Each interview lasted between 15-40minutes. A face-to-face interview style was used throughout the study. It was held at a venue

and time of convenience to participants, that is, school compound and homes for parents/carers/guardians. Each interview was carried out after seeking permission to record. To ensure the accuracy and cultural suitability of the translated interview guide, a rigorous back-translation process was employed. First, the original interview guide in English was translated into the Twi language by a professional translator who was familiar with the local context of illegal mining involving adolescents. Subsequently, another independent translator, who had no prior knowledge of the original English version, translated the document back into English. The back-translated version was compared with the original guide to identify and resolve any discrepancies in meaning, terminology, or cultural relevance. This process helped maintain linguistic equality and ensured that the questions were ideologically in line with the research objectives. Additionally, the final translated guide was reviewed by local experts, who were familiar with child labour and illegal mining, to ensure its suitability to the population of study.

Ethical Clearance

One major requirement to meet before embarking on any research work is seeking and acquiring ethical clearance either from the Ethics Committee for Humanities and acquiring an introductory letter from the Departmental Research and Ethics Committee, Psychology and a letter from the Department of Psychology of the University of Ghana, introducing the researcher as a University of Ghana student and stating the intention behind the study. Ethical clearance was sought from the Departmental Research & Ethics Committee (DREC) at the Department of Psychology, School of Social Sciences at the University of Ghana with a protocol number DREC/029/22-23. The introductory letters were presented to the Planning and Development Officer, Social Welfare Officer and the District Chief Executive Officer, all of Adansi North to

seek permission to visit the selected communities, schools and identified mining sites. The study duly focused on the six selected communities due to previous Galamsey data in the district.

A copy of the letter was forwarded to the education directorate in the district. The District Assembly led by the Coordinating Director held a general meeting of the entire assembly staff to introduce the researcher, read out the purpose of the study and encourage their cooperation for the period of study; the community leader and assembly members ensured parents were well sensitized ahead of the interview. One of the communities held a durbar to welcome the researcher and her team to the people before the interviews began. This exercise strengthened the purposive and convenient sampling. Parents who were absent from the durbar were easily traced to mining sites. Another chief assembled his elders to properly understand the intention of the study before granting us access to the community school.

The researcher gave copies of the interview guide to the two-sample population; took turns explaining the questions thoroughly before the interview was conducted. Participants' clear understanding of the questions and the confidentiality clause facilitated productive and engaging interview sessions.

Ethical considerations

The researcher introduced herself to the District Assembly, Head of Schools, and Parents to request their permission before conducting interviews at schools and homes. Verbal consent was sought from each participant detailing the study's objectives, assuring their anonymity, and informing them that they could withdraw their consent at any moment and have their data deleted. This consent emphasized participant confidentiality and made it clear that the interview data would only be used for academic research. Upon explaining the study to participants, privacy and confidentiality were guaranteed. Participants were also told that their responses would remain private and that the data would not identify them in any way. Right before the

interviews, there was oral debriefing, which created good humor for laughs before the start of the interview. Given that the study's target population comprised adolescents, I conducted individual meetings with them prior to the interviews to establish rapport touching on their education and lifestyle in general before the interviews were done.

Reflexivity

Embarking on a qualitative study places the researcher in a variety of situations that could affect the final study outcome. Reflectivity, therefore, enables the researcher to identify specific potential influences on the research as well as the steps taken to overcome those influences (Olmos-Vega et al., 2023; Palaganas et al., 2017). Considering the aforementioned, this part discusses how my own experiences, views, and background may have impacted the study and the strategies that I adopted to solve them. The participants' deeply personal narratives evoked strong emotional responses, including grief, empathy, and at times, despair. While these stories affected me profoundly, I maintained self-control, consciously separating my reactions from my professional role. Brief pauses during interviews allowed both participants and me moments for reflection and emotional recalibration. These experiences prompted me to critically reassess my positionality as a researcher navigating sensitive human experiences.

Trustworthiness

In qualitative research, data trustworthiness is necessary for ensuring findings' accuracy and reliability. Trustworthiness is assessed using four primary criteria: credibility, transferability, dependability, and confirmability. The criteria validate the research process, ensuring that conclusions are accurate and reliable. This study utilized multiple strategies to meet these criteria and maintain the integrity of the research.

Credibility

Involves the truthfulness of data and its accuracy in representing the experiences and perspectives of participants. The interview guide was validated before data collection to enhance credibility and ensure that the questions were relevant and appropriate for the research topic. This step ensured that the collected data was significant and directly aligned with the research objectives. Purposive sampling enabled the selection of participants with knowledge and relevance to the study, thus enhancing the quality and relevance of the data.

Three coders, including the researcher and two research assistants, worked together during data collection and analysis to ensure the accuracy of the findings. The coders analyzed the data, verifying their interpretations to address discrepancies. Regular discussions among the research team ensured that the analysis accurately reflected the participants' experiences. High-quality recording equipment, detailed memos, and comprehensive transcriptions ensured precision in the data collection process. Interviews utilized a semi-structured interview guide, ensuring consistency across participants while allowing flexibility to explore individual experiences. The various layers of validation, including peer reviews, literature reviews, and external feedback, improved the research's credibility.

Transferability

Denotes the degree to which study findings can be applied in different contexts or settings. The study procedures were documented to aid transferability, enabling other researchers to evaluate the relevance of the findings to different populations or environments. This account of the research process, including interview methods, sampling strategy, and analysis, aids future researchers in using similar methods and reaching comparable conclusions in various settings. The researcher kept a thorough audit trail, including transcribed interviews, analysis procedures, and study findings. This transparency offers a clear record of the research process, aiding others in assessing the transferability of the findings.

Dependability

Indicates the reliability and consistency of the research process across time. Documenting the steps taken in the research is crucial to ensure dependability, showing that the findings consistently emerge from the data. The researcher and research assistants examined the research design, sampling strategy, and data collection methods in this study. This collaboration ensured alignment and consistency of all research components throughout the study. The research team held regular discussions to confirm their interpretations, thus enhancing the reliability of the findings. The audit trail recorded all essential elements of the study, improving transparency and confirming that the research process followed a defined and replicable methodology.

Confirmability

Refers to the objectivity of findings and the degree to which conclusions are influenced by the data instead of the researcher's personal biases. The researcher employed several techniques to decrease data interpretation bias for confirmability. The researcher used bracketing to eliminate personal experiences, emotions, and preconceptions before and during interviews. This technique reduces researcher biases in data interpretation. The researcher kept a reflective notebook to document personal ideas and biases that may have affected the study. Recognizing these biases kept the researcher focused on objective analysis.

The researcher used a field notebook to accurately record interviewees' comments. This notebook tracked observations and assured data correctness, representing participants' opinions. For neutrality and participant viewpoints, the researcher typically used the field diary during analysis. Confirmability required peer debriefing and ongoing monitoring to validate the

researcher's interpretations and ensure that conclusions were based on evidence rather than prejudices.

Rigor

To ensure rigor, the researcher employed triangulation, which involved multiple independent coding of the data and subsequently engaging in collaborative discussions to reconcile interpretations, reduce individual bias, and enhance analytical depth. This was done by the researcher and two assistants who assisted with the data collection. Also, the researcher engaged with two colleagues, familiar with qualitative data analysis to critically review the data, interpretations, and emerging themes. This external feedback served to challenge assumptions, expose potential blind spots, and strengthen the overall credibility and confirmability of the findings.

Data Analysis

The data was analyzed using qualitative methods. The analysis comprised two parts: the first examined adolescents' experiences in mining work, while the second explored parental perceptions of adolescents' mining. Reflexive thematic analysis (RTA) was used to analyze the data (Braun & Clarke, 2022). RTA was selected as the most appropriate method for this study because it offers a theoretically flexible, inductive, and interpretative approach that aligns well with the study's phenomenological orientation. Although the research adopted a phenomenological design, which seeks to understand lived experiences, reflexive thematic analysis is well suited for this purpose as it enables deep engagement with participants' narratives while acknowledging the interpretative role of the researcher. RTA does not require adherence to the rigid procedures of descriptive phenomenology; rather, it accommodates the

subjective and situated nature of meaning-making, making it a compatible analytic method for phenomenological research that emphasizes contextual interpretation and researcher reflexivity.

Before analysis began, the data was transcribed verbatim and typed in Microsoft Word by the researcher and a research assistant with the support of the researcher's supervisors. To ensure transcription accuracy, the transcripts were reviewed and cross-checked by the researcher against the audio recordings. The researcher then familiarized herself with the data by thoroughly reading and re-reading the interview transcripts, making initial notes on recurring patterns and ideas.

Coding of data followed a systematic approach using reflexive thematic analysis (Braun & Clarke, 2022). Initial codes were generated by systematically labeling meaningful segments of the data, allowing themes to emerge organically. Codes were then grouped into broader themes, reviewing and refining them to ensure they accurately captured the participants' experiences. Once the themes were established, they were defined and named to clarify their significance in relation to the research questions. Finally, the researcher wrote the analysis, weaving the themes into a cohesive narrative that not only answered the research questions but also reflected on how her own perspectives influenced the interpretation.

To support the credibility of findings, several strategies were employed consistently with qualitative best practices and the reflexive thematic analytic process. During the familiarization and coding stages, the researcher paid close attention to emotional tone, language use, and contextual meaning, allowing her to remain grounded in participants lived realities. Recurrent codes were highlighted and organized into a coding table using Microsoft Word. This preliminary coding table was reviewed and validated by fellow graduate students and a qualitative research expert. Their feedback contributed to refining and confirming the accuracy

of the codes and emergent themes. Following this collaborative process, some themes were further revised to better reflect the data and ensure conceptual clarity.

The researcher also engaged in reflexive journaling throughout the analysis to critically examine how her positionality, assumptions, and prior knowledge may have influenced interpretive decisions. Regular peer debriefing sessions with a qualitative research supervisor enhanced analytic rigour, supported reflexivity, and helped mitigate potential bias. These measures contributed to producing an analysis that was credible, transparent, and grounded in participants' perspectives.

This process enabled a rich, interpretative exploration of both adolescents' experiences in mining and parental perceptions of adolescents' mining, providing valuable insight into the socio-cultural realities surrounding child labour. The use of reflexive thematic analysis thus offered a methodologically sound and philosophically consistent framework for making sense of complex human experiences within a phenomenological research design. Inductive reasoning was employed in the study because general observations were made from the specific observations obtained during the data collection. Patterns and trends were identified in the study which assisted in analysis.

Although a phenomenological design guided this study to explore the lived experiences of adolescents affected by illegal mining, thematic analysis was chosen as the method of data analysis due to its flexibility and suitability for identifying common patterns across a wider participant pool. Unlike Interpretative Phenomenological Analysis (IPA), which emphasizes detailed, case-by-case interpretation, thematic analysis allowed for the extraction of broader themes while remaining grounded in participants' narratives. This approach supported the study's aim of capturing the essence of adolescents shared experiences without limiting the sample size or interpretive scope.

CHAPTER FOUR

RESULTS

Introduction

This chapter details the qualitative data collected, analysis and findings drawn to address the research questions outlined in Chapter 1. Following the data collection presented in Chapter 3, the data were analyzed using a phenomenological framework focused on uncovering the shared meanings and essential structures of participants' experiences related to adolescents' labour in illegal mining. Key themes and insights were identified. This chapter begins with (Results) findings from adolescent participants, a summary of superordinate and subordinate themes, a thematic network summary, and an introduction of various themes. The main body of the chapter then presents the findings organized by the emerging themes of (Research question, superordinate themes and subordinate themes and examples of quotes from participants). Finally, each section includes an interpretation of the findings in relation to the study's purpose and a comparative analysis of parents and adolescents' narratives on mining in Ghana.

Findings from Adolescent Participants

The first part of the study focused on analysing the responses from 30 adolescent participants, aged 10 to 19 years, who provided valuable insights into their experiences and perspectives on mining.

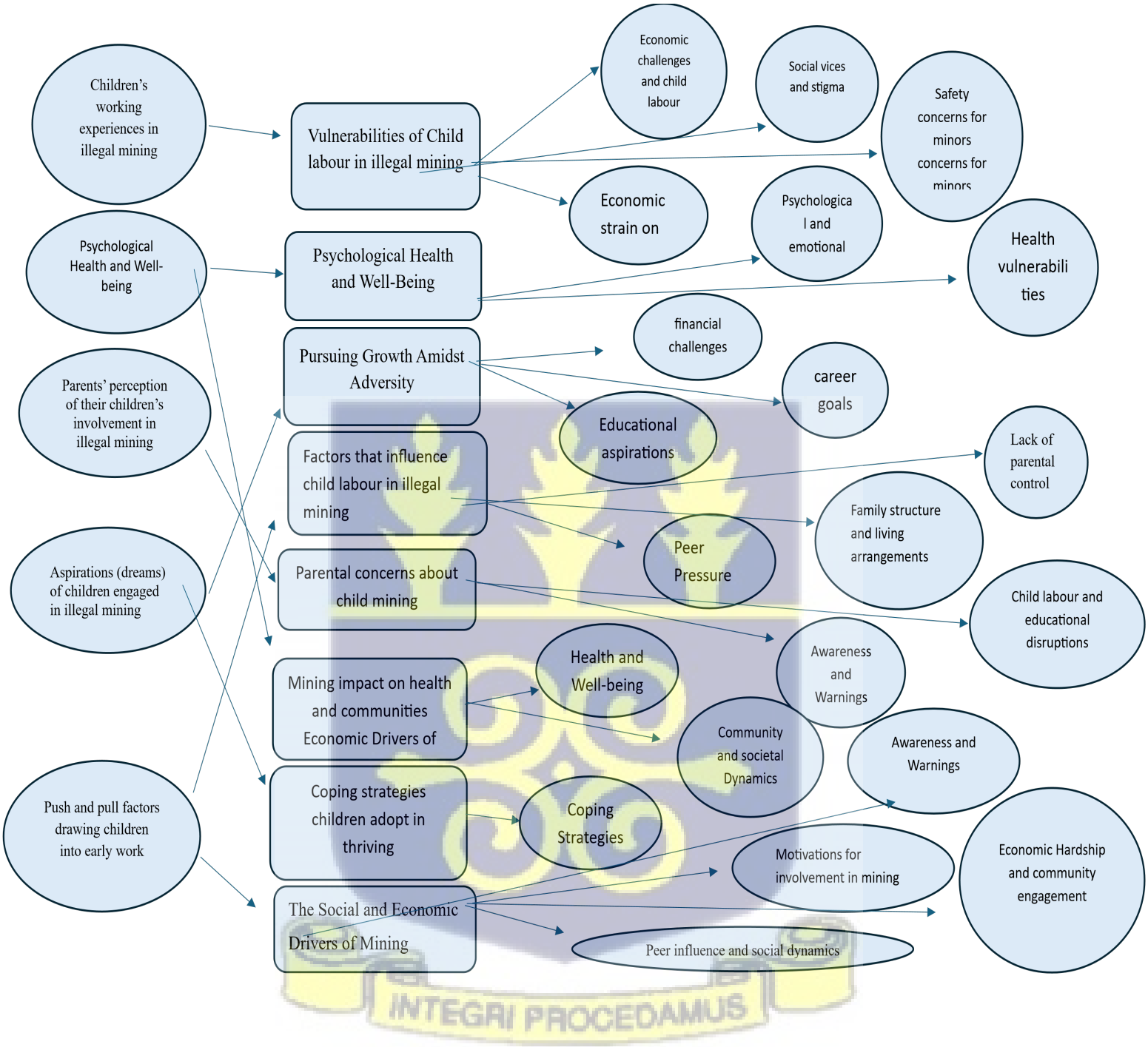
Themes

From the data collected, four super-dominant themes emerged, each with subthemes, reflecting different aspects of adolescents' involvement in mining activities and their impacts. Figure 2.0 presents the thematic network of the entire section. Table 3 also presents a summary of superordinate themes and subordinate themes.

Table 3: Summary of Superordinate Themes and Subordinate Themes

Research Questions	Superordinate Themes	Subordinate themes	Examples
Adolescents' working experiences in illegal mining	Vulnerabilities Faced by Adolescents in illegal mining	Economic Challenges and Adolescent Labour	*"My parents are not able to take care of me and my siblings cos there are no jobs here like welding or tiling. I work to survive…"*
		Environmental Degradation	*"Our* farmlands are being destroyed…they took my mother's land for galamsey activities…*pathway to school has become death traps…"*
		Safety Concerns for Minors	"I have witnessed accidents at the site. It claimed two lives and left several people injured…" *"We carefully walk around the site to avoid falling* into the pits…*"*
		Social Vices and Stigma	*"I go to the site dodging…cos adults talk about the dangers with children working at galamsey sites…"*
Adolescents' psychological/mental well-being associated with illegal mining.	Psychological Health and Well-Being	Psychological and Emotional Well-being	*"I don't understand this life…I am confused anytime I wake up to lacks and hunger…I don't even understand the work I do;. We are just surviving. No help from anywhere…I am not happy…"*
		Health vulnerabilities	*"…I am down with severe candidiasis as a result of sitting in galamsey pits, waterbodies for house…its polluted with mercury and other chemicals, body itches and cuts takes long before it heals…"*
Adolescents engaged in illegal mining.	Pursuing Growth Amidst Adversity	Educational Aspirations, Career Goals, Financial Challenges	*"Yes. I work (galamsey) to feed and support my siblings…I want to become a pilot…but do I achieve that when I don't have money…no help from family or friends. My parents are dead…Hunger drives me crazy..."*
Push and pull factors drawing children into early work.	Factors that influence child labour in illegal mining	Family Structure, Living Arrangements Lack of parental control Peer pressure	*"My child does not respect me…cos I no longer take care of him due to health challenges…He is now working at galamsey site to feed himself and his siblings…some join him to work…they no longer go to school"* *"I love working with my friends at the site...they come for me."*

Figure 2 Thematic network Summary



Theme One:

Vulnerabilities of Adolescents in Illegal Mining

Adolescents in illegal mining encounter various vulnerabilities that impact their work experiences. Exploring the experiences of adolescents in illegal mining, focusing on the challenges they face and the vulnerabilities this practice creates. The main theme, Vulnerabilities of Adolescents in Illegal Mining, has four subthemes that draw attention to the connected challenges impacting their lives: 1) Economic challenges and child labour, 2) Environmental degradation, 3) Safety concerns for minors, 4) Social vices and stigma. Each subtheme highlights a different aspect of the challenges, from the economic reasons driving adolescents into dangerous work to the social and environmental impacts of their involvement.

Economic Challenges and Child Labour. The economic challenges many adolescents face mean that galamsey (informal mining) becomes one of the few options available for financial survival. Adolescents acknowledged that mining, despite the inherent risks, provided an income source in the absence of stable employment opportunities. In many cases, the economic necessity of survival overshadowed concerns about the physical dangers associated with mining.

> "My parents do menial job, so they are unable to take care of me and my siblings. I work to feed my siblings. Sometimes my parents take some of the money I earn. We are just surviving. My mom sometimes gives me Ghc4.00, then I pay Ghc1.00 as a study fee. The remaining Ghc3.00 cannot buy anything enough for me." (Male, 13year-old, Participant CM4, directly engaged in galamsey)

> "My mother is unable to give Ghc5.00 pocket money daily…but I want to go to school, so I have started a boy-girl relationship with a "gala guy" to survive…" (Female, 14year-old, Participant CM26, indirectly connected to galamsey through a miner)

This perspective reveals the stark realities of poverty that make hazardous work seem necessary. Mining is framed as a last resort but also as a critical lifeline for families facing extreme financial hardship. "I work every day to make enough money at different galamsey sites. We walk distance, miles just in search of sites, from one community to the other just to do something with our hands; we work in groups. I sometimes earn Ghc200 on good days less than other days. I am paying for my school uniforms, feeding and others; I mostly support my mother financially cos she is unemployed." (Male, 17year-old, Participant CM9, directly engaged in galamsey)

Some adolescents also expressed guilt and discomfort over their reliance on income generated through their involvement in mining. Although they recognized the physical risks and educational costs, the immediate financial benefits were often too critical to forego, especially in cases where parents struggled to secure employment or sustain their families.

> "To support mother financially…. Galamsey work is very risky and tiresome. I have been healing from skin disease because of working there. The highest amount I have made so far is Ghc1200" (Male, 16year-old, Participant CM7, directly engaged in galamsey)

The sense of guilt and helplessness among adolescents highlights the difficult ethical and emotional challenges they face. Although they desire to protect themselves, the lack of viable financial alternatives forces them to make painful compromises, underscoring the need for more stable economic opportunities for families.

> "I am working very hard to support mother financially even though I know the job is dangerous, risky and very tiring… I sometimes sustain shovel cuts; skin rashes and headaches but I still go, cos my ability to support my family makes me happy; On good days, I earn Ghc1200 weekly or Ghc500 on bad days" (Male, 16year-old, Participant CM7, directly engaged in galamsey).

Social Vices and Stigma. Adolescents voiced concerns over the prevalence of drugs and alcohol in mining areas, which they felt posed a serious risk to their health and behaviour. These substances are often readily available at galamsey sites, creating an environment where adolescents are exposed to risky behaviour that could lead to addiction and other health issues. This exposure to substance abuse can have long-term effects, contributing to behavioural issues, dependence, and even criminal activities.

> "Continuous sight of groups of guys smoking weed to get ready to work shocks me, sometimes hot fights happen as a result of cheatings, stealing of loads; bloody fight scares me; I sometimes flee from the site until peace returns. My brother gives me a particular medicine that makes me feel strong and energetic; I work long hours nonstop. No tiredness at all so I make more money, and it makes my big brother happy. I don't know if it can cause trouble someday or not. I sometimes feel very sad with the routine…of muddy environment, shovel." (Male, 14year-old, Participant CM24, directly engaged in galamsey)
>
> "There are a lot of problems on site…traders are on site who sell medicine for any health problems or injuries. We don't go to the hospital…we self-medicate…there are violence on site sometimes get arrested by the police because of their actions on the site…" (Male, 15year-old, Participant CM26, directly engaged in galamsey)
>
> "Sometimes, we work underground, and the requires psyching the mind differently; we are encouraged to take strong drugs in order to survive the heat in the pit…" (Male, 17year-old, Participant CM11, directly engaged in galamsey)

The widespread use of drugs and alcohol in mining areas not only endangers adolescents' health but also creates a cultural environment that normalizes substance abuse, making it more likely for young workers to engage in these vices. This exposure can hinder their cognitive and

emotional development, lead to health complications, and increase the likelihood of anti-social behaviours, perpetuating a cycle of harm that undermines their long-term potential.

> "Sad enough some adults don't care about what we do. Those who care about us get abused by miscreants among us. Most of us have left home. We sleep anywhere just to continue working. Some of us smoke weed, swallow drugs before we work underground. That is what also makes them behave violently on the site..." (Male, 15year-old, Participant CM26, directly engaged in galamsey) "The site is dangerous; people steal and misbehave; fights brew among us due to misunderstanding. There are hangouts for booze and chops…girls come there too so it makes guys go hyper and aggressive." (Male, 17year-old, Participant CM9, directly engaged in galamsey)
>
> "Before work, I take a drug (makes me feel good) and or energy drink sometimes that doesn't make me feel sleepy at all. I work for hours nonstop. I consume lots of energy drinks to work more hours, it boosts my energy at work and makes me work faster. I enjoy taking drugs and drinks; so, I look forward to it every working day. It does not give me any complications, and I don't go to the hospital too" (Male, 14year-old, Participant CM24, directly engaged in galamsey)

In addition to physical and behavioural risks, adolescents involved in mining often face social stigma within their communities. Adolescents themselves observed that community members sometimes viewed mining families with distrust or judgment, perceiving them as uncommitted to education or morally compromised. This stigma can lead to social exclusion, with adolescents and their families feeling isolated from community activities and support net works.

"Some of my classmate avoid me in their gathering because I don't go to school…I am not happy; is it my fault that I have to work to feed and clothe? I try to belong through playing with them; they understand me better now…but I miss school." (Male, 14year-old, Participant CM24, directly engaged in galamsey)

"I thought I needed money for school, that is why I started working at the site, but it is become difficult to stop…I want to make more money to come out of poverty and hunger; my grandmother does not talk to me because I went against her advice and started working at the site." (Male, 12year-old, Participant CM17, directly engaged in galamsey)

This social exclusion compounds the challenges these families already face, leading to a loss of social capital and weakening of community bonds. Stigmatization can affect adolescents' self-esteem, making them feel marginalized and less motivated to pursue education or other positive activities. Over time, social exclusion can reinforce cycles of poverty, as adolescents and their families have limited access to support systems, educational resources, and employment opportunities outside of mining.

"I wish I had parents who can cater for my needs so I concentrate on my studies (education), but I just have to continue working to support myself, mother and siblings…I feel so unlucky sometimes…I wonder when all these toils will end." (Male, 17year-old, Participant CM9, directly engaged in galamsey)

"I have turned my father's room into a brothel (he is always at work far from the community) …my mates who are into galamsey patronize it with their girlfriends; sometime, I get business during school hours…; even big men in the

community give me ideas on how to expand it…I am making money" (Male, 15year-old, Participant CM26, directly engaged in galamsey)

Environmental Degradation. One of the most concerning consequences of galamsey is the pollution of rivers, lakes, other local water sources and the atmosphere. Parents expressed alarms over how mining activities, especially the use of chemicals like mercury and cyanide in gold extraction, have contaminated water supplies, posing severe health risks for the community. This pollution impacts both human health and the local ecosystem, making clean water scarce and increasing the risk of waterborne diseases.

"I make sure I don't get closer to the uncovered underground pits…I was an eyewitness to some friends who fell into open pit and died. I cough a lot, but I drink ginger juice to help it…" (Male, 15year-old, Participant CM21, directly engaged in galamsey)

"It is a risk walking to school due to the state of the farmlands; galamsey activities has destroyed many parts of our farmlands, walk paths to school; school children in nearby communities who walk 12miles (in and out of school every day); can't walk to school without a guide else they fall into open pits." (Female, 14year-old, Participant CM29, directly engaged in galamsey)

"During a quarry activity one day, the site is close to our house, our pot of soup fell from the fire pot; the grounds vibrate anytime they work; I feel so scared; my heart skips in fear most of the time and the dust from the site fills the air making breathing difficult for me." (Female, 17year-old, Participant CM23, directly engaged in galamsey)

Water pollution not only deprives communities of essential resources but also creates a long-term environmental health crisis, contributing to the spread of illnesses and impacting

agricultural practices that rely on clean water. This deterioration of water quality underscores the need for environmental policies that restrict harmful mining practices and safeguard critical water resources. Access to safe drinking water is fundamental, and its loss due to pollution from galamsey activities perpetuates community health risks, undermining overall well-being.

> "Galamsey activities has polluted our waterbodies so bad that; we (boys/men) experience severe skin itches after work; the girls/women are complaining of itches in their private parts preventing from continuous…sometimes we drink the dirty water when there's no money to buy mineral water; we end up using earned monies for medicine; we don't patronize hospitals…we are in our world." (Male, 15year-old, Participant CM19, directly engaged in galamsey).

> "I came back from school to do some sharp job, to get money for food in school, my first two days in the galamsey waterbody landed me in trouble, I am currently battling with severe candidiasis. I can't sleep, free wet, the itch and scratches oozes blood from my private part" my mother cannot afford the medicine I need…" (Female, 17year-old, Participant CM1, directly engaged in galamsey).

Safety Concerns for Minors. All adolescents perceived mining as unsafe and unsuitable for adolescents. They were acutely aware of the physical and psychological dangers mining posed, from injuries to trauma. The dangerous environment is seen as an immediate threat to their lives, and they often express a deep sense of fear for their own safety. This perception is reinforced by first-hand experiences of adolescents returning home with injuries or falling ill due to exposure to harsh conditions and toxic substances.

> "I have witnessed an accident at site that broke me emotionally; a work pal died. Sitti ng around is as dangerous as working in the pit. The site is usually filled with dust and the heated atmosphere can be unbearable on our young skins." (Male, 14year-old, Participant CM20, directly engaged in galamsey)
>
> "Some of the petty traders around the galamsey site sell safety wear but I cannot afford it….so I work barefooted and that sometimes land me in getting injuries, but I have to continue working…hunger is killing us here; most of look sick due to hunger" (Male, 16year-old, Participant CM18, directly engaged in galamsey)

Adolescents' strong perceptions of mining as dangerous reflect an understanding of the specific risks associated with the work. Their fear goes beyond typical parental concerns, driven by real instances of harm and the relentless nature of mining activities.

> "I followed my friends to the galamsey site and witnessed a gory accident; two people lost their lives as the earth caved in on them, leaving most injured; this incident scared me but my quest to provide for my siblings and mother keeps me working." (Male, 15year-old, Participant CM12, directly engaged in galamsey)

Theme Two

Psychological Health and Well-Being

Psychological health and well-being of adolescents in illegal mining include their emotional, psychological, physical and social functioning; encompassing their ability to prioritize their health, manage stress, relate to others, and make sound decisions, as well as a sense of purpose and fulfilment. This was to address the second objective of the study. Two subordinate themes were identified under this broad theme: 1) Psychological Problems 2) Physical Health Challenges

Psychological Problems. Many adolescents experienced a complex mix of emotions related to mining. On one hand, adolescents often felt a sense of pride in being able to contribute to the family's income, especially in financially challenging times. This pride in supporting their family was frequently accompanied by a sense of independence and maturity. However, this positive emotion was overshadowed by feelings of stress, fear, and anxiety associated with the hazards of mining, such as unstable tunnels, potential cave-ins, and long hours in physically taxing conditions.

> "Yes. I work (galamsey) to feed and support my siblings. I feel very unhappy about the state we are in but no other means of work for survival. Sometimes the explosives make me afraid. I struggle to sleep. And sometimes I cry in my sleep. It makes me think I am going mad, but I cannot stop. If I stop, how will I get money to support myself? I …Life is wicked." (Female, 17year-old, Participant CM1, directly engaged in galamsey)

These mixed emotions reveal an internal conflict within adolescents, where the psychological burdens of dangerous work counter the perceived benefits of contributing financially. Over time, this emotional strain can erode their mental health, potentially leading to chronic stress or trauma from sustained exposure to hazardous conditions.

"I go to the site on weekdays; I go to the site at night and come to school during the day. On weekends, I go there in the morning, except on the days when the soldiers come around. I have become used to hard labour cos no one cares about us. It feels stressful. I find myself lost in thought sometimes. And that is dangerous at the mining site because you need full attention to work with the chemicals. A little mistake can end your life, and that makes me anxious. My source of strength is the intake of lots of energy drinks; it makes me work nonstop." (Male, 14year-old, Participant CM2, directly engaged in galamsey)

Adolescents shared the emotional strain they endured due to their mining involvement, with many expressing constant worry about potential injuries and long-term health hazards. This emotional toll extended beyond the adolescents, affecting the mental health and stability of entire families.

" …The job itself is very tedious; I have sustained lots of injuries on my body (legs and hands) I treat sours every week; I sometimes feel dizzy at work; but have to meet the time duration to claim my pay for the day so I press on. I sometimes feel crazy and wish I could stop it but hunger drives me back to work. I don't want to become a thief or an armed robber, I see how those people get killed in the community. When will all these end...I wish there was a perfect world for children to dream and achieve their dreams" (Male, 16year-old, Participant CM6, directly engaged in galamsey)

"…Eiiiii….the work is very difficult paaaa, very dangerous because we don't cover the pit after working...whenever I have to work underground I must smoke weed (marijuana) so I can survive the heat underground…I sometimes weep, cry

> and become sad because I feel something is not right but no way for hunger, so I press on…" (Male, 16year-old, Participant CM7, directly engaged in galamsey)

The emotional toll is a shared burden, affecting both adolescents and their families. This sustained anxiety can strain family relationships, create a sense of helplessness, and contribute to broader mental health issues within the household. Adolescents and their families alike bear the emotional weight of this precarious balance between financial necessity and safety.

> "My mother does not want me to see me around the house; she says I have refused to heed her advice thus to focus on education. I hang out with my work pals; I don't go home; few times I stopped by home to see my siblings my mother rains insults on me but I see they need money…hmmmmmm…I wish mother understands me; sleeping around is not safe for me… (Male, 16year-old, Participant CM7, directly engaged in galamsey)

> "I am unable to study my books; it gets worse when I don't make much money, I can scream on my siblings and parents or get out of the house very angry; I feel so much pressure, my heart beats fast…I need help." (Male, 15year-old, Participant CM30, directly engaged in galamsey)

Physical Health Challenges. Physical injuries were a recurring concern among adolescents, with many recounting incidents where they suffered cuts, bruises, fractures, and other injuries from mining work. These injuries were not only physically painful but also prevented adolescents from attending school, participating in social activities, and exacerbating their physical and emotional vulnerability.

> "… mining site is very stressful. I use ointment whenever I have body pains. Some people take tramadol and other energy drinks to boost their energy, but I

don't do that." (Male, 15year-old, Participant CM26, directly engaged in galamsey)

"whenever I sustain cuts on my legs, my mother applies scream on it; no hospitals. Most of the dug pits are uncovered and unsafe for walking around. I witnessed an accident at the site that claimed a life and left some injured." (Male, 10year-old, Participant CM15, indirectly connected to galamsey through a miner).

The physical injuries reinforce the precarious nature of mining work and the risk it poses to an adolescent's development. Each injury has lasting repercussions, limiting adolescents' mobility, preventing them from engaging in education, and exposing them to the risk of infections or long-term physical disabilities.

"I have had several cuts on my body due to the use of shovel and axes for digging; I have been to the hospital a few time; we self-medicate (there are people on standby with assorted medications for all situations at the sites) most times to avoid raising concerns…the situation is crazy...i have to be discreet with working life else we get sacked" (Male, 17year-old, Participant CM11, directly engaged in galamsey)

"I got an injury during work one day while using the shovel and started bleeding profusely; I applied lots of water and when it stopped I got some medicinal plant on it that stopped the bleeding; I had to stop work for some hours...I continued work but lost money" (Male, 13year-old, Participant CM6, directly engaged in galamsey).

Adolescents again expressed deep concern over their exposure to hazardous substances, especially mercury, which is commonly used in small-scale mining for gold extraction. Exposure to mercury and other chemicals can lead to neurological, respiratory, and developmental health issues, with long-term effects that can impact cognitive function, physical health, and future earning potential. The lack of protective equipment or adequate safety measures means that adolescents are directly exposed to these toxins daily.

> "After washing the load, we sweep the dust of gold into a pan, take it to a safe place; buy mercury at GHc100; I personally wash with the mercury, draw the rest using my mouth to recover some for reuse because its expensive so it requires prudent use of it". (Male, 14year-old, Participant CM20, directly engaged in galamsey).

Exposure to unsafe substances highlights a severe public health concern that goes beyond immediate injuries. Mercury exposure can have long-term and potentially irreversible health effects, particularly on developing adolescents. These risks underscore the need for regulatory interventions and safer practices in mining communities to protect vulnerable populations.

> "My mouth got soured because of the daily use of the mercury. My friends complain of same symptoms; our skins look pale and dirty every time; no time to bath with clean water… It is so easy to buy any of the chemicals we need for smelting the mineral we mine; we always want to reuse it so we use every means to preserve it and its expensive too." (Male, 12year-old, Participant CM28, directly engaged in galamsey);
>
> "I cough a lot sometimes its bloody…. Ginger syrup helps a little. We are struggling with chest pains, and I get tired after work, we inhale the dust every

day; no nose covers or any protective wears." (Male, 12year-old, Participant CM21, directly engaged in galamsey).

Chronic health issues, especially respiratory problems, were frequently mentioned by parents, who noted that mining's physical toll often led to persistent coughing, breathing difficulties, and exhaustion in adolescents. The long hours spent in dust-filled, poorly ventilated areas have a detrimental impact on respiratory health, with adolescents often facing chronic symptoms that affect their daily lives and capacity for other activities, such as schooling or play.

"… I got back home with severe cold due to inhalation of dust during work" (Male, 17year-old, Participant CM22, directly engaged in galamsey) *"*…I smoke weed with my gang (group of gala boys); that is what keeps our bond. I am always happy when I smoke because it gives me peace of mind." (Female, 19year-old, Participant CM25, directly engaged in galamsey)

*"*I experience severe itching in my private part (vagina) after working in a waterbody (galamsey)" ((Female, 17year-old, Participant CM20, directly engaged in galamsey) *"*I have severe cough from working at the galamsey site; the air is polluted with all sorts of chemicals." (Male, 16year-old, Participant CM21, directly engaged in galamsey).

Chronic respiratory issues reveal the severe physical toll mining exacts on adolescents' bodies. Beyond the immediate health risks, these conditions limit adolescents' physical abilities, lead to fatigue, and ultimately affect their long-term physical and cognitive development. The prevalence of these health issues among young miners' points to an urgent need for protective measures, medical support, and alternative employment options for families.

"The work is difficult; it affects my waist and arms. I buy medicine from the drug store on the site; it gives temporary relieve; I treat same every week; I sometimes use ointment for the body pain as well." "Most of the JHS Graduate have all moved to galamsey sites to make money for SHS entry fees and to support the family." (Male, 14year-old, Participant CM20, directly engaged in galamsey).

"I am considered as the father of the house by my mother because my father been bedridden for years; my mother fries yam and sell, I am struggling with body pains, severe itches around my private part (scrotum and penis) I am in so much pain, I can't sleep, can't study meanwhile, I have to prepare for my BECE exam." (Male, 16year-old, Participant CM18, directly engaged in galamsey)

Theme Three

Strategies adolescents Adopt in Thriving

Adolescents despite their involvement in illegal mining which serves as a source of livelihood, they held their aspirations and future goals as weapons to succeed in life. Three subthemes were identified to address this objective of adolescents' aspirations: 1) Educational Aspirations, 2) Career Goals and ambitions, and 3) Socioeconomic Barriers.

Educational Aspirations, Career Goals, and Financial Challenges

Many adolescents noted that, despite their involvement in mining, they still held aspirations for education and envisioned pursuing careers that could offer financial stability and a way out of poverty. Adolescents often saw mining as a temporary means to achieve these educational goals, viewing it as a way to save for school fees or necessary materials.

> "I engage in galamsey to make additional money for myself and my education…my dream is to become a Pilot or a Doctor." We are many guys who engage in galamsey work during vacations to save enough money for school." (Male, 15year-old, Participant CM26, directly engaged in galamsey)

This drive for education reflects a deeper awareness among adolescents of the limitations that poverty imposes and a desire to break the cycle. However, the reliance on mining as a source of income can ultimately hinder their academic progress and reduce the likelihood of achieving these ambitions.

> "I am in school and currently in SHS 2. I go to school and do galamsey alongside to support for my upkeep; I support my siblings with a few stuff." (Male, 17year-old, Participant CM22, directly engaged in galamsey)

Economic hardship emerged as a primary barrier to educational access, with mining seen by adolescents as a temporary solution to overcome this barrier. However, many adolescents were conflicted, understanding that mining work could endanger both the child's physical safety and academic future.

> "On weekdays, I go to the site at night and come to school during the day. On weekends, I go there in the morning, except on the days when the Soldiers come around" (Male, 14year-old, Participant CM24, directly engaged in galamsey)

This tension between educational aspirations and financial constraints underscores the complex decision-making process families face. Although mining provides an immediate source of income, it often restricts educational opportunities, perpetuating cycles of poverty and limited career options.

"I go to the site when I don't have enough money to go to school. I also go there during vacations to make enough money for the next term. No other options of work" (Male, 16year-old, Participant CM7, directly engaged in galamsey)

Career goals and ambitions. In the context of adolescents involved in illegal mining, career goals and future aspirations are often influenced by the harsh realities of their present circumstances, which are shaped by the challenging and exploitative environment they grow up in. These adolescents are generally deprived of opportunities to develop conventional career aspirations due to their labour-intensive and hazardous work. However, some adolescents still express hopes for a different future, though these aspirations are often constrained by limited access to education, support systems, and societal structures.

Adolescents working in illegal mining are often unaware of the broader range of career opportunities outside the mines. Many of them express desires to remain in the mining industry due to familiarity, lack of exposure to other career paths, and a belief that mining is the only viable way to earn a living. "I want to be a miner like my father. It's the only job I know, and it gives me money…" (Male, 15year-old, Participant CM5, directly engaged in galamsey)

The influence of family members, particularly parents who are involved in illegal mining, significantly shapes the adolescents' aspirations. These adolescents often adopt the career goals of their family members, seeing their future in the same line of work. "My mother works here, and I want to help her. When I grow up, I want to be like her and find gold too." (Female, 15year-old, Participant CM30, directly engaged in galamsey)

While many adolescents may express aspirations tied to their current environment, others show a desire to escape the mines and pursue more stable and dignified careers, clarifying that despite the challenges, some adolescents do dream of careers that represent escape from the

hardships of illegal mining. However, their dreams are often hindered by a lack of educational access and the pressures of contributing to family income. "I want to be a pilot one day, but I know I need to work hard to make it. I can't just stay here forever." (Male, 16year-old, Participant CM4, directly engaged in galamsey) "My fingers are good at fixing anything electronic…I am able to use boxes to make cars, and I really enjoy it…I want to become an Engineer." (Male, 13year-old, Participant CM16, directly engaged in galamsey) "I want to be a pilot one day, but I know I need to work hard to make it. I can't just stay here forever." (Male, 16year-old, Participant CM4, directly engaged in galamsey).

Socioeconomic Barriers. Even when adolescents' express aspirations beyond illegal mining, the socio-economic barriers they face such as poverty, lack of access to quality education, and the immediate need to earn income make it difficult to realize these goals. "I want to be a nurse, but my parents need me to help with work at the sites. I don't know if I will ever get to continue school or even realize my dreams…I feel very sad." (Female, 15year-old, Participant CM11, directly engaged in galamsey).

Due to financial constraints, adolescents may not be able to attend school regularly, or at all, because they are required to work in the mines. Education is often viewed as a luxury rather than a necessity, which restricts their potential for future advancement. "I don't go to school regularly because I need to work to help feed my family and even use some of the money to buy school stuff…going to school after work is almost impossible because I sleep throughout lesson time or arrive late." (Male, 16year-old, Participant CM15, directly engaged in galamsey)

The financial strain faced by these adolescents and their families often means that they are unable to access quality education. Even when adolescents express interest in schooling, the cost of tuition, school supplies, and the need to work to support the family make education

unattainable. "I want to go to school, but my mother doesn't have the money to push me; I help her to work at different mining sites. She says I'll be able to go back to school when we have enough money." (Male, 17year-old, Participant CM18, directly engaged in galamsey)

Many adolescents in illegal mining communities lack the resources or access to vocational training that could provide an alternative path to employment. The absence of access to skill-building opportunities outside the mining industry limits their aspirations. "I would like to learn how to fix cars or build houses, but there is no place for me to learn those things. So, I just work here (galamsey sites) with my father." (Male, 13year-old, Participant CM13, directly engaged in galamsey).

Theme Four:

The Social and Economic Drivers of Mining Involvement

Child mining is a delicate issue influenced by various social, economic, and cultural factors. In many developing regions, adolescents are drawn into mining activities due to poverty, family financial needs, and limited access to quality education. We identified five major subthemes under this broad theme to address the 4th objective of the study: To identify the push and pull factors drawing adolescents into early work. These subordinate themes include 1) Family Structure, Living Arrangements, and Responsibility, 2) Lack of Parental Care, 3) Educational Aspirations, Career Goals, and Financial Challenges, 4) Economic Challenges and Child Labour, 5) Peer Influence.

Family Structure, Living Arrangements, and Responsibility. The adolescents reported that when they lived with extended family members, especially grandparents or older siblings, they often felt a stronger obligation to help with financial contributions. This arrangement often occurred when parents were absent due to migration for work or family

separation. Grandparents, being older, often had limited income-generating capacity, which placed pressure on adolescents to support the household. This structure shifts the typical family roles, pushing adolescents into early financial responsibility.

> "Yes, please I am into galamsey work……we are 9 siblings, and we live with our grandmother. She is not well so I (senior boy among them) combine mining activities with school…she is not happy with me cos I am influence the younger ones to; they go to the site with me…we sometimes sleep around the site just to avoid grandma's confrontation (she prefers we focus on farming as a means of livelihood)." (Male, 14year-old, Participant CM2, directly engaged in galamsey)

> "Yes, I go to the site[mine] every day after school…my mother's business is down…" (Male, 17year-old, Participant CM9, directly engaged in galamsey).

This living arrangement also creates a context where adolescents feel an implicit or explicit duty to support the household, even at the cost of their education or well-being. This sense of duty reflects both cultural expectations of supporting family and the lack of alternative income sources.

> "I go there [the mining pit] at any time...on weekdays, I go there at night and come to school in the morning. …On weekends, I go there in the morning and come home in the evening...my father is not home, and the hunger is unbearable. My mother is late. (Male, 16year-old, Participant CM7, directly engaged in galamsey).

Family separation, particularly in single-parent households, frequently exacerbates financial strain. According to the adolescents in these households, they often felt a need to contribute to the family's finances, especially when only one parent could work. In cases of

absent or limited child support, adolescents saw mining to alleviate some of the household's financial burden.

> "My father lives in a different community; he is there in search of greener pastures; my mother is not working hence she depends on me to work and bring home to feed the family. My father does not send money home too…I feel pressured too much" (Male, 13year-old, Participant CM4, directly engaged in galamsey).

This sense of responsibility reflects the impact of family structure on adolescents' perception of their roles within the household. In single-parent families, the economic pressures are often intensified, leading adolescents to view mining as an essential contribution. " Yes. I don't have enough money to go to school…. I combine school and illegal mining work to feed and support my siblings. And I do it every day" (Female, 15year-old, Participant CM13, directly engaged in galamsey)

Adolescents also reported that they took on significant responsibility to support their families financially, either out of obligation or a personal drive to assist. This often arose in larger families where each member was expected to contribute or in households facing severe poverty. Adolescents frequently saw mining as one of the few ways they could make a meaningful financial contribution. "Yes, my parents seem overwhelmed by opportunities in the community, so they don't care about our welfare…this state really hurts. So, I had to find work by any means to support myself and younger siblings. Sometimes my mother asks for money from me; I give her grudgingly...I wish for a better life." (Male, 13year-old, Participant CM4, directly engaged in galamsey)

This sense of duty highlights the way financial hardship redefines childhood roles, shifting expectations of adolescents' participation in income generation. It emphasizes the significant weight of economic responsibility placed on adolescents due to family structure and living arrangements.

> "…Four of my siblings are working in Accra but they don't send any money home to cater for us (they don't care) so the financial challenges at home pushed me into doing galamsey work. The excruciating pains in my body are unbearable, but hunger drives me back to work." (Female, 16year-old, Participant CM3, directly engaged in galamsey)

Lack of parental care. Parental care is a critical service every family owes to their adolescents. The inability to meet such conditions has many consequences. Some participants indicated that lack of parental care pushed them into illegal mining in the community because they must assume the responsibility of fending themselves: "My parents are unable to care for our needs, we have to survive hence our involvement in galamsey work…we (siblings) are happy doing something profitable; we are not beggars at least" (Male, 13year-old, Participant CM4, directly engaged in galamsey)

The inability of parents to care for and meet the financial needs of adolescents is among the key factors that underly adolescents' experience in the community pushing them into galamsey operations in the community. This becomes a difficult path for minors to chat although it is against the human rights laws of Ghana and environmental protection protocols. Adolescents find themselves in this situation because parents are unavailable to meet the full support of their adolescents:

> "My parents are not able to take care of me and my siblings. They are separated. I work to survive and make my siblings live. My mom tries to feed us but not always...thank God for galamsey work, we can eat every day and buy neat clothes too" (Male, 13year-old, Participant CM4, directly engaged in galamsey)

Challenges and Child Labour. The economic challenges many families face mean that galamsey becomes one of the few options available for financial survival. Parents acknowledged that mining, despite the inherent risks, provided an income source in the absence of stable employment opportunities. In many cases, the economic necessity of survival overshadowed concerns about the physical dangers associated with mining.

> " My parents are not able to take care of me and my siblings. I work to survive and support my siblings. The money for feeding is too small and insufficient for the five of us. She is determined but incapable." (Male, 13year-old, Participant CM4, directly engaged in galamsey)
>
> "…I work to support my parents... I sometimes accompany my father to the mines...so we can have more money to buy food for the week…we go every day, after school, weekends and every day during vacation" (Male, 10year-old, Participant CM15, directly engaged in galamsey)

This perspective reveals the stark realities of poverty that make hazardous work seem necessary. Mining is framed as a last resort but also as a critical lifeline for families facing extreme financial hardship. "My business at this site is to make good money. I earn Ghc200 on good days. I use it to pay my dues at school and use the rest for my upkeep and support my

family" his respondent depends on the money from galamsey for her upkeep and sponsor part of her education." (Male, 17year-old, Participant CM9, directly engaged in galamsey).

Some adolescents also expressed guilt and discomfort over their reliance on income generated through their involvement in mining. Although they recognized the physical risks and educational costs, the immediate financial benefits were often too critical to forego, especially in cases where parents struggled to secure employment or sustain their families. "My purpose here at this site is to work to support my mother financially…. Even though the work is very risky and tiresome. I am struggling with skin diseases…there are insect bites from the waterbody. The highest amount I have made so far is Ghc1200" (Male, 16year-old, Participant CM7, directly engaged in galamsey).

The sense of guilt and helplessness among adolescents highlights the difficult ethical and emotional challenges they face. Although they desire to protect themselves, the lack of viable financial alternatives forces them to make painful compromises, underscoring the need for more stable economic opportunities for families.

> "I struggle with my mother in trying to understand why I should be the one feeding the family; the argument can be fierce, but I still go to the site to support mother financially…. Work is dangerous, open pit swallow workers sometimes. Despite the harsh condition of the site and the condition of working, I still go back…I want to see my siblings happy" (Male, 16year-old, Participant CM6, directly engaged in galamsey).

Peer pressure. Another subtheme that emerged is peer pressure. Some adolescents identified peer pressure as reasons that lured them into participation in illegal mining. Many adolescents explained that their peers often encouraged them to join mining operations, portraying it as an opportunity to earn money quickly and gain social recognition. One respondent made the following *submission:*

> "I started going to the site with my big brother… some of school mates joined later (Male, 14year-old, Participant CM2)
>
> "Yes, my brothers were involved in it and convinced me to join them…I worked for 5 hours only on some days…We leave home around 7 pm and close at 2 am." (Male, 17year-old, Participant CM9, directly engaged in galamsey).

Peer influence was especially pronounced in communities where mining is normalized and considered a common activity among youth. This subtheme highlights the social dynamics at play, where the desire to belong and maintain relationships with peers often outweighs concerns about the risks and consequences of illegal mining. "My JHS friend works at a galamsey site and his deal there is good. He leaves the house early to the site and sometimes earns as much as ghc1500 a day or ghc600 when things are hard." (Male, 13year-old, Participant CM16, directly engaged in galamsey).

In some cases, adolescents felt that refusing to join mining activities could lead to social exclusion or ridicule from their friends, which heightened the pressure to conform. "My friend persistent counsel changed my mind so I join them at the site to work...i know I am going against my parent's counsel but, hunger will not allow me stay focused on my studies. I envy my friends; some of them have bought motorbikes with the money earned. I want to own something important." (Male, 12year-old, Participant CM17, directly engaged in galamsey).

Part Two: Findings from Parent Participants

The second part of the study focused on analysing the responses from 30 Parents between the ages of 20 to 70 years, who provided valuable insights into their concerns and stance on child mining.

Themes

From the data collected, three super dominant themes emerged with subthemes, each reflecting different aspects of parental concerns of child involvement in mining activities and its impacts. Below is a summary of superordinate themes and subordinate themes:

Table 4: Superordinate Themes and Subordinate Themes

	Superordinate Theme	Subordinate theme	Examples
Parents' perception of their adolescents' involvement in illegal mining	Parental concerns about child mining	Child Labour and Educational Disruption	*"Reports from his school say my son brings lots of money and phones to school…"*
			"Some NGOs come around to warn against involving children in labour…but we need the extra money…"
		Awareness and Warnings	
Adolescents's psychological/mental well-being associated with illegal mining	Mining's Impact on Health and Communities"	Health and Well-being	*"He got an injury during work ...I help treat him, so he goes back to work…we need the money"*
Aspirations (dreams) of adolescents engaged in illegal mining	Coping strategies children adopt in thriving		*"During durbars, we are warned not to engage children in hard work…I know my son should not be working now but hunger needs food…"*
		Community and Societal Effects of Mining	
Push and pull factors drawing adolescents into early work	The Social and Economic Drivers of Mining Involvement		*"We have to find a strategy to survive…no father in their lives so; we are working together to make enough money"*
		Coping Strategies	*"My son's friends are very troublesome…they bring their lots home to show him. It keeps him thinking and I had to let him join them"*

		Peer Influence and Social Dynamics	*I try to ensure my children only work part-time, so they can still go to school…"*
		Economic Strain on Families	*"…I* compare him with what his mates are achieving through galamsey work. He now joins them to work… *I feel so proud of him now" …my petty business in hinged on loans and I need to pay back."*
		Economic Hardship and Community Engagement	*"Farming work is not doing well due to galamsey activities…we are confused as to which one is safe…galamsey pays faster than farming.*
		Motivations for Involvement in Mining Activities	*"Most of us are single parents and have no viable business…our strength does less work at the site to we involve our children…it's shameful but we need to survive…"*

Theme one

Parental concerns about adolescents in mining

Parental concerns about adolescents in mining are rooted in the significant risks and harm that such labour poses to adolescents' well-being. Mining, especially in informal and unregulated sectors, exposes adolescents to hazardous working conditions, including exposure to toxic chemicals, physical injuries, and long hours in unsafe environments. Two subthemes were identified under this superordinate theme 1) Adolescents Labour and Educational Disruption and 2) Awareness and Warnings.

Adolescents Labour and Educational Disruption. Parents expressed profound apprehension regarding the perilous nature of mining, recognizing that their adolescents were subjected to substantial legal and physical risks. These hazards encompassed a variety of potential long-term health issues, including those caused by exposure to noxious substances or hazardous conditions, as well as injuries associated with the physically demanding labour. Despite these hazards, mining was frequently perceived as a necessity for economic survival, and parents found it difficult to balance their apprehensions about their adolescent's safety with the immediate financial advantages that mining work offered.

> "Reports from his school say my son brings lots of money to school and phones. He acts rudely and disrespectfully; he talks with lots of pride, feeling all matured and big; he drinks alcohol and chases girls…I heard that from his friends" (Male, 50year-old, Participant PM30)
>
> "The community police reports of how young girls go to the site at midnight for iPhone and cash for sex and parents are so worried about this development…" (Female, 42year-old, Participant PM27).
>
> "This work is dangerous for children. They have been exposed to the use of cocaine and other hard drugs to keep them working hard; nudity has entered the lifestyle of the girls just to attract gifts from gala boys/men (pornographic materials; they have begun influencing the little one through watching such materials with them…" (Male, 50year-old, Participant PM30).

This acknowledgment of danger underscores a critical dilemma: the brutal realities of poverty frequently compel parents to accept hazardous work environments for their adolescents, despite their complete awareness of the potential harm. The broader societal challenges are

reflected in the parental apprehension regarding this hazardous labour, which occasionally overshadows child protection concerns due to economic requirements.

The education of adolescents was substantially disrupted by their involvement in mining. Parents described how mining activities frequently resulted in their adolescents missing school or even dropping out altogether. The necessity of mining for financial gain resulted in the secondary status of education, which deprived adolescents of future opportunities for advancement. As adolescents spent more time in the mines, their engagement with formal education decreased, which had an impact on their literacy, social development, and long-term career prospects. "He is not serious about his studies. He spends more time working than learning…he talks money and gadgets" *(*Male, 57year-old, Participant PM21) "Working at the galamsey site has really affected his academics. He stopped schooling at a point until the intervention of a Social Welfare officer; that has stopped him from going to the site often...now he goes to school and to the site during vacation" (Female, 57year-old, Participant PM7) "Initially, it was his interest in school that made him indulge in galamsey work. He can skip school for many times and go to the galamsey…He even goes at night…he has lost the studios mind he once enjoyed…I don't know how to help him…" (Female, 64year-old, Participant PM2).

This disturbance to the educational system will have significant long-term repercussions. Because they lack the information and skills necessary for other career options, adolescents who work in mining confront major obstacles in escaping the cycle of poverty. This is because they do not get an education that is enough. This contributes to the perpetuation of a cycle of poverty that is passed down from generation to generation and restricts the adolescents' personal and professional development.

Awareness and Warnings. Many parents deliberately discouraged their adolescents from working in mines despite financial demands. They knew very well the hazards involved, physical injury, medical issues, and future exploitation possibility. Many parents emphasized the importance of education as a means to secure a better future and sought to teach their adolescents about the hazards of mining. Many times, these cautions sprang from a strong need to shield their adolescents from the hazards they had personally encountered. "My daughter is getting tempted to engage in galamsey activities, but my constant warning keeps her away. As a police officer, I have witnessed an accident at the site that claimed a life. I felt sad" (Female, 38year-old, Participant PM26) "I have demonstrated hard work through farming to my grandchildren but galamsey has robbed me of them listening to me. I have and still warn them not to engage in galamsey activities but none of them is listening…hunger is the cause." (Female, 68year-old, Participant PM24).

Notwithstanding these cautions, the financial appeal of mining was usually powerful enough to convince young people to disregard advice from parents. Parents' efforts to steer their adolescents away from mining reflect their understanding of its harmful long-term effects on their well-being. However, the struggle to offer viable alternatives sometimes undermines these efforts, highlighting the severe financial hardships families face.

Parents' main worries were safety and education; many of them worried about their adolescents' participation in mining leading to significant health problems, accidents, or worse. Adolescents were often exposed to hazards including respiratory issues, physical injuries, and even deaths due to the hard-working conditions and lack of control in many mining sites. Apart from these pressing issues, parents were concerned about the long-term consequences on their adolescents' education and opportunities. Though quick, the financial gains of mining often came at the expense of a child's prospects of future escape from poverty by compromising their scholastic aptitude. "Children are dying at the site; two children were reported to have drowned at one of the sites. Some get injured due to the tools (shovel) they use for work. I have treated my son of injuries a couple of times." (Male, 57year-old, Participant PM24)

These concerns reflect the tension between short-term financial necessity and long-term investment in education. The inability to shield adolescents from hazardous work conditions or provide adequate educational resources exacerbates parents' sense of helplessness.

Theme Two

Impact of Mining on Health and Communities

Mining had an impact on the health and well-being of families as well as the community with both immediate and long-term consequences. Two subordinate themes were identified 1) Health and Well-being 2) Community and Societal Effects of Mining: to address the objective on the psychological/mental well-being associated with illegal mining.

Health and Well-being. Since there are many stories of accidents and chronic health problems, parents are very concerned about the physical toll that mining takes on their adolescents. Workers commonly suffer from respiratory issues due to dust inhalation, exhaustion from long hours, and physical injuries caused by the hazardous mining conditions. Adolescents often worked in dangerous circumstances that lacked enough ventilation, which

increased the likelihood of developing long-term health concerns. Additional pressure was placed on the health of adolescents as a result of physical weariness, in addition to the lack of proper diet and medical attention. “Galamsey work is dangerous for children due to the lack of safety tools at the site. He comes home with injury sometimes, which prevents him from going to work often. I pity him.” *(*(Female, 42year-old, Participant PM27) “He got an injury during work one day while using the shovel; I had to make him stop work for some hours to treat it with a plant (herb).” (Male, 48year-old, Participant PM6) *“*I have taken him to the hospital several times because of accidents at the site.” (Female, 39year-old, Participant PM21*) “*My son falls sick often due to the intensity of the work they do during the day and night even at dawn; he is breaking his back daily to cater for his siblings and family”. (Female, 52year-old, Participant PM18) “A lot of the women in this community do galamsey jobs; their private parts are infected with severe itches; this situation is affecting marriages” (Female, 61year-old, Participant PM16) “My son has been suffering from tuberculosis as result of working in galamsey water; his private part is almost rotten due to severe itches” (Female, 52year-old, Participant PM20).

The physical effects that mining has on adolescents are quite concerning, and the fact that they do not have access to medical care or sufficient nourishment makes these problems much worse. These adolescents already struggle to protect their health, and their inability to afford proper medical care for accidents or infections only worsens their situation.

Apart from physical well-being, families' emotional load was another major issue. Over their adolescents working in such dangerous situations, parents expressed sentiments of tremendous anguish and powerlessness. Many expressed the emotional toll of seeing their adolescents go through the physical demands of mining and their ongoing concern about possible mishaps or long-term medical harm. Parents' mental tension in balancing their financial

demands with their duty to safeguard their adolescents mirrors the larger emotional costs of poverty.

> "My son has moved out of the house; he got back home from work one day, packed a few clothes and left …I complained about his several injuries and bad cough. His arrogance has taken his mind from anything school... I think my son has lost his sense of right decisions…he wanted to become a Medical Doctor" (Male, 55year-old, Participant PM23)

> "COVID-19 period increased the involvement of adolescents in work at galamsey sites in the community…children are now forming gangs of workers; they get injured but keep it secret; they have a way of treating themselves without going to the hospital." (Male, 58year-old, Participant PM22)

Like their parents, the adolescents endure emotional distress, often leading to tension, anxiety, and resentment toward their circumstances. Growing up in such surroundings may have long-lasting psychological impacts on adolescents' emotional development and views of family life, employment, and safety.

Community and Societal Effects of Mining

Adolescents' engagement in mining adds to community dispersion. Many parents said that mining activity, especially in rural locations, resulted in family separation, with some families moving closer to mining sites and others being alienated from the larger community. Changes in family structures, such as single-parent households or the absence of caregivers, have often weakened family support networks. Furthermore, mining-induced movement made it impossible for adolescents to build long-term ties with classmates, leading to further social

isolation. "It bothers me a lot that my son is involved in a situation this bad. Adolescents now talk big, with no sense of respect for the elderly. They refuse to take counsel from people who know the effect of mining; some are getting chased out of the house due to disrespect. (Male, 57year-old, Participant PM7)

Families put survival above social relationships, and adolescents grow up in surroundings where social cohesiveness and communal well-being are sacrificed in the face of financial constraints, ultimately destroying the social fabric of society.

Parents also expressed worries about the larger environmental damage related to mining, including pollution and the depletion of nearby resources. With long-term effects for the health of the environment as well as the people living in these places, mining often results in the degradation of natural settings. Major effects of mining activities noted as affecting not just adolescents' health, but also traditional livelihoods, were water pollution, deforestation, and loss of agricultural land.

> "Galamsey activities has destroyed a lot of water bodies and farmlands. The environment has become death traps for its people especially school-going children and the aged. I fear for the future of our children; will the lands yield good food in the future? Hmmmmmm…this sight is troubling our minds." (Female, 38year-old, Participant PM6)

These environmental problems reflect the wider socioeconomic issues that are involved with mining. The short-term economic advantages that mining generates are outweighed by the long-term ecological harm and the depletion of local resources, which further exacerbates the challenges that the community is now facing.

Theme 3

Survival Strategies

To cope with the economic pressure and the need for their adolescents to contribute financially, many parents made attempts to strike a balance between work and education. In some cases, parents allowed their adolescents to engage in part-time mining work or sought safer forms of employment, hoping to minimize the risks while still maintaining the financial support that mining provided. This compromise was often made out of necessity, as parents were unable to completely sever their adolescence involvement in mining due to the family's financial dependence on their earnings. "I try to ensure my children only work part-time, so they can still go to school. It's not easy, but it's the best we can do." (Female, 52year-old, Participant PM20) "I encourage them to work in safer places, like helping with agriculture, so they don't have to go into the mines all the time." (Female, 68year-old, Participant PM24)

These strategies represent parents' attempts to mitigate the risks associated with mining while still addressing the immediate financial needs of their families. However, this approach is fraught with challenges, as part-time work often leads to exhaustion and may still interfere with school attendance.

In some instances, parents sought help from external sources, such as social welfare services or community organizations, to keep their children in school and out of the mines. These interventions ranged from financial assistance for education to community programs designed to provide safe alternatives to child labour. However, access to such services was often limited

and inconsistent, and many families faced barriers in accessing the support they needed. "It really affected his academics. He stopped schooling at a point until the intervention of a Social Welfare officer; that has stopped him from going to the site...now he goes to school" (Female, 57year-old, Participant PM7) "The community police alert me on my children's behaviour and that helps me control them." (Female, 58year-old, Participant PM11)

Social Support. Resilience was characterized by the ability to withstand or recover from difficult circumstances. While many parents express deep concern for the physical and emotional toll of mining on their children, their resilience is shaped by the need to survive, provide for their families, and maintain hope for a better future. "It hurts to see him work in the mines, but if he doesn't, we won't have enough money for food. I've had to accept it, but I do everything I can to make sure he stays safe." (Female, 52year-old, Participant PM20) "I stay awake at night thinking about how to get her out of the mine, but we don't have the money for school. It hurts, but I keep going." (Male, 57year-old, Participant PM27)

Resilient parents often exhibit adaptability by finding creative ways to make the best of a dire situation. They may not have the resources to provide an education or a safer environment, but they find ways to adapt to the situation, protect their adolescents as much as possible, and ensure their families continue to survive. "I don't want my grandchildren to work, but there is no choice. So, I try to make sure they don't work too long and take breaks. I tell them not to go too deep into the pits." (Female, 68year-old, Participant PM24) "The farm produce profit is not sufficient... It's not much, but it helps. I hope one day I can save enough to send my son to learn a vocation and stop him from this dangerous work." (Female, 58year-old, Participant PM11) "I don't know how much longer I can protect him, but every time he works, I tell him to be careful. If I can't change the situation, at least I can help him stay safe." (Female, 48year-old, Participant PM17)

While many parents in illegal mining communities feel forced to send their adolescents to work due to financial pressures, some parents stand their ground, determined to protect their adolescents from the dangers and exploitation of mining: "I know we are struggling, but I will never allow my children to work in the mines. I want them to learn, to have a future outside of this life. I'm willing to sacrifice everything to make sure they stay in school." (Female, 52year-old, Participant PM20) "It's hard, and sometimes we go without, but my son will not go into the mine. He's too young, and I don't want him to end up sick or hurt like some of the other children here." (Male, 50year-old, Participant PM18).

> "I have to work hard to make ends meet, but I tell my children every day that they must stay in school. I don't want them to repeat my mistakes. I've seen what happens to children who work in the mines, and I won't let that happen to them." (Female, 50year-old, Participant PM28)

Theme 4

A range of social and economic pressures that lead to adolescents' involvement in mining activities were identified from parent's responses. Factors like financial instability, community dynamics, family structure, and peer influence emerge as critical determinants shaping these decisions. Under this theme, we identified two subthemes which are analyzed below: 1) Peer influence and social dynamics, 2) Economic strain on family, 3) Economic hardship and community engagement and 4) Motivations for involvement in mining activities.

Peer Influence and Social Dynamics. Adolescents' participation in mining became mostly driven by peer pressure. Parents often noted that acquaintances who had already begun working in the mines had an impact on their adolescents. Adolescence felt driven to engage in mining to fit in or to display their maturity because of this peer influence, therefore establishing

a social norm around mining. This dynamic emphasizes how social and economic forces interact as adolescents' decisions are shaped by their need for financial independence and their want of social recognition. "He listens to his friends so much; no effort from me works; I know hunger is a factor why he believes his friends advice. They go everywhere together" (Female, 44year-old, Participant PM4) "He complains about my meagre money; and compares himself to his friends; he says some own motorbikes, iPhone, expensive watches and can take care of their siblings. I want to be like them." (Female, 52year-old, Participant PM20)

> "My children complain bitterly about insufficient food; no clothes; boredom and longs walk to school every day; Three of them came home one day and told me how they met their school met at a galamsey site. They have joined them since then for work...they look happy about the money" (Male, 58year-old, Participant PM22)

The mining environment becomes a breeding ground for not only physical health risks but also social issues that negatively affect adolescents' development. Parents expressed worries about the exposure of adolescents to other risky behaviour, such drug use, that often accompanies mining environments. These behaviours are compounded by the absence of proper supervision and the pressures of working in dangerous conditions. "He is not serious about his studies. He spends more time working than learning." (Male, 57year-old, Participant PM21) "Initially, it was his interest in school that made him indulge in galamsey work. He can skip school for many times and go to the galamsey…He even goes at night." (Female, 64year-old, Participant PM2)"

In addition, mining caused some adolescents to turn their backs on receiving an education. Because adolescents placed a higher priority on earning money than attending school,

the instant cash advantages that mining provided made education seem to be unnecessary. This rejection of education reflects a broader shift in values, one that prioritizes immediate economic needs and newfound independence over long-term personal growth. "He has stopped school since he started working, no more academic talks. He stopped schooling at one point until the intervention of the social welfare officers from the district assembly." (Male, 58year-old, Participant PM9)

Finally, parents realized that their adolescents' engagement in mining brought about changes in their views and values as a consequence of their involvement. Although many adolescents were more self-sufficient because of this, it also resulted in a lack of respect for those in positions of authority and for the standards that have been established over time. Adolescents' interests evolved as a result of the cash from mining, which, when paired with their newly acquired freedom, led to problems among families and communities.

A 50-year-old female participant (PM13) described her son's increasing defiance due to illegal mining work:

> "My son dodges to the site without permission and he has become defiant. I used to do this work with him; we fetch the load and wash at a convenient place, smelt and sell the gold. On my way back from work I got injured and stopped going to the site; now only my son goes; he has become arrogant and disrespectful."

Economic Strain on Families. For many families, adolescents' earnings from mining became a financial necessity. Despite the parents' discomfort with the situation, the income from their adolescents' work often became essential to meeting the household's basic needs, such as food, rent, and medical care. This created a complex dependency, where parents felt trapped

between their desire to protect their children and the need to support their families. Parents expressed guilt and frustration, aware of mining's dangers yet feeling powerless to choose otherwise. "I don't want my child working in the mines, but we depend on that money for food. It's a hard situation." (Female, 68year-old, Participant PM24) "I feel guilty every day because I know the mines are dangerous, but we have no choice. My child's earnings keep us afloat." Female, 52year-old, Participant PM20)

This financial dependency complicates the situation for many families, as the immediate benefits of child labour in mining come at a long-term cost to adolescent's education, health, and overall well-being. This cycle of economic dependency reinforces the challenge of breaking free from child labour.

The involvement of adolescents in mining also had significant effects on family dynamics. Parents observed shifts in traditional family roles, with children becoming key financial providers at a young age. This often led to tensions within families, as parents struggled to reconcile their protective instincts with the need for their children to contribute financially. Moreover, the emotional stress caused by the constant worry about adolescents' safety, combined with the pressure of financial hardship, sometimes resulted in strained relationships between family members. "Since my child started working in the mines, our family has been more tense. The worry is always there, and it's hard to focus on anything else." (Female, 68year-old, Participant PM24) "Two of my children are working at the galamsey site; they are supposed to be the future, but they're already working like adults. It's hard to see them growing up too fast." (Female, 52year-old, Participant PM20)

These tensions reflect the broader emotional and psychological toll of child labour, where the need for survival often undermines the emotional stability and cohesion of the family

unit. Parents, caught between economic necessity and protective instincts, often struggle to maintain a sense of unity and well-being within the family.

Economic Hardship and Community Engagement. Many parents disclosed that their adolescents' participation in mining activities was primarily motivated by financial constraints. They characterized situations in which economic hardship resulted in a scarcity of income-generating opportunities, particularly in under-resourced communities. Mining was perceived as a viable alternative to alleviate the financial burden, despite its inherent hazards. Parents expressed that mining enabled adolescents to contribute to the household, thereby ensuring that they had access to fundamental necessities such as food, clothing, and school fees. The severity of financial instability in these communities is further demonstrated by the normalization of such work for adolescents, where urgent economic benefits frequently surpass concerns for the adolescent's safety and long-term health. "His father is sick and bedridden and financial issues are bad…I am a farmer and a petty trader" (Female, 52year-old, Participant PM20) "Yes, I am a mother of seven (7) children and a farmer…we are going through severe financial hardships; their father moves from one place to the other for greener pasture to no avail." (Female, 56year-old, Participant PM25).

A 68-year-old grandmother (PM24) shared her deteriorating situation:

> "I have eleven children who live in Abidjan. I live in this community with fifteen grandchildren, I trained them to farm but I am now very ill, unable to take care of them; they are hungry. The older ones no more go to the farm with me, they work at galamsey site, and the little ones are getting influenced too. They make lots of money but don't give me some."

> "This community needs financial support and jobs for grown-ups…parents must be empowered to cater for the needs of their children". (Female, 69years-old, Participant PM5)

Mining emerged as a backup option for families with limited or no stable employment. Parents observed that their low-income status or occupational constraints prevented them from meeting domestic expenditures, which led them to reluctantly approve of their adolescents' participation in mining. This economic vulnerability is indicative of the broader community's struggles with limited employment opportunities, which frequently result in mining being one of the few available income sources. These choices are further complicated by the absence of sustainable and accessible employment opportunities, which compel parents to engage their adolescents in potentially hazardous work.

Participant testimonies illustrate these dynamics. A 68-year-old female (PM24) noted: "For two years this galamsey came to this town, on Saturdays, by the time I wake up and leave my room, they will be nowhere to find. They have left for the galamsey…they have found a better alternative to farming; quick money is the reward."

Similarly, a 52-year-old mother (PM10) shared:

> "... I am unable to sleep whenever my son goes to work at night. If not for the fact that there's hardship at home, I would have made my son stop immediately; we have no better option, my husband has been bedridden for years and I fry yam and sell...buyers don't pay"

The economic pressures were exacerbated by the family structure, particularly in single-parent or large families, which frequently required adolescents to contribute to the family

income. Single parents, particularly mothers, reported having a more difficult time managing household expenses on a single income. Mining was suggested as a transient but indispensable solution. In the same vein, large families encountered increased economic difficulties, with older children occasionally feeling obligated to assist their younger siblings. "I have seven (7) children; I am a cocoa farmer, but harvest is not good; now my three elderly children have started going to galamsey site to make extra money to support me and their siblings. Financial hardship is real here." (Male, 56year-old, Participant PM25).

> "Most of my eleven (11) children are unable to send money to me due to unfavourable tax restrictions on transfers (Abidjan to Ghana), I don't have any other means of income except the farm and now my age and health issues; my desire to give my grandchildren better lives look bleak." (Female, 68year-old, Participant PM24).

Motivations for Involvement in Mining Activities. According to parents, many adolescents believed that mining was essential for their families to maintain their financial stability. Not only does this sense of economic obligation emphasize the financial strains they experience, but it also reflects the psychological effects of poverty, as adolescents assume adult responsibilities at a young age. The perception of mining as essential, rather than optional, demonstrates the extent to which financial survival dictates their actions, despite the physical hazards involved. "He feels happy because of his ability to support the family financially…he is always looking forward to the next day of work…he buys for himself stuff for school and gives me some" (Female, 62year-old, Participant PM28) "He makes good money; he brings the money home and saves some for his education…even during the days he is sick; he strives to go to work so home can be sweet" (Female, 52year-old, Participant PM20) "My doctor advised that I stopped working; so, I am unable to take care of them hence their readiness to give work their all to even help me heal." (Female, 64year-old, Participant PM29).

Peer pressure was identified as a substantial motivator for the involvement of minors in mining. Parents noted that adolescents were drawn to mining jobs out of a sense of belonging or curiosity, as they saw their peers working in the industry. In numerous instances, parents have expressed that it is difficult to discourage their adolescents from mining due to the influence of their peers in such tight-knit communities. Despite family objections or safety concerns, adolescents may perceive mining as a normative activity within their social communities, which may lead to a greater willingness to participate in it. "His work peers have influenced him so much; he does not listen to me anymore; he disrespects my counsel, and it is affecting the younger ones." (Female, 64year-old, Participant PM29). "Peer pressure and financial hardship keeps him working at galamsey sites. I warn him not to go there yet he goes all the time" (Male, 57year-old, Participant PM4). "Yes, his brothers are involved in it and convinced him to join

them. We leave home around 7 pm and closed at 2 am" ((Female, 64year-old, Participant PM29).

> "They work in groups; they hire buses to the various sites. They have bought motorcycles for the work they do; this has made them so arrogant and they would not go to school. He used to appreciate the little money I give him but now he ignores me because he earns better money at the site" (Female, 64year-old, Participant PM29).

Aspirations for financial independence or specific objectives, such as saving for education or personal requirements, also motivated certain adolescents to pursue mining. Parents recounted instances of adolescents who were driven by the desire to enhance their own or their family's financial status, despite the inherent dangers. This perspective implies that adolescents possess a certain level of resilience and ambition, as mining is perceived as not only a source of financial respite in the present but also as a first step toward a more stable future. Nevertheless, the absurdity is that, despite the potential for short-term economic benefits, mining may also jeopardize these long-term aspirations as a result of health risks or interrupted education. "He makes money for himself; He has acquired things like a phone, motor and school stuff" (Male, 55year-old, Participant PM23) "…they are busy with betting games with the money they make; playing cards deep into the night. They don't sleep; neither go to school…" (Male, 58year-old, Participant PM22).

A Comparative Analysis of Parent and Adolescents' Narratives on Mining in Ghana

Adolescents' mining, particularly in the illegal mining sector (Galamsey), is a matter pressed by poverty, lack of education and economic despair. Here, we compare the narratives of children involved in mining with those of their parents, highlighting areas of convergence and

divergence in their experiences. While both groups recognize the dangers and the need for mining, their perspectives differ in agency, long -term consequences and coping mechanisms. Analysis reveals how structural inequalities force families into exploitative work while shaping their responses to the crisis.

Economic need and Adolescent labour

Both parents and children recognize that extreme poverty is the main factor of child mining. Teenagers describe working to support their families, pay school fees, or buy basic needs. A 13-year-old boy explains: “My parents are not able to take care of me and my siblings. They are separated. I work to survive and make my siblings live. My mom tries to feed us but not always...thank God for galamsey work, we can eat every day and buy neat clothes too” (Male, 13year-old, Participant CM4, directly engaged in galamsey) . Similarly, parents admit their dependence on their adolescents’ income, with a mother stating: “We depend on that money for food. It’s a hard situation” (Participant PM20).

However, while adolescents’ express resignation and guilt ("I feel so unlucky sometimes... I wonder when these toils will end"), parents articulate a deeper feeling of helplessness and frustration. Some lament their inability to control their children, as one father notes: “He disrespects my counsel... it’s affecting the younger ones” (Participant PM29). This divergence reflects the generational divide: children focus on immediate survival, while parents deal with failure to provide alternatives.

Health and Safety Risks

The two groups recognize the serious dangers of mining, yet their concerns vary in scope. Adolescents report injuries, exposure to toxic chemicals such as mercury, and respiratory

diseases (“I cough a lot... I used ginger to cure it”). Some normalize the use of drugs to bear some harsh conditions (“I take drugs to face the heat underground”). Meanwhile, parents emphasize long-term health consequences. A mother has described her son's tuberculosis contracted from contaminated water (“His private part is almost rotten due to severe itches” – Participant PM20), while another recounts sleepless nights worrying about accidents (“I stay awake thinking how to get her out of the mines” – Participant PM27). Unlike adolescents, who often downplay risks, parents frame mining as constant danger to their teenage futures.

Education vs. work

Education is valued by both adolescents and parents, but economic pressure force compromises. Teenagers consider mining as a temporary means to fund school education (“I go to the site at night and school in the day” – Participant CM24). Many desire a career like nursing or engineering but struggle to balance labour and studies. Parents, however, fear that mining will permanently disrupt education. A father recalls, "He stopped schooling until social welfare intervened" (Participant PM9). While some parents try to enforce part-time work on their adolescents (“I try to ensure they only work part-time” – Participant PM20), others despair as their children prefer income over school education (“He spends more time working than learning” – Participant PM21). This tension demonstrates the tragic trade-off between immediate survival and long -term opportunity.

Social Stigma and Peer Influence

Both teenagers and parents accept social pressures around mining. Teenagers have to face exclusion from peers (“Classmates avoid me... I miss school” – Participant CM24) but find acceptance among the fellow miners ("I play with my workmates—they understand me"). Parents, however, blame peer influence for corrupting their adolescents’ values ("His work peers

have influenced him so much" – Participant PM29). They describe behavioral changes, such as drug abuse and disrespect ("He drinks alcohol and chases girls" – Participant PM30). While teenagers want acceptance, parents see mining communities as morally corrosive, further straining family dynamics.

Environmental Degradation

Environmental damage by mining affects both groups, but their concerns vary in scale. Teenagers describe personal pain ("Severe itches after working in polluted water") – Participant CM19), while parents associate pollution with broader societal collapse ("Galamsey has destroyed our water bodies with mercury and poisonous chemicals"*)* – Participant PM6). Some parents combine environmental damage to the decline in agriculture and community health ("destroyed farmlands are now like death traps for school going children and the aged") – Participant PM20). This shows how mining destroys not only individuals but entire communities

Survival and Resilience

Adolescents and parents rely on different survival strategies. Children rely on drugs and peer support to bear the work ("I take energy drinks to work faster") – Participant CM24). Some even embrace mining for the independence it provides ("I make money, and it makes me happy") – Participant CM7).

Parents, meanwhile, look for external aid (eg., social welfare) or apply restrictions ("I tell him to be careful... it's all I can do" – Participant PM20). A few resist entirely ("I will never allow my children in the mines" – Participant PM28), but most are trapped by economic necessity. This contrast reveals the power imbalance- adolescents adapt to survival, while parents struggle to save them within an oppressive system.

The stories of children and parents revealed both shared struggles and contrasts. Both groups consider mining as dangerous yet economically unavoidable. However, children focus on immediate survival, while parents lament over long-term predicaments. Peer influence and social stigma make their experiences more complex, with adolescents seeking belonging and parents fearing moral decay. Finally, these narratives highlight systemic failures, poverty, lack of education, and weak labour safety, that trap families in the cycle of exploitation. Solutions should address both economic options and enforcement of child labour laws, ensuring that adolescents' futures are not sacrificed for short -term survival. Only then can the convergence of frustration between parents and children can turn into a shared hope for a better future.

CHAPTER FIVE

DISCUSSION

Introduction

This chapter presents the summary of findings, discussions, strength and weaknesses, Implications for future research, conclusion and recommendations for this study on Exploring the experiences and well-being of adolescents and parents in illegal mining (galamsey) communities: the case of Adansi North District in the Ashanti Region, following the purpose of the study to investigate the experiences and well-being of adolescents involved in in illegal mining (galamsey) activities in the Adansi North District of the Ashanti Region, Ghana and answer the following research questions: i) To explore adolescents' working experiences in illegal mining; ii) To understand parents' perception of their adolescents' involvement in illegal mining in these communities; iii) To explore adolescents' adolescents' psychological/mental well-being associated with illegal mining; iv) To explore the aspirations (dreams of adolescents engaged in illegal mining; v) To establish the push and pull factors drawing adolescents into early work.

This chapter will detail the main findings derived from the qualitative data collected through a phenomenological framework, the study focused on uncovering the shared meanings and essential structures of participants' experiences related to adolescents' labour in illegal mining. Following the presentation of findings, a discussion will explore the implications of these findings in relation to the existing literature, culminating in a summary of conclusions and recommendations for future action or research.

Adolescents' Working Experiences in Illegal Mining

Illegal mining, especially galamsey, exposes adolescents to factors that harm their health, including environmental degradation, hazardous working conditions, and economic hardships

that lead to dangerous tasks. Ahern and Stephens (2001) emphasize that mining continues to rank among the world's most dangerous professions, not only because of immediate risks like workplace injuries and fatalities but also due to chronic health effects such as occupational lung diseases (e.g., silicosis, asbestosis, pneumoconiosis) and increased cancer susceptibility (Stephens & Ahern, 2001) . Additionally, social stigma and detrimental behaviours at mining sites make a tough cycle to escape. Galamsey mining causes environmental deterioration by contaminating water bodies with harmful substances like cyanide and mercury. According to The Ghanaian Times, reported cases of kidney diseases have risen significantly in recent years. Dr. Amoako Atta, Head of the Renal Unit at Komfo Anokye Teaching Hospital, attributes this alarming trend in part to the widespread use of mercury by illegal miners (galamsey operators), which contaminates water sources and poses severe public health risks (Kusi-Ampofo & Boachie-Yiadom, 2012). Small-scale mining operations in Ghana release an estimated 5 tons of mercury annually, posing severe environmental and public health risks (Asklund & Eldvall, 2005). Beyond contaminating water bodies, these toxic chemicals, with mercury being the most prevalent, inflict systemic damage by targeting the renal, nervous, gastrointestinal, and respiratory systems (Obiri, 2011). Direct exposure to polluted rivers further jeopardizes human health, causing both dermatological harm and broader systemic toxicity. Water resources frequently suffer severe degradation from mining operations, primarily through two pathways: excessive consumption during ore processing and contamination from waste discharge, tailings seepage, and abandoned waste rock deposits. Experts now call water "mining's most common victim" as the industry's growing footprint leaves freshwater ecosystems increasingly vulnerable across the globe (Remy, 2003). Lakes and rivers are vital for agriculture and drinking water, but contamination poses serious health risks to children who drink them. Environmental damage harms the ecosystem, makes adolescents more vulnerable by restricting their access to clean water, and increasing their risk of waterborne infections. Similar to this research, Turner

(2021) stresses how environmental degradation in mining towns makes families more dependent on mining, which perpetuates child exploitation and poverty. When natural resources like fertile land and water are lost, children lose the chance to live sustainably and meet their fundamental needs.

The environmental consequences of illegal mining contribute to economic pressures that drive adolescents into hazardous labour at a young age. Galamsey is one of the only sources of income for many adolescences, forcing them to undertake dangerous mining work to support their families amid financial hardship and limited employment opportunities. Physical damage and exposure to dangerous chemicals are possible, although short-term financial gains frequently take precedence over long-term health risks. Lack of alternative economic opportunities increases their mining dependence, which worsens their poverty cycles. Even though it may be profitable, mining harms adolescents' long-term development and well-being, according to Agboola et al. (2020). This financial situation highlights the complexity of child labour in clandestine mining, as children choose survival above education and growth.

In mining, mishaps, injuries, and fatalities are common. A devastating mining disaster occurred in Dunkwa-on-Offin, Central Region, where a collapse of an illegal small-scale mining ("galamsey") pit near the Offin River resulted in the tragic burial and fatalities of over 100 miners (Samuel et al., 2012). Adolescents' safety is constantly at risk from mine shaft collapse and mercury exposure (Gyan et al., 2023). Many adolescents suffer psychological distress from experiencing accidents or being unwell from bad situations. Adolescents work under dangerous conditions because they have few other choices to support their families. Illegal mining companies' disregard for adolescents' safety worsens this issue.

Social vices and humiliation make mining town adolescents more susceptible. High drug and alcohol use rates are common in mining communities. Adult miners utilize these opioids to cope with the physical demands of the work, and adolescents are regularly exposed to this.

Normalizing drug use on mining sites exposes adolescents to physical damage and addiction's behavioural and psychological impacts. This environment makes young workers more susceptible, which may harm their behaviour and health, according to Bhattacharya et al. (2021). Because the public distrusts mining families, adolescents who work in business may face social shame. Socially excluded, adolescents are lonely and unable to flourish because they lack social support and education. Due to their marginalization, Bourdillon and Carothers (2019) stated that these adolescents cannot overcome mining industry limits, perpetuating poverty and social injustice.

Adolescents participating in illegal mining face economic, environmental, safety, and social issues that establish a loop. Mining may improve the economy, but also harms adolescents' emotional, intellectual, and physical health. Funoh (2014) states that child labour in mining typically hinders long-term development, trapping adolescents in a cycle of exploitation and limited chances. Illegal mining poses safety and environmental risks that make adolescents escape from cycles of poverty.

The stigma associated with mining families and social marginalization further isolates these adolescents, preventing them from obtaining the skills and support networks they need to overcome this pattern.

A comprehensive approach is needed to solve these issues. Wilson (2019) suggests that governments should provide additional revenue streams including education financing and school attendance initiatives to reduce families' dependency on child labour. Bozzoli et al.

(2011) suggest improving mining towns' healthcare systems to reduce the psychological and physical effects of mining on adolescents. Holistic, community-centred solutions can end child labour in mining by securing children's access to better, healthier futures and removing their dependence on dangerous work.

Parental Perception of Adolescents' Involvement in Illegal Mining

Adolescent mining raises a varied dilemma reflecting both the complicated dynamics within families and the larger social, economic, and cultural settings. Parents whose adolescents are involved in mining often experience a mix of conflicting emotions. Although they are aware of the health, safety, and developmental hazards connected to adolescent work, parents may feel driven by financial need to either support or approve of these activities. Low-income mining communities, where families have few options owing to poverty, clearly show this conflict between economic difficulty and child well-being as shown by Dammert et al. (2018) and Valentine (2017). Parents frequently feel caught by the lack of practical options, which makes it difficult to stop the cycle of child mining even if they are aware of the damage child labour may inflict on their adolescents' education and welfare.

Social conventions that tolerate adolescent work exacerbate this cycle and affect parental impressions as well as the acceptability of adolescent mining by society. Studies by Abebe (2019) and Huynh et al. (2015) have shown that adolescents entering mining are driven in great part by society's notion that they should help the home economics in many mining areas. The acceptance of such behaviour results in a confusing situation wherein parents, despite their great worries about the future of their children, find it impossible to reject these demands. Bourdillon and Carothers (2019) underline even more how deeply rooted child labour is in certain societies, thus it becomes difficult to reject without questioning society expectations.

Emotionally, parents show signs of remorse, irritation, and a sense of powerlessness. Their understanding of the hazards to their adolescents' health and education mixed with the lack of choices help to explain this. As Kirby (2017) points out, lack of enabling systems like social welfare initiatives and educational possibilities aggravate stress. The emotional toll is exacerbated when parents find themselves in a position when they believe they are failing to provide their adolescents with the chances they need to flourish. Structural changes, especially those addressing the economic basis of child labour, have become clearly necessary. Breaking the cycle of adolescent mining mostly depends on long-term solutions including improved access to education and vocational training, according to parents.

While parents do not view child labour as entirely negative, some believe that despite its drawbacks, it teaches children important work principles. Adonteng-Kissi (2023) emphasizes how certain societies see child labour as a necessary component of a child's growth as they believe that working helps to build responsibility and self-sufficiency. Studies stressing the negative effects of child labour, especially its disturbance of adolescents' education stand in contrast here. For instance, studies by Sharma and Dangel (2019) reveal that when adolescents spend more time working than attending school, child labour often causes notable rates of school drop-out.

According to the findings, parents also often see child miners as displaying disruptive behaviour like violence, absenteeism, and rebellious actions. This echoes the larger worry about adolescent work in mining causing social and behavioural problems, hence aggravating the cycle of poverty. These opinions line up with research by Adonteng-Kissi (2018), who characterized child work as a violation of adolescents' basic rights, hence maybe robbing them of the chance to live in a loving environment supporting their growth and development. The differences in parental opinions from seeing adolescents work as an educational tool to seeing it as a major

violation of adolescents' rights highlight the intricate interaction of cultural, social, and financial elements in forming views toward child labour.

Aspirations (dreams) of adolescents engaged in illegal mining

Adolescents involved in galamsey often have strong aspirations for education and professional development as they see it as a way out of the poverty cycle. Despite the demanding nature of their employment, many see mining as a temporary method to pay for their education by buying required supplies or by saving money for school tuition. Their focus is on reaching a job and educational objectives; they are also quite conscious of how poverty limits their prospects. Many times, these educational goals contradict the demanding reality of mining employment. Since mining gives families quick revenue, they rely on, the economic struggle forcing youngsters into galamsey is related to the lack of suitable financial options. This need creates major obstacles to intellectual development.

Many young adolescents work long hours in the mines, skipping school to meet immediate cash needs. Adolescents feel driven to support their families and themselves as well as to recognize the hazards mining poses to their health, safety, and education, therefore creating a difficult decision-making process. Some children balance school and mining by working on weekends or late, usually leading to mental stress and physical tiredness. Although this schedule is essential, it causes them to lose concentration on their studies, therefore lowering their chances of reaching professional objectives. The constant need for cash often undermines their resilience and educational aspirations typically resulting in delayed or abandoned goals, thereby reinforcing barriers to long-term academic and career advancement. Important for school-age children (6–12 years), the fourth stage of Erikson's psychosocial development, "Industry versus Inferiority," offers insight into the hardships of these adolescents and focuses on building competencies needed for future success. Adolescents engaged in galamsey run more dangers of

inferiority and emotions of inadequacy as their lack of attendance in class and acquisition of necessary life skills reduces their capacity to compete with peers driven on education. Jesse (2023) says that the absence of important job and personal development skills limits these adolescents' future potential, therefore aggravating the cycle of poverty and poor life possibilities (Colenberg et al., 2021).

Erikson's theory holds that communities and caregivers should support adolescents' social and educational initiatives to develop their feeling of competence and provide chances for development. Adolescents who fail to develop a sense of competency due to mining demands may experience feelings of inadequacy, profoundly affecting their future potential and self-esteem. Breaking the cycle of poverty and arming these youngsters with the tools required for success in the twenty-first century depends on helping them to return to school and meet educational objectives.

Parents of adolescents engaged in galamsey have great difficulty matching their adolescents' money contributions with their schooling and general welfare. Many parents try a careful balance by allowing adolescents to engage in part-time mining or safer alternatives as financial constraints on families sometimes restrict parents' choices. A frequent strategy is to control adolescents' working hours so they may go to school and help to generate family revenue. Adolescents' capacity to focus on their academics may be hampered by tiredness resulting from part-time mining. Moreover, even if some parents try to direct their adolescents towards safer career possibilities like agriculture, these alternatives usually do not provide the quick money mining delivers, which forces families to be reliant on this dangerous job.

Sometimes parents seek safer options by means of outside help from social welfare agencies or community groups. Many families depend on mining as their only source of income as these services, which might include programs meant to keep children out of work or financial

aid for education are often inadequate and unreliable. Local governments and community police among other community-based support mechanisms help parents control their adolescents' mining activity. These mechanisms provide control and assistance; yet they cannot substitute more all-encompassing initiatives required to address the fundamental socioeconomic issues driving families into mining.

Adolescents' psychological/mental well-being associated with illegal mining.

The psychological well-being of adolescents engaged in illegal mining, or galamsey, is significantly influenced by the dangerous working conditions and the emotional strain of reconciling work with educational aspirations. Adolescents engaged in mining often have major emotional and psychological problems like regret, anxiety, despair, and loneliness. Adolescents in these circumstances suffer from physical illnesses resulting from the dangerous workplace, including wounds, fractures, respiratory problems, and impaired immune systems, and chronic disorders include tiredness, and their concentration on school is hampered by physical and mental suffering, therefore limiting their future opportunities.

Along with the acute physical hazards, long-term psychological consequences of child work are very pronounced. Adolescents involved in mining report mental health problems like attention difficulties, remorse, and emotional anguish that aggravate their stress according to the study (Bozek et al., 2020). According to Ryff's psychological well-being theory, child work reduces important elements of psychological well-being including self-acceptance, personal development, and the ability to build good connections with others (Ryff, 1989). Frequently displaying behavioural problems like bullying, violence, and gang participation, child miners compromise their capacity to build positive connections and hence reduce their self-worth and mental stability. This is consistent with studies by Trinh (2020), who found similar mental health

problems in adolescents engaged in work in India, and Antia (2020), who claimed high degrees of despair and loneliness among child labourers.

Apart from influencing the adolescents personally, galamsey has psychological effects on families and communities as well. Deciding whether to let their adolescents work often causes parents great emotional stress as they worry about their adolescents' future and safety. The financial strains of mining activity aggravate this anxiety and lead to an emotional roller coaster. Families often relocate closer to mining sites, disrupting extended family support networks where financial pressures and the imperative to protect children contribute to family fragmentation. This movement aggravates adolescents' experience of isolation and helps to cause social disintegration in the society by impairing their capacity to build solid social ties.

Adolescents' well-being suffers from the physical hazards connected to galamsey, including mercury's toxicity. Adolescents who labour in poorly ventilated environments are more likely to have chronic medical conditions including respiratory disorders. Many adolescents have wounds and fractures, but restricted access to enough medical treatment usually forces families to rely on dubious folk treatments. Parents say that overuse causes regular ailments; many adolescents, especially girls, have vaginal infections. These problems compromise physical health and cause social stigmas and damaged relationships.

Some youngsters take great satisfaction in helping their family survive; yet, the emotional toll their job takes usually eclipses this pleasure. Many youngsters struggle with guilt and remorse stemming from the continuous stress of working in dangerous environments as well as from worry and concern about their health and safety. Along with the absence of educational possibilities, the mental and physical strain from illegal mining may cause trauma and chronic stress, therefore aggravating the cycle of poverty and exploitation.

These results are consistent with past studies showing how bad child work is for mental health. Jesse (2023) noted that many young people working in labour give up important life skills and knowledge, therefore limiting their prospects and encouraging inferiority complexes. Adolescents who struggle to concentrate on personal development or follow a sense of purpose may feel inadequate and isolated from their classmates, which could cause emotional pain (Farrell, 2022; Friedman & Scholnick, 2022).

Finally, the risks of the labour, the lack of educational possibilities, and the emotional pressure placed on both adolescent and their families greatly compromise the psychological, emotional, and physical well-being of youngsters participating in illegal mining. Without thorough initiatives addressing both the immediate hazards of mining and provide sustainable alternatives for income, education, and social support, the cycle of poverty and negative health outcomes in these communities is difficult to interrupt. The mental health effects of child labour highlight the urgent need of safer practices, improved access to education, and community-based support networks to protect sensitive adolescents and help them to break out from the cycle of exploitation.

Factors That Influence Adolescents in Mining

Adolescents engaging in illegal mining is a problem with roots in family relationships, economic difficulty, and communal influences all around. Although cash is clearly the primary motivator, the absence of safe and consistent employment possibilities for adults drives even more dependence on mining as a living. According to Ofosu-Mensah and Ababio (2011), young people in mining areas particularly are driven into this risky activity by lack of job. The main motivator is poverty, which fits data showing that unstable finances often force parents to push their adolescents into work to meet household needs sometimes at the price of their safety and

growth. Consistent with results from Gonsama et al. (2021) and Khatab et al. (2019), this trend shows that poverty, parental education, household size, and the rural environment are major factors influencing child labour worldwide. For those who are unemployed, a trend that runs across many studies, including Akabzaa (2000), which implies that many young people have no practical alternative to illegal mining; the promise of fast financial rewards makes mining an especially appealing option. This also validates patterns wherein child work is more common in rural regions, mainly in agricultural and mining operations (Ghana Statistical Service, 2019). The six towns under investigation revealed this trend: most of them were involved in agricultural and illegal mining activities. This discovery verified patterns in earlier results in India and Ghana with high rates of child labour cases, especially in the agricultural sector (Ghana Statistical Service, 2019; Lambon-Quayefio, 2021).

Family problems include broken households, missing parents, and health-related concerns for adolescents, aggravating these financial difficulties. Particularly in single-parent homes, family dynamics magnify the demand on adolescents to be financially active, hence redefining their roles and obligations. The lack of constant parental assistance adds to the psychological stress these adolescents experience, therefore supporting conclusions by Colenberg et al. (2021) that lack of care makes adolescents more vulnerable to bad developmental outcomes. This is consistent with Erikson's psychosocial development theory, which holds that adolescents deprived of consistent care might grow to have distrust and an inferiority complex (Berk, 2022; Waite-Jones & Rodriguez, 2022).

Family structure is a major factor in these settings regarding whether adolescents are driven into mining. Single-parent homes or those with big families, as said, often demand adolescents to assume financial obligations that interfere with their education and upbringing. This result supports Bloeman (2009), who emphasized that given rapid cash benefits,

adolescents in such circumstances might be more prone to drop out of school and pursue mining. While some studies stress the negative consequences of these choices on the prospects of adolescents, others illustrate that the socioeconomic pressures, especially in rural areas, leave families with little alternatives except depending on mining for survival.

One cannot undervalue the impact of community standards and peer pressure. According to this research, adolescents' decisions on whether to or not to engage in mining are typically accepted in society and are affected by those of their peers. This social dynamic reflects the results of Ofosu-Mensah (1999), who contends that certain communities have culture embedded illicit mining where gold mining is not only considered as a means of escape from poverty but also as a respectable career option. As Ofosu-Mensah and Ababio (2011) point out, the attractiveness of mining is further enhanced by the need for social status and the attraction of a lavish existence. Miners, especially in places with little job possibilities, acquire reputation and financial independence, which helps mining to look like a more appealing choice than going to school.

Still, adolescents clearly suffer psychologically from this way of living. Working conditions in mining are dangerous and physically demanding, as past studies including those from the International Labour Organization (2023) and Tweneboah-Koduah & Adams (2020) have underlined, therefore posing major health hazards. This reality stands in direct contrast to the societal expectations put on adolescents to lessen family poverty; despite the long-term damage these diseases inflict. Often, at the expense of their education and prospects, many families under financial strain prioritize short-term financial relief over the safety and well-being of their adolescents.

Given these complicated and overlapping concerns, remedies must solve not only the urgent financial demands but also the more general systemic reasons forcing adolescents into dangerous employment. This calls for structural transformation including better social safety nets, access to high-quality education, and alternatives to livelihood. Giving families financial assistance and building safe job possibilities for adults can help to relieve some of the pressure on alternative to pursue mining. Adolescents might find a way out of the cycle of poverty and dangerous work by means of educational scholarships and community-based assistance initiatives.

Long-term solutions also must address family dynamics including the constraints single-parent homes experience and guarantee adolescents' access to school free from coerced early work. Communities may stop the cycle of reliance on mining by matching economic assistance with efforts at child protection, therefore providing sustainable livelihoods for families without endangering the development and safety of the next generation. For adolescents living in mining areas, this all-encompassing approach which combines long-term development plans with urgent relief is vital for building safer and better futures.

Effects of Adolescents' Mining on the Well-Being and Personal Development of Adolescents

For adolescents and families engaged in poverty, the physical, psychological, and social issues of child labour in mining represent a major concern. As Funoh (2014) points out, mining results in negative long-term effects for well-being even when it boosts local economies. Adolescents engaged in mining especially face this paradox: they experience interruptions in schooling, mental stress, and health hazards while nevertheless getting brief financial respite. In accordance with Agboola et al. (2020), who underlined the propensity of mining activities to emphasize economic gain above community effect, child labour in mining constitutes a trade-

off where short-term survival impairs long-term growth and potential. For adolescents working in mines, the psychological burden outweighs the normal. These adolescents suffer a complicated combination of pride in helping to ensure family survival and guilt about the dangerous working circumstances. Gyan et al. (2023) show how relocation in mining towns causes stress from safety worries, an impact that fits the persistent worry these young workers and their families experience. The atmosphere of dread and isolation often found in mining towns, as noted by Owen and Kemp (2015) is further compounded by parents' anxiety over their adolescents' safety, intensifying this stress. With adolescents compelled to prioritize survival above social integration, these psychological problems affect family relations and change conventional ideas about education and personal growth.

Physically, mining exposes young workers to regular injuries, respiratory issues, and poisonous compounds like mercury, which cause both acute and long-term health concerns. This result is consistent with the research demonstrating that mining locations often display inadequate health infrastructure, aggravating already existing medical conditions (Sahu and Kumbhar, 2020). These bodily hazards hinder future freedom and help to keep poverty alive since adolescents' poor health reduces their working ability in maturity. This is consistent with research by Sumberg & Sabates-Wheeler (2020), who addressed the custom of early work, often in family-based activities, preparing children for labour. Still, mining increases the physical toll on young workers by adding more health hazards than those associated with agricultural employment.

Furthermore, undermining community cohesiveness are the social and environmental consequences of mining. Terminski (2012) addresses how relocation brought on by mining disturbs social systems and resource access, which fits the experience of households engaged in mining operations. Further difficulties for health and survival come from community

fragmentation and ecological damage including water contamination, therefore aggravating family hardships. The social stigma linked to child miners isolates these adolescents even more because their communities could perceive them poorly, therefore aggravating the cycle of poverty and marginalization.

These results emphasize the importance of systematic treatments tackling developmental effects of child work in mining as well as economic aspects. As Wilson (2019) advises, good policy solutions should concentrate on lowering families' financial dependence on kid income. Programs that provide people alternate, safe economic possibilities, for example, might help adolescents to put education and development above employment. Offering adolescents a path out of poverty, financial aid for education and incentives for attendance might also help to mitigate educational interruptions.

Apart from financial assistance, it is essential to increase mental health and medical facilities within mining towns. Promoting adolescents' emotional and physical health fits advice from Bozzoli et al. (2011), who stressed the need for healthcare in reducing the long-term effects of relocation and resettlement. In addition to addressing urgent financial needs, holistic, community-centred interventions might help adolescents' developmental paths be broken out from the cycle of child labour in mining and pointed toward secure, healthier futures.

Parental Perception of Adolescents' Involvement in Illegal Mining

Child mining raises a varied dilemma reflecting both the complicated dynamics within families and the larger social, economic, and cultural settings. Parents whose adolescents are involved in mining often experience a mix of conflicting emotions. Although they are aware of the health, safety, and developmental hazards connected to child work, parents may feel driven by financial need to either support or approve of these activities. Low-income mining communities, where families have few options owing to poverty, clearly show this conflict

between economic difficulty and child well-being as shown by Dammert et al. (2018) and Valentine (2017). Parents frequently feel caught by the lack of practical options, which makes it difficult to stop the cycle of child mining even if they are aware of the damage child labour may inflict on their adolescents' education and welfare.

Social conventions that tolerate child work exacerbate this cycle and affect parental impressions as well as the acceptability of child mining by society. Studies by Abebe (2019) and Huynh et al. (2015) have shown that adolescents entering mining are driven in great part by society's notion that they should help the home economics in many mining areas. The acceptance of such behaviour results in a confusing situation wherein parents, despite their great worries for the future of their adolescents, find it impossible to reject these demands. Bourdillon and Carothers (2019) underline even more deeply rooted child labour in certain societies; thus, it becomes difficult to reject without questioning society expectations.

Emotionally, parents show signs of remorse, irritation, and powerlessness. Their understanding of the hazards to their adolescents' health and education mixed with the lack of choices help to explain this. As Kirby (2017) points out, lack of enabling systems like social welfare initiatives and educational possibilities aggravate stress. The emotional toll is exacerbated when parents find themselves in a position where they believe they are failing to provide their children with the chances they need to flourish. Structural changes, especially those addressing the economic basis of child labour, have become clearly necessary. Breaking the cycle of child mining mostly depends on long-term solutions including improved access to education and vocational training, according to parental concerns.

Parent opinions on child labour are not totally negative, however. Some parents believe that even if child labour has some negative effects, it teaches their adolescents important work

principles. Adonteng-Kissi (2023) emphasizes how certain societies see child labour as a necessary component of a adolescents' growth as they believe that working helps to build responsibility and self-sufficiency. Studies stressing the negative effects of child labour, especially its disturbance of adolescents' education stand in contrast here. For instance, studies by Sharma and Dangel (2019) reveal that when adolescents spend more time working than attending school, child labour often causes notable rates of school drop-out.

According to the findings, parents also often see child miners as displaying disruptive behaviour like violence, absenteeism, and rebellious actions. This echoes the larger worry about child work in mining causing social and behavioural problems, hence aggravating the cycle of poverty. These opinions line up with research by Adonteng-Kissi (2018), who characterizes child work as a violation of adolescents' basic rights, hence maybe robbing them of the chance to live in a loving environment supporting their growth and development.

The differences in parental opinions from seeing child work as an educational tool to seeing it as a major violation of adolescents' rights display the intricate interaction of cultural, social, and financial elements in forming views toward child labour. Although some see child labour as a crucial component of survival and character-building, others acknowledge its negative consequences on adolescents' physical and mental well-being, thereby stressing the necessity of a sophisticated way to handle the problem.

Social and Environmental Impact of Galamsey

Galamsey, or illegal small-scale mining, has social and environmental consequences that exacerbate the difficulties mining families experience. Families' livelihoods are directly impacted by the environmental damage linked with mining, which includes water pollution, soil erosion, and reduction in agricultural output. Field interviews conducted across five

communities in Obuasi Municipality revealed that surface mining triggers severe land degradation, fundamentally altering agricultural viability. The process strips the land of its fertile topsoil, uproots vegetation, and destroys trees through heavy machinery, ultimately depleting soil nutrients and leaving vast tracts of land barren and unsuitable for farming (Emmanuel Aboka Yaw et al., 2018). Turner (2021) underlines how the degradation of natural resources compels communities to depend even more on mining, therefore sustaining the circumstances that drive adolescents into dangerous employment. The loss of pure water and rich land deepens poverty as households fight to satisfy their fundamental requirements and look for other sources of income. In this framework, the acceptance of child labour in mining becomes a survival tactic, therefore supporting the loop of financial difficulty and child exploitation. Adolescents at mining sites also face major health hazards caused by drug addiction and dangerous activities. As Bhattacharya et al. (2021) have shown, drug and alcohol usage at mining sites is sometimes accepted, which increases vulnerability among young workers and children. Adolescents' physical and mental health may suffer greatly from this exposure, which also raises their risk of addiction, accidents, and psychological suffering. These negative practices at mining sites draw attention to the larger social and psychological effects of mining, where adolescents are not only at danger of physical injury but also exposed to risky social dynamics that can influence their long-term development.

The social stigma attached to child mining aggravates the marginalizing of mining households even further. Adolescents engaged in mining are generally shunned by their friends and communities, as the literature notes, therefore restricting their access to school, social support, and chances for personal development. This institutional exclusion prevents adolescents from getting the tools they need to escape child labour and feeds poverty cycles.

According to Bourdillon and Carothers (2019), this exclusion keeps inequality alive and makes it difficult for young people to get out of the social and financial traps the mining sector sets.

Adolescents' Psychological Well-Being and Illegal Mining

The current study found that child labour negatively affects adolescents' emotional, mental and behavioural dimensions of psychological well-being. Specifically, child labour hurts adolescents' emotional well-being causing them to experience depressive symptoms (including loneliness, sadness, regrets, weeping, and boredom) and anxiety disorder (including fear and worries). Additionally, adolescents in illegal mining experience mental health problems including lack of concentration, guilt, and broken hearts. Child miners were also found to experience mild forms of substance abuse (smoking behaviour and abuse of tramadol) and behavioural problems (including bullying, physical aggression, belonging to gangs, and social vices).

The findings can be interpreted within Ryff's psychological well-being theory showing that child labour lowers adolescents' psychological well-being, including self–acceptance, personal growth, purpose in life, positive relations with others, environmental mastery, and autonomy. The result shows that child labour robs adolescents' personal growth and lowers the overall sense of individual thought of development and progress (Bozek et al., 2020). Due to adolescents' involvement in mining, adolescents were unable to fully devote their time to pursuing their academic work and hence are unable to find a sense of purpose in life (Bozek et al., 2020).While forming positive relationships is crucial for psychological well-being, child labourers who display behavioral problems such as bullying, physical aggression, and gang involvement often struggle to connect with peers and gain acceptance, leaving them highly vulnerable to rejection. This will further lower their self-esteem, self-worth and happiness in

life. Child labourers with behaviour problems will also find it hard to balance and live peacefully with others, which is critical in developing a deep sense of stability and joy.

How a person connects with the environment and develops a sense of mastery to take charge of the overall environment also counts towards their PWB. However, the study found that an adolescent's involvement in illegal mining generates feelings of regret and anxiety, as they are aware it is both socially unacceptable and a violation of Ghana's laws. This creates a sense of cognitive dissonance between knowing the right thing and doing the wrong thing. Adolescents in Galamsey operations are exposed to dangerous and often hostile environments which leaves them with poorer psychological resources to feel safe and develop a sense of direction and focus in life.

These findings align with prior research: Antia (2020) reported heightened depression and loneliness among child labourers, and Trinh's (2020) work in India corroborated these mental health risks, especially depression. However, child working within cultural and social systems considered appropriate for adolescents have been found to improve mental health among adolescents in Africa (Trinh,2020). This indicates that child labour might not always lead to negative mental health outcomes for adolescents.

Aspirations of adolescents and Illegal Mining

According to our findings, child miners still have both educational goals and career goals they want to pursue beyond working in the mines. Despite the current challenge adolescents are experiencing in their mining operations, they wish to return to school to pursue their full academic dreams, complete and have their dream jobs. Personal development of these adolescents in mining operations is critical for healthy living.

The findings can be interpreted within Erikson's fourth stage psychosocial stage (Industry versus Inferiority, 6-12 years) which ushers in school-age children and the need to develop competencies for the future (Farrell, 2022; Friedman & Scholnick, 2022). Unfortunately, Jesse (2023) found that most children involved in child labour represent school-going age but miss out on education and are unable to develop critical life skills necessary for success in their adult lives (Colenberg, et al., 2021; Jesse, 2023). The failure to develop effective career and personal development plans put these adolescents in serious poverty, and limited life chances in adult life.

According to Erikson, children define industry at this stage to be the overall best person in all endeavours especially in schoolwork and feel a sense of isolation if they do not do well (Friedman & Scholnick, 2022). The failure of child labourers to attain competence and industry puts them in psychological distress which makes them reflect on their lives as failures compared to their colleagues who are in school. It is critical for caregivers to nurture a sense of industry by supporting children in their academic, social, and game activities by encouraging them (Friedman & Scholnick, 2022). This will make them develop a psychosocial virtue called competence in their ability to handle the challenges in adulthood and create productive efforts (Friedman & Scholnick, 2022). However, children who constantly fail to develop competence will experience inferiority complex.

Supporting child miners to return to school to pursue a decent career and develop adequate and relevant skills for success in the 21st century is critical in turning the tides around for them.

Strengths And Limitations

Galamsey, or illegal small-scale mining, has severe social and environmental consequences that exacerbate the difficulties faced by mining families. The environmental damage linked to these activities - including water pollution, soil erosion, and reduced agricultural output - directly undermines household livelihoods. Field interviews across five communities in Obuasi Municipality revealed that surface mining causes extreme land degradation, stripping fertile topsoil, uprooting vegetation, and destroying trees through heavy machinery. This process depletes soil nutrients, leaving vast tracts of land barren and unsuitable for farming (Emmanuel Aboka Yaw et al., 2018). Turner (2021) emphasizes how such resource degradation forces communities into greater reliance on mining, perpetuating cycles that push adolescents into hazardous labour. With the loss of clean water and arable land, families struggle to meet basic needs, making child labour a survival strategy that reinforces financial instability and exploitation.

Adolescents working at mining sites face significant health hazards, including exposure to substance abuse and dangerous working conditions. Bhattacharya et al. (2021) document how drug and alcohol use at mining sites is often normalized, increasing vulnerability among young workers. This exposure jeopardizes both physical and mental health, elevating risks of addiction, workplace injuries, and psychological trauma. Beyond immediate dangers, these practices highlight broader social and developmental consequences as adolescents are not only exposed to physical harm but also to destructive social dynamics that can impair long-term well-being and life opportunities.

The stigma associated with child mining further marginalizes affected families. As literature notes, adolescents engaged in mining are frequently shunned by peers and communities, limiting their access to education, social support, and personal growth

opportunities (Bourdillon & Carothers, 2019). This institutionalized exclusion traps them in poverty by denying resources needed to escape exploitative labour. Such systemic barriers sustain inequality, making it nearly impossible for young people to break free from the socioeconomic traps created by the mining industry.

Implications for Future Research

The findings of this study offer valuable insights into the lived experiences and well-being of adolescents and parents in illegal mining communities. However, they also highlight several important areas that warrant further investigation to deepen our understanding of this complex issue and develop more effective interventions.

First, longitudinal research would provide critical data on the long-term consequences of child mining. By tracking the same individuals over time, future studies could examine how involvement in mining affects adolescents' psychological health, educational attainment, and physical well-being in adulthood. Such research could also evaluate the lasting impact of rehabilitation programs designed to reintegrate former child miners into formal schooling or alternative livelihoods.

Second, comparative studies across different mining regions would yield important contextual insights. While this study focused on Ghana's Adansi North District, examining variations across other mining communities in Ghana and comparable settings internationally could reveal how local socioeconomic conditions, cultural norms, and governance structures influence child labour patterns. This knowledge could help tailor interventions to specific regional needs.

Third, an intersectional approach would enhance our understanding of vulnerability factors. Future research should investigate how gender, socioeconomic status, and family

structure interact to shape adolescents' risk of exploitation in mining operations. For instance, are girls more likely to experience certain types of harm compared to boys? How do single-parent households or large families affect a child's likelihood of entering mining work? Answering these questions could help develop more targeted support systems for at-risk groups.

Additionally, research should explore the effectiveness of various intervention strategies. While this study identified the need for economic alternatives and mental health support, systematic evaluations of different program models would help determine which approaches work best in specific contexts.

Finally, technological innovations present promising avenues for supporting mining communities. Future studies could examine how mobile platforms, distance learning tools, or other digital solutions might provide education and services to hard-to-reach populations engaged in illegal mining.

By pursuing these research directions, scholars can build on this study's foundation to develop more nuanced, evidence-based solutions for protecting vulnerable adolescents and families in mining-affected regions worldwide. The ultimate goal should be generating knowledge that not only advances academic understanding but also translates into concrete improvements in policies and programs.

Recommendations

Given the complex interplay of social, economic, and environmental factors, addressing the issue of child mining requires multifaceted interventions that go beyond merely enforcing child labour laws. The literature suggests several key policy recommendations that focus on both immediate relief and long-term solutions.

Environmental Regulations and Clean-up Programs

Implementing stricter environmental regulations to limit the use of toxic chemicals in mining and restore polluted water sources is critical. Community-based initiatives, such as environmental education and sustainable farming practices, can help mitigate the long-term ecological damage caused by mining. By addressing the environmental roots of child labour, such policies would provide families with viable alternatives to relying on mining.

Economic Support and Job Creation

One of the most effective ways to reduce child labour is to address the underlying economic conditions that force families to rely on their adolescents' labour. Programs focused on job creation, financial support, and skill development for parents can provide alternatives to mining. As Adonteng-Kissi (2022) suggests, prioritizing local businesses and community-based economic development initiatives can help reduce reliance on child labour in mining communities by offering adults sustainable sources of income.

Youth Outreach and Substance Abuse Prevention

Addressing the social normalization of substance abuse in mining communities requires targeted outreach and education programs. Initiatives that provide safe spaces for children, along with alternatives such as recreational activities, vocational training, and youth clubs, can help

steer adolescents away from mining and reduce the risk of substance abuse. Programs that focus on the dangers of drugs and alcohol, coupled with providing healthy recreational options, could mitigate some of the harmful social behaviour prevalent in mining areas.

Social Support and Reintegration Programs

To counter the social exclusion of mining families, anti-stigma campaigns that aim to change community attitudes toward child labour and mining can play a vital role. Integrating adolescents back into educational settings and providing support for families facing social stigma is essential to breaking the isolation and marginalization caused by child mining. Additionally, community-based support systems that encourage collective responsibility for child protection can help promote a culture of care and inclusion.

Conclusion

The study's purpose is to explore the experiences and well-being (psychological) of adolescents in child labour in mining operations in Ghana. Data from adolescents revealed key themes such as reasons for mining, including family structure, financial challenges, and peer pressure, as well as the significant effects of mining on their psychological well-being, health, and social environment. Additionally, adolescents expressed concerns about mining, including safety risks and a desire to leave the activity. Parents' responses provided complementary insights, emphasizing factors influencing mining, such as economic hardships and community engagement. Parents also discussed the adverse impacts of mining on adolescents' well-being and personal development, including disruption to education and exposure to social stigma. Moreover, parental perspectives highlighted concerns about their adolescent's safety and coping strategies to navigate the economic and emotional strain caused by mining activities.

The findings reveal the urgent need for interventions addressing the root causes of child mining, such as poverty, lack of education, and inadequate parental oversight. The findings further highlight the critical need for community-wide initiatives to curb peer influence and social acceptance of mining, while simultaneously developing sustainable alternatives for income generation and social engagement. This calls for multi-stakeholder approaches, including government, NGOs, and local communities, to implement policies and programs that protect children, provide educational opportunities, and promote sustainable livelihoods. By addressing these systemic issues, the harmful cycle of child mining can be broken, fostering healthier and more secure futures for vulnerable children and their families.

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APPENDICES

Appendix A

DEPARTMENT OF PSYCHOLOGY
& ETHICS COMMITTEE (DREC)
SCHOOL OF SOCIAL SCIENCES

UNIVERSITY OF GHANA

DEPARTMENTAL RESEARCH

Protocol number

ETHICAL REVIEW INSTRUCTIONS AND TEMPLATE

Instructions and Notes:

- Depending on the nature of what you are doing, some sections may not be applicable to your research. If so, mark as "N/A."
- When you right a protocol, keep an electronic copy. You will need a copy if it is necessary to make changes.

1 Protocol Title: **EXPLORING THE EXPERIENCES AND WEL-BEING OF ADOLESCENTS AND PARENTS IN ILLEGAL MINING (GALAMSEY) COMMUNITIES: THE CASE OF ADANSI NORTH DISTRICT ASSEMBLY IN THE ASHANTI REGION OF GHANA**

2 **Background and Objectives (600 words)**

Provide the scientific or scholarly background for, rationale for, and significance of the research based on the existing literature and how will it add to existing knowledge.

- Provide a brief background to the study.
- Describe the purpose of the study.

The globe has advanced development in recent years with impressive steps. Yet hundreds of millions of individuals continue to live in abject poverty. Children suffer disproportionately. They constitute half of the people who struggle to exist on less than $2.15 a day despite making up one third of the world's population. According to estimates, 333 million kids are living in abject poverty. (UNICEF, Child-poverty, 2017)

No matter how developed a nation is, children are mostly affected by poverty, because of their dependence on There is no doubt that poverty and its ramifications negatively affect families, neighbourhoods, and even entire nations, but did you also realize that children's socioeconomic position has an impact? A wide range of risk factors, from health issues to harder times in school, affect children who live in poverty. Unfortunately, in the United States, 15 million kids—or roughly 21% of all kids—live in low-income homes with earnings below the government poverty line or poverty threshold, which has been demonstrated to grossly understate the requirements of working families. The average family needs a household income of almost twice that much, according to research, to fulfill their basic necessities. (Poverty-and-its-effects-on-children, 2019)

In Ghana, illicit but lucrative artisanal gold mining has taken off. Nevertheless, it destroys the ecosystem, results in deforestation, and contaminates the water, air, and soil by releasing hazardous chemicals. According to information from the CDC's Emergency Preparedness and Response, pollutants like mercury and cyanide can be fatal to people because they contaminate water, air, and soil through both natural and man-made processes. (Venancious Ngmenkrom Tuor, PATH, 2023)

Most analysts and policymakers have, up until recently, viewed Ghana's galamsey menace as a technical and economic (not a political) problem caused by the lengthy and time-consuming procedures involved in obtaining the necessary licenses for engaging in ASM on a legal basis; pervasive poverty; and high rates of youth unemployment. (Galamsey in Ghana, 2017).

Although Ghana has had a defined procedure for ASM on a legal basis since the late 1980s, it is believed that 85% of the industry's small-scale miners operate illegally. Illegal mining, also referred to as "galamsey," has had detrimental effects for Ghana, ranging from economic losses to the government (since illegal miners do not pay taxes) to the contamination of critical water bodies. (Abdul-Gafaru Abdulai, Policy Brief No.5, 2017)

Within the chain of activities that boosts galamsey is the role of children in assisting in breaking mineral-bearing stones, washing them off, and running errands for the key players as they go about their duties. From exposure to dust, and dangerous chemicals such as

mercury, the children face it all at the sites. With worsening economic conditions and parents' inability to take care of their children meaningfully, so many children are left at the mercy of galamsey to fend for themselves and contribute to their family income. Parents who struggle financially are more likely to demand that their children should engage in galamsey alongside schooling so that they can support home financially (Azumah, Baah & Nachinaab, 2021). According to Hamenoo, Dwomoh, and Dako-Gyeke (2018) child labor is frequently caused by parental absence, poverty, and ineffective enforcement of laws governing both education and child labor.

Academically, the results of this study will contribute to the vast body of knowledge already available.

This study aims at learning the lived experiences of children aged 10-17years living in the six mining communities in the Fomena Township in Ashanti Region of Ghana.

It also seeks to encourage the improvement and implementation of already existing policies made for children in the mining sector; and also, to add to the formulation of practical ideas toward the future of these children.

3 Data Use (Check as many that may apply)

Describe how the data will be used.

☒ Examples include: Dissertation, Thesis, Undergraduate honours project

☒ Publication/journal article, conferences/presentations

☒ Results released to agency or organization

☐ Results released to participants/parents

☐ Results released to employer or school

☐ Other describe)

_____

_____

4 Inclusion and Exclusion Criteria (100 words maximum)

Describe the criteria that define who will be included or excluded in your final study sample. If you are conducting data analysis only describe what is included in the dataset you propose to use.

Indicate specifically whether you will target or exclude each of the following special populations:

- Minors (individuals who are under the age of 18)
- Adults who are unable to consent
- Pregnant women
- Prisoners

The study will mainly focus on children aged 10 to 19 years.
Parents/Carers/Guardians of these children will be included in the study.

5 Recruitment Methods (500 words maximum)

- Number of participants
- Describe who will be doing the recruitment of participants.
- Describe when, where, and how potential participants will be identified and recruited.
- Describe and attach materials that may be used to recruit participants (attach documents or recruitment script with the application).

The aim of this thesis research is to gather information from about 30 individuals from six communities. This number will comprise of Children and Parents/Carers/Guardians within these communities.

6 Procedures Involved (1000 words maximum)

Describe all research procedures being performed, who will facilitate the procedures, and when they will be performed. Describe procedures including:

- The duration of time participants will spend in each research activity.
- The period or span of time for the collection of data, and any long term follow up.
- Questionnaires that will be administered (Attach all surveys, interview questions, scripts, data collection forms, and instructions for participants). Attached
- Interventions and sessions (Attach supplemental materials to the online application).
- Lab procedures and tests and related instructions to participants. N/A
- Video or audio recordings of participants.
- Previously collected data sets that will be analyzed and identify the data source (Attach data use agreement(s) to the application).

Each participant will be engaged for 30-45mins at most.

The exercise is expected to be executed within three (3) weeks.

Audio recorders will be used for the exercise. Consent will be sought prior to interviews

7 Compensation or Credit (100 words)

- **Describe the amount and timing of any remuneration or course credit to participants.**
- **Identify the source of the funds to compensate participants**
- **Justify that the amount given to participants is reasonable.**

Snacks will be given to the participants (Adults) for their time.

8 Risk to Participants

List the reasonably foreseeable risks, discomforts, or inconveniences related to participation in the research. Consider physical, psychological, social, legal, and economic risks.

Participants may unintentionally recall anxious or painful recollections from their time on mining sites. Every participant will be made aware of this possible risk and asked to think about it carefully before getting involved.

9 Potential Benefits to Participants

Describe the potential benefits that individual participants may experience from taking part in the research. Indicate if there is no direct benefit. Do **not** include benefits to society or others.

The study's participants will be encouraged to stay in school and the programs will be put in place by the Minerals Commission of Ghana to protect them from this type of labour.

10 Privacy and Confidentiality

Describe the steps that will be taken to protect subjects' privacy interests. "Privacy interest" refers to a person's desire to place limits on whom they interact or to whom they provide personal information.

Describe the following measures to ensure the confidentiality of data:

- Who will have access to the data?
- Where and how data will be stored
- How long the data will be stored?
- If applicable, how will audio or video recordings be managed and secured. Add the duration of time these recordings will be kept.
- If applicable, how will the consent, assent, and/or parental permission forms be secured. These forms should be separated from the rest of the study data. Add the duration of time these forms will be kept.
- If applicable, describe how data will be linked or tracked (e.g., master list, contact list, reproducible participant ID, randomized ID, etc.).
- If your study has previously collected data sets, describe who will be responsible for data security and monitoring.

Parents/Guardians and Teachers will be asked to either give a verbal or written consent before the study starts. Parents will further be asked to consent on behalf of their children. Data obtained will only be accessed by the principal investigator and thesis supervisors if the need be. All data collected will be stored on a computer.

11 Consent Process Describe the process and procedures you will use to obtain consent. Include a description of: • Who will be responsible for consenting participants? • Where will the consent process take place? • How will consent be obtained? • If participants who do not speak English will be enrolled, describe the process to ensure that the oral and/or written information provided to those participants will be in that language. Indicate the language that will be used by those obtaining consent.
Consent will be obtained either verbally and written from parents and on behalf of children from parents/carers/guardians. The principal investigator will be responsible for seeking consent of the participants. Parents will be well informed on what the study entails before being asked to give their parental permission for their children to partake in the study. All information or questions will be transcribed into the local dialect Twi for participants who may not be fluent in English Language. The consent process will take place in the homes of the participant or any place of convenience to them.

Enclosure

1. Recruitment Information

Dear sir/madam,

You are invited to participate in an academic research project being conducted by a graduate student at the Department of Psychology, University of Ghana. The study aims to explore the psychological well-being of children in this mining community. Using a range of scientific methods, the study will collect data on the interactions from children and parents/carers/guardians, on their lived experiences working in the mines and its psychological well-being. Your involvement in this thesis research is entirely voluntary, and you will have complete freedom to leave at any time.

If you want to volunteer and participate, you will be providing us with information by filling out questionnaires about your experiences with children involved in mining activities.

You can be assured that any information you provide will be kept private to the greatest extent possible. Please contact the researcher **(Bernice Ama Kafui Botchway Mrs.)** if you need any additional details about the research, you can reach her on telephone numbered **0249779044**.

Thank you in anticipation.

Best regards

Bernice Ama Kafui Botchway.

MPhil. Social Psychology Student

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INTERVIEW GUIDE FOR CHILDREN

Section A: Demography (Children)

1. Gender: (1) Female [ ] (2) Male [ ]
2. Age: ……..
3. Level of Education
4. Region:
5. District:
6. Community:
7. Religion:

Section B: Pre-screening Questions

1. Are you in school? If yes which level?
2. Are you involved in mining either directly or indirectly?
3. Do you combine your mining activities with your school?
4. When and how often do you go for mining activities?

Section C: Family Characteristics

1. Who do you live with?
2. Are your parents living together. Probe
3. What work does your carer/guardian/parents do? Probe

Section D: Community related characteristics

1. How long have you lived in this community?
2. What is the main occupation of this community?

Section E: Children Lived Experiences with mining

1. Why are into mining activities? (Directly or indirectly)
2. Share with me how your typical day is like working at mining site?
3. Any benefits?

Section F: Aspirational characteristics

1. Have you chosen to remain a miner in the future (when you grow up)?
2. How did you end up being involved in mining activities?
3. What do you want to become in future and why?
4. What are you currently doing towards those aspirations?

Section G: Psychological/Mental well-being of Children

1. Are you (always) happy being involved in mining activities? Probe for satisfaction
2. What about your other aspirations? Probe for passion
3. How will you describe
4. e your health, safety, and well-being in relation to your involvement in mining activities? Probe for feelings of sadness or hopelessness.
5. Will you encourage your friends to do mining and why? Probe for safety or otherwise
6. What will you change about your current situation of involvement in mining if you could?
7. Is there anything else you want to share with me about your involvement in mining activities? Probe for signs of depression or happiness

Thank you for your participation. Your responses will be kept confidential and used for research purposes only.

INTERVIEW GUIDE FOR PARENTS/CARERS/GUARDIANS

Section A: Demographic Information

1. Gender:

2. Age:

4. Occupation (Father/Mother):

5. Number of children:

6. How long have you been living in this (mining) community?

Section B: Pre-Screening Questions

1. Are involved in mining activities (directly or indirectly)?
2. For how long?
3. Is any of your children (under 18years) involved in mining activities?
4. How long has she/he/they been involved and at what age?

Section C: Aspirations

1. Is your child currently going to school?
2. Any career plans for the children?
3. How did she/he/they get into mining activities?
4. Are they any advantages and disadvantages of your child being involved in mining?

Section D: Psychological Well-Being

1. Do you notice something unusual about your child?
2. Based on your observation as a guardian, how will you describe the behaviour of your child since she/he/they has been actively engaged in mining and its related activities?
3. Will you describe her/him/they as happy with the work?
4. How passionate are they about the work? Probe for excitement or compulsion
5. Are they able to combine work with school? Probe for academic performance
6. So, do you consider their involvement in mining to be best for them in terms of health/safety? Probe (how or why)

Additional Comments

Do you have anything else to share with me concerning the involvement of children in mining activities in this community?

Thank you for your participation. Your responses will be kept confidential and used for research purposes only.

PARENTS / GUARDIANS CONSENT FORM/PERMISSION FOR CHILDREN

Introduction

Hello, my name is ……. from the University of Ghana of Ghana. I am here in your community to conduct academic research on "the psychological well-being of children in illegal mining (galamsey) communities. The data will be brought here for validation before final submission.

Purpose of study.

The numerous impacts of mining cuts across the sixteen (16) regions of Ghana. Ashanti Region of Ghana has been sited to as one of the hot grounds where mining activities has been for a long time. Obuasi township is one of the places sited for mining activities. The study covers one of its thirty-three districts' assemblies called **Fomena**. According to study by the International Labour Organization (ILO), the communities are engaged in small scale mining, community mining and illegal mining as well. Economic hardship has driven men, women and children into 'galamsey' (meaning "gather and sell") activities as a means of survival. This study seeks to probe into the lived experiences of children living and working in these mining communities; enquire how parents/carers/guardians of these children perceive their children working on the mines; what are the effects of mining on the psychological well-being of these children, and how these children foresee their future.

Confidentiality.

Everything we shall discuss would be kept strictly confidential and you can decide not to answer any question you are uncomfortable with, and it will not affect you in any way. Your participation is voluntary, and you are not under compulsion to participate in this study.

This conversation will last for about 30-45minutes and when we are done, you will be compensated.

Do you want to participate in this study? Yes ☐ ☐ No

Do you permit your child(ren) to participate in this study? Yes ☐ ☐ No