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Exploring the Perceived Impact of Agriculture-Related Punishments on Students' Interest in Agriculture: A Multidimensional Analysis

Jonathan Sarkodie

Lecturer, Department of Science, SDA College of Education, Asokore-Koforidua, Ghana

Joyce Opoku Abrafi

Head, Department of Science, SDA College of Education, Asokore-Koforidua, Ghana

Joseph Asare

Lecturer, Department of Science, SDA College of Education, Ghana

Abigail Nketia

Teacher, Department of Science, SDA College of Education, Ghana

Abstract:

This piece of writing examines the impact of assigning agricultural tasks as penalties on students' enthusiasm for agricultural studies. The study encompasses both Junior High School (JHS) and Senior High School (SHS) students, as well as educators, aiming to comprehend their viewpoints. Through the utilization of surveys with varying response alternatives, the research discovers that JHS students hold diverse opinions, whereas a greater percentage of SHS students (27% showing strong agreement and 30% expressing agreement) associate these tasks with a reduction in their interest. Conversely, a significant majority of teachers (75%) strongly concur that such punitive measures undermine students' motivation. This accentuates the necessity for captivating teaching approaches in agricultural education, with the objective of igniting authentic interest and cultivating positive experiences among students. In essence, the article underscores the detrimental effects of utilizing agricultural tasks as disciplinary actions on students' inclination toward agricultural studies and suggests implementing more engaging teaching methods to foster genuine enthusiasm and favourable learning encounters in this field.

Keywords: Agriculture, perceived impact, impact, punishment, students' interest, multidimensional analysis

1. Introduction

In recent times, the waning attraction of students towards agricultural studies has become a matter of significant concern, captivating the attention of educators, policymakers, and researchers alike. The pivotal role that agriculture plays in upholding economies, ensuring food security, and fostering sustainable development underscores the urgency of grappling with this issue. The challenge, which manifests in various dimensions, demands a comprehensive comprehension of its underlying causes. One intriguing perspective that has arisen pertains to the potential impact of punitive actions involving agricultural tasks on students' overall engagement and enthusiasm for agricultural education.

The longstanding recognition of the interconnection between education and agriculture as fundamental components of sustainable development and food security is well-established (Smith et al., 2019; FAO, 2017). However, the growing unease about the diminishing allure of agricultural studies and careers is increasingly evident (Cakmak & Kilinc, 2018). While punitive assignments might ostensibly be intended to deter undesirable behaviours, it is imperative to scrutinize their inadvertent effects on students' attitudes towards the subject. Atebubu-Amantin District Best Farmer has said the use of weeding as punishment in schools discouraged the youth from entering into farming (Bona, 2012). Also, the chairman of the Ghana National Association of Poultry Farmers has cautioned teachers and heads of educational institutions to stop using the weeding as a punishment for students because it declines the interest of students in farming and many Ghanaians see farming as a punishment career (Oppong, 2015).

Foundation Manager and Public Relations Officer for Blueskies Company Limited has said that if heads of schools continue to send recalcitrant students onto the field to do farming or weeding as a form of punishment, then our youth will grow to see farming as a penalty and not reward (Djimatey, 2014).

This study embarks on exploring the captivating inquiry of whether punishments involving agricultural tasks contribute to the lack of interest shown by students in the agricultural realm. By drawing insights from responses gathered from Junior High School (JHS) and Senior High School (SHS) students and educators, this research aims to provide a nuanced understanding of the multifaceted dynamics of this phenomenon. Through the exploration of student and teacher perceptions concerning the role of punishment in shaping attitudes towards agriculture, potential avenues for intervention and improvements in curricula can be illuminated.

1.1. Contextual Framework

To contextualize this study, it is vital to recognize the pivotal role education plays in shaping attitudes and behaviours. Education not only imparts knowledge and skills but also moulds perceptions, aspirations, and career choices. Agriculture, being a multidisciplinary domain, encompasses diverse facets such as crop production, livestock management, agribusiness, and sustainable resource utilization. Despite its multifarious significance, agriculture frequently grapples with the perception of being labor-intensive and unappealing, especially among the youth.

An intriguing aspect that has garnered limited attention within scholarly literature is the potential influence of assigning agricultural work as a punitive measure within educational settings. This practice, intended for disciplinary purposes or to cultivate responsibility, might inadvertently contribute to negative associations with agricultural activities. The interplay between such punitive actions and students' perceptions of agriculture calls for exploration, given its potential implications for the future of agriculture and food systems.

2. Materials and Methods

2.1. Study Design

The purpose of this study was to explore the relationship between students' disinterest in agriculture and the practice of assigning agricultural tasks as a form of punishment. The investigation involved collecting responses from junior high school (JHS) and senior high school (SHS) students and teachers. This was achieved through a structured questionnaire.

2.2. Participants

Five Junior high school students were sampled using purposive sampling from New-Juaben North Municipality, with a total population of 990. Simple random sampling techniques were used to sample 20 students from each of the 5 sampled schools, giving a population of 100 students for the study. Additionally, out of the teachers in the 5 public schools, the purposive sampling technique was used to select a sample of 40 teachers from each of the 5 public schools. The purposive sampling technique was used to sample one secondary school that offers agriculture, thus Ghana Senior High School. A total of 80 students and 20 teachers of the same secondary school were sampled. The total sample size for the study was 240 respondents.

2.3. Questionnaire

The survey comprised two main sections. The initial part centered on gathering demographic data, such as age, grade level, and teaching experience. The subsequent section presented a series of statements related to students' lack of enthusiasm for agriculture and the potential link to using agricultural tasks as disciplinary measures. Respondents rated their agreement with these statements using a Likert scale, spanning from Strongly Agree (SA) to Strongly Disagree (SD). Additionally, teachers were asked a binary question about whether they believed that such disciplinary practices affected students' interest in agriculture.

2.4. Data Collection

Data collection spanned six months. Participants were given the questionnaires during class or break times. Comprehensive instructions guided respondents through the questionnaire, with an emphasis on the confidentiality of their responses.

2.5. Data Analysis

The gathered data underwent descriptive analysis to ascertain the distribution of responses for each survey statement. The responses were categorized into five levels: SA (Strongly Agree), A (Agree), N (Neutral), D (Disagree), and SD (Strongly Disagree). Frequencies and percentages were calculated for each response category across individual statements.

Furthermore, teachers' binary responses were analyzed to determine the percentage of those who answered affirmatively ("YES") or negatively ("NO") to the question regarding the influence of assigning agriculture-related tasks as punishment on students' interest in agriculture.

2.6. Ethical Considerations

Ethical guidelines were adhered to, encompassing the acquisition of informed consent from all participants. Participation was entirely voluntary, with participants being assured that their contributions would remain confidential and anonymous.

3. Results

- Research Question 1: Students being punished by giving agriculture-related work in Junior High Schools is the cause of students' lack of interest in Agriculture

Response	Frequency	Percentage (%)
Strongly Agree (SA)	23	23
Agree (A)	21	21
Neutral (N)	10	10
Disagree (D)	26	26
Strongly Disagree (SD)	20	20

Table 1: Showing the Responses of JHS Students on Whether Giving Agriculture-Related Work as Punishment Is the Cause of Student's Lack of Interest in Agriculture

The data presented in table 1 highlight students' perspectives on the correlation between being assigned agriculture-related work as a form of punishment and their resulting lack of interest in Agriculture. The survey employed a Likert scale to capture the range of responses, including Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (SD). The distribution of responses offers insights into the complexity of students' attitudes toward this issue.

A substantial proportion of students (44%) expressed agreement, either Strongly Agree (23%) or Agree (21%), with the notion that punitive agricultural assignments contribute to their diminished interest in Agriculture.

- Research Question 2: Students being punished by giving agriculture-related work in Senior High Schools is the cause of students' lack of interest in agriculture

Response	Frequency	Percentage (%)
Strongly Agree (SA)	22	27.5
Agree (A)	24	30
Neutral (N)	6	7.5
Disagree (D)	22	27.5
Strongly Disagree (SD)	6	7.5

Table 2: Showing the Responses of SHS Students on Whether Giving Agriculture-Related Work as Punishment Is the Cause of Students' Lack of Interest in Agriculture

The analysis of the responses revealed a nuanced perspective among the students. A substantial percentage (57.5%, SA + A) of the respondents indicated that they perceive a connection between punishment involving agriculture-related work and their lack of interest in agriculture. Moreover, the responses also highlighted the significance of subjective interpretation; while a considerable proportion acknowledged the connection, a substantial number (35%, D + SD) held a contrary viewpoint, emphasizing the complexity of the issue.

- Research Question 3: Students being punished by giving agriculture-related work in schools is the cause of students' lack of interest in agriculture

Response	Frequency	Percentage (%)
YES	45	75
NO	15	25

Table 3: Showing the Responses of Teachers on Whether Giving Agriculture-Related Work as Punishment Is the Cause of Student's Lack of Interest in Agriculture

Perceived Impact on Interest in Agriculture: The data presented showcases a clear divide in opinions among teachers regarding the link between punitive agriculture-related assignments and students' waning interest in the subject. A substantial 75% of respondents attribute the lack of interest in agriculture to such punitive measures.

4. Discussion

The findings in table 1 align with previous research suggesting that negative experiences in educational contexts can influence students' attitudes and engagement (Perry & Turner, 2015; Skinner et al., 2018). Johnson and Brown (2020) conducted a study that underscored the importance of reevaluating the use of weeding as a punishment in schools, emphasizing its potential impact on students' attitudes towards agriculture.

These findings are consistent with previous research by Smith et al. (2018), who noted that negative associations with academic tasks can lead to reduced motivation and engagement in related subjects.

Conversely, a significant number of students (46%), encompassing those who Disagree (26%) or strongly Disagree (20%), contested the idea that punishment-based involvement in agriculture undermines their enthusiasm for the subject. This divergence of opinion underscores the need for a nuanced examination of the multifaceted factors influencing students' perceptions and attitudes toward agriculture-related tasks. The dissenting opinions are in line with the observations of Johnson and Lee (2020), who emphasized the importance of considering individual preferences and learning styles in shaping attitudes toward subject matters.

The 10% of students who adopted a Neutral stance suggest a subgroup that does not firmly associate punitive agricultural assignments with diminished interest. This group could potentially reveal insights into the role of neutrality or ambivalence in influencing academic engagement. This is in line with the work of Brown et al. (2020), who explored the impact of ambivalent attitudes on academic motivation.

The variation in responses may be attributed to diverse learning preferences, prior experiences with agriculture, and perceptions of the pedagogical approach. Factors such as the nature of the agricultural tasks, the level of guidance provided, and the overall educational context could mediate the relationship between punishment and interest. This aligns with Vygotsky's socio-cultural theory (1978), which emphasizes the role of context and social interactions in shaping individuals' attitudes and motivations.

The divergent opinions expressed by the students warrant a more comprehensive exploration of the underlying factors. The relationship between education and interest is intricate, with multiple variables at play. Attribution theory could provide insights into how students attribute their lack of interest to the specific punishment (Weiner, 1985). Additionally, the role of teacher-student relationships, pedagogical methods, and curriculum design should not be overlooked. Punishment, when perceived as an intrinsic part of the learning process rather than a punitive measure, might have different effects (Deci & Ryan, 1985).

Furthermore, the cultural context cannot be ignored, as attitudes towards agriculture and disciplinary practices may vary across different regions and societies (Al-Samarraie et al., 2018). Comparative studies involving diverse cultural settings could illuminate the universality or context-specific nature of the observed trend.

These findings seem to concur with the notion of self-determination theory, where external control factors can undermine intrinsic motivation, leading to decreased interest (Ryan & Deci, 2000). The act of employing agricultural tasks as a form of punishment might inadvertently signal to students that agriculture is a laborious and undesirable endeavor, reinforcing negative perceptions.

Consideration of Factors: It is paramount to recognize the intricate interplay of multifaceted factors that contribute to students' disinterest in agriculture. Educational psychology research has repeatedly highlighted the influence of pedagogical strategies on students' motivation (Skinner et al., 2008). Thus, while punitive assignments might contribute, it is equally plausible that ineffective teaching methods, curriculum design, and societal attitudes towards agriculture also play pivotal roles.

Implications for Educational Practice: The discourse prompted by this data underscores the importance of critically evaluating punitive measures within education. Educators must strive to strike a balance between discipline and fostering genuine interest. Alternative methods, rooted in positive reinforcement and intrinsic motivation enhancement, warrant exploration (Deci & Ryan, 1985). Incorporating interactive and experiential learning approaches within agricultural education could potentially rekindle students' enthusiasm by connecting them with the subject matter on a more personal level.

Limitations and Future Research: As with any study, the present analysis also presents limitations. The data are confined to the perspectives of teachers, potentially neglecting valuable insights from students themselves. Moreover, the cross-sectional nature of the study prohibits the establishment of causal relationships. Future research could adopt a mixed-methods approach, combining teacher and student perspectives, longitudinal analysis, and qualitative exploration to provide a more comprehensive understanding of the dynamics at play.

5. Conclusion and Recommendations

5.1. Conclusion

In conclusion, while the data underscores varying levels of agreement and divergence among junior high school students, senior high school students, and teachers, a trend emerges suggesting acknowledgment of the influence of agricultural tasks as disciplinary measures on students' declining interest in agriculture. In particular, senior high school students and teachers display a more pronounced consensus on this matter. This analysis underscores the need to explore alternative disciplinary strategies that foster enthusiasm for agricultural subjects without undermining them. Further investigation could delve into the precise factors shaping students' viewpoints and propose effective measures to cultivate a genuine agricultural interest beyond punitive tactics.

5.2. Recommendations

- **Varied Teaching Approaches:** Schools should adopt a range of teaching methods that make agriculture an engaging and practical subject. Incorporating interactive exercises, hands-on projects, and field trips can foster a more favourable connection between students and agriculture.
- **Positive Motivation:** Instead of relying heavily on punitive measures, educators should concentrate on positive reinforcement. Recognizing and rewarding students for their achievements and efforts in agriculture can cultivate a more supportive atmosphere.
- **Practical Skill Emphasis:** Prioritize the development of hands-on skills within the realm of agriculture. Students are more likely to remain engaged when they see how their agricultural knowledge can be practically applied in real-world scenarios and potential careers.
- **Student Participation:** Involve students in the decision-making process regarding agricultural activities. Allowing them to voice their preferences about the types of tasks or projects they undertake can increase their sense of responsibility and interest.
- **Awareness Campaigns:** Arrange campaigns that highlight the significance of agriculture and its broader societal impact. Assisting students in comprehending the importance of agriculture can nurture a deeper understanding and regard for the subject.

- Teacher Development: Provide opportunities for teachers' professional growth to learn about innovative and effective teaching strategies for agriculture. Well-prepared educators can render the subject matter more appealing and interactive.
- Balanced Evaluation: Reevaluate the assessment methods used in agricultural education. Concentrate on evaluating comprehension and practical abilities rather than exclusively relying on conventional exams, which might contribute to unfavourable perceptions.
- Collaborative Efforts: Promote collaboration among teachers, students, and parents to collectively address the issue of diminishing interest in agriculture. Transparent communication can lead to more successful strategies.

By implementing these alternative recommendations, educational institutions and teachers can work towards establishing a more captivating and positive learning environment for agricultural education, thereby addressing the concerns highlighted in the analysis.

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