Risk and Protective Factors of Emotional and Behavioral Problems in School Children: A Prevalence Study

Sadia Saleem and Zahid Mahmood
University of Management and Technology

A sample of 5053 school children (51% girls and 49% boys) with the age range of 13-17 (\(M = 14.40, SD = 1.25\)) from 43 government schools in the city of Lahore were selected through multistage sampling method. An indigenously developed School Children Problems Scale (SCPS; Saleem & Mahmood, 2011) was used as a self report measure to determine the prevalence of emotional and behavioral problems of children. Going by the intensity measure on the total of SCPS 31% participants fell in the severe category (one standard deviation above the mean) of these 16% fell in the very severe category (two standard deviations above the mean). By the frequency count, 21% of the sample scored above the 90th percentile. The most frequently reported problem was Anxiousness (16%) followed by Feelings of Rejection (15%) and Academic Problems (15%). Results are discussed in terms of the manifestation of emotional and behavioral problems in school children in traditional and collectivistic cultures, and their relationship with social demographic factors was also explored.

Keywords: School children, prevalence, emotional and behavioral problems.

The new trends and advancements in the field of psychology also focused on emotional and behavioral problems of children and adolescents (Wilmshurst, 2009). New classification systems and more sophisticated assessment procedures were developed to identify children with mental health problems (Scott, 2002). With the passage of time the concept of mental illness was replaced by mental health,
quality of life, and well-being of children (Park, 2004; Teachman, 2008).

In recent times, childhood and adolescent period is considered to be very crucial, as this period of growth and development is influenced by biological, physical, emotional, and social factors (Nicolson & Ayers, 1997). Moreover, beside developmental changes, children faces many parental and social pressures that also make this period quite stressful and thereby rendering the child more vulnerable to developing emotional, psychological, and behavioral problems (Caspi, Taylor, Moffitt, & Plomin 2000; Rowling, 2006). These problems might be manifested in terms of academic, emotional, social, and psychological difficulties. Usually, these problems tend to fade away in time but if persist, may lead to serious negative consequences (Saluja et al., 2004; Slemming et al., 2010).

The problems faced by school children are usually referred to as emotional and behavioral problems or afterwards the terms of internalizing and externalizing problems (Achenbach & Edelbrock, 1978). Internalizing problems are referred to more over controlled behaviors which include symptoms related to depression, anxiety, social withdrawal, and somatic complains (Baker, Grant, & Morlock, 2008; Merrell, 2001). Externalizing problems are referred to more under controlled and overt behaviors including aggression, acting out tendencies, disruptive, defiant, and hyperactive behaviors (Merrell, 2003; Zahn-Waxler, Klimes-Dougan, & Slattery, 2000).

Throughout the world various epidemiological studies have been carried out to look at the pattern, frequency, and prevalence of emotional and behavioral problems in children and adolescents (e.g., Breton et al., 1999; Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Erol, Simsek, & Munir, 2010; Lau & Kan, 2010; Slade, 2007; Slemming et al., 2010). For example, in order to determine the prevalence rate of emotional and behavioral problems among Saudi schoolchildren and adolescents, the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) Parent-Form was used. The sample consisted of 1313 children with the age range of 6-18 years. The results showed that 8.30% adolescents were estimated to be disturbed emotionally and behaviorally (Abdel-Fattah et al., 2004). It was also found that the prevalence of internalizing problems was higher than externalizing problems. In another prevalence study, Emami, Ghazinour, Rezaeishiraz, and Richter (2007) studied 4599 adolescents in Iran by using General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988). It was found that about 19.50% of the adolescents scored above the cut-off point. Moreover, age and gender were found to be significantly related with the mental health problems of
adolescents as girls were significantly higher on mental health than boys and adolescents of 18 years old have more problems than adolescents of 17 years.

Liu, Kurita, Sun, and Wang (1999) carried out a study on a Chinese sample of 1695 children between the ages of 6-11 years. Parents were used as informants on the Chinese version of CBCL (Achenbach & Rescorla, 2001). Stratified-cluster sampling technique was employed to select the sample. The results revealed that according to parental ratings, overall prevalence of child psychopathology was found to be about 17.20%. Boys showed more problems than girls. Logistic Regression analysis showed that early separation was found to be significant predictors of child psychopathology. The risk factors included disturbed marital relationship between parents and family conflict. Canino et al. (2004) studied the prevalence of DSM-IV (1994) disorders in children and adolescents. The sample consisted of 1886 children of 4-17 years of age. A multistage sampling technique was used to select the sample. Results indicated that the overall prevalence rate was found to be 19.80% with ADHD and ODD being the most frequently reported disorders.

Barkmann and Schulte-Markwort (2005) studied the prevalence of emotional and behavioral problems in children and adolescents in Germany. Self report and parental rating on CBCL was used. The sample consisted of 1950 children and adolescents of ages 4-18. The prevalence rate was found to be between 10% to 18% in children and adolescents. Elhamid, Howe, and Reading (2009) carried out a prevalence study of emotional and behavioral problems in Egypt. The sample consisted of 1186 children 6-12 years of age. The Strength and Difficulties Questionnaire (SDQ; Goodman, 1997) was used and parents and teachers were the informants. According to teachers, 34.70% of the children were showing abnormal behaviors; among them 27.70% children were found to have conduct problems. According to the parents’ ratings 20.60% children fell in abnormal category with more frequently reported conduct and peer related problems.

Roberts, Atkinsson, and Rosenblatt (1998) provided a comprehensive and critical overview on the various studies of prevalence of emotional and behavioral problems of children and adolescents focusing on the methodological issues and current trends. They reviewed 52 prevalence studies carried out in different parts of the world on children’s and adolescents’ mental health problems. This interesting review of diverse methods and designs revealed that the prevalence rate of child psychopathology ranged from 1% to 51%
with the mean of 15.80%. Roberts et al. (1998) have also identified various factors that possibly influence the wide variations in the prevalence rates of emotional and behavioral problems. These included the use of different selection criteria of sample, varied sample sizes, different information sources, the criteria of defining problems and assessment procedures used in the assessment of the mental health problems of children and adolescents.

Another possible source of variation in prevalence rates is the use of assessment tools that may not be culturally sensitive and linguistically appropriate (Canino et al., 2004). Cultural values and social background of an individual play a vital role in shaping and developing human behavior. Social values and norms to define what a problem is may vary considerably from culture to culture (Marsella, 1988). The question of using different classification systems and measurement procedures in various cultures was also raised. The traditional assessment tools for psychological problems are generally based on a standard set of definition, classification criteria, developed in different languages and standardized on different populations. As a result, these tools may have limited applicability and would add little to the understanding of problematic behavior in different cultures (Matsumoto, 2000). Therefore, it is difficult to have an accurate estimation of emotional and behavioral problems comparable across diverse set ups and cultures.

Despite, the large variation in prevalence rates, that fact remain there that increasing number of children are reported to have emotional and behavioral problems (Achenbach, Dumenci, & Rescorla, 2002; Al-Gelban, 2007; Collishaw, Maughan, Goodman, & Pickles, 2004). It is also widely acknowledged that if emotional and behavioral problems remain unidentified or untreated, these may have long lasting impact not only on various domains of functioning of child’s life but also the families and society at large (e.g., Listug-Lunde, Zevenbergen, & Petros, 2008; Okwumabua, Wong, & Duryea, 2003; Suveg, Zeman, Flannery-Schroeder, & Cassano, 2005) ranging from poor school performance, sense of rejection, unemployment and psychiatric problems in later years (e.g., Hughes, Lourea-Waddell, & Kendall, 2008; Mash & Wolfe, 2005; Nock & Kazdin, 2002; Turner, Finkelhor, & Ormrod, 2010).

Literature also identified many psychosocial factors that may become risk factors for developing emotional and behavioral problems of children (e.g., Muris, Mayer, Reinders, & Wesehagens, 2011). These risk factors not only increase the severity but also the complexity of the problems. There is a wide range of predisposing factors including age and gender of the child (Bilancia & Rescorla,
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2010; Maikovich-Fong & Jaffee, 2010; Shaw, Dallos, & Shoebridge, 2009), parental educational status (e.g., Semke, Garbacz, Kwon, Sheridan, & Woods, 2010; Silver, Measelle, Armstrong, & Essex, 2010), family system and family size (Luoma et al., 1999), socioeconomic status (Slobodskaya & Akhmetova, 2010) and the quality of parent-child relationship (Moss, Bureau, Béliveau, Zdebik, & Lépine, 2009). To sum up, there are a number of associated risk factors have been identified in the Western literature, yet it will be important to note that how these factors operate in a collectivistic culture like Pakistan. It is also evident from the literature that specific cultural and socio demographic background of the child should also be taken into account while determining the risk and protective factors of child psychopathology in any community (Heitlich & Goodman, 2004).

In Pakistan, the population estimate of around 175 million, 32% living in rural and 68% living in urban areas, with 43% of the population being under 15 years (Federal Bureau of Statistics, 2011). Awareness about the children and their mental health problems remains neglected in this developing society. There is a dearth of systematic studies to determine the pattern and the frequency of emotional and behavioral problems of children and adolescents. This lack of mental health services mirrors the lack of awareness and the paucity of epidemiological data to provide the magnitude of the problem. Very few systematic studies have been carried out in Pakistan to address this crucial and important issue of emotional and behavioral problems in children. For instance Javed, Kundi, and Khan (1992) investigated the prevalence of emotional and behavioral problems of children in Lahore by using Children’s Behavior Questionnaire (Rutter, 1967). Teachers were used as informants and the sample consisted of 225 children with the age range of 9-11 years. The findings indicate that the most common problem was antisocial behavior with the prevalence rate of 9.30%.

Syed, Hussein, and Mahmud (2007) provided the account of emotional and behavioral problems amongst 5-11 years old school children in Karachi. The sample consisted of 675 parents. The SDQ (Goodman, 1997) parents’ version was used. It was found that 47% of children were rated as normal, 19% as borderline, and 34% as abnormal. As far as gender is concerned, parents reported no gender difference on emotional, peer problems and prosocial except on conduct problems where boys scored significantly higher than girls. In another study, Syed, Hussein, and Haidry (2009) found the prevalence of emotional and behavioral problems of children studying in primary schools of Karachi. The parent and teacher versions of SDQ were
used. Overall findings suggest that parents rated 34.40% children on abnormal category whereas teacher rated 35.80% children on the abnormal category. However, the above mentioned studies carried out in similar culture are not comparable as they used different tools, different populations, different informants and culturally alien tools to assess emotional and behavioral problems faced by children.

In spite of this wide variation in the prevalence rates of Emotional and Behavioral Problems (EBP) in children, psychological studies have revealed that a sizable population in children and adolescents do have issues relating to mental health functioning. The roots of these problems lie in childhood experiences. Also, there is an ample evidence to suggest that there is a need of early and timely identification of mental health problems to avoid the complexities and related dysfunctions in a child’s life. Therefore, in order to determine the extent of emotional and behavioral problems, a large scale prevalence study should be carried out with the self report as the medium of information and using culturally sensitive and psychometrically sound assessment procedures.

The aims and objectives of this study were, firstly to determine the prevalence of emotional and behavioral problems of school children. Secondly, to determine the risk and protective factors such as age, gender, class, parental education, and family system for developing emotional and behavioral problems of school children.

**Method**

**Population**

The study was carried out in the city of Lahore, the second largest city of Pakistan and the provisional capital of the province of Punjab. According to the demographical picture of Lahore, the estimated population is about ten million, where 96% population is Muslim and the rest 4% comprise Christianity, Hinduism, and Sikhism (Federal Bureau of Statistics, 2011). The educational setup in Pakistan consists of three parallel educational systems namely government run schools, private schools and the madrassas (attached to mosques, where formal education accompanied with religious education). In order to maintain the homogeneity of the sample, only the government schools were selected which accounted for almost 90% of school going children in Pakistan. These schools follow the same curriculum, examination system, time table, exam schedule, and medium of instruction i.e. Urdu (the national language of Pakistan).
Participants

In this research, total 50 schools were contacted (25 boys and 25 girls) from all the nine towns of Lahore, among them 43 gave permission for data collection.

A multistage sampling technique was used to select the participants. In the first stage, stratified sampling technique was used for dividing the sample of government schools into two main strata including boys and girls schools of Lahore. In the second stage, the two main strata were further divided into three substrata according to grade including 8th, 9th, and 10th with the age range of 13-17 years. At the last stage, the participants were selected through systematic random sampling where every 3rd child was selected from each grade. Initially, the sample consisted of 5227 school children. Overall, 174 (3%) protocols were discarded on the basis of missing personal information or incompletion of final protocol. In this way, the final sample consisted of 5053 participants (boys 49% and girls 51%) of grade 8th, 9th, and 10th. The mean age of the sample was 14.40 years ($SD = 1.25$). The sample was collected from 43 mainstream government schools of Lahore (19 boys and 24 girls).

Instruments

Demographic Performa. A demographic performa was developed in the light of literature and those demographic variables were added which were found to be associated with emotional and behavioral problems. It includes age, gender, parental education, parental occupation, number of siblings, and family type.

School Children Problems Scale. The emotional and behavioral problems were measured through an indigenously developed self-report measure School Children Problems Scale (SCPS; for full detail see Saleem & Mahmood, 2011). Briefly, SCPS was developed by using emic (Berry, 1989) and bottom up approach (Achenbach & Rescorla, 2007), in three stages, that is, in the first stage, presenting problems of 103 referred school children (45% boys and 55% girls) were collected. In the second stage, 129 problems were rated by 20 experienced school/clinical psychologists on their frequency of occurrence in school children. One hundred nine problems most frequently observed (90%) formed the basis of the
SCPS. In the last stage, after pilot testing, SCPS with 109 items and a 4-point rating scale was standardized on a sample of 853 school children selected through multistage sampling (51% girls and 49% boys). The Principal Component Factor Analysis of SCPS resulted in a six factor solution namely Anxiousness, Academic Problems, Aggression, Withdrawal, Feelings of Rejection, and Somatic Problems. Anxiousness contain 23 items e.g., “worrying”, “fear to take initiative”, “fear of the unknown”, “unable to express”, “easily get worried”, and “fearful”. The items denote to a generalized state of apprehension marked by a fear of failure, overwhelming functioning of the child. The second factor Academic Problems denoted to a lack of interest and motivation in studies and absence of basic academic skills e.g., “loss of interest in studies”, “inability to concentrate”, “lack of confidence”, “fear of exams and failure”, and “carelessness”. The third factor Aggression reflects a conduct that is offensive and irritating towards others around e.g., “problems of loosing temper easily”, “inability to sit still”, “use of abusive language”, “argues a lot”, “teasing”, “interfering”, and “annoying others”. The fourth factor Social Withdrawal denote to avoidance, lack of involvement in social interaction with others around e.g., “avoiding friends”, “prefers to stay quiet”, “irritability”, and “staying one place for long time”. The items on Feelings of Being Rejected denote to a feeling of being unloved, ignored or disliked specially by parents e.g., “feelings of being rejected by teachers and parents”, “lack of parental interest in my studies”, “no one cares for me”. The last factor is related to psychosomatic symptoms often associated with stress, pressure and tension e.g., “headache”, “feelings of nausea”, “panic”, “dizziness”, “cold sweats”, and “tension”.

The SCPS was found to have acceptable psychometric properties. The Cronbach Alpha was .92 and one week test-retest reliability was .79. The split half reliability of SCPS was .89. A significant positive correlation was found between SCPS and two broad band scales of the Youth Self Report of CBCL (YSR; Achenbach & Rescorla, 2001), with Internalizing Problems ($r = .76$) and with Externalizing Problems ($r = .70$).

**Procedure**

Initially, 50 schools were contacted and brief description of the aims of the current research was sent to them. Forty three school authorities responded positively. Each school was personally visited by the researchers for obtaining consent and school authorities were
informed about the aims and the objectives of the research and they were assured that all the information would be kept confidential and only be used for research purposes.

All the participants were given the choice whether they want to participate in the present study or not. All those who agreed to participate were assured that their information would be kept confidential and it would not be shared with their school authorities. All the participants then provided the final protocol for testing comprising demographic information and SCPS. The instructions were given in Urdu. It took about 20 minutes to complete the protocol. After completion, each group was given about another 20 minutes for asking any questions, feedback, and debriefing. It was also made sure by the researcher to minimize the attrition rate and missing data. After each testing, all the protocols returned by the participants were checked for missing information.

Results

After data collection, all data was recorded properly with special considerations given to privacy and confidentiality of the research participants. Descriptive statistics were computed for the demographic variables. Means and standard deviation were computed for all the six subscales and total score of SCPS. Subscales and total scores were compared for gender, age groups, and class. The association with demographic variables with total SCPS score was examined using Ordinal Logistic Regression.

Table 1
Means and Standard Deviations of Age, Number of Siblings, and Parental Education (N=5053)

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>14.40</td>
<td>1.25</td>
</tr>
<tr>
<td>No. of siblings</td>
<td>3.71</td>
<td>1.73</td>
</tr>
<tr>
<td>Father education (years)</td>
<td>8.45</td>
<td>5.47</td>
</tr>
<tr>
<td>Mother education (years)</td>
<td>7.10</td>
<td>5.50</td>
</tr>
</tbody>
</table>

The Table 1 indicates that the mean age of the participants is 14.40 years (SD = 1.25). The average number of siblings of the
current sample was 3.71 (SD = 1.73). As far as the parental education is concerned, father’s education in terms of years of education the mean was 8.45 (SD = 5.47) and for mother’s education mean was 7.10 (SD = 5.50). This Table helped in further categorization of the sample in various demographic groups.

Table 2
*Demographic Characteristics of the Participants (N= 5053)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>49</td>
<td>51</td>
<td>100</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th</td>
<td>32</td>
<td>34</td>
<td>33</td>
</tr>
<tr>
<td>9th</td>
<td>41</td>
<td>33</td>
<td>37</td>
</tr>
<tr>
<td>10th</td>
<td>27</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>Age Groups (in Years)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 or less</td>
<td>45</td>
<td>66</td>
<td>55</td>
</tr>
<tr>
<td>15 or more</td>
<td>55</td>
<td>34</td>
<td>45</td>
</tr>
<tr>
<td>No. of siblings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 or less</td>
<td>47</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>4 or more</td>
<td>53</td>
<td>48</td>
<td>51</td>
</tr>
<tr>
<td>Father’s Education (year)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 (Primary)</td>
<td>35</td>
<td>23</td>
<td>29</td>
</tr>
<tr>
<td>6-10 (Matric)</td>
<td>39</td>
<td>31</td>
<td>35</td>
</tr>
<tr>
<td>10+(College)</td>
<td>26</td>
<td>46</td>
<td>36</td>
</tr>
<tr>
<td>Mother’s Education (year)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 (Primary)</td>
<td>51</td>
<td>28</td>
<td>39</td>
</tr>
<tr>
<td>6-10 (Matric)</td>
<td>32</td>
<td>36</td>
<td>34</td>
</tr>
<tr>
<td>10+(College)</td>
<td>17</td>
<td>36</td>
<td>27</td>
</tr>
<tr>
<td>Mother’s Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>96</td>
<td>93</td>
<td>94</td>
</tr>
<tr>
<td>Working</td>
<td>4</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Family System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>74</td>
<td>61</td>
<td>67</td>
</tr>
<tr>
<td>Joint</td>
<td>26</td>
<td>39</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 2 shows that slightly more girls (51%) than boys (49%) participated in the current study. Table 2 also indicates that there were
predominantly more participants from 9th grade (37%) than from 8th and 10th grades. The age groups were derived on the basis of means and SD of the participants, it was found that there were more participants in 14 or less category (55%) than 15 or more group (45%). As far as the family size was concerned, there were slightly more participants whose number of siblings was 4 or more (51%). The Table 2 also showed that there were slightly more children whose fathers’ education was college level or higher (36%). As far as mother’s education was concerned 39% had completed 10 years of schooling. There were more housewives (94%) than working. Moreover, the greater portion of participants was living in nuclear family system (67%) than in a joint family system.

Prevalence of Emotional and Behavioral Problems

In order to determine the prevalence of emotional and behavioral problems, the raw frequencies of the sample falling in each of the 10th percentile were calculated for six factors and the total score respectively. The sample was also divided into four categories of severity of emotional and behavioral problem scores according to means and the standard deviations in the following manner. These four categories are mild (2 SD below the mean), moderate (1 SD below the mean), severe (1 SD above the mean), and very severe (2 SD above the mean).

Table 3
Distribution of Percentile Points on Total and Six Factors of SCPS
(N= 5053)

<table>
<thead>
<tr>
<th>Percentile Points</th>
<th>Anx II</th>
<th>Acad II</th>
<th>Agg III</th>
<th>Withd IV</th>
<th>Rej V</th>
<th>Som VI</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10</td>
<td>11</td>
<td>11</td>
<td>14</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>20</td>
<td>11</td>
<td>12</td>
<td>9</td>
<td>10</td>
<td>14</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>30</td>
<td>8</td>
<td>9</td>
<td>11</td>
<td>14</td>
<td>9</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>40</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Continued....
Table 3 revealed that if we consider 90th Percentile as cut-off point for severe disturbance of emotional and behavioral problems, there are about 21% children reported to have severe emotional and behavioral problems.

Table 4

Distribution of the Participants on Six Factors and Total Problems Scores of SCPS (N = 5053)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Very Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiousness</td>
<td>15</td>
<td>38</td>
<td>31</td>
<td>16</td>
</tr>
<tr>
<td>Academic</td>
<td>15</td>
<td>43</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>Aggression</td>
<td>19</td>
<td>36</td>
<td>32</td>
<td>13</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>21</td>
<td>35</td>
<td>36</td>
<td>8</td>
</tr>
<tr>
<td>Rejection</td>
<td>25</td>
<td>38</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>Somatic</td>
<td>16</td>
<td>41</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>SCPS Total</td>
<td>16</td>
<td>37</td>
<td>31</td>
<td>16</td>
</tr>
</tbody>
</table>

Note. SCPS = School Children Problem Scale

The Table 4 indicated that about 16% of school children have more serious emotional and behavioral problems which fall on the “very severe” category. The results also revealed that if we consider the “very severe” category only, most frequently reported emotional and behavioral problems are anxiousness (16%), academic problems (15%), and feeling of being rejected (15%). In other words about 16%
of the participants have shown serious emotional and behavioral problems and also need clinical attention.

**Risk and Protective factors of Emotional and Behavioral Problems**

The Ordinal Logistic Regression was carried out by using gender, class, age, number of siblings, parental education, and family system as potential predictors of emotional and behavioral problems in school children. In the initial analysis, gender and class were found to be significant; whereas age of the child, number of siblings, and parental education were found to be non significant. Consequently, step by step all the non significant variables were dropped from the analysis. In this way, the final model included gender, class, and the family system. The results of the final model are presented in Table 5.

Table 5

*Ordinal Logistic Regression Analysis for Identifying Factors Associated with the Four Categories of SCPS (N = 5053)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>Odd Ratio</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (Boys) *Girls</td>
<td>.35</td>
<td>.09</td>
<td>1.42</td>
<td>1.18</td>
<td>1.70</td>
<td>.001</td>
</tr>
<tr>
<td>Grade (8th) *10th</td>
<td>.41</td>
<td>.09</td>
<td>1.55</td>
<td>1.02</td>
<td>1.84</td>
<td>.001</td>
</tr>
</tbody>
</table>

*Reference category in parentheses.

Findings of Table 5 indicate ordinal regression model, the outcome variable i.e., emotional and behavioral problems of school children was regressed on the two predictors, the Gender and the Grade which were simultaneously entered in the model. Table 5 revealed that gender and grade were found significant predictors of emotional and behavioral problems of the participants. In other words, girls were at greater risk of developing emotional and behavioral problems than boys. Educational level of the participants was also found to be a significant predictor of emotional and behavioral problems as going from 1, 2, to 3 (from 8th, 9th, and 10th class), we expect children from 10th grade were more likely to have higher level of emotional and behavioral problems.

Odds Ratios were used to indicate the extent of unique predictor effect. The results revealed that odds of girls for having emotional and
behavioral problems were 1.42 times than the odds of boys having emotional and behavioral problems. While considering the effect of educational class, children studying in 10th class are more likely to have emotional and behavioral problems (Odd Ratio = 1.55) than children of 8th class.

**Discussion**

As society was awakened by social and political changes, rapid industrialization and mass education, interest in the welfare of children has also increased (Wilmshurst, 2009). From an object of exploitation, cheap labour fit to do dirty and dangerous jobs, the child, as the father of tomorrow, started to be treated not as a minion but a prized possession (Gelfand, Jenson, & Drew, 1997). Accordingly, many psychological, social, and sociological theories highlighted the importance of healthy growth and development (Berk, 2006). Most theories posit that early experiences are among the most crucial factors in the development of the child. Bad experiences would result in anti social, immoral, and mentally unstable adulthood. Still children were regularly subjected to abuse, neglect, coercion, inhuman treatment, and they continue to suffer from deprivation of their fundamental rights in large parts of the developed world and the most of the developing world (Wenar & Kerg, 2000). The number of children suffering from emotional behaviour problems became a hallmark of the civilized society. However, researches showed an incredulously wide variation in the prevalence rates of these problems from 1%-50% (Roberts et al., 1998). The disparate results were indicative more of a lack understanding of the issues involved, appropriateness and subtlety of research techniques than a paucity of research in this area.

Another alarming trend may be observed in many prevalence studies is related to diagnosing children and adolescents with psychological disorders (e.g., Ezpeleta, Keeler, Erkanli, Costello, & Angold, 2001). Contrary to the prevalent trend, the current research has focused on identifying the patterns, frequency and intensity of emotional and behavioral problems in an urban sample of school children. The problems faced by children and adolescents may be the result of continuous growth and development where a child is developing from every aspect having to face many challenges and pressures (Buist, Dekovic, Meeus, & Van Aken, 2004; Rowling, 2006). So the problems faced by children may be of transitory nature and tend to fade in time (Gelfand et al., 1997). Therefore, it is
premature, presumptuous, unfair and unethical to brand the child with a psychological disorder instead of looking at the functioning level of the child, as a part of the course of development. Hence, our approach in this study is looking at the strengths rather than weaknesses, symptoms rather than diagnosis, problems rather than disorders.

School Children Problems Scale (Saleem & Mahmood, 2011) comprising six factors namely Anxiousness, Academic Problems, Aggression, Social Withdrawal, Feeling of Rejection, and finally Psychosomatic Problems. While the five factors Anxiousness, Academic Problems, Aggression, Social Withdrawal and Psychosomatic Problems were found to be consistent with the problems reported in literature (e.g., Achenbach & Rescorla, 2001; Reynolds & Kamphaus, 1992), while, Feeling of Rejection was found to be peculiar for this sample. Keeping in view the Achenbach and Rescorla’s (2001) conceptualization, Anxiousness, Social Withdrawal, and Psychosomatic Problems can be considered as internalizing problems and Aggression can be considered as the only externalizing problem. It is very clear that the pattern of problems is more internalizing than externalizing in Pakistani cultural context.

Prevalence rates were estimated in terms of intensity and frequency. The first approach was based on describing scores on SCPS on four categories namely “mild”, “moderate”, “severe” and “very severe”. The second approach was based on the Achenbach’s conceptualization (1991) of “clinical level” that the percentage of sample scoring highest among the normative sample can be determined if the child scores above the 90th Percentile for his/her age and gender group. In Pakistani urbanized sample internalizing problems such as Anxiousness, Withdrawn, Feelings of Rejection, and Psychosomatic Problems were found to be far more common than externalizing ones. More than 30% of the sample fell in 1 SD above the mean and 16% 2 SD above the mean. Going by the frequency count 21% scored at 90th percentile. These estimates conservative by some standards, do show the high magnitude of the problems in children in the sample. Girls and older children show significantly higher rates as consistent with the previous studies (Bilancia & Rescorla, 2010; Maikovich-Fong & Jaffee, 2010). Moreover, Anxiousness was the most common problem reported by the adolescents followed by a Feeling of Rejection and Academic Problems. Quite surprisingly, Aggression, acknowledged as an externalizing behaviour was much less overt and more irritating and annoying. The aggression in school children in Pakistani cultural context is more passive, subdued and indirect expression of anger than reported in the Western studies (e.g., Achenbach & Rescorla, 2001).
Such findings could be explained by the collectivistic, controlling, and authoritarian culture that prevails in Pakistan (Saleem & Mahmood, 2011). Instead of free expression of emotions the culture demands, restraint and respect leading to indirect expression of strong feelings. The lack of opportunities for expression of feeling results in more withdrawal as a safety measure, somatic problems, and of course academic problems which could be construed as a part of an internalizing problem.

The results of current research also found that girls and older children (grade 10) were at greater risk of developing emotional and behavioral problems. These findings are consistent with literature (e.g. Angold et al., 2002; Emami et al., 2007; Kingery, Ginsburg, & Alfano, 2007; Rescorla et al., 2007). Though in many developed societies, girls are now getting their rights in urban population, more opportunity for education, choice of career, freedom of expression and equal rights to grow personally as well as academically.

Stewart et al. (1999) highlighted that in a traditional collectivistic society like Pakistan religion plays a vital role in shaping the moral values and way of living. Girls are expected to confirm the social and religious norms at large. Girls in our traditional family system are not treated equally as boys. Girls must learn to obey their parents and mainly responsible for maintaining family honor. All these familial and societal expectations and pressure put girls at greater risk for developing emotional and behavioral problems.

**Suggestions for Further Research**

In the course of analysis and discussion the following suggestions are being made to overcome some of the limitations of this research and further expand the scope of this seminal work. Firstly, as this study was carried out only on urban children, it would be very useful to carry out a parallel research for rural population to study the divergence of emotional and behavioral problems in different regions of Pakistan. Secondly, a similar study can be carried out for assessing emotional behavioural problems using a triangular approach taking into account views of a child, parents, and teachers in each case bearing in mind that these three sources would produce different types of information. Thirdly, as this study has taken into account only those children who study in government run schools, a similar study can be carried out to compare the emotional and behavioral problems of children from private and madrassa school systems.
Conclusion and Implications

This current research focused on to determine the magnitude of emotional and behavioral problems among children of mainstream public run schools. This exploratory study found larger prevalence rate with predominantly internalizing problems with girls and older children at greater risk of developing emotional and behavioral problems. As we can see that the contextual nature of any prevalence would naturally result in some diverse and distinctive findings. Such findings clearly suggest the type and focus of counseling that may help these children to be organized as a matter of urgency. Furthermore, this study will help teachers and parents for early identification and timely interventions for children with problems.

References


EMOTIONAL AND BEHAVIORAL PROBLEMS


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