Influence of Perceived Stress, Anxiety, and Self-Esteem on Aggressive Behavior among Teenagers

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Abstract

This study was carried out to find out the influence of perceived stress, anxiety, and self-esteem in correlation with aggressive behavior among the teenagers in Ado-Ekiti, Nigeria. An ex-post facto research design was conducted using a purposive sampling technique. A total of 240 students were sampled from 5 schools (40 students per school). The respondents age range from 13-19 years. Information was collected with the use of a self-structured questionnaire. Results from this study revealed that there was a significant relationship between aggression and perceived stress (r =0.002; <0.05). This found that the higher the level of aggression, the higher the stress level among secondary school students. There was also a significant relationship between aggression and self-esteeom (r= -0.166 and sig (0.01) < 0.05). This implies that the lower the levels of self-esteem, the higher the level of aggression. The study also shows that anxiety did not significantly predict aggression among secondary students (0.328 > 0.05 level) and also (r) = 0.63. Also found that perceived stress and self-esteem has a negative effect on aggression (-0.634) while anxiety has a positive effect on aggression. The study revealed age, gender, ethnic group, parent type jointly predicted aggression (R2=0.780 P<0.05) among teenagers in the selected secondary schools. However, Educators and families need to be aware of the stressors in children’s lives and help children learn how to cope and manage them appropriately.

Keywords: Perceived Stress, Anxiety, Self-Esteem, Aggressive Behavior, Teenagers, Ado-Ekiti

1. Introduction

Aggressive behavior is a multifaceted phenomenon as it can be examined from different perspectives causing inconsistencies in the use of the term in clinical practice [1]. Aggression can be defined as any behavior that causes painful experience to another person, or as actions that are destructive to one’s self, other people or belongings [2]. Aggressive behaviors can take a variety of forms: physical aggression, verbal insults, relationship manipulation, and nonverbal expressions of disdain [1]. Since the 1980 there has been a steady increase in research analyzing problems of aggressive behavior among children and adolescents at school, reflecting the growing seriousness of this problem in societies, these behaviors involves aggression against property and that of other classmates, as well as aggression against teachers and peer themselves [3]. Adolescents use indirect aggressive behaviors that are most effective in harming the social goals of their peers [4]. Females have traditionally been viewed as less aggressive than males [5]. Boys may use physical aggression as a way of harm instrumental goals of peers and for gaining mental physical dominance; girls, however, use indirect aggression to prevent social relational goals, such as another’s feeling of inclusion in a group [6], [5].

Adolescence is a particularly compelling period of development. Over the lifespan, adolescence is characterized by a rather lengthy transition phase in which the individual is neither a child nor an adult. This transition involves biological, social, and psychological changes marked by the development of mature forms of thought, emotion, and behavior [7]. Adolescent developmental tasks include challenges of identity, autonomy, sexuality, academic functioning, and peer relationships [8]. There is typically a greater expression of risk taking and exploration of new behaviors during adolescence, which are part of the developmental processes that contribute to autonomous identity formation and functioning.

Children and adolescents experiences stress in their daily lives [9]. Internal and external sources can cause stress for children [10]. Being away from home, worrying about peer relationships, worrying about school work, changing bodies, and fear of being different are some of the daily stressors in school-aged children. Some children have other stressors such as parents’ divorce, moving to a new school, serious illness, or failure at school that causes more stress in their lives [11]. Coping with stress for children is sometimes done through crying or wishful thinking [5]. Other times children use bullying or other forms of aggressive behavior as a way to cope with stress [11]. However, none of these behaviors help eliminate stress from a child’s life, but may distract the child from the stress. Educators and families need to be aware of the stressors in children’s lives and help children learn how to cope and manage them appropriately.

Victims of adolescent aggression have been found to suffer anxiety, [12] the effects of which may ultimately lead to lifelong reproductive disadvantage. On the other hand, socially aggressive adolescents are often popular, sought after by peers, and rank high in social status [13]. Adolescent social anxiety, in particular, is important to study for several reasons. First, social anxiety is associated with behavioral inhibition and social withdrawal, which may impair adolescents’ ability to form successful, intimate relationships with
their peers. In fact, social anxiety interferes with the development and quality of adolescents’ romantic relationships and has long been recognized as important for understanding adults’ interpersonal behavior and psychological functioning [14]. Second, high levels of social anxiety may indicate the presence of social phobia, an anxiety disorder that typically has its onset during adolescence [15], and which can be very distressing to adolescents and extremely disruptive to their everyday functioning.

Self-esteem is the extent that persons believe they are capable, significant, successful and worthy. Global self-esteem is an overall feeling of self-worth [16]. A general sense of personal worth coupled with a coherent sense of identity appears to be critical for the youths’ mental health. The complex personal, social and familial adjustments required in asserting one’s identity, depends on individual’s self-esteem and help individuals to get over aggressive behavior, self-esteem could be said to be ones attitude towards oneself along a positive-negative dimension [15], [16] self-esteem is “the individual’s over-all level of self-acceptance or self-rejection”. Two aspects of self-esteem are mentioned by Rosenberg, high and low self-esteem, individuals with high self-esteem feel respectable, worthy, but not superior; on the other hand, individuals with low self-esteem do not satisfy themselves, and reject their selves. It could also be seen in the evaluation of self; having high self-esteem means that an individual likes himself or herself. On the other hand having low self-esteem means that an individual feels uncomfortable about himself. However, Adolescents with high self-esteem may compete with peers using more pro-social behavior and may be better able to avoid aggressive interactions. High self-esteem may play a role in the disparate reproductive strategies of males and females.

There is no gainsaying that the propensity to be aggressive is a natural phenomenon that is intrinsic to the human experience. Indeed, recent researchers have done a lot to stress the potentially adaptive nature of aggressiveness in certain domains of the modern human world [13]. Certain forms of aggression might also be considered acceptable or, indeed, desirable, in some sports and business settings. On the other hand, because acts of aggression concern intentional harm to others, they are generally viewed as moral transgressions that must, therefore, be considered to be conventionally maladaptive.

Neglect from peers may leave children without resources for coping with social or emotional issues, making friends, or receiving help [5]. However, there is dearth of empirical studies on aggressive behavior among teenagers. Nonetheless previous empirical studies in Europe and American focused on family factors, peer influence, school climate and poverty as important predictors of aggressive behavior among teenagers. This study is therefore poised to examine factors such as anxiety, self-esteem and perceived stress on aggressive behavior among teenagers

2. Method
Participants: The study is an ex-post facto research design involving the use of a structured questionnaire interviewing teenagers at secondary schools selected in Ado-Ekiti, Ekiti state, Nigeria. The study was conducted in Ado Local Government Area because the population of the teenagers is high. Ado Local Government is one of the local governments within Ado- Ekiti Metropolis. This study was carried out in five secondary schools within the local government. These include: Ansar-rudeen Grammar school, Mary Hill, Anglican high School, Christ girls, Ado Grammar school, Ado CommunitySchool. The study population comprised of teenagers (age 13-19 years) in the secondary schools selected. a sample of 240 research participants were purposively selected. The respondents’ age ranged from 13 to 19years. Sampling method used in this study was the purposive sampling to select participant for the study.

2.1 Measures
A structured questionnaire was used for data collection in the study. The questionnaire was divided into five sections (A, B, C, D & E) Aggression Scale developed by [17]. It is a 29 item scale. The internal consistency scores, estimated with Cronbach’s alpha coefficient, were high (.87). This scale was scored using a 5-point Likert format; 1= uncharacteristic of me, 5= very characteristic of me. High score means the participants is high on aggression Measured self-esteem of the participants - This scale was developed by Rosenberg [16]. It is a 10 item scale. Adapting the scale and revalidation yielded a Cronbach Alpha of 0.86 and a Guttmann Split half coefficient of 0.88. the scale was scored using a 4-point likert format ranging from strongly agree to strongly disagree. This scale was scored by summing the ratings assigned to all the items after reverse scoring the positively worded items. Scores range from 10 to 40, with higher scores indicating higher self-esteem. The inter-item reliability of the scale is 0.84.
Perceived stress scale (PSS)- The scale was developed by[18]. Internal reliability from Cohen and Williamson, Coefficient alpha of .78. Each item on PSS is rated on a 5-point Likert format ranging from never (0) to almost always (4). Positively worded items are reversed scored and the ratings are summed, with higher scores indicating more perceived stress.
Beck Anxiety Inventory (BAI) - was developed by [19]. The BAI is a 21- item self-report questionnaire. Scores on the scale indicate individual’s anxiety level;
Variables

Aggression (r = 0.75; [19]).

Consistency (a = 0.92) and high test-retest reliability.

3. Results

2.2 Procedure

The administration of the questionnaire was coordinated and monitored by the researchers, assisted by two trained undergraduates’ students from the Ekiti state university. Approval for the study was obtained from the school authorities, before the participants were asked to complete the questionnaire. Participation in the study was completely voluntary and informed consent was obtained from participants. Participants were informed of their freedom to withdraw at any time.

2.3 Analysis

Data was collected and analyzed using the Statistical Package for the Social Sciences. (SPSS) Hypotheses one to three were analyzed using Pearson Product-Moment correlation while hypothesis four and five were tested using Multiple Regression analysis.

3. Results

Table 1 Summary of Pearson (r) Showing Relationship between Aggression and Perceived Stress

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aggression</td>
<td>51</td>
<td>15.665</td>
<td>-</td>
<td>0.195</td>
<td>0.002*</td>
</tr>
<tr>
<td>2. Perceived Stress</td>
<td>15</td>
<td>4.002</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Correlation is significant at the 0.05 level (2-tailed)

Table 2 Summary of Pearson (r) Showing Relationship between Self-Esteem and Aggression

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aggression</td>
<td>51</td>
<td>15.665</td>
<td>-</td>
<td>-</td>
<td>0.166</td>
</tr>
<tr>
<td>2. Self-esteem</td>
<td>16.75</td>
<td>4.502</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Correlation is significant at the 0.05 level(2-tailed)

Table 3 Summary of Pearson (r) Showing Relationship between Anxiety and Aggression

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aggression</td>
<td>51.2</td>
<td>15.665</td>
<td>-</td>
<td>0.63</td>
<td>0.328</td>
</tr>
<tr>
<td>2. Anxiety</td>
<td>16.75</td>
<td>4.502</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Correlation is significant at the 0.05 level(2-tailed)

Table 4 Summary of Multiple Regressions Showing Relationship between Independent Variables on Aggression

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>t-value</th>
<th>Std Error</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>63.224</td>
<td>12.291</td>
<td>5.144</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 5 Summary of Multiple Regression Showing Demographic Predictors of Aggression

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>t-value</th>
<th>Std Error</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>60.169</td>
<td>6.542</td>
<td>9.198</td>
<td>.000</td>
</tr>
<tr>
<td>Sex</td>
<td>-5.829</td>
<td>-2.287</td>
<td>2.548</td>
<td>.023</td>
</tr>
<tr>
<td>Ethnic</td>
<td>-2.221</td>
<td>-.701</td>
<td>3.170</td>
<td>.484</td>
</tr>
<tr>
<td>Parent type</td>
<td>7.372</td>
<td>1.399</td>
<td>5.271</td>
<td>.163</td>
</tr>
<tr>
<td>Age</td>
<td>-2.457</td>
<td>-1.502</td>
<td>1.636</td>
<td>.134</td>
</tr>
</tbody>
</table>

Dependent variable: Aggression

R²=0.84 Adjusted R²= 0.72

5. Discussion

Hypothesis one proposed that there will be a significant relationship between perceived stress and aggression. The result demonstrated that there was a significant relationship between aggression and perceived stress (r = 0.002; <0.05). This found that the higher the level of aggression, the higher the stress level among secondary school students. This was consistent with [20] which suggested that stress is positively correlated with aggression among adolescents. Similarly, if children’s coping mechanisms are weak, they tend to be aggressive in the face of stress [21]. However, being away from home, worrying about peer relationships, worrying about school work, changing bodies, and some of the daily stressors among teenagers may influence aggressive behaviour.

Hypothesis two stated that there will be a significant positive relationship between aggression and self-esteem. The result showed that there was a significant relationship between aggression and self-esteem (r = -0.166 and sig (0.01) < 0.05). This implies that the lower the levels of self-esteem, the higher the level of aggression. This finding supports the work of [22]. In their longitudinal study, they discovered a relationship between low self-esteem and anger among teenagers. [23] have observed that people with low self-efficacy are easily distracted and frustrated and in general frustration often leads to aggression. Furthermore, according to [24]. He found out that low self-esteem was related to aggression. As a follow up to this study, these researchers then explored the long-term consequences of self-esteem within the longitudinal data from the Dunedin Multidisciplinary Health and Development Study [3], [24].

Hypothesis three proposed showed that there was no significant relationship between aggression and anxiety (significance (0.328) > 0.05 level) and also (r) = 0.63. This means that anxiety did not significantly predict aggression among secondary students. This
result was in agreement with [25] who reported that anxiety among adolescents was negatively correlated with aggression. In other words, the higher the level of anxiety, the lower the level of aggression. 

Hypothesis four shows independent and joint significant relationship of perceived stress, self-esteem, anxiety on aggression among secondary school students. The table reveals perceived stress has a negative effect on aggression (-0.634) also self-esteem has a negative effect on aggression while anxiety has a positive effect on aggression. Based on the significant relationship of perceived stress, self-esteem, anxiety on aggression and negative value on the dependent variable, the result was in agreement with [25] who reported that anxiety among adolescents was negatively correlated with aggression. In other words, the higher the level of anxiety, the lower the level of aggression.

Hypothesis five proposed that demographic factors such as age, gender, ethnic group, parent type) will have a joint and independent relationship with aggression. This hypothesis investigates which of the socio demographic variable would predict aggression among adolescents. This was tested using multiple regression analysis and the result is present that age, gender ethnic group, parent type jointly predicted aggression (R²=0.780 P<0.05). This reveals that the presence of socio-demographic variables have significant independent predictors of aggression among secondary school students. Therefore, hypothesis four was partially accepted in this study since the coefficients the independent variables have positive and negative value on the dependent variable (Aggression).

5.1 Conclusion
In conclusion, this study gave us insights, which could inform therapist and service providers on future planning and implementation of provision for intervention.

5.1 Recommendations
Regular aggression management training and education must be offered in schools. When planning training and educational programs, the focus should be on interactional aspect in aggressive incidents. Parents are strongly advised to be abreast of the kind of movies their children watch. Reason being that children who are found of watching aggressive movies may consciously or unconsciously act out the aggressive action watched in the movies towards their friends.

References
to aggression, antisocial behavior, and delinquency. Psychological science, 16, 328-335.

Dr. Olatunji Samuel Olutunde holds a B.Sc. degree in Psychology; M.Sc. in Physiological Psychology, University of Ibadan, Nigeria, And a Ph. D. in Clinical Psychology of the Ekiti State University Nigeria. He is currently a Reader and Head of Department of Psychology Ekiti State University, Ado Ekiti, Nigeria. He has over twentyfive publications in both local and international Journals. He is a member of the Nigerian Psychological Association.