

## EMOTIONAL INTELLIGENCE AND SELF-ESTEEM AS DETERMINANTS OF DELINQUENT BEHAVIOUR AMONG IN-SCHOOL ADOLESCENTS WITH HEARING IMPAIRMENT

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### Abstract

Adolescents with hearing impairment are at higher risk of behavioural problems including delinquency due to factors such as academic deficit, delayed language development, and social isolation among others. The research aimed to examine emotional intelligence and self-esteem as a determinants factor of delinquent behaviour among in-school teenagers with hearing impairment in Southwestern Nigeria. The research used a descriptive survey design. The purposive sample approach was used to selected 224 in-school adolescents (IScAs) with hearing impairment, of whom 184 were deemed suitable for study among six integrated schools in Southwestern Nigeria, one school per state. Data was analysed using Pearson Product Moment Correlation (PPMC). The hypothesis's findings demonstrated that there is no significant relationship between delinquent behaviour and emotional intelligence among school-age adolescents with hearing impairments ( $r = -0.097$ ;  $p > 0.05$ ). Emotional intelligence and delinquent behaviour are negatively correlated ( $r = 0.097$ ) among school-age adolescents with hearing impairments. Furthermore, the research demonstrates a positive correlation ( $r = 0.091$ ) between criminal conduct and self-esteem among teenagers with hearing impairments who are enrolled in school. Based on the results, it was suggested that parents, teachers, and school administrators educate the public about how to help teenagers with hearing impairments develop their emotions via self-awareness, deliberate learning, and activities.

**Keywords:** Adolescents, Delinquent behaviour, Emotional intelligence, Hearing impairment, In-School adolescents.

### 1. Introduction

The World Health Organisation (WHO) defines adolescence as the time between the ages of ten and nineteen (10–19 years) that follows infancy but precedes maturity. One of the most important life transformations occurs during this time. It further categorised the adolescent stage into two namely, (Quadri, Omopo & Ukpere, 2005) early adolescence, age ten to fourteen years (10 – 14) and late adolescence, age fifteen to nineteen years (15 – 19). Over the previous century, a lot has changed at this time, including early teenage years, development, global interaction, and shifting sexual views and behaviour. Adolescents comprise one-fifth (1/5) of the world and thirty-two percent (32%) of Nigeria's population (Antigha, 2019). Adolescents with hearing impairment also form a part of the population of adolescents in the world but their period of adolescence can be extended to between 13 to 21 years because of their language delay which often results in social isolation and slower cognitive development (Jacob, Pillay & Oyewumi, 2021). The period of IScAs with hearing impairment is equally a critical period for identity formation because they need more time to explore their identities leading to extended adolescence (Adigun, 2020).

Any defect in hearing that stops a person from fully hearing sounds via their ears is referred to as a hearing disorder (WHO, 2021). The degree of hearing impairment might be mild, moderate, or severe depending on the degree to which an individual can hear the frequencies associated with speech. Adolescents with minor hearing difficulties struggle to perceive faint or

distant speech. Individuals with an average degree of hearing loss may need hearing aids or digital assistants to enhance sound perception. However, adolescents with severe hearing loss may find it hard to distinguish sounds. The causes of hearing loss can be genetic or from the influence of the environment. Hearing impairment caused by the implication of deoxyribonucleic acid (DNA) and genetics is the most commonly reported case of hearing impairment. Deoxyribonucleic acid and genetics-related impairment contribute to about 50-60% of all hearing impairment (Adigun, 2022). The seriousness of hearing loss can be measured according to an increase in volume that is made or above the usual level of sound that is produced by an audiometer. Adolescents with hearing impairments engage in delinquent behaviour (Meroyi & Alaka, 2022).

Mittal and Kumar (2020) expresses that juvenile delinquency is a criminal, antisocial, or illegal offence committed by persons below 16 years of male and below 18 years of female, which is liable to be presented before a court of law, the law court here is the Juvenile Justice Board. Malik *et al.* (2018), argued that delinquent act committed by the accused adolescent is considered to be beyond parental control making them solely responsible and liable for punishment, observation and reformation. Juvenile delinquency pertains to the habitual involvement in criminal activities by individuals who are juveniles, specifically those under the legal age of eighteen (Tone, 2020). Some delinquent behaviour among adolescents with hearing impairment of concern to the study are truancy, stealing, street begging and violence. Psychosocial factors such as emotional intelligence, self-esteem, parenting styles, peer influences, and social integration can influence delinquent behaviour among adolescents with hearing impairment.

Emotional intelligence includes an aptitude for compassion and constructive interaction with others, as well as being able to recognise, understand, and regulate one's own feelings. The capacity of teenagers with hearing impairments to recognise and assess their emotional states and use this knowledge to shape their thoughts and actions is also known as emotional intelligence (Davis Hernandez & Williams, 2016). Emotional intelligence, according to Buşu (2020), is the capacity to be emotionally stable in a way that allows one to understand oneself and others (interpersonal relationships) and to use one's emotions effectively, which may lead to a positive emotional shift. It significantly influences various aspects of the lives of in-school adolescents with hearing impairment, including behaviour. Emotional intelligence acts as a protective factor that enables adolescents with hearing impairment to better manage stress, control impulses and navigate social situations, thereby reducing their likelihood of engaging in delinquent acts.

Self-esteem is another factor influencing adolescent behaviour. As a fundamental aspect of human development, self-esteem affects decision-making, social interactions, and overall well-being (Quadri & Muibi, 2025). Adolescents with hearing impairments require a strong sense of self-worth to navigate life effectively. Self-esteem influences various dimensions of development, including academic performance and emotional stability (Dogar, Akhwanzada, Bajwa, Haider & Asmat, 2020). It shows how competent and capable a person believes they are at handling difficulties. While those with low self-esteem may experience emotions of inferiority, individuals with high self-esteem often display confidence (Dogar, *et al.* 2020); (Adekunle, & Meroyi, 2023). Moreover, Balogun *et al.* (2025) reported that self-esteem can serve as a source of motivation, enabling adolescents to address challenges without resorting to maladaptive behaviour such as self-harm or suicidal ideation. The authors also proposed that teenagers who have poor self-esteem are more prone to suffer from worry, guilt, bad eating

habits, self-harming activities, and, in the worst situations, suicide.

## **2. Statement of the Problem**

Adolescents with hearing impairment are at higher risk of behavioural problems including delinquency due to factors such as academic deficit, delayed language development, and social isolation among others. However, many of these problems are caused by emotional intelligence incompetencies and lack of self-esteem. Various efforts have been made to develop values that will change students with hearing impairments' disposition to delinquent behaviour. The existing studies that relate to delinquent behaviour have made use of a limited variety of variables, for example, support system, teacher factors, level of education, and caregivers' epistemic belief, with little attention paid to the significance of emotional intelligence and self-esteem factors for addressing delinquent behaviour among in-school adolescents with hearing impairment.

Consequently, the current study sought to determine how self-esteem and emotional intelligence can predict delinquent conduct in teenagers with hearing impairments who are enrolled in school in southwest Nigeria. It was hypothesised that among in-school adolescents with hearing impairments, there exists no significant association between delinquent conduct and emotional intelligence, nor between delinquent behaviour and self-esteem. The hypothesis was examined at the significance level of 0.05.

## **3. Literature Review**

Emotional intelligence, as articulated by Kanesan and Fauzan (2019), refers to the ability to comprehend and experience one's own emotions and those of others, to differentiate between them, and to use this understanding in cognitive processes and problem-solving. This multidimensional construct encompasses four key components: (a) perceiving personal and social emotions acceptably, (b) integrating emotions into cognitive processes, (c) understanding and reasoning about personal and others' emotions, and (d) regulating personal and others' emotions (Kanesan & Fauzan, 2019).

Another problem that people with hearing impairments struggle with is the ability to identify feelings, which is essential to emotional intelligence. Due to their hearing impairments, these in-school adolescents are deprived of the ability to interpret facial expressions, gestures, facial expressions and other body gestures, vocal tones, and other aspects of communication that convey the status of emotions and feelings (Zupan & Eskritt, 2024). This deficit contributes to wrong ideas about social interactions, an increased tendency to respond with intense emotions, and improper ways to cope with stress and negative emotions that elevate delinquency probability (Zupan & Eskritt, 2024).

Furthermore, self-control, which is part of the emotional intelligence model, has been found to predict delinquent behaviour (Obungwah, 2022). Difficulty controlling one's emotions may arise as a result of communication difficulty, limited social interaction, and increased rate of frustration or anxiety among in-school adolescents with hearing impairment (Olufemi-Adeniyi, 2021). Poor skills in the regulation of emotions can lead to increased difficulty with issues such as impulsivity, and aggression in engaging in antisocial behaviour that exacerbates the risk of delinquency (Eisenberg *et al.*, 2019). Research has established and shown the relationship between the level of emotional intelligence and in-school adolescents with hearing impairment in terms of social competence, academic achievement, and psychological well-being; several research (Obungwah, 2022). The findings indicate that the current arrest record is elevated among IScAs with low emotional intelligence, as there exists a beneficial connection between emotional intelligence and pro-social

behaviour, and a negative correlation with aggression, conduct disorder, and antisocial behaviour (Adigun, 2020).

Emotional intelligence is instrumental in diagnosing and managing delinquent behaviour among in-school adolescents with hearing impairment. Interventions aimed at improving in-school adolescent's emotional self-awareness, as well as their abilities to understand and regulate their emotions, can also improve social and emotional outcomes resulting in better interpersonal relationships and reduced odds of delinquency in this population. Comprehensive methods targeting IScAs, their families, peers, and educational environments are essential for encouraging healthy behavioural patterns and well-being among adolescents with hearing impairment. It is essential to recognise that this population faces numerous obstacles to treatment; thus, it is crucial to approach them with flexibility, cultural sensitivity, and a focus on their holistic needs, given the intricate nature of their delinquent behaviour.

Emotional intelligence and delinquency have been the subjects of considerable research during the past decade. In the longitudinal study of over 3,000 youth from 10 to 18 years, persistently low self-esteem was significantly associated with non-violent and violent offending as well as other risky behaviour as compared to the participants with high and fluctuating self-esteem (Saran *et al.*, 2021). This supports other research which indicated low emotional intelligence as a formative factor of delinquency that leads to a delinquent process beginning from low-ranking delinquent behaviour that might progress (Wong, 2021). To the same extent, Shah *et al.* (2023) also pointed out an important fact; that emotional intelligence is a partial mediator of harsh parenting and delinquency while also having a direct influence on delinquency. Using their results, they determined that there are several medical and indirect ways that self-esteem problems increase the chances of delinquency.

Self-esteem, characterised as an individual's overall assessment of their worth and value, is a multifaceted concept that includes cognitive, emotional, and behavioural elements (Birni & Eryilmaz, 2024). Self-esteem significantly influences psychological well-being, social relationships, behavioural patterns, and the likelihood of engaging in delinquent activity, rather than being just a question of self-alienation (Birni & Eryilmaz, 2024). A long-standing subject of psychological inquiry, self-esteem remains a challenging concept to define. It is a fundamental human need, that contributes to a fulfilling life. An individual's capacity for decision-making is influenced by their level of self-esteem, making it an essential aspect of human experience. Extensive research over the past decade has explored the connection between self-esteem and delinquency. Longitudinal studies, such as Saran *et al.* (2021), involving over 3,000 youth, revealed that persistently low self-esteem is significantly associated with both non-violent and violent offending, as well as other risky behaviour, compared to those with high or fluctuating self-esteem.

Considering self-control, Adigun's (2022) meta-synthesis highlighted self-control as one of the most robust correlates of delinquent behaviour when combining both cross-sectional and longitudinal studies conducted during the past three decades. Hay and Meldrum further established that self-control was conditionally sensitive; where it functioned as a personal characteristic making the individual prone to delinquency, it also interacted with other risk factors such as deviant peers to exacerbate the anti-social tendencies. Interestingly, recent 2022 cross-sectional research by Wolff *et al.*, (2022) investigated the major determiners of the early onset of delinquency and they found that self-control as a theory, acts at its maximum influence on children in late childhood/early adolescence. It also seems that self-control deficits are connected to an increase in the risk of impulsive-reactive delinquent behaviour due to a lack of behavioral control and planning abilities (Monahan *et al.*, 2017).

Another factor that has been identified as posing a risk based on the research in relation to deficits in the regulation of emotions. In a cross-sectional self-report study by McLoughlin *et al.* (2019), adolescent males and females diagnosed with clinically significant conduct disorder symptoms were noted to have compromised emotional regulation competencies, namely the ability to identify, label, and modulate their own emotions. These deficits elevate the risk of aggressive behaviour, and violence if not controlled. Underpinning this, a meta-analysis also affirms that emotional dysregulation enhances a general delinquency probability as well as probabilities of proactive and reactive violence (Fine *et al.*, 2020). However, recent research conducted suggests that there could be some mediating role of emotional regulation for why it is that low self-control predicts delinquency – those who lack self-control are easily angered and do not possess effective coping skills needed to control these feelings, hence engaging in antisocial behaviour (Hinnant *et al.*, 2023).

In combination, these studies offer strong support for self-esteem difficulties, and emotional dysregulation as specific personal risk factors that increase delinquency potential in youth either by themselves or in combination with other factors. These intra-personal skills deficits help in perpetrating delinquent behaviour patterns that may worsen through cumulative processes and peer/environmental influences. The more recent research provides additional support for self-esteem, self-control, and skills in regulating emotions as such acute targets for early-Integral Development to prevent the emergence of well-entrenched delinquent conduct.

#### **4. Bronfenbrenner's Ecological Systems Theory**

The present study is anchored by Urie Bronfenbrenner's Ecological Systems Theory which describes a broad framework that helps to comprehend human development as a process that takes place in a complex environment marked by a multiplicity of structural layers (Guy-Evans, 2024). Stemming from the work of a Russian-American psychologist, Urie Bronfenbrenner's theory defines development as the process in which an individual is shaped by various environmental systems grouped in four levels: microsystem, mesosystem, exosystem, and macrosystem, as well as chronosystem- the temporal dimension of an individual's development (Lopez *et al.*, 2021). The theory postulated that individual factors such as low self-esteem and inadequate environmental factors like ineffective education for diversity (Boccio and Beaver, 2021). Some noted sources of stress for students with hearing impairments are communication difficulties, lack of ability to interact with others and prejudice (Katsuya & Sano, 2023).

Employing Bronfenbrenner's Ecological Systems Theory to examine emotional intelligence and self-esteem as determinants of delinquent behaviour among IScAs with hearing impairments in Southwestern Nigeria entails analysing the influence of microsystems, mesosystems, exosystems, and macrosystems within a child's environment on the emergence of delinquent behaviour in this specific demographic. This approach affirms the notion that delinquent behaviour does not result solely from the psychological features of the individual but also from the interactions existing between that person and his/her background (Paquette & Ryan, 2001).

#### **5. Methodology**

The research used a descriptive survey design of a correlational nature. The approach was deemed appropriate due to its capacity to provide comprehensive data. The research population included all IScAs with hearing impairment in integrated schools located in Southwestern Nigeria. The states include Lagos, Ekiti, Ogun, Ondo, Osun, and Oyo. The table below displays the

population of pupils with hearing impairment throughout six states in Southwestern Nigeria:

**Table 1.** Population of the study

| <b>S/<br/>N</b> | <b>Name of special schools</b>                                      | <b>State</b> | <b>No. of adolescents<br/>with hearing<br/>impairment</b> |
|-----------------|---------------------------------------------------------------------|--------------|-----------------------------------------------------------|
| 1               | Methodist Grammar School, (Deaf Unit ), Ijokodo, Ibadan.            | Oyo State    | 44                                                        |
| 2               | St. Peter's College (Deaf Unit), Olomoores, Abeokuta, Ogun State.   | Ogun State   | 32                                                        |
| 3               | Ikeja High School (Deaf Unit), Ikeja, Lagos State.                  | Lagos State  | 39                                                        |
| 4               | Akure High School (Deaf Unit), Akure, Ondo State.                   | Ondo State   | 39                                                        |
| 5               | Special School for the Deaf, Ikoro-Ekiti.                           | Ekiti State  | 27                                                        |
| 6               | Osun State Secondary School for persons with special needs, Osogbo. | Osun State   | 43                                                        |
|                 | <b>Total</b>                                                        |              | <b>224</b>                                                |

The whole enumeration approach was used for the research since it facilitates the examination of the entire population when the population size is rather modest. In the survey technique, the entire population is used for the study. Consequently, all the 224 IScAs with hearing impairment in Southwestern Nigeria.

1. The respondents in the study were adolescents with hearing impairment.
2. The respondents were adolescents with a hearing impairment that is in the school setting at the time of the study.
3. The ages were between 13 to 21 years but basically, adolescents with hearing impairment in Junior Secondary School 3 to Senior Secondary School (JSS 3 and SSS 1-3), as they were able to attend to items in the instrument better than those in lower classes.

The tool used to gather data from the respondents was modified from the emotional intelligence test scale created by Salovey and Meyer (1990) and the delinquency behaviour scale created by Bendixen and Olweus (1999). The reliability test was conducted using Alpha Cronbach, the reliability scale for emotional intelligence yielded 0.89, self-esteem yielded 0.70, and delinquency behaviour yielded 0.93. The necessary introduction letters were sent out to the heads of schools and permissions were obtained. The questionnaires were distributed and

collected within the space of eight weeks. Only completed questionnaires were collated and used for data analysis. Both descriptive and inferential statistics were used to gather the data.

## 6. Results and Discussion

The questionnaire was sent in 224 copies to IScAs with hearing impairments in six special schools located in the six southwest states of Nigeria. The states—Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti—were represented among these institutions. 82 copies of the questionnaire in all were returned and were deemed helpful for the analysis of the research. This resulted in an 81.25% response rate.

### 6.1 Demographic Data Analysis

**Table 2:** Gender distribution of IScAs with hearing impairment.

| Gender       | Frequency  | Percentage |
|--------------|------------|------------|
| Male         | 90         | 49.5       |
| Female       | 92         | 50.5       |
| <b>Total</b> | <b>182</b> | <b>100</b> |

Table 2 illustrates the gender distribution of IScAs with hearing impairment. The study indicated that out of 182 individuals with hearing impairment, 92 are females, representing 50.5%, while 90 (49.5%) are males. This indicates that female IScAs with hearing impairment are the most represented group in the research.

### 6.2 Hypotheses Testing

**H<sub>01</sub>:** Emotional intelligence and delinquent conduct among IScAs with hearing impairment do not significantly correlate.

**Table 3:** Relationship between emotional intelligence and delinquent behaviour among IScAs with hearing impairment

| Variable               | N   | Mean  | Std.D  | r      | Sig   | Remark          |
|------------------------|-----|-------|--------|--------|-------|-----------------|
| Emotional Intelligence | 182 | 54.3  | 13.197 | -0.097 | 0.195 | Not Significant |
| Delinquent Behaviour   | 182 | 67.08 | 23.046 |        |       |                 |

Delinquent behaviour and emotional intelligence do not significantly correlate among IScAs with hearing impairment, as shown in Table 3 ( $r = -0.097$ ;  $P > 0.05$ ). However, the table also revealed a negative connection ( $r = -0.097$ ) between delinquent behaviour and emotional intelligence among IScAs with hearing impairment. Thus, the idea was not disproved.

**H<sub>02</sub>:** Self-esteem and delinquent conduct among IScAs with hearing impairment do not significantly correlate.

**Table 4:** Relationship between self-esteem and delinquent behaviour among IScAs with hearing impairments.

| Variable             | N   | Mean  | Std.D  | r     | Sig   | Remark          |
|----------------------|-----|-------|--------|-------|-------|-----------------|
| Self-esteem          | 182 | 26.12 | 5.996  | 0.091 | 0.221 | Not Significant |
| Delinquent Behaviour | 182 | 67.08 | 23.046 |       |       |                 |

Table 4 shows that self-esteem and delinquent behaviour do not significantly correlate among IScAs with hearing impairment ( $r = 0.097$ ;  $P > 0.05$ ). Nonetheless, the data showed that among IScAs with hearing impairment, there is a positive correlation ( $r = 0.091$ ) between delinquent conduct and self-esteem. Hypothesis 2 was therefore not disproved..

## 7. Discussion

The results of the first hypothesis showed that among IScAs with hearing impairment in southwest Nigeria, there is no discernible correlation between emotional intelligence and delinquent conduct. The study's results run counter to those of Olufemi-Adeniyi (2021) and Obungwah (2022), who discovered that delinquent actions are predicted by self-control, a component of the emotional intelligence model. According to the study, there are difficulties such as limited social interaction, communication difficulties, and increased rate of frustration or anxiety that can make hearing impairment unable to control their emotions. This study believes that all the aforementioned factors can push IScAs with hearing impairment to engage in delinquent acts. Also, the effect of the emotional intelligence factor on delinquent acts has also been demonstrated in other studies. In a cross-sectional self-report study by McLoughlin *et al.* (2019), adolescent males and females diagnosed with clinically significant conduct disorder symptoms were noted to have compromised emotional regulation competencies, namely the ability to identify, label, and modulate their own emotions. Interestingly, recent cross-sectional research by Wolff *et al.* (2022) on the major determiners of the early onset of delinquency found that self-control as a theory, acts at its maximum influence on children in late childhood/early adolescence.

The second hypothesis likewise revealed no significant correlation between self-esteem and delinquent conduct among IScAs with hearing impairment in South-Western Nigeria. This finding was in contrast with that by Lopez (2015), who identified low self-esteem as a factor associated with delinquent behaviour. That study suggested that individuals with low self-control often exhibit low self-esteem, leading to impulsive decision-making with little consideration for future consequences. Hernandez and Garcia (2020) explored the connections between self-esteem and psychosocial variables linked to delinquency among individuals with hearing impairment. Their findings suggest that low self-esteem, when combined with peer pressure, family dynamics, and environmental influences, increases the likelihood of delinquent behaviour (Lee & Kim, 2021; Ramirez & Sanchez, 2023). Providing encouragement and care serves as a protective factor, reducing the vulnerability of individuals with low self-esteem to delinquency. Interestingly, recent cross-sectional research by Wolff *et al.*, (2022) on the major determiners of the early onset of delinquency found that self-control as a theory, acts at its maximum influence on children in late childhood/early adolescence. It also seems that self-control deficits are connected to an increase in the risk of impulsive–reactive delinquent behaviour due to a lack of

behavioral control and planning abilities (Monahan *et al.*, 2017).

## 8. Conclusion

This study offers strong support for deficits in self-control and emotional dysregulation as specific personal risk factors that increase delinquency potential in youth either by themselves or in combination with other factors. These intra-personal skills deficits help in perpetrating delinquent behaviour patterns that may worsen through cumulative processes and peer/environmental influences. The more recent research provides additional support for self-esteem, self-control, and skills in regulating emotions as such acute targets for early-Integral development to prevent the emergence of well-entrenched delinquent conduct. The study further concluded that emotional intelligence was a determinant of delinquent behaviour among the respondents not only impacting their response to delinquent behaviour but also their overall quality of life.

## Recommendations

These recommendations are offered in light of the study's results:

1. More should be done by parents, teachers, and school administration to educate IScAs with hearing impairments in southwest Nigeria on how to develop their emotional intelligence. These can include practices, self-awareness, and intentional learning. Parents can be encouraged to help in the journey of the adolescent towards achieving greater emotional intelligence because developing emotional intelligence takes time and practice.
2. The school management, teachers, and parents must take decisive measures to handle cases of delinquency among adolescents. Better corrective measures like cognitive reconstruction, bibliotherapy, counseling, and mentoring among others to punish delinquent adolescents rather than measures that will harden their hearts the more.
3. The government, school administration, educators, and parents in southwest Nigeria must be honest in their efforts to curb the persistent number of teenage delinquent cases. Users' information demands may be sufficiently met by university libraries. Adolescents must not be indulged nor be allowed to do as they wish.

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