Depression, Anxiety, Stress and Psychosocial Functioning in School Going Adolescents

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Abstract

Background: Lifetime prevalence of the psychological morbidities, depression and anxiety increases to around 17% - 25% of the population by the end of the teens from 1% of the population below 12 years of age. The greatest increase in incidence occurs around 15 - 18 years. Some of the Indian studies have reported a prevalence of psychiatric illnesses in the range between 14.4% and 31.7%; thus, affecting psychosocial functioning and performance.

Methodology: The sample comprised of 100 students from 8th, 9th and 10th standard. The participants were administered a booklet containing demographic questionnaire, psychometric scales such as DASS (Depression, Anxiety and Stress Scale) and Strengths and Difficulties Questionnaire (SDQ).

Results: Statistical analysis done by using descriptive and inferential statistics i.e. mean, standard deviation (SD), percentages, Correlation analysis. The results indicate that there is negative correlation between prosocial behavior with difficulties, stress, depression, and anxiety whereas there is a positive correlation with all the other negative mental health indicators like conduct problems, peer problems, emotional symptoms and hyperactivity.

Conclusion: The current study shows that the symptoms of depression, stress and anxiety have significant effect on psychosocial functioning.

Keywords: Depression; Anxiety; Stress; Psychosocial Functioning

Introduction

In the current social scenario, Depression and anxiety are recognized as common, serious mental health problems and are affecting student population and adolescents on a large scale [1,2]. Lifetime prevalence of the psychological morbidities, depression and anxiety increases to around 17% - 25% of the population by the end of the teens from 1% of the population below 12 years of age [3,4].

DASS- 21 (Depression, Anxiety, and Stress Scale) is a scale which has 21 questions and is used to assess the link between anxiety, depression and stress among various population [5,6]. The scale has two versions; A short form (21 items) and a long form (42 items) which are valid and reliable measures in patient and general population [7,8], different racial and cultural groups [9,10].

Depression, Anxiety, and Stress Scale 21 has a lucid internal structure which is established by either analyzing items obtained from direct usage [7,10] or examining factor structure from usage of DASS-21 by participants in various studies [11].

Depression, anxiety, and stress affect functioning and performance of adolescents. Significant amount of time is spent in school with peers, which makes psychosocial functioning a vital mental health aspect. Strengths and Difficulties Questionnaire (SDQ) is one of the instruments employed widely to measure psychosocial functioning [14]. The scale measures five distinct domains of psychosocial functioning among adolescents namely: Hyperactivity/inattention, emotional symptoms, conduct problems, peer problems, and pro-social behavior [15,16]. Demographic variables have a deep effect on the expression of anxiety and depression depending on the perception of one’s self and also the social context. Another important finding in the various past studies is the lower prevalence of depression in males when compared to females, the higher prevalence in females is attributed to menarche [20,21]. In females anxiety, sleep, appetite disturbances, and fatigue are associated with depression [22]. Also, they are observed to have more body image dissatisfaction, concentration problems, and work difficulties [23]. Some of the differences are due to belief systems related to culture and help seeking attitude.

India has 20.5% adolescents of the world, amounting to around 2430 lakh young people, according to recent UNICEF report. Adolescence is said to be complex in nature, which has been recognized by the Indian Dharmashastra, which prescribes specific codes of behavior in this period. The cultural practices towards adolescents are influenced by traditional codes of conduct, even in the present day [25]. In accordance with Indian unified cultural values, youngsters are expected to follow group harmony and the family norms, even today [26].

There is the absence of statistical data about prevalence of mental health among Indian adolescents, Some of the Indian studies have reported a prevalence of psychiatric illnesses in the range between 14.4% and 31.7%; [27]. A recent study among South Indian urban adolescents, it was seen that 4.3% were severely depressed, 19.4% were moderately depressed, and 37.1% were mildly depressed [28]. According to a study done by Sahoo., et al. depressive symptoms were present in 18.5%, anxiety symptoms in 24.4%, and stress in 20% of young Indian males [29]. Both anxiety and depression were found in about 87% of participants [30]. Poor academic performance [31], suicidal behavior [32] are some of the adverse consequences of depression and stress.

Aim of the Study

Aims of the study were to investigate the role and effect of demographic variables, on psychosocial functioning, anxiety, depression, and stress.

Inclusion Criteria: Students from eighth, ninth and tenth standard who have consented for the study.

Exclusion Criteria: Students from eighth, ninth and tenth standard who are not healthy.

Materials and Methods

Participants: Sample consists of adolescents of eighth, ninth and tenth standard attending school. Telugu and English were the comfortable languages for the students. 100 was the total sample. Of 100 participants, 50 (50%) were males, and 50 (50%) were females. With respect to residence, 50 (50%) of participants resided in rural areas, whereas 50 (50%) were staying in urban areas, 50% were government school students and 50% were private school students. Informed consent was obtained from the parents and the school authorities. The privacy and confidentiality was assured.

Measure: Quantitative methodology was used to collect data. Various psychometric scales were given in the form of a booklet.

Strength and Difficulties Questionnaire [15] has 25-questions and is a brief behavioral screening scale. The questionnaire is rated on 3-point scale (0-2), "2" denoting certainly true an "0" denoting "Not True" and The questionnaire has five subscales - emotional symptoms, conduct problems, hyperactivity, peer relationship problems, and pro-social behavior. The sum of the total scores of the subscales except for pro-social behavior gives the total score for difficulties and sum of the items in each subscale gives their total score.

Depression Anxiety Stress Scales 21 [6,7] is a short version of a 42-item self-report instrument designed to measure the three negative emotional states of depression, anxiety, and stress. This is a 21-item scale measured on a 4-point rating scale (0-3), "3" denoting “applied to me very much, or most of the time” and "0" denoting "did not apply to me at all".
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Procedure
Data collection: The researchers contacted various schools located in Khammam and adjoining rural areas of Khammam to obtain permission for data collection. The permission was obtained from the school authorities. A one hour session was requested to the class teacher and booklets were distributed in the classroom. The booklet consisted of demographic performa sheet, and various scales including SDQ and DASS. The nature of the study was explained to the participants. Doubts were clarified and instructions were given to fill the booklet. Confidentiality of information was promised to the students.

Statistical analysis
The data was analyzed using SPSS 20.0.

Results

<table>
<thead>
<tr>
<th></th>
<th>Boys Mean</th>
<th>Boys SD</th>
<th>Girls Mean</th>
<th>Girls SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDQ</td>
<td>14.75</td>
<td>4.41</td>
<td>18.94</td>
<td>4.82</td>
<td>0.001*</td>
</tr>
<tr>
<td>Emotional problems</td>
<td>3.38</td>
<td>2.13</td>
<td>4.08</td>
<td>1.91</td>
<td>0.086</td>
</tr>
<tr>
<td>Conduct problems</td>
<td>3.66</td>
<td>1.92</td>
<td>3.2</td>
<td>1.55</td>
<td>0.190</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td>3.58</td>
<td>1.88</td>
<td>3.58</td>
<td>1.73</td>
<td>1.0</td>
</tr>
<tr>
<td>Peer problems</td>
<td>4.12</td>
<td>1.61</td>
<td>4.16</td>
<td>1.51</td>
<td>0.898</td>
</tr>
<tr>
<td>Prosocial score</td>
<td>5.96</td>
<td>2.72</td>
<td>7.6</td>
<td>1.41</td>
<td>0.0003*</td>
</tr>
<tr>
<td>Depression</td>
<td>17.12</td>
<td>6.44</td>
<td>16.56</td>
<td>6.57</td>
<td>0.667</td>
</tr>
<tr>
<td>Anxiety</td>
<td>18.12</td>
<td>6.36</td>
<td>17.28</td>
<td>6.003</td>
<td>0.498</td>
</tr>
<tr>
<td>Stress</td>
<td>16.44</td>
<td>5.74</td>
<td>17.52</td>
<td>5.38</td>
<td>0.334</td>
</tr>
</tbody>
</table>

Table 1: Comparison of SDQ and DASS between boys and girls.

The results indicate that there is negative correlation between prosocial behavior with difficulties, stress, depression, and anxiety whereas there is a positive correlation with all the other negative mental health indicators like conduct problems, peer problems, emotional symptoms and hyperactivity.

<table>
<thead>
<tr>
<th></th>
<th>Emotion r</th>
<th>P value</th>
<th>Conduct r</th>
<th>P value</th>
<th>Hyperact r</th>
<th>P value</th>
<th>Peer r</th>
<th>P value</th>
<th>Prosocial r</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>0.231</td>
<td>0.207*</td>
<td>-0.05</td>
<td>0.593</td>
<td>0.08</td>
<td>0.40</td>
<td>0.013</td>
<td>0.897</td>
<td>-0.03</td>
<td>0.76</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.0209</td>
<td>0.84</td>
<td>0.1296</td>
<td>0.20</td>
<td>0.22</td>
<td>0.02*</td>
<td>0.025</td>
<td>0.801</td>
<td>-0.03</td>
<td>0.76</td>
</tr>
<tr>
<td>Stress</td>
<td>0.113</td>
<td>0.91</td>
<td>0.248</td>
<td>0.01*</td>
<td>0.135</td>
<td>0.177</td>
<td>0.116</td>
<td>0.296</td>
<td>-0.0003</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 2: Inter domain correlation between SDQ and DASS.

Females possessed higher pro-social behavior mean as compared to males whereas males possessed level of difficulties score as compared to females. Rural adolescents differed from urban adolescents on pro-social behavior and anxiety. Government school and private school adolescents differed significantly on pro-social behavior stress and anxiety.

Discussion
The objective of the present study was to investigate the effect of demographic variables on DASS and SDQ.

Current study shows that, pro-social behavior is negatively correlated with difficulties, stress, depression, and anxiety whereas all the other negative indicators of mental health like emotional symptoms, peer problems, conduct problems and hyperactivity are correlated positively. Children’s temperament characteristics have consistently been shown as being related to skilled social behavior, pro-social behavior, cognitions and social competence [33]. Children with temperamental inhibition, who typically display fear, anxiety, and withdrawal when exposed with a range of new stimuli including people, objects, and situations, have been observed to show unoccupied behavior with signs of anxiety and are considered to be at risk for later peer rejection [33]. Higher frequency of pro-social behavior was linked to greater life satisfaction and pro-social acts for school students, males were observed to be engaging in fewer prosocial acts when compared to females. Females placed more importance on the social and psychological implications of pro-social behavior than males [34]. Based on gender roles, males are expected to be achievement oriented and independent whereas females are believed to be empathetic, pro-social and more responsive than males [35,36].

Residence tends to influence people’s behavior of caring and sharing due to their social psychological value. For instance, rural residents are more likely to help or share because urban residents are more individualistic whereas rural individuals have been used to live as a team, while. Present study also concludes that, relationship with parents has effect on pro-social behavior and total difficulties score. According to the literature, out of all the stages of one’s life, adolescence represents a stressful developmental period whereby many demands are imposed on the individuals by themselves and others [37]. Anxiety, stress, neuroticism, depression are a result of poor family environment in terms of parental rejection and parental hostility [38].

Though life needs stress constructively up to a certain limit and may be adequate for personality development, but if these stresses become too severe which disengage the psychic equilibrium producing maladaptive patterns of behavior: Inadequate interaction with environment and family leads to stress and anxiety [39]. In the same scenario, the adolescents’ attempts toward developing a self-concept may affect the parent-child relationship and disengage the balance in the family environment leading to conflicts, thereby creating ripples in the organization of the family leading to stress and anxiety as an other consequence [38].

**Conclusion**

Females have a higher prosocial score and better coping when compared to males. Research concerned with stress, anxiety and depression offers a number of opportunities for clarifying developmental psychopathology during adolescence. This area offers opportunities for research.

**Conflicts of Interest**

Nil.

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