Academic Performance and Emotional and Social Impairment among Adolescents

Mst. Afroza Parvin
Trainee Educational Psychologist
Dept. of Psychology, DU
&
Dr. Shaheen Islam
Professor
Dept. of Psychology, DU
Today’s presentation

• Definition of emotional and social impairment
• Studies related to emotional and social impairment
• Rationale of the study
• Objective of the study
• Study methods
• Results of the Study
• Discussion related to this study
• Further investigation
• Conclusion
Emotional impairment

According to Federal Definition CFR 300.8 (c) (4)

Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance

(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors;

(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
C) Inappropriate types of behavior or feelings under normal circumstances

(D) A general pervasive mood of unhappiness or depression

(E) A tendency to develop physical symptoms or fears associated with personal or school problems.
Social Impairment

- Absence of federal guidelines

- Diagnostic and Statistical Manual of Mental Disorders (DSM) of the American Psychiatric Association classification system for identifying social maladjustments (DeYoung, 1984; Kester, 1983; Slenkovich, 1983)

- This system equates internalized emotional problems with serious emotional disturbance, and externalized behavior or conduct problems with social maladjustment.
Practitioners in the field are aware

• that students' conduct disorders and emotional disturbances do not fit neatly into mutually exclusive categories.

• that the vast majority of students referred and served by special education as seriously emotionally disturbed exhibit problems which are externalizing, acting out, or conduct related.
No strictly defined boundaries in the diagnostic process

Very common for students who have conduct problems to also be found to have one or more other problems such as attention deficit / hyperactivity or depression at the same time (Gresham, Lane & Lambros, 2000; Lahey & Loeber, 1997; Lahey, McBurnett & Loeber, 2000, Davis, Sheeber, & Hops, 2002).
Emotional and social impairments include:

- Depression
- Anxiety
- Withdrawal
- Immaturity
- Aggressive behavior
- Conduct behavior
- Attention deficit hyperactive disorder (ADHD)
Emotional and social impairment and poor academic performance

Various studies had demonstrated an association:

- Poor academic performance is one of the general characteristics of students with emotional & social impairment (Kneedler, 1984).

- Anxiety disorders are associated with lower academic achievement (Stein & Kean, 2000; Woodward & Fergusson, 2001; Kessler, 2003).

- Depression is associated with lower academic achievement (Asarnow et al., 2005; Chen et al., 1995; Marmorstein and Iacono, 2001).
Rationale of the study

• This study would provide insight among the professionals in the related fields about emotional and social stability of adolescents in relation to their academic performance

• Would make teachers and authority aware of emotional and social problems of adolescent

• Would be helpful to improve academic performance of students
Objective of the study

General objective:
To see the relationship between emotional and social stability and academic performance among adolescents.

Specific objectives:
- To determine reliability of “Beck Youth Inventories™ of Emotional and Social Impairment (BYI)”
- To determine validity of “Beck Youth Inventories™ of Emotional and Social Impairment (BYI)”
- To determine the relationship between each of the inventories (self-concept, anxiety, depression, anger, & disruptive behavior) and academic performance
Methodology

The present study has two phases-

- Phase-1: Psychometric properties (reliability & validity)
- Phase-2: relationship between emotional & social impairment and academic performance
Phase-1: Psychometric properties

- 4 schools of Dhaka city were randomly selected from those recognized by Board of Intermediate and Secondary Education.

- Total 100 (50 boys & 50 girls) students of 6th & 7th grade were randomly selected from those schools (25 from each school).
## Sampling distribution (phase-1)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Sex</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>boys</td>
<td>girls</td>
</tr>
<tr>
<td>Grade 6</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>Grade 7</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>
Phase-2: relationship between emotional & social impairment and academic performance

- One school was selected purposively on the basis of class roll reflecting academic performance. The grade levels were also selected purposively to cover adolescence age range.

- All students (total=100; boys=46, girls=54) of two classrooms (6th & 7th grade) were taken as a sample.
## Description of the sample (phase-2)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Sex</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>boys</td>
<td></td>
</tr>
<tr>
<td></td>
<td>girls</td>
<td></td>
</tr>
<tr>
<td>Grade 6</td>
<td>21</td>
<td>31</td>
</tr>
<tr>
<td>Grade 7</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>54</td>
</tr>
</tbody>
</table>
Measure of emotional & social impairment

- Original English version of the “Beck Youth Inventories™ of Emotional and Social Impairment (BYI)” and Bangla version of the “Beck Youth Inventories™ of Emotional and Social Impairment (BYI)” (Islam & Parvin 2009) were used to measure emotional and social stability.
Beck Youth Inventory (BYI)

BYI consists of five self-report inventories can be used separately or in combination to quickly assess symptoms of depression, anxiety, anger, disruptive behaviour and self-concept in children and early adolescents.

Five self-report inventories are-
- Beck self-concept inventory for youth (BSCI-Y)
- Beck anxiety inventory for youth (BAI-Y)
- Beck depression inventory for youth (BDI-Y)
- Beck anger inventory for youth (BANI-Y)
- Beck disruptive behavior inventory for youth (BDBI-Y)
Instruments for determining validity

- Piers-Harris Children’s self-concept Scale (Begum & Haque, 1976)
- Adapted version of Taylor’s “Children form of Manifest Anxiety Scale (Afroze, 1984)
Measure of academic performance

- Merit list of students was used to measure academic performance.
Phase 1: Psychometric properties

- BYI was translated into Bangla and checked by experts in the field.
- To determine test-retest reliability, the Bangla version of BYI was administered twice to a group of 100 students (boys=50, girls=50) of 6th & 7th grade. The interval between two administrations was 14 days.
- The internal consistency was measured by computing Cronbach’s alpha.
- To determine congruent validity, Piers-Harris Children’s self-concept Scale & Adapted version of Taylor’s “Children form of Manifest Anxiety Scale” was also administered to this group.
- Inter-correlation among five inventories were computed by analyzing Pearson’s product moment correlation.
Phase-2: relationship between emotional & social impairment and academic performance

- Bengali version of the “Beck Youth Inventories™ of Emotional and Social Impairment (BYI)” (Islam & Parvin, 2009) was administered to all students (total = 100, boys = 46 & girls = 54) of two classrooms who were in 6th & 7th grade.

- Then the students in each grade was divided into three groups. Students who were between 1 to 22 in the merit list grouped as top one-third, students between 23 to 45 in the merit list grouped as middle one-third and students between 46 and 69 in the merit list grouped as bottom one-third.

- T-test was used to analyze the relationship between five inventories and academic performance
Results

Presented in two phases-

• Phase-1: Psychometric properties (reliability & validity)

• Phase-2: relationship between emotional & social impairment and academic performance
Reliability of the scale:

- Co-efficient alphas of each of the five inventories ranged from .54 to .84.
- Test-retest reliability of each of the five inventories ranged from .54 to .91.
Validity of the scale

- Inter-correlations among each inventories was significant at 0.01 level

- Correlation among BSCI-Y and other inventories were negative & significant at 0.01 level

- Correlation between BSCI-Y and Piers-Harris Children’s Self-concept Scale was .72

- Correlation between BAI-Y and Adapted version of Taylor’s “Children form of Manifest Anxiety Scale was .69
# Relationship between Emotional & Social impairment and academic performance

<table>
<thead>
<tr>
<th>Inventories</th>
<th>Group</th>
<th>N</th>
<th>Mean (SD)</th>
<th>Standard deviation</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-concept (BSCI-Y)</td>
<td>Top one-third</td>
<td>31</td>
<td>41.58</td>
<td>8.33</td>
<td>3.56**</td>
</tr>
<tr>
<td></td>
<td>Bottom one-third</td>
<td>40</td>
<td>34.20</td>
<td>9.04</td>
<td></td>
</tr>
<tr>
<td>Anxiety (BAI-Y)</td>
<td>Top one-third</td>
<td>31</td>
<td>11.55</td>
<td>6.63</td>
<td>-2.94**</td>
</tr>
<tr>
<td></td>
<td>Bottom one-third</td>
<td>40</td>
<td>16.88</td>
<td>8.20</td>
<td></td>
</tr>
<tr>
<td>Depression (BDI-Y)</td>
<td>Top one-third</td>
<td>31</td>
<td>8.70</td>
<td>8.02</td>
<td>-3.55**</td>
</tr>
<tr>
<td></td>
<td>Bottom one-third</td>
<td>40</td>
<td>16.30</td>
<td>9.94</td>
<td></td>
</tr>
<tr>
<td>Anger (BANI-Y)</td>
<td>Top one-third</td>
<td>31</td>
<td>9.77</td>
<td>6.68</td>
<td>-3.42**</td>
</tr>
<tr>
<td></td>
<td>Bottom one-third</td>
<td>40</td>
<td>17.55</td>
<td>11.18</td>
<td></td>
</tr>
<tr>
<td>Disruptive behavior (BDBI-Y)</td>
<td>Top one-third</td>
<td>31</td>
<td>3.06</td>
<td>2.61</td>
<td>-2.52**</td>
</tr>
<tr>
<td></td>
<td>Bottom one-third</td>
<td>40</td>
<td>5.67</td>
<td>5.26</td>
<td></td>
</tr>
</tbody>
</table>

***All of the t values were significant at 0.05 level
Discussion

- Bangla version of BYI of can be considered as a good measure of emotional and social impairment from children between 11-14 years.
- Students in the top one-third had significantly higher self-concept and better academic performance than are bottom one-third.
- Students in the bottom one-third were higher in anxiety, depression, anger and disruptive behavior and were lower in academic performance than top one-third.

- These findings were supported by many studies discussed in the previous section.
Further investigation

- Sample unit from all parts of Bangladesh to extend the usability of BYI and to develop norms.

- Studies are invited for determining congruent validity of BDI-Y, BANI-Y, BDBI-Y

- Phase 1 of this study can be replicated for other grades and age ranges (7-14)

- In-depth studies can be used to investigate whether emotional & social stability cause poor academic performance or poor academic performance leads to emotional & social instability.
Conclusion

- Professional helps needed to breaking the cycle between emotional & social instability and poor academic performance.

- Educators need to consider the emotional aspects of students as important as cognitive aspect.
ANY QUESTIONS
THANKS A LOT