Involvement of Junior High School Pupils in Illegal Mining Activities and its Influence on Academic Performance: Evidence from Amansie West District, Ghana

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ABSTRACT

This study examines the involvement of Junior High School (JHS) pupils in illegal mining activities and its influence on academic performance in the Amansie West District of Ghana. Anchored on the Social Learning Theory, Ecological Systems Theory, and the Sustainable Livelihoods Concept, the research employed a pragmatist paradigm with a concurrent mixed methods design. Quantitative data were collected from 177 JHS pupils through a closed-ended questionnaire, while qualitative insights were obtained from semi-structured interviews with seven pupils engaged in illegal mining. Findings reveal that while pupils generally acknowledge the importance of education for future success, economic hardship, limited livelihood opportunities, inadequate school infrastructure, peer influence, and weak law enforcement drive their involvement in illegal mining. Engagement in mining was found to contribute to absenteeism, physical exhaustion, reduced concentration, and ultimately lower academic performance, particularly in core subjects such as Mathematics, English, and Science. The study recommends targeted interventions including improved educational infrastructure, enhanced teacher professional development, scholarship schemes, flexible learning schedules, and community awareness campaigns. The findings have implications for policy and practice in addressing child labour in resource-based economies and promoting sustainable education outcomes.

Keywords: illegal mining, academic performance, Junior High School, Ghana, Amansie West District, education policy

INTRODUCTION

Illegal mining, popularly referred to as galamsey in Ghana, has long been recognised as both a livelihood source and a socio-environmental challenge (Hilson, 2002; Mensah, Agyapong, & Yeboah, 2020). While small-scale mining contributes significantly to rural economies, its unregulated variant—illegal mining—has been associated with environmental degradation, public health risks, and social disruption (Hilson & Nyame, 2006; Veiga et al., 2014). A growing concern in recent years is the participation of school-aged children, particularly JHS pupils, in such activities, raising questions about its implications for education outcomes.

Ghana's education policy, anchored in the Free Compulsory Universal Basic Education (FCUBE) programme and reinforced by initiatives such as capitation grants, school feeding, and free uniforms, aims to promote equitable access to basic education (UNICEF, 2019). Yet, in mining-intensive districts such as Amansie West,

these efforts compete with economic realities that draw pupils away from classrooms and into mining pits (Owusu & Dwomoh, 2012).

Empirical evidence indicates that pupil engagement in illegal mining is linked to absenteeism, fatigue, and reduced academic achievement (Adu-Gyamfi, 2014; Acquah & Addo, 2021). Despite these observations, scholarly investigations into the specific socio-economic drivers, perceptions about education, and direct academic effects among JHS pupils in this district remain limited. This study addresses that gap by exploring:

1. Pupils' perceptions of education in Amansie West.
2. Factors influencing their involvement in illegal mining.
3. The effects of such involvement on academic performance.

LITERATURE REVIEW

Theoretical Underpinnings

The **Social Learning Theory** (Bandura, 1977) explains how pupils model the behaviours of peers, relatives, and community members engaged in mining when these behaviours yield visible rewards.

The **Ecological Systems Theory** (Bronfenbrenner, 1979) highlights how micro-, meso-, and macro-level influences—family poverty, peer norms, weak regulation—shape pupil decisions.

The **Sustainable Livelihoods Concept** (Ellis, 2000) shows how loss of agricultural land pushes families toward mining, often involving children, thereby undermining human capital formation through education.

Conceptual Review

Illegal mining (galamsey) is widespread in Ghana's gold-rich districts, driven by poverty, unemployment, and quick financial returns (Hilson, 2002). Education in mining areas suffers from absenteeism, inadequate facilities, and competing economic demands (Roby, 2004). Key drivers of pupil mining involvement include economic necessity, peer pressure, and weak enforcement (Ofosu-Mensah & Asante, 2018).

Empirical Review

Studies in Ghana (Adu-Gyamfi, 2014; Acquah & Addo, 2021) and Zambia (Musabila, 2014) show that mining involvement reduces attendance and academic performance. These findings consistently point to economic hardship, inadequate education infrastructure, and social normalisation as persistent challenges.

METHODOLOGY

Paradigm and Approach

A **pragmatist paradigm** guided the study, employing a **concurrent mixed methods** design to integrate quantitative and qualitative insights.

Population and Sampling

The population comprised public JHS pupils in Amansie West. **Stratified random sampling** selected 177 pupils for the survey, and **convenience sampling** identified seven mining-involved pupils for interviews.

Data Collection and Analysis

A closed-ended questionnaire measured perceptions, drivers, and effects of mining involvement. Semi-structured interviews elicited deeper narratives. Reliability testing produced a Cronbach's alpha of 0.82.

Quantitative data were analysed with descriptive statistics in SPSS v.22; qualitative data underwent thematic analysis.

Ethics

Ethical clearance was obtained from the University of Education, Winneba, with consent from participants and the district education office.

RESULTS

Perceptions of Education

82% of pupils valued education for future success, but only 56% were satisfied with teaching quality. Interviews revealed frustration with overcrowded classrooms and inadequate resources.

Factors Influencing Involvement

Poverty (71%), peer influence (64%), and limited opportunities (63%) were key drivers. Pupils described mining as a normalised activity with minimal enforcement risks.

Effects on Academic Performance

Mining pupils had higher absenteeism (mean 2.8 days/week) and lower pass rates in core subjects (38% vs. 74% for non-mining peers). Interviews linked mining to fatigue, missed lessons, and poor concentration.

Table 1. Summary of Key Findings

Indicator	Mining Pupils (%)	Non-Mining Pupils (%)
Agree education is essential	79	85
Attend school regularly	44	86
Pass BECE mock exams	38	74
Absent ≥2 days/week	71	18
Main reason for mining: poverty	71	—

DISCUSSION

Findings align with **Social Learning Theory**, as pupils model mining behaviours of successful community members. **Ecological Systems Theory** explains multi-level drivers—from household poverty to weak macro-level enforcement—while the **Sustainable Livelihoods Concept** links environmental degradation to reduced livelihood diversity and child labour in mining.

Educationally, mining undermines attendance and performance, consistent with prior research (Roby, 2004; Ghanney et al., 2020). Interventions must integrate economic and educational strategies to break the cycle.

CONCLUSION AND RECOMMENDATIONS

Conclusion:
Pupil mining involvement in Amansie West stems from intertwined economic, social, and structural factors, with measurable negative impacts on attendance and academic outcomes.

Recommendations:

- **Policy:** Enforce child labour laws; create livelihood diversification programmes.

- **Education:** Improve infrastructure; offer scholarships, school feeding, and flexible schedules in mining zones.
- **Community:** Run awareness campaigns; build school–community monitoring partnerships; expand counselling and mentoring programmes.

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