

EMOTIONAL RESPONSE AND SOCIAL INFLUENCE AS CORRELATES OF EMPATHIC TENDENCY AMONG SELECTED SAMPLE OF SECONDARY SCHOOL STUDENTS

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Abstract

This study examined the emotional response and social influence as correlate of empathic tendency among secondary school students in Ondo State, Nigeria. The study was a survey design and 200 secondary school students were conveniently sampled from Akoko Anglican Grammar School, Arigidi, Akoko, Okota High School, Arigidi-Akoko and Ajiroko Technical Grammar School Arigidi-Akoko. Emotional response was measured using the Trait Emotional intelligence questionnaire, Social Influence was measured using the Social Influence Questionnaire, while empathic tendency was measured using Index of Empathy for Children and Adolescents. Pearson Product Moment Correlation (PPMC) analysis was conducted to test the relationship among the study variables. The result revealed that emotional response did not show significant relationship with empathic tendency among Secondary School Students [$r(197) = -.008, p < 0.01$], Social Influence had a significant relationship with empathic tendency among secondary school students at a significant level of [$\beta = 0.331, p < 0.01$] influence empathic tendency among secondary school students. The joint contributions of the predictor variables were also significant [$R^2 = 0.197, F = 11.624; p < 0.05$]. The result of this study portends empirical driven conclusion that leads to the important of Social Influence in the empathic tendency among secondary school students.

Keywords: Emotional response, Social influence, Empathic tendency, Psychology

Introduction

Empathy is a crucial socio-emotional competence in interpersonal relationships and social functioning; it is especially important during adolescence because this stage of life has been identified as a critical period of socio-emotional development (Decety and Cowell, 2014; Eisenberg, 2020). Empathy allows a person to understand, share, and act upon

the feelings of others, encouraging prosocial behavior and minimizing antisocial ones. Empathy is classified into two major sub-headings: cognitive empathy, the ability to use another's perspective, and affective empathy, the feeling evoked by another's state of emotional arousal (Davis, 1983; Shamay-Tsoory *et al.*, 2009).

The benefits of empathy have been of great concern in psychological and educational studies with a focus specifically on how it can be used to teach moral and ethical value (Batson *et al.*, 2007). Empathy development in educational settings has been shown to cultivate a positive school climate, enhance peer relationships, and reduce aggression, making it a key focus in adolescent development research (Jolliffe and Farrington, 2006; Barr and Higgins-D'Alessandro, 2007). Hence, in adolescence, a period marked by significant emotional, cognitive, and social growth, empathy emerges as a crucial skill for navigating complex social landscapes, building relationships, and understanding social norms (Wagaman, 2011). Thus, the educational reforms in Nigeria which focuses on developing socio-emotional competencies, including empathy, as part of a holistic approach to the development of young people (Olapegba, 2010).

Empathy has been identified as one of the important socio-emotional competencies associated with prosocial behavior and positive peer relationship during adolescence (Belacchi *et al.*, 2022), but there are reports of increasing bullying, conflicts, and emotional insensitivity, thus suggesting low empathic tendency among students in many Nigerian secondary schools (Omoteso, 2010). Though international literature highlighted emotional response and social influence as important predictors of empathy (Silke, 2021), empirical evidence from Nigerian adolescents remains limited. Arguable, emotional response may influence how students attend to and respond to other people's emotions, while social influence-peer norms and interpersonal pressures-

play an important role in adolescent behavior (Pfeifer, 2011).

Statement of the Problem

School environments all over the world assist in fostering the growth and development of empathic tendencies which is part of the human nature, allowing people to exhibit emotional growth and proper social functioning in societies. However, researchers in Nigeria have focused their studies relating to empathy on the effects of social interaction and intervention on public schools' students as a national question and empathy on employee commitment, and perceived empathy on self-concept clarity (Onwuka, 2024; Afolabi and Dennis, 2017) Therefore, the need to further provide insights into the relatedness of these variables.

Objective of the Study

The major objective of this study was to investigate the relationship as it exists between emotional response, social influence and empath tendency among selected sample of Secondary Schools in Ondo State. While the specific objectives were to examine the independent relationships between emotional response, social influence and empathic tendency among these secondary school students and more importantly, the joint influences of emotional response and social influence on empathic tendency of these selected secondary schools' participants. This is to ascertain which of the two variables is a better predictor of empathic tendency in order to provide context-specific evidence that could inform school-based socio-emotional interventions.

Literature Review

Affective Response and Empathy

The emotional response, or a direct reaction to an emotionally evocative

event, has been believed commonly to beat the core of affective empathy because it gives more resonance and direct contact with the emotional state of another individual (Eisenberg *et al.*, 2006). Empirical evidence suggests that among adolescents, those with high levels of emotional reactivity have a higher level of empathy and prosociality but a lower level of antisociality (Davis, 1983; Preston and de Waal, 2002). However, it has been found in studies that extreme or uncontrolled emotional reactivity can actually prevent empathic engagement because it tends to cause the personal overload of emotion rather than constructive empathetic responses. In fact, Singer and Lamm (2009) deem that unregulated emotional arousal from the observation of another's emotional experiences results in overload instead of a constructive empathetic response.

Not only is affective empathy the complexity of empathy, as theories like Functional Architecture of Empathy by Decety and Jackson (2004), argue that empathy refers to the interplay between affective and cognitive dimensions. This model suggests that affective empathy, or emotional resonance, must be supplemented with cognitive empathy-the ability to take another's point of view. Cognitive empathy thus situates emotions within a contextualized comprehension that, in adolescence-when adolescents begin taking their social lives with greater agency, becomes highly crucial. An adolescent that is impoverished in cognitive empathy may display an emotionally dysregulated rather than compassionately regulated response to others' distress.

Recent studies suggests that maturation with regards to this set of brain regions through adolescence including the

anterior insula and the anterior cingulate cortex-occurs in concert with the development associated with the processes of empathy (Bernhardt and Singer, 2012; Kral *et al.*, 2017). These regions contribute to or are implicated in the processes of emotional regulation and self-other differentiation important for a balanced empathic response. Research also underlines that such neural responses are triggered by social context, and thus, it points out that biology and environment are interwoven in determining empathy in adolescents.

Cultural contexts, such as in Nigeria, mold the ways that emotional arousal is accepted and expressed and, therefore is an important factor in developing emotional responses to emphatic stimuli. While, therefore, many African societies would seem to be collectivist cultures favoring emotional sharing and communal support, which might be conducive to the expression of empathy, these displays would have to be carefully regulated to fall within the dictates of such cultures as a way of avoiding cultural faux pas., this dimensionality in the development of empathy brings about the need for incorporating culturally adapted strategies in the programs for developing empathy if they are to positively influence Nigerian adolescents.

Social Influence and Empathy

Social influence through peer pressure, social modeling, and perceived social norms all strongly influence empathic behavior. It is during adolescence that the desire to gain approval from peers grows even stronger, as during this phase of life adolescents are more likely to model the empathic behaviors they observe around them, coming both from peers and from authority figures a notion that further

sustains that the development of empathy is an individual and a social process. A study by Miklikowska *et al.* (2011). found that the empathic behaviors of peers positively predict the usage of those behaviors by young teenagers. This would indicate that the social modeling of behaviors is an important part of the development of empathy.

School settings are naturally positioned as powerful staging grounds for such social influences. The inner secondary school is the best avenue for cultivating culture supportive of prosocial behaviors since it is the avenue where children first learn and take hold of regular social behaviors. Thus, the study by Eisenberg *et al.* (2010)., indicated that school culture that is marked by inclusion, respect, and supporting relationships promote empathy and reduce aggressive behavior in schools. This is further supported by Durlak *et al.* (2011), who indicated that school-based programs in Social Emotional Learning (SEL) are associated with significant aims in empathy, social awareness, and overall emotional intelligence. Indeed, the programs would afford the teenagers more structured opportunities to practice empathy in navigating more complex social interactions.

Considering how such may impact peer dynamics and relationships of authority in Nigerian schools, it is rather important to understand the ways through which social influence might impact empathetic responses among school adolescents. Since group identity and peer bonding can be at their height during this particular stage of development, it sometimes facilitates empathy or, on the other hand, impedes it when the prevailing norms among peers become negative. According to Bandura's social learning

theory, behaviors are learned and reinforced within a social context; hence, Nigerian schools have much to benefit from incorporating SEL programs that promote emphatic skills modeled by teachers and reinforced through peer interactions (Adamu *et al.*, 2024). This would then help in the development of empathy as a social virtue since this will conform with the collectivist values of the Nigerian society.

Incorporating Emotional Response, Social Influence, and Empathy Development

Thereafter, the current empirical evidence proceeds to investigate the interaction between emotional response and social influence in creating empathy; this, particularly during adolescence, is quite significant. According to Weisz and Zaki (2017), for there to be the development of empathy, there ought to be "both intrinsic (emotional reactivity) and extrinsic (social influence) antecedents". They thus identified that for empathy training programs to be successful, they would have to address both components-one, giving adolescents tools for emotional regulation, and two, creating social environments that model and reward empathic responses. Lewin's model of person-environment interaction, 1936, even provides the further insight that empathy is an outcome of person-environment interactions, reinforcing the need for interventions with regard to empathy along both individual and social dimensions. On the other hand, it has been said that empathy may benefit more from integrated theory of mind and emotion regulation frameworks at adolescence than in any other period (Decety and Moriguchi, 2007). The theory of mind, or knowledge about other persons' mental states, largely shares common features

with cognitive empathy. In essence, this would help an adolescent interpret the signals within the emotions of others and act on them in a manner sensitive to those emotions. When combined with effective emotional regulation, Theory of mind enables adolescents to respond in a well-balanced way: emotionally empathizing but not getting overwhelmed by such feelings of empathy or aloof.

Empathy might then be better conceptualized in the social behavior that is reinforced within societies, such as Nigeria, where strong social values concerning community and shared well-being have been instilled. As Oyserman *et al.* (2002) indicated in a study on empathy in collectivist cultures, social norms modulate emotional responses to favor group harmony over individual sentiment. A cultural background of this kind might suggest that such interventions as enhancing empathy among Nigerian school adolescents are likely to be maximally effective if they can be contextualized within communal values so as to make them understand the practice of being empathetic as social bonding meant for common good.

Therefore, the current study investigates the interaction between emotional response and social influence in relation to empathy tendencies among Nigerian secondary school students. In this study, therefore, an attempt is made to add to the global literature of studies on empathy and to bridge the gaps in the African-centered research on adolescent empathy.

Hypotheses

The following hypotheses set in alternative form were tested:

H₁: Emotional response will be significantly related to the empathic tendency among secondary school student

the higher the emotional response, the higher the empathy.

H₂. Social influence and empathic tendency will be highly correlated among secondary school students. Positive social influences will predict higher empathy.

H₃. Emotional response and social influence together will predict empathic tendency among secondary school students, with each adding to further the understanding of empathy development in this population.

Methods

Design and Participants

The present research has employed a cross-sectional survey design to elicit information on the relationship between the empathic tendency and emotional responses, as well as social influence of students in secondary schools. Variables are observational, with no manipulation. Empathic tendency was the dependent variable while emotional response and social influence were the predictor variables. This study was carried out in Akoko North West Local Government Area of Ondo State, Nigeria. It focused on three accessible public secondary schools: Akoko Anglican Grammar School, Okota High School, and Ajiroke Technical High School, within the Arigidi Akoko town. A total of 200 students were randomly picked from the three public secondary schools through random sampling techniques. The sample consisted of a nearly equal number of male (50.0%) and female participants (49.5%) who were spread over 10 to 20 years of age, with a mean age of 13.72 years (SD = 2.23). The respondents were students from junior secondary and senior secondary levels, and of these, 78 students (39.0%) were from junior secondary school and 122

students (61.0%) from senior secondary school.

Instruments

The data were collected with the help of a structured questionnaire consisting of four sections labeled A-D.

Section A: Socio-Demographic Information: In this section, the participants were asked to mention their age, gender, religion, and class level.

Section B: IECA-IECA is a 22-item self-report scale constructed by Bryant (1982) that for a long period now has been one of the most prevalent measures of empathy among children and adolescents. Items of this scale assess both positive and negative feelings and are responded to on a 'yes/no' criterion. Sample items include: "People who kiss and hug in public are silly," and "Kids who have no friends probably don't want any." The IECA has seen use in a number of studies involving children and adolescents, such as Cohen and Strayer (1996) and Eisenberg *et al.* (1988). In the present study, the IECA had a reliability coefficient of 0.377.

Section C: Trait Emotional Response Scale (ETQ) – Developed by Petrides and Furnham (2001), this 30-item questionnaire measures global trait emotional intelligence. Responses are recorded on a 7-point Likert scale, ranging from 1 (completely agree) to 7 (completely disagree). Sample items include, “Expressing my emotions with words is not a problem for me,” and “I can deal effectively with people.” In the

current study, the reliability of the ETQ was found to be 0.87.

Section D: Social Influence Questionnaire (SIQ)-This 13-item self-report measure was established by Lennox and Wolfe, in 1948 to evaluate social influence tendencies. Respondents replied on a Likert scale that ranges from 0 always false to 5 always true. Many items are reverse-scored to minimize response bias. Sample items include, "I actively avoid wearing clothes that are not in style," and "I tend to pay attention to what others are wearing." The reliability coefficient for the SIQ in this study was 0.563.

Procedure

Permission was obtained from the participating schools' principals in writing form. Once the research proposal was approved, the researcher arranged with the school authorities to collect data on a date and time so as not to interfere with their school and extra-curricular activities. Students were made aware of the purpose of the research study. Participation was purely voluntary and they were assured that the result of the research would be used solely for research purpose. Out of the 220 questionnaires distributed, 200 were dully completed and used for analysis.

Results

A Pearson Product Moment Correlation (PPMC) analysis was conducted to examine the relationships among the study's key variables, with results summarized in Table 1.

Table 1: Test of Relationships among Variables

Variables	Mean	SD	1	2	3	4	5	6	7
1. Age	13.72	2.23	1						
2. Sex	-	-	-.010	1					
3. Religion	-	-	.287**	.060	1				
4. Class	-	-	.254**	-.172*	.078	1			
5. Emotional Response	30.45	3.29	-.173*	-.276**	-.118	-.071	1		
6. Social influence	34.69	8.87	.154*	.036	.152*	-.052	-.197**	1	
7. Empathic tendency	103.58	23.63	.163*	-.101	-.178*	.028	-.008	.320**	1

Note: p < 0.05, p < 0.01

The correlation results indicate that gender is significantly related to empathic tendency [r(197) = .163, p < .05] [r(197) = .163, p < .05], suggesting a potential impact of gender on students' empathic tendencies. Similarly, religious affiliation was positively associated with empathic tendency [r(197) = .178, p < .05] [r(197) = .178, p < .05], indicating that stronger religious beliefs may be linked to heightened empathic responses among students.

The analysis further revealed that emotional response was not significantly correlated with empathic tendency [r(197) = -.008, p > .05] [r(197) = -.008, p > .05], suggesting that emotional response might not directly influence empathic tendency. In contrast, social influence showed a significant positive relationship with empathic tendency [r(197) = .320, p < .01] [r(197) = .320, p < .01], implying that students with higher social influence are more likely to exhibit empathic tendencies.

Table 2: Summary of Multiple Regression Analysis of Emotional Response and Social Influence on Empathic Tendency

Variable	B	t	R	R ²	Df	F	P
Emotional Response	0.058	0.839	0.325	0.106	197	11.624**	<0.05

Discussion

This present study determines the role of both emotional response and social influence in regard to empathic disposition in developing adolescence students at secondary school. Hypothesis 1, which states that emotional response will significantly be related to the empathic tendencies of the respondents, is not supported since it was found out that emotional response makes quite a small dent on the level of empathy of the respondents. This is opposite to the

study of Eisenberg and colleagues in 2006 where the emotional response, such as distress or compassion, is considered to be the major building blocks of empathy. According to the model, empathy is built on the capability of the person to share the emotion with others whom she or he has had some exposure to and this ability comes with certain control mechanisms over emotions.

The difference exhibited in the findings of this research can perhaps be explained in terms of culture. Triandis *et*

al. (1995) for example argues that in several collectivist societies, such as Nigeria, people do not need to feel the emotions in order to feel empathy, as social norms and expectations of the group fulfill this role. Such a cultural orientation may place an enhanced tendency on maintaining group solidarity that might curtail the influence of the individual emotional states on the level of empathy.

The findings of the study did thus support Hypothesis 2 to the effect that social influence would be a strong predictor of empathic tendencies. This agrees with the arguments by Batson *et al.* (1997) who indicated that empathy is built not only through engagements but also through other environmental factors. This also agrees with Decety and Jackson (2004) who indicated that the cognitive and emotional components such as perspective taking and regulation of emotion that makeup empathy are supported by the environment. In this regard, it must be observed that the school environment has much more marked tendencies for social influence. For example, it was noted by Wentzel (2014) that the development of pro-social behavior and the growth of empathy all require the facilitation of positive social relationships with peers and an appropriate social setting. Similarly, programs that encourage all these interactions and exposure to various individuals have been shown to facilitate adolescents in developing and improving their empathic skills (Schonert-Reichl *et al.*, 2012).

Hypothesis 3. It was supported that emotional response social influence will predict the empirically measured empathic tendencies. Of the two, social norms influence was more incisive. That reveals that the empathy of the secondary school

children is situational and not constitutional. This also supports the thesis of Batson *et al.* (1997) that while empathy is the concern of the individual, yet the individual is influenced greatly by their society. Still, it is consistent with the general perspective of collectivist societies that emphasizes the social infrastructure at the expense of the internal flow of emotions of the individuals (Triandis, 1995). Additionally, these also support the Empathy- Altruism Hypothesis (Batson, 1997) that there are factors in environment and situation that can increase empathy level especially for help giving behaviours - they include social factors.

Conclusion

In this respect, it would appear that the propensity for empathy in secondary school students is essentially modulated by social rather than by individual emotional contingencies. Whereas emotional response was postulated as a major predictor, the restrictedness of its function in this study underlines the greater efficiency of the social context in which empathy develops. Approaches toward developing empathy would, therefore, be better directed toward encouraging positive social interaction and pro-social behavior, especially within school settings. However, there are limitations in this study. Since the search has targeted only public school students among secondary school students in Akoko, Ondo State, generalization may not be effective in private schools or in other areas. The future study should try to use more diverse samples throughout Nigeria for the wide applicability of these findings. Again, by researching other potential predictors, like socio-economic background and personality traits, might

offer a broader range of factors that determine empathy in students.

Recommendations

Based on the insight gained, the study suggests the following recommendations

1. Policy Development: The Nigerian Ministry of Education should continue to encourage programs meant to build empathy through community-oriented activities-mentorship, peer support systems, and cultural exchange programs geared towards the development of mutual understanding and value beliefs.
2. Curriculum Integration: In a school setting, empathy-enhancing practices should be integrated into the curricula. Through activities such as service-learning projects, formal debates, role-playing exercises, and group discussions, students will practice empathetic practice by increasing awareness of multiple perspectives and fostering collaborative interaction.
3. Evidence-Based Practice: Development and implementation of school curriculums should be based on current research to ensure that interventions aimed at developing empathy conform to contemporary standards of modern education and societal needs. Regular evaluations are to be conducted to ascertain the effectiveness of these strategies in maintaining long-term applicability.

By focusing on these areas, education stakeholders will foster a culture that upholds empathy, promotes emotional intelligence, and will in return better position those towards beneficial and cohesive interactions socially in a multitude of settings.

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