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Anxiety among high school students in India: Comparisons across gender, school type, social strata and perceptions of quality time with parents

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ABSTRACT

The broad objective of the study was to understand better anxiety among adolescents in Kolkata city, India. Specifically, the study compared anxiety across gender, school type, socio-economic background and mothers' employment status. The study also examined adolescents' perceptions of quality time with their parents. A group of 460 adolescents (220 boys and 240 girls), aged 13-17 years were recruited to participate in the study via a multi-stage sampling technique. The data were collected using a self-report semi-structured questionnaire and a standardized psychological test, the State-Trait Anxiety Inventory. Results show that anxiety was prevalent in the sample with 20.1% of boys and 17.9% of girls found to be suffering from high anxiety. More boys were anxious than girls (p<0.01). Adolescents from Bengali medium schools were more anxious than adolescents from English medium schools (p<0.01). Adolescents belonging to the middle class (middle socio-economic group) suffered more anxiety than those from both high and low socio-economic groups (p<0.01). Adolescents with working mothers were found to be more anxious (p<0.01). Results also show that a substantial proportion of the adolescents perceived they did not receive quality time from fathers (32.1%) and mothers (21.3%). A large number of them also did not feel comfortable to share their personal issues with their parents (60.0% for fathers and 40.0% for mothers).

INTRODUCTION

Anxiety is one of the most common psychological disorders in school-aged children and adolescents worldwide (Costello, Mustillo, Erkanli, Keeler & Angold, 2003). The prevalence rates range from 4.0% to 25.0%, with an average rate of 8.0% (Bernstein & Borchardt, 1991; Boyd, Kostanski, Gullone, Ollendick & Shek, 2000). These figures could be underestimated since anxiety among a large number of children and adolescents goes undiagnosed owing to the internalized nature of its symptoms (Tomb & Hunter, 2004). Anxiety is associated with...
substantial negative effects on children's social, emotional and academic success (Essau, Conradt & Petermann, 2000). Specific effects include poor social and coping skills, often leading to avoidance of social interactions (Alban, Chorpita & Barlow, 2003; Weeks, Coplan & Kingsbury, 2009), loneliness, low self-esteem, perceptions of social rejection, and difficulty forming friendships (Bokhorst, Goossens & De Ruyter, 2001; Weeks et al., 2009). Importantly, school avoidance, decreased problem-solving abilities, and lower academic achievement have also been noted as consequences (Donovan & Spence, 2000; McLoone, Hudson & Rapee, 2006; Rapee, Kennedy, Ingram, Edwards & Sweeney, 2005). Anxiety is considered to be a universal phenomenon existing across cultures, although its contexts and manifestations are influenced by cultural beliefs and practices (Good & Kleinman, 1985; Guarnaccia, 1997).

In India, the main documented cause of anxiety among school children and adolescents is parents' high educational expectations and pressure for academic achievement (Deb, 2001). In India, this is amplified in secondary school where all 16-year old children attempt the Class X first Board Examination, known as the Secondary Examination. Results of the Secondary Examination are vital for individuals since this is the main determining criteria for future admission to a high quality senior secondary school and a preferred academic stream. There is fierce competition among students since the number of places in these educational institutions is fewer than the number of students. Therefore, parents urge their children to perform well in the first Board Examination and, to this end they may appoint three to four private tutors or more for special guidance. After the Secondary Examination, all students appear in the Class XII Final Board Examination known as the Higher Secondary Examination. Competition is again ferocious as performance in this examination determines university entrance. Admission to courses in Medicine, Engineering and Management are the most preferred choices for parents because these qualifications are seen to guarantee future job prospects. It is relevant to mention here that in one year alone in India, 2320 children, or more than six children per day, committed suicide because of failure in examinations (National Crime Records Bureau, Ministry of Home Affairs, Government of India, 2000). This shocking figure underlines the seriousness of this problem and its resounding social costs to communities.

Previous research on the sociodemographic correlates of anxiety reveals well-established relationships with gender and socioeconomic status, but little evidence of consideration of school type. Gender effects for anxiety disorders and symptoms have been found in studies of children and adolescents in English-speaking countries. Generally, more girls than boys develop anxiety disorders and symptoms. Adolescent girls report a greater number of worries, more separation anxiety, and higher levels of generalized anxiety (Campbell & Rapee, 1994; Costello, Egger & Angold, 2003; Poulton, Milne, Craske & Menzies, 2001; Weiss & Last, 2001). Socioeconomic status has been found to be both related and unrelated to anxiety. Broadly, social disadvantage is associated with increased stress (Goodman et al., 2005). In studies of adults, socioeconomic status has been found to impact both directly on rates of mental illness and indirectly via the influence of poverty and financial hardship on low and middle income groups (Hudson et al., 2009). While anxiety is known to affect both learning and performance (McDonald, 2001), no empirical research has explored the relationship between adolescent anxiety and school type, school choice, or mode of instruction.

With respect to mothers' employment status, research suggests that maternal employment, by itself, is unlikely to impede a child's social and emotional development (Gottfried & Gottfried, 2006). In fact, the opposite may be true, for children of working mothers, particularly daughters, tend to be more independent, to enjoy higher self-esteem, and to hold higher educational and occupational aspirations and less stereotyped views of men and women than those whose mothers are not employed (Hoffman, 1989; Richards and Duckett, 1994). Moreover, early studies of toddlers (Schachter, 1981), primary school-aged children (Gold and Andres, 1978a), and adolescents (Gold and Andres, 1978b) consistently established that children of employed mothers were as confident in social settings as children whose mothers remained at home and were somewhat more sociable with peers.

In previous empirical research, anxiety has been linked to parenting practices and features of parent-child relationships (Rapee, 1997). In particular, clinical and nonclinical studies have identified parental rejection and control as risk factors for the development of high levels of
anxiety and anxiety disorders (Rapee, 1997). The attributes of time spent with parents and the communication between parent and adolescent are important as measures of parent physical and emotional availability. For example, in terms of attachment, Moore and Hofferth (1979) found that working women spent half as much time caring for their children as did housewives, but their children still developed normal attachments to them. Other studies with young children have shown that the quality of the time the parents and children spend together, along with the making of adequate child-care arrangements, outweighs the quantity of time spent together (Easterbrooks and Goldberg, 1985). Recent literature on the multiple roles adopted by working parents is mixed with some studies suggesting that multiple roles increase stress levels and diminish parenting capacity (O’Neil & Greenberger, 1994; Repetti, 1993), and yet other studies suggesting that multiple roles bring health-giving benefits such as higher incomes, feelings of competence, increased self esteem and wider social relationships that have follow on effects to family relationships (Barnett, 1999).

Since a very limited number of studies have addressed anxiety among school-aged children and adolescents in India, and because of the seriousness of its adverse consequences, it was considered important to explore this issue further. The aims of the study were two-fold. First, to understand adolescents’ anxiety across gender, school type (also referred to as medium of instruction), socio-economic background and mother’s employment status in Kolkata city, India. Second to understand the perceptions of the adolescents about the quality time they receive from their parents. The following hypotheses were formulated for verification:

1. The anxiety of adolescent boys and girls, irrespective of medium of instruction, socio-economic background and mother’s employment status differs significantly.
2. The anxiety of adolescents studying in Bengali and English medium schools, irrespective of gender, socio-economic background and mother’s employment status differs significantly.
3. The anxiety of adolescents belonging to different socio-economic backgrounds, irrespective of gender, medium of instruction and mother’s occupational status differs significantly.
4. The anxiety of adolescents having working and non-working mothers, irrespective of gender, medium of instruction and socio-economic background differs significantly.

**METHOD**

**Site:**

The city of Kolkata, formerly known as Calcutta, is the capital of the State of West Bengal located in Eastern India with a hinterland of over 220 million residents. Kolkata is also known as the ‘City of Joy’. The urban agglomeration of Kolkata itself is home to more than 14 million people, making it India’s third-largest metropolitan area after Mumbai and Delhi (Census of India, 2001) and the eighth-largest metropolitan area in the world (United Nations, 2005). People from various neighbouring states move to Kolkata for educational, vocational, and employment purposes. Kolkata’s schools are administered by the state government or private, including religious and philanthropic organisations. The medium of instruction in schools is predominantly Bengali or English and, to a lesser extent, Hindi and Urdu. Kolkata has nine universities with numerous affiliated colleges. The literacy rate in West Bengal (69.2%) is slightly higher than that for India overall (65.2%). In the ten-year period from 1991 to 2002, literacy rates for males and females in the State increased by 9.8% and 13.6% respectively (Kingdon, 2007).

**Sample:**

Participants in the study were a group of 460 adolescents, aged 13-17 years. Adolescents were students studying in class IXth standard to Class XIIth standard. Participants were selected using a multi-stage random sampling technique such that the final sample was drawn from five Bengali medium and three English medium schools in Kolkata city.

**Materials**

The study tools that were used for achieving the objectives of the study were as follows:

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(i) Semi-structured Questionnaire (Chatterjee, 2007). A semi-structured questionnaire was custom-made for gathering information about the demographic and socio-economic background of the adolescents, the profile of their parents, and the amount of time adolescents spent with their parents. The face validity and socio-cultural admissibility of the semi-structured questionnaire was ascertained. The semi-structured questionnaire consisted of the following three sections:

- **Section 1: Demographic and Socio-economic Information**: This section consisted of items covering the participant's age, gender, education and family structure.
- **Section II: Parental Profile**: This section consisted of items relating to parental age, education, income and occupation.
- **Section III: Time Spent with Parents**: This section consisted of four items related to the quality and quantity of time adolescents spend with their parents.

(ii) State-Trait Anxiety Inventory (Spielberger, Gorsuch and Lushene, 1970). The State-Trait Anxiety Inventory (STAI) is the most widely-used cross-cultural anxiety measure (Hishinuma et al., 2000). It was originally developed as a research instrument to investigate anxiety in normal adults and has also been successfully used to measure anxiety in junior and senior high school students. The STAI is comprised of separate self-report scales for measuring two distinct anxiety concepts: state anxiety (A-State) and trait anxiety (A-Trait). According to Spielberger and colleagues, state anxiety (A-State) reflects a "transitory emotional state or condition of the human organism that is characterized by subjective, consciously perceived feelings of tension and apprehension, and heightened autonomic nervous system activity" (Spielberger et al., 1970, p.3) whereas trait anxiety denotes "relatively stable individual differences in anxiety proneness and refers to a general tendency to respond with anxiety to perceived threats in the environment" (Spielberger et al., 1970, p.3).

For this study, trait anxiety was measured. The STAI A-Trait scale consists of 20 statements asking respondents to describe how they generally feel along a four-point scale ranging from 1 - Almost never, 2 - Sometimes, 3 - Often and 4 - Almost Always. There is no fixed time limit to complete the inventory. The scale has 7 reverse and 13 direct items that are scored accordingly. Using this measure with an Indian sample required ascertainment of the socio-cultural admissibility of the test. First, inventory items were translated into the local Bengali language and checked by three experienced bilingual researchers. Second, the Bengali version was back-translated into English to ensure the stability of the meaning of each test item (Chatterjee, 2006). The scores of the STAI range from a minimum score of 20 to a maximum score of 80 such that higher scores indicate greater anxiety.

**Procedure**

A prior appointment was made with school authorities from Bengali and English medium schools in Kolkata to apprise them of the objectives of the study and to obtain their permission for data collection. Afterwards, a tentative schedule for data collection was developed in discussion with the authorities. Data were collected with the voluntary consent of the adolescent participants. Voluntary consent was obtained after sharing the objectives of the study and reassuring the participants about their anonymity and the confidentiality of information they were providing.

**Data Analysis**

Data collected from the adolescents were cleaned and prepared for analysis. Apart from descriptive statistics (measures of central tendency and dispersions), 't'-tests and 'F'-tests were applied for verification of hypotheses. In the absence of *apriori* evidence in this under researched area, these univariate procedures for assessing group differences were used as a starting point for assessing the extent to which mean differences were associated with group membership. Simple analyses to establish group differences were considered important preliminary steps towards more comprehensive future assessment of the degree or strength of relationships in multivariate approaches. Although measuring multiple variables was one of the aims of this study, the present study was not designed as

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a multivariable study. In future, however, it will be necessary to conduct research wherein dependent variables can be considered simultaneously with a view to establishing the precise nature of the effects of these variables on group differences.

**RESULTS**

*Background Information*

The sample comprised 460 adolescents: 48.0% were boys and 52.0% were girls. Their ages fell into four clusters: 13-14 years (25.0%), 14-15 years (26.0%), 15-16 years (25.0%) and 16-17 years (23.0%). In terms of their educational background, the adolescents were from class IX (N=117), class X (N=121), class XI (N=115) and class XII (N=107). Two-thirds (67.0%) of the adolescents were from nuclear families and one-third (33.0%) were from joint families where extended family members were living together. Regarding the profile of the adolescents' parents, most were aged 35 - 50 years with the majority of fathers aged 41 - 50 years (64.0%) and the majority of mothers aged 36 - 45 years (67.0%). Around 43.0% of parents were university graduates with 33.0% of fathers and 17.0% of mothers holding postgraduate qualifications. Around 14.0% of fathers and 34.0% mothers no formal university qualifications. In terms of employment, about one-third (33.0%) of the fathers worked in the government service sector, while 62.0% worked in the non-government and/or were self-employed. The majority of mothers (73.0%) did not work. Working mothers were employed almost uniformly across three service sectors in jobs such as working in government organizations, non-government organizations and self-employment. Fathers' monthly income was spread with 30.0% earning more than Rs.15,000/ per month, 46.0% earning Rs. 6,000/ to Rs. 15,000/ per month, while a further 15.0% earned less than Rs.6,000/ per month. Recalling that only a minority of mothers were employed, mothers' monthly income was limited to 5.0% earning more than Rs.15,000/ per month, 16.0% earning Rs.6000/ to Rs.15,000/ per month and 6.0% earning less than Rs.6000/ per month.

*Anxiety among Adolescents*

To understand the anxiety faced by adolescents, the STAI (A-Trait) was used after local adaptation. Data displayed in Table 1 show that the mean anxiety score in the case of adolescent boys (24.0) was slightly higher than for adolescent girls (22.5). Further analysis of data revealed that 20.1% (45/220) of boys and 17.9% (43/240) of girls were suffering from high anxiety as measured using the STAI2.

For verification of the first hypothesis, a ‘t’-test was applied for comparing the means and standard deviations. At a 0.01 level of significance, the first hypothesis, *the anxiety of adolescent boys and girls, irrespective of medium of instruction, socio-economic background and mother's employment status differs significantly*’ was supported, that is, adolescent boys of Kolkata city suffer from higher anxiety than adolescent girls.

**Table 1: Anxiety Scores of Adolescents: A Comparison Between Adolescent Boys and Girls**

<table>
<thead>
<tr>
<th>Sample Group</th>
<th>Central Tendency Measures</th>
<th>Deviations</th>
<th>'t'-test and Probability value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Mode</td>
</tr>
<tr>
<td>Adolescent Boys (N=220)</td>
<td>24.0</td>
<td>25.0</td>
<td>26.8</td>
</tr>
<tr>
<td>Adolescent Girls (N=240)</td>
<td>22.5</td>
<td>22.0</td>
<td>21.0</td>
</tr>
</tbody>
</table>

*Significant at 0.01 level*

Comparison of anxiety between the adolescents attending English and Bengali medium schools revealed that the mean values for the adolescents attending Bengali medium schools (24.6) was slightly higher than that for adolescents attending English medium schools (21.6). The

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2 A score of 44 is proposed as the clinical cut-off for high anxiety in adults (Himmelfarb & Murrell, 1983, 1984).
standard deviations were 5.2 and 5.7 respectively. These data are presented in Table 2. Data show that the adolescents coming from the Bengali medium schools were slightly more anxiety prone than their English medium school counterparts.

To verify the second hypothesis i.e., 'the anxiety of adolescents studying in Bengali and English medium schools, irrespective of gender, socio-economic background and mother's employment status differs significantly', a 't'-test was applied. It was observed that the 't'-value was significant at a p<.01 level. Hence, the second hypothesis was accepted.

Table 2: Anxiety Scores of Adolescents: Comparison between English and Bengali Medium school Students

<table>
<thead>
<tr>
<th>Medium of Instruction</th>
<th>Central Tendency Measures</th>
<th>Deviations</th>
<th>'t'-test and Probability value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Mode</td>
</tr>
<tr>
<td>English (N=210)</td>
<td>21.6</td>
<td>22.0</td>
<td>22.</td>
</tr>
<tr>
<td>Bengali (N=250)</td>
<td>24.6</td>
<td>25.0</td>
<td>25.8</td>
</tr>
</tbody>
</table>

* Significant at 0.01 level

Comparing anxiety across socio-economic groups, Table 3 illustrates the central tendency and the standard deviation measures of the anxiety scores of the adolescents from different socio-economic backgrounds. The mean anxiety scores were found to be the highest for the middle socio-economic group (30.0), followed by the low socio-economic group (28.6) and then the high (23.6) socio-economic group. The standard deviations for the high, middle and low socio-economic groups were 5.5, 8.0 and 6.3 respectively.

For confirmation of the third hypothesis, 'the anxiety of adolescents belonging to different socio-economic backgrounds, irrespective of gender and medium of instruction and mother's employment status differs significantly', the 'F'-test was applied. It was observed that the 'F' value was significant at (p<.01). Hence, the second hypothesis was supported.

Table 3: Anxiety Scores of the Adolescents from Different Socio-economic background

<table>
<thead>
<tr>
<th>Socio-economic Group</th>
<th>Central Tendency Measures</th>
<th>Deviations</th>
<th>'F'-test and Probability value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Mode</td>
</tr>
<tr>
<td>High (N=170)</td>
<td>25.6</td>
<td>24.0</td>
<td>24.8</td>
</tr>
<tr>
<td>Medium (N=210)</td>
<td>30.0</td>
<td>28.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Low (N=80)</td>
<td>28.6</td>
<td>28.0</td>
<td>30.0</td>
</tr>
</tbody>
</table>

* Significant at 0.01 level

To compare the anxiety of adolescents having working and non-working mothers, the central tendency and standard deviation measures are presented in the Table 4. From the table it can be observed that the mean anxiety score for adolescents having working mothers (26.2) was slightly higher than that for adolescents having non-working mothers (23.4). The standard deviations were 6.0 and 5.4 respectively for the two categories. These data are displayed in Table 4.

For verification of the fourth hypothesis i.e., 'the anxiety of adolescents having working and non-working mothers, irrespective of gender, medium of instruction and socio-economic background differs significantly', a 't'-test was done to compare the means and standard deviations. Test results were found to be significant at p=0.01 levels and therefore the third hypothesis was also retained.
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Table 4: Anxiety Scores of the Adolescents with Working and Non-Working Mothers

<table>
<thead>
<tr>
<th>Sample Group</th>
<th>Central Tendency Measures</th>
<th>Deviations</th>
<th>‘t’-test and Probability value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Mode</td>
</tr>
<tr>
<td>Adolescents having Working mothers (N=141)</td>
<td>26.2</td>
<td>25.0</td>
<td>22.4</td>
</tr>
<tr>
<td>Adolescents having Non-Working mothers (N=319)</td>
<td>23.4</td>
<td>24.0</td>
<td>25.2</td>
</tr>
</tbody>
</table>

*Significant at 0.01 level

Quality and Quantity of Time Given by Parents

In order to understand the parent-child relationship in general and the quality and quantity of time spent by the parents with their children in particular, four basic questions were put to the adolescent group. The first question was, *do your parents find time to speak to you during weekdays?* Responses revealed that 79.8% of adolescents’ fathers and 93.4% of adolescents’ mothers find time to speak to them. The second question was, *during holidays do your parents take you out?* Adolescents confirmed that 64.0% of their fathers and 70.0% of their mothers did so. The third question asked *do you think that you get quality time from your parents?* Of the adolescents, 67.9% responded affirmatively that they received quality time from their fathers while 78.7% of them received the same from their mothers. The fourth question in this section asked *do you feel comfortable to share your personal problems?* Only about 40.0% of the adolescents felt free to communicate their personal problems with their fathers while 60.0% of them could do so with their mothers.

Examining gender effects across all four questions revealed a pattern in that adolescents were more comfortable in communicating with their mothers than their fathers. Gender-wise analyses also revealed that females received higher quality interactions and more time from both parents compared to their male counterparts.

Table 5: Time Spent With Parents: Gender-Wise Perception (%)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Boys (N=220)</th>
<th>Girls (N=240)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes Responses</td>
<td>Yes Responses</td>
</tr>
<tr>
<td></td>
<td>Father</td>
<td>Mother</td>
</tr>
<tr>
<td>Do your parents find time to speak to you during weekdays?</td>
<td>76.8</td>
<td>92.3</td>
</tr>
<tr>
<td>During holidays do your parents take you out?</td>
<td>61.4</td>
<td>64.5</td>
</tr>
<tr>
<td>Do you think that you get quality time from your parents?</td>
<td>63.7</td>
<td>73.7</td>
</tr>
<tr>
<td>Do you feel comfortable to share your personal problems?</td>
<td>31.8</td>
<td>47.2</td>
</tr>
</tbody>
</table>

Base: All participants who provided ‘Yes’ responses

DISCUSSION

This study measured adolescent anxiety across a number of dimensions and explored the nature of parent-child relationships by capturing adolescent perceptions of quality time with their parents.

The mean anxiety score for adolescent boys (24.06) was found to be slightly higher than that for adolescent girls (22.55) with 20.1% of boys and 17.9% of girls also found to be suffering from high anxiety. These findings conflicts with previous research regarding adolescent anxiety in developed countries wherein girls are more likely to develop anxiety symptoms and disorders.
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(Campbell & Rapee, 1994; Costello, Egger & Angold, 2003; Poulton, Milne, Craske & Menzies, 2001; Weiss & Last, 2001). This difference may be attributed to cultural practices in Indian society. Despite the context of domestic change brought about by globalization, underlying patriarchal structures persist (Da Costa, 2008; Kingdon, 2007) wherein boys continue to face more pressure regarding their proper choice of vocation and future career (Deb, 2001). However, at the same time, it is relevant to highlight that the difference between mean anxiety scores of boys and girls, although statistically significant, is not contextually substantial. Anxiety levels of the adolescent girls, therefore, cannot be dismissed simply because the levels are, on average, lower than those for the adolescent boys. As new consumers in an ever-growing competitive education marketplace (Donner, 2006), families have differential expectations about the likely outcomes of education for boys and girls. Investment in schooling for daughters is seen primarily as a route to attaining better marriage prospects. Investment in sons’ education, however, is related to the expectation that their future employment will provide familial security. The weight of this responsibility falls heavily on boys. This is particularly problematic in West Bengal as unemployment and underemployment remain high for both men and women (Da Costa, 2008).

Adolescents from Bengali medium schools (24.6) were slightly more anxious than their English medium counterparts (21.6). In part, this may be explained by the growing trend to view Bengali medium schools as inferior to English medium schools and adolescents’ cognizance of this positioning. The mother tongue for most children in Kolkata is Bengali, with English being the most widely-used second language and Hindi being the third (Annamalai, 2004). According to Annamalai (2004), the policy of retaining English as the medium of instruction in universities coupled with its rising use in the sphere of international business has influenced the demand for English instruction in Indian primary and secondary schools. Where English medium schools were once the exclusive reserve of the urban upper and middle classes, they have been growing in popularity across classes and geography such that English medium education has boomed in the past two decades (Donner, 2006). Parents, and indeed, students themselves, may presume that education in Bengali medium schools is a disadvantage in that it segregates them from the English-dominated world of knowledge and future employment opportunities in English-speaking countries (Annamalai, 2004).

The relationship between anxiety and academic performance has been described in a number of findings relevant to the understanding of adolescents (Phillips, 1978; Sarason, 1980; Tobias, 1979). First, anxiety interferes more with academic performance during adolescence than during childhood. In a culture that judges an individual’s intellectual abilities and ascribes status on the basis of academic performance, it is perhaps not surprising that students become more anxious over their academic success and failures as they age. Second, the relationship between an adolescent’s academic success and anxiety is curvilinear — a minimal amount of anxiety tends to enhance academic performance, but excessive anxiety undermines academic performance (McDonald, 2001). Further, anxiety influences both learning and production in a foreign language classroom (MacIntyre & Gardiner, 1989).

The mean value for anxiety was found to be highest for the adolescents belonging to the middle socio-economic class (30.07), followed by the adolescents belonging to the lower (28.62) and then the higher (23.60) socio-economic class. This finding is not surprising in light of the above discussion about the relationships between the rising middle class, the demand for educational achievement and drive for occupational prestige, this finding is not surprising. Increases in secondary enrollment rates in India reflect emerging middle class parental desires and expectations (Kingdon, 2007). In India economic and social development itself is under great pressure and this is keenly felt by the middle class who are under greater stress to hold their ground, protect their social position and to move ahead (Ganguly-Scrause & Scrause, 2009). The pressure on the lower classes is perhaps better understood from a psychological perspective. For example, in a review of studies from low and middle income countries, Patel and Kleinman (2003) confirmed the association (albeit weak) between indicators of poverty and the risk of common mental disorders. Importantly, exploration of the mechanism of the relationship revealed specific factors such as the experience of insecurity, hopelessness, rapid social change, violence and physical ill-health explained heightened risk. The least anxiety is seen in case of the high socio-economic adolescents, this may be partly attributed to their secured future at least in terms

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of material and financial aspects, as Kaplan and Sadock (2000) reported, the prevalence of anxiety disorders tends to decrease with higher socio-economic status.

The mean value of anxiety scores of the adolescents having working mothers (26.27) was slightly higher than that of adolescents having non-working mothers (23.46). This finding appears in contrast to an extensive body of previous research conducted in developed countries revealing neither positive nor negative effects of maternal employment on children's development (Gottfried & Gottfried, 2006). Much of this research has been conducted from a maternal deprivation standpoint which assumes that when the mother is no longer the primary caregiver, deprivation for children results (Gottfried & Gottfried, 2006). When this assumption is suspended, at least in developed countries, research reveals that children of employed mothers often experience favorable (rather than unfavorable) development outcomes and appear to be so socially mature since employed mothers are more inclined than unemployed mothers to grant their children independence and autonomy when their youngsters are ready for it (Hoffman, 1989).

And, when mothers have stimulating jobs, receive adequate social support from their husbands and other close associates, and are highly committed to being a parent, they have generally favorable impressions of their children, rely less on power assertion to control their behavior, and are inclined to take an authoritative approach to child rearing – precisely the parenting style so often associated with favorable cognitive, social and emotional outcomes (Crockenberg and Litman, 1991; Greenberger and Goldberg, 1989; Greenberger, O'Neil, and Nagel, 1994). Of course, employed mothers may be less effective parents if they are dissatisfied with their jobs, are not highly committed to being a parent, or receive little support in their parenting role (Greenberger and Goldberg, 1989). Under these circumstances, working mothers can become rather aloof, impatient and restrictive, which makes their children more argumentative and difficult (Lerner and Galambos, 1988). Adolescents with working mothers have not been found to be more delinquent or more academically handicapped than children with unemployed mothers. Moreover, the data suggests that daughters tend to benefit more than sons from their mother’s employment, in terms of their academic and vocational achievements (Dellas, Gaier, and Litman, 1991; Greenberger and Goldberg, 1989; Greenberger, O'Neil, and Nagel, 1994). Of course, employed mothers may be less effective parents if they are dissatisfied with their jobs, are not highly committed to being a parent, or receive little support in their parenting role (Greenberger and Goldberg, 1989). Under these circumstances, working mothers can become rather aloof, impatient and restrictive, which makes their children more argumentative and difficult (Lerner and Galambos, 1988). Adolescents with working mothers have not been found to be more delinquent or more academically handicapped than children with unemployed mothers. 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as India. For example, a recent cross-cultural study of parenting and adolescent attachment in India and Germany (Albert, Trommsdorff & Mishra, 2007) revealed that Indian adolescents reported less anxiety with increasing use of control by their mothers, unlike their German equivalents. That is, maternal control appeared to convey security and acceptance to Indian adolescents whereas for German adolescents this was perceived as overprotection and constraint (Albert, Trommsdorff & Mishra, 2007).

Conclusions

In a nutshell, results of this study of 460 adolescents in Kolkata, India, show that anxiety was prevalent in the sample with one-fifth of the boys and less than one-fifth of the girls registering high anxiety. Statistically significant higher anxiety levels were experienced by more boys, students from Bengali medium schools, adolescents belonging to the middle class, and those having working mothers. Additionally, a substantial proportion of the adolescents perceived they did not receive quality time from fathers (32.1%) and mothers (21.3%), and did not feel comfortable sharing their personal issues with their mothers (40.0%) or fathers (60.0%).

The findings of the study, although modest, speak in favour of both anxiety prevention efforts for adolescents and mental health promotion efforts aimed at adolescents’ parents. First, although broader strategies for global adolescent mental health have been well detailed elsewhere (see for example Patel, Flisher, Ketirck & McGarry, 2007; Patel, Flisher, Nikapota & Malhotra, 2008), it is worth reiterating that measures such general and specific prevention education, self-help strategies and resources, and psychosocial support networks and services, and can be embedded in educational settings. Schools offer an ideal setting for universal prevention activities with potential to reach large numbers of children and adolescents (Masia-Warner et al, 2006; Chatterji et al., 2004; Barretta and Pahl, 2006). Additionally, the school environment is likely to facilitate the acquisition of competencies in Indian children as it is viewed as a place of learning (Rambaldo et al., 2001). At school adolescents can be taught how to manage stress and anxiety and can practice skills. As a targeted intervention strategy, there is evidence to suggest that cognitive-behavioral treatment can reduce levels of anxiety among adolescents, for example Hudson et al., (2009) found that cognitive-behavioral skills are more efficacious in the treatment of childhood anxiety than a treatment that includes only nonspecific therapy factors.

Second, mental health promotion with adolescents’ parents is essential. Steinberg (2001), one of the world’s leading researchers on parent-adolescent relationships has strongly advocated for a “systematic, large-scale, multifaceted, and ongoing public health campaign to educate parents about adolescence” (p.1). Ideally, he suggests such a program would be cross-disciplinary involving resources and expertise from health care, government organizations, community groups, education systems and the mass media and would be directed towards improving parents’ knowledge of, and attitudes towards the common issues of adolescents. Parent education is specifically required in the Indian context to deal with the phenomenon of educational pressure and the comparison of the performance of one’s own child with the best ranked students. Before such measures are introduced in India, however, further research is required to understand the ways in which culture and anxiety interact and to unpack risk and protective factors for the development of anxiety specifically in Indian adolescents. But time is of the essence.

Limitations

A number of English medium school authorities did not give permission for collection of data since none of the respective class teachers agreed to spare their scheduled classes for the purpose of data collection. Therefore, the investigators were unable to collect data from an equal number of English medium schools and also an equal number of adolescents from the lower socio-economic strata. Secondly, the findings of the study were based on the self report of adolescents.
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Relationships between parental pressure for better academic performance and mental health variables of adolescents of 11th and 12th standard

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The objective of the study was to find out the prevalence of parental pressure for better academic performance of the 11th and 12th adolescents of Kolkata city and examine the relationships between parental pressure and mental health with special reference to anxiety, emotional and social adjustment, self-concept and self-confidence. It was hypothesized that male and female adolescent students across 11th and 12th standard will differ significantly with respect to parental pressure for better academic performance and its impact on mental health. A group of 370 adolescents (182 males and 188 females) from six schools were covered in the study in Kolkata and they were selected following multi-stage sampling technique. Data were collected by a Semi-structured Questionnaire, Beck Anxiety Inventory, Social Adjustment Inventory and Self-concept Scale. Parental pressure for better academic performance was reported by nearly half (46.2%) of the adolescents. In this regard, statistically significant difference was found between genders (p<0.05) i.e., female adolescents (53.2%) experienced more pressure than that of male adolescents (39.0%, 71/182). Parental pressure for better academic performance caused high anxiety among the adolescents than that of the adolescents who did not experience the same (p<0.001). Likewise in case of emotional adjustment, self-concept and self-confidence parental pressure had negative effects. The findings of the present study suggest sensitization programs for parents about the issue and in this regard school could be a good platform. In addition, electronic and print media should come forward to organize discussion and write evidence based report on negative effects of academic pressure. Special school-based orientation program for adolescents on life skills would be immensely beneficial to enhance their psychological competence to combat different stressful situations in life.

Keywords: parental pressure, adolescents, adjustments, anxiety, self-concept, self-confidence.

Latest evidence indicates that academic related issues are among the most important sources of chronic and sporadic stress for young people in both Western (Brown, et al., 2006; Christie & MacMullin, 1998; Gallagher & Millar, 1996; Kczuma & Kennedy, 2004) and Asian countries (Deb et al., 2011; Mitra & Deb, 2011; Deb, 2001; Sun, 2011; Sun et al., 2011; Dadda & Lin, 1993; Huan et al., 2008; Tang & Westwood, 2007). In India, academic stress is a common phenomenon because of demographic and socio-economic factors as well as unemployment scenario of the country. Every parent wants their child to become first in the class. If their expectation is not fulfilled they become upset which has been reflected in their face and cause anxiety among children. Punishments and fear of punishments at school is also a potent factor that may contribute to academic stress and mental tension.

During the development phase, stress may come from any aspect of the child's environment: home, school, neighbourhood, or friendship (Anderson, Jimerson & Whipple, 2005; Hess & Copeland, 2006). Kozuma and Kennedy (2004) reported that school-related situations such as tests, grades, studying, self-imposed need to succeed, as well as that induced by others are the main sources of stress for Australian high school students. The impact of academic stress is also far-reaching; high levels of academic stress have led to poor outcomes in the areas of exercise, nutrition, substance use, and self-care (Weidner, Kohlmann, Dotzauer & Burna, 1996). Again, fourth, fifth and sixth-grade girls who have higher levels of academic stress are more likely to experience feelings of depression (Wenne-Gross & Siperstein, 1997).

Many adolescents in India get referred to hospital psychiatric units for school-related distress exhibiting symptoms of depression, high anxiety, frequent school refusal, phobia, physical complaints, irritability, weeping spells, and decreased interest in school work (Rangaswamy, 1982; Verna, Sharma & Larson, 2002). Fear of school failure is reinforced by both the teachers and the parents, causing children to lose interest in studies (Shah, 1991; Verna & Gupta, 1990). This is similar to the scenario in the East Asian countries, where psychiatrists use the terms 'high school senior symptoms' or 'entrance examination symptoms' to indicate mental health problems among students (Lee & Larson, 2000). The self-worth of students in the Indian society is mostly determined by good academic performance, and not by vocational and/or other individual qualities (Varma, 1998). Ganesh and Magdalin (2007) found that Indian children from non-disrupted families have higher academic stress than children from disrupted families. It is likely that the children from disrupted families get less attention and guidance from their parents regarding academic matters than do their counterparts in non-disrupted families. This, paradoxically, reduces their academic stress thus highlighting the negative impact of the parental vigilance and persuasion on the academic lives of their children.

Given the above background in mind, the present study attempted to find out the prevalence of parental pressure for better academic performance and examine the relationships between parental pressure and mental health of 11th and 12th standard adolescents of Kolkata city with special reference to anxiety, emotional and social adjustment, self-concept and self-confidence.

Hypotheses of the study

Hypothesis 1: Adolescent male and female students differ significantly with respect to parental pressure for better academic performance.
Hypothesis 2: Mental health variables of the adolescent students like anxiety, emotional and social adjustment, self-concept and self-confidence who experienced pressure for better academic performance and who did not experience the same differ significantly.

Research Design

This cross-sectional study carried out in Kolkata urban areas and followed quantitative methods of data collection for achieving the broad objective of the study.

Site

The study was carried out in Kolkata city, formerly known as Calcutta which is the capital city of the state of West Bengal. Kolkata, which is also known as 'City of Joy', is one of the four metropolitan cities in India. As of 2011, the Kolkata city had 4.5 million residents and India's third largest metropolitan area after Mumbai and Delhi (Census of India, 2011) and the eighth-largest metropolitan area in the world (United Nations, 2006). People from various states move here for vocational, educational and employment and other purposes. The state has both government and private schools. The medium of instruction in schools is predominantly Bengali or English and, to a lesser extent, Hindi and Urdu.

Method

Participants

The present study covered school going male and female adolescents studying in 11th and 12th standard. Six schools, three male and three female, were selected purposely keeping geographic spread into account. From five school 60 students, 30 from 11th standard and 30 from 12th standard were covered while in one school 70 adolescent students came forward to act as subject. All the adolescent students were selected on the basis of voluntary participation. Thus altogether 370 adolescents (182 males and 188 females) from six schools were covered in the study.

Instruments

In order to achieve the objective of the present study, following study tools were used:

1. Semi-structured Questionnaire developed by Banubabika Bhattacharyya and Dr. Sibnath Deb (2008) comprised of five sections viz.,

   - Section I: Background Information
   - Section II: Perceived Home Environment and Interpersonal Relationship
   - Section III: Nature of Violence Experienced by the Adolescent
   - Section IV: Reporting
   - Section V: Self-Confidence and Guidance

   This questionnaire helped in collecting both quantitative and qualitative data. Pertaining to self-confidence was collected using question like 'Do you feel confident in achieving your academic goal in life?' Some of the items are closed ended with two modes of response and/or multiple-choice responses while some of the questions are open ended where the subject are asked to write his/her opinion.

   Self-concept Scale (Rastogi, 1979). The scale consists of 51 items covering 10 constructs of self-concept. The constructs are health and sex appropriateness, abilities, self-confidence, self-acceptance, worthiness, present, past and future, beliefs and convictions, feeling of shame and guilt, sociability, emotional. It is a self-administering scale, where, the statements are to be ticked against five categories of responses- Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. The respondents are to read each statement carefully and check which applied to them. There is no right and wrong response. The Split Half method following Spearman-Brown Prophecy formula was used to compute the reliability of the scale and was found to be 0.87. The scale is scored 5, 4, 3, 2, 1 for positive items and 1, 2, 3, 4, and 5 for negative items. The rationale is that the higher the score of an individual, the higher is his self-concept. The lower the score of the individual the lower is his self-concept.

   Beck Anxiety Inventory (Beck, 1993): It is a 21-question multiple-choice self-report inventory that is used for measuring the severity of an individual's anxiety. It is about how the subject has been feeling in the last week, expressed as common symptoms of anxiety (such as numbness, hot and cold sweats, or feelings of dread). Each question has the same set of four possible answer choices, which are arranged in columns and are answered by marking the appropriate one with a cross. These are: Not At All; Mildly: It did not bother me much; Moderately: It was very unpleasant, but I could stand it; and Severely: I could barely stand it.

   The BAI was moderately correlated with the revised Hamilton Anxiety Rating Scale r (150) = - .51, and was mildly correlated with the revised Hamilton Depression Rating Scale, r (153) = .25. The subject is instructed to put a cross (X) mark against the answer, which is best suited for him/her. Each symptom is rated on a 4-point scale ranging from 0 to 3. The response of "Not at all" is scored 0 points; "Mildly: it did not bother me much" is scored 1 point; "Moderately: it was very unpleasant, but I could stand it" is scored 2 points; and "Severely: I could barely stand it" is scored 3 points. The rationale of the score is that, the total scores from 0-7 points reflect a minimal level of anxiety; scores of 8-15 indicate mild anxiety; scores of 16-25 reflect moderate anxiety; and scores of 26-63 indicate severe anxiety. The test-retest reliability of this scale has been calculated by administering the test twice on a sample of 83 subjects. The reliability coefficient was 0.75.

   Social Adjustment Inventory (Pal, 1985): The inventory has 60 items, which measures both emotional and social adjustment of an individual. This instrument was originally based upon the Bell's Adjustment Inventory (Bell, 1939; 1962) which has a long tradition of adaptation in psychological research in India. Bell's original Adjustment Inventory measured a person's degree of adjustment in four realms of life: health, social, emotional, and occupational. It has been widely used in therapeutic practice as it assists clinicians to identify relevant areas of adjustment and maladjustment. Several adaptations of this inventory can be found in the Indian literature (see for example Hussain, 1970; Jain, 1972; Mohan & Hussain, 1987; Pal, 1995; Singh, 1974.) In this study, the Pal (1995) version of the Social Adjustment Inventory (1995) was used after local adaptation in the Bengali language (Deb & Makherjee, 2009). It was employed as a means of determining the degree of social adjustment held by each child. The advantage of using this instrument lies in its wide use as it provides profiles of social adjustment in children with a range of comparative childhood issues, for example, chronic illness or disability. In this version, there were 60 items, each with response categories of yes or no. Example items included: 'I don't have any problem in mixing with people'; 'It has become my habit to
take an active part in social functions', and 'In my view, it is better to work in a group rather than individually'. Scoring was straightforward as recommended by Bell with yes responses allocated a score of 2 and no responses allocated a score of 1; generating a maximum score of 120 and a minimum score of 60. The rationale of the score is that, for emotional adjustment related 30 items, high score indicates low emotional adjustment while for social adjustment related items, high score indicates high social adjustment. The socio-cultural admissibility of the test was ascertained by translating the items from English into the local Bengali language. This was undertaken independently by three experienced researchers. The Bengali version of the test was then back-translated into English to ensure stability of the test items (Mukherjee, 2006).

The socio-cultural admissibility of the tests was ascertained by adopting the following steps:

**Step I:** The items of the test were translated into local Bengali. Following which it was checked by three experienced researchers.

**Step II:** The Bengali version of the test was retranslated into English to ascertain whether the meaning of the test item remained the same.

### Procedure and analysis

A prior appointment was made with the school authorities to appraise them about the objectives of the study and to obtain their permission for data collection. After getting the permission, a tentative schedule was developed in discussion with the authorities for data collection and accordingly data were collected. Data collected from the adolescents was edited and checked so that any gap or confusion identified can be clarified. Again all the filled in data sheets were subjected to in-house thorough editing and scrutiny. Thereafter data were fed into the computer for statistical analysis. Comparison between groups i.e., parental pressure for better academic performance and mental health variables were made using independent sample t-test. All analysis was conducted using SPSS for Windows 17.0 (SPSS Inc, Chicago, IL).

### Ethical issues considered

In order to ensure the quality data and also for protection of rights of the study subjects, the followed ethical were considered:

- Objectives of the study were briefed to all the study subjects.
- Participation in the study was voluntary.
- Informed consent was obtained.
- Confidentiality of information was ensured.
- Subjects were asked that they could withdraw themselves from the study at any point of time if they wished so.

### Results

About half of the adolescents (49.2%) were male while the remaining 50.8% were female and mostly they belonged to 15 to 18 years age group. About half of them were studying in 11th standard, while rest 50.3% was in 12th standard. About one-third (32.2%) came from joint family while 67.8% hailed from single or nuclear family (Table 1).

### Table 1: Demographic and Socioeconomic Characteristics of the Adolescents (N=370)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>%</th>
<th>Variables</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>Mother's Education</td>
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<td></td>
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<tr>
<td>Male</td>
<td>182</td>
<td>49.2</td>
<td>Lower than secondary</td>
<td>99</td>
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<tr>
<td>Female</td>
<td>188</td>
<td>50.8</td>
<td>Secondary to H.S.</td>
<td>130</td>
<td>35.1</td>
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<td>Gradate and above</td>
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<td>14-15 years</td>
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<td>5.4</td>
<td>Fathers' Occupation</td>
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<td>16-17 years</td>
<td>313</td>
<td>84.6</td>
<td>Service</td>
<td>136</td>
<td>36.8</td>
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<td>18 years and above</td>
<td>37</td>
<td>10.0</td>
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<td>Grade</td>
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<tr>
<td>XI</td>
<td>184</td>
<td>49.7</td>
<td>Mothers' Occupation</td>
<td></td>
<td></td>
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<tr>
<td>XII</td>
<td>196</td>
<td>50.3</td>
<td>Service</td>
<td>32</td>
<td>8.7</td>
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<td>4.6</td>
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<td>Housewife</td>
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<td>Single</td>
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<td>67.8</td>
<td>Others</td>
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<td>4.6</td>
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<td>Number of Siblings</td>
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<td></td>
<td>Family Income (per month)</td>
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<td></td>
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<tr>
<td>Only child</td>
<td>126</td>
<td>34.1</td>
<td>&lt;Rs.10,000</td>
<td>137</td>
<td>37.0</td>
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<tr>
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<td>143</td>
<td>38.7</td>
<td>Rs.10,000-20,000</td>
<td>104</td>
<td>28.1</td>
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<tr>
<td>Two or more siblings</td>
<td>101</td>
<td>27.3</td>
<td>Rs.20,001&gt;</td>
<td>129</td>
<td>34.9</td>
</tr>
<tr>
<td>Father's Education</td>
<td></td>
<td></td>
<td>Place of Living</td>
<td>322</td>
<td>87.0</td>
</tr>
<tr>
<td>Lower than secondary</td>
<td>74</td>
<td>20.0</td>
<td>Urban</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary to H.S.</td>
<td>88</td>
<td>23.8</td>
<td>Semi-Urban</td>
<td>48</td>
<td>13.0</td>
</tr>
</tbody>
</table>

About one-third were only child and the rest 38.7% and 27.3% had only one sibling and two or more siblings respectively. So far as the educational background of the parents of adolescents are concerned, 20.0% father and 26.8% mothers were found to be below secondary level; 23.8% fathers and 35.1% mothers studied Secondary to Higher Secondary levels; while maximum percentage of parents were graduate and above (56.2% fathers and 38.1% mothers).

Regarding parental occupation findings disclosed that 36.8% fathers and 8.7% mothers were in service and the rest 56.2% father and 4.6% mothers were in business. Maximum percentage of mothers was housewives (82.2% mothers). A small number of parents i.e., 7.0% fathers and 4.6% mothers were self-employed. Monthly income of more than one-third (37.0%) families were less than Rs.10,000; 28.1% families had family income of Rs10,001 to Rs.20,000 while rest 34.9% families had monthly income was more than Rs.20,001. So far as place of living is concerned, maximum number of adolescents (87.0%) lived in urban areas, while rest 13.0% lived in semi-urban areas (Table 1).
More than two-fifth adolescents (46.2%) experienced parental pressure for better academic performance. In this regard significantly more number of female adolescents (53.3%) experienced parental pressure compared to males (39%) (p<0.01). Therefore, it might be stated that the hypothesis one i.e., adolescents male and female students differ significantly with respect to parental pressure for better academic performance has been accepted. However, no significant difference was observed between 11th (47.3%) and 12th (45%) standard adolescent students with respect to parental pressure.

### Table 2: Impact of Parental Pressure on Adolescents’ Mental Health

<table>
<thead>
<tr>
<th>Psychological Variables</th>
<th>Too much pressure from parents for better academic performance</th>
<th>Y Test</th>
<th>Probability value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (N=171)</td>
<td>No (N=329)</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>15.24</td>
<td>8.71</td>
<td>11.89</td>
</tr>
<tr>
<td>Emotional Adjustment</td>
<td>44.64</td>
<td>5.21</td>
<td>43.1</td>
</tr>
<tr>
<td>Social Adjustment</td>
<td>52.56</td>
<td>3.85</td>
<td>52.26</td>
</tr>
<tr>
<td>Self-concept</td>
<td>162.68</td>
<td>16.96</td>
<td>166.47</td>
</tr>
<tr>
<td>Self-confidence</td>
<td>4.33</td>
<td>0.70</td>
<td>4.40</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; **Significant at 0.01 level; ***Significant at 0.001 level; NS: Not Significant

Anxiety was found to be significantly higher among the adolescents who experienced parental pressure for better academic performance compared to their counterparts i.e., who did not experience parental pressure (p<0.001) (Table 2).

So far as emotional adjustment of the groups is concerned, it was lower among the former group and found to be statistically significant at 0.01 level i.e., when the adolescents who received parental pressure for better academic emotional adjustment capacity get affected compared to adolescents who do not experience parental pressure for better academic performance. Regarding social adjustment, difference between two groups was observed as reflected in the mean score, but it was not statistically significant. However, in case of self-concept, statistically significant difference was observed between two groups (p<0.05) i.e., self-concept was poor among the adolescents who experienced parental pressure. The study also revealed that parental pressure affected self-confidence of the adolescents although statistically not significant (p>0.05).

The second hypothesis i.e., mental health variables of the adolescent students like anxiety, emotional and social adjustment, self-concept and self-confidence who experienced pressure for better academic performance and who did not experience the same differ significantly has been accepted partially.

**Discussion**

The present study observed that about half of the adolescent students (46.2%) of 11th and 12th standard in Kolkata experienced parental pressure for better performance. Indian parents are very much worried about future of their children since number of good educational institutions for higher studies are limited compared to total student population and unemployment scenario of the country. If a student does not perform well in the 10th and 12th standard examinations, it might be very difficult to ensure admission in preferred stream especially in medical and engineering colleges, which are the most common preferences for most of the students especially parents. Some parents whose children failed to get a seat in the Government Medical and Engineering Colleges through National Level Entrance Examination opt for private educational institutions although education in private technical colleges is very expensive since the institution charge high capitation fees. This critical situation hijack sleep of a large number of the parents before the 10th and 12th standard final examinations and they consciously or unconsciously put pressure on their children for better academic performance and hardly think of negative consequences of pressure.

Findings of the present study have been corroborated by some of the studies carried in the Asian and Western countries (Dodds & Lin, 1993; Huan et al., 2008; Tang & Westwood, 2007; Mitra & Deb, 2011; Deb et al., 2011: Brown, et al., 2006; Kouzma & Kennedy, 2004). In China, the situation is worse (Li et al., 2007, Zhao et al., 2009, China Youth Social Service Centre, 2008). Nearly ninety percent (86.6)% of Chinese students feel high or very high pressure because of academic matters. Academic pressure is reported to be higher among school students of some other countries like Japan, Korea and US (Li et al., 2007, Zhao et al., 2009). Academic pressure and difficulties have been identified as contributing factors for suicidal ideation and attempts among Chinese adolescents (Liu & Tein, 2005).

In regard to academic pressure, female adolescent students (53.2%) experience more pressure than their counterparts i.e., male students (39%). One reason for this is that females are more likely to regard school performance as very important, and therefore they worry more about academic failure (Jones & Hattie, 1991b). It is important to note that some level of academic pressure might be facilitating for improving performance but anxiety with higher intensity might work otherwise. At the same time, the findings of the present study indicate that parents have developed more expectation from female adolescents. Perception and outlook of the parents have changed in the urban educated families i.e., parents want their female child to become more educated and financially independent especially in India i.e., female children are discriminated in terms of care, nutrition, education and so on, the situation has changed in the urban areas. One recent study in Kolkata reported that there is preference for girl child by the parents as they believe that they will receive care and support from the female child more compared to male child (Deb & Chatterjee, 2008).

Further the study revealed that about half of the adolescents (46.2%) who received parental pressure developed anxiety. Score in anxiety scale has been found to be significantly higher among the adolescents who experience parental pressure compared to adolescents who do not experience parental pressure. So far as parental pressure is concerned, findings of the present study corroborate with another Kolkata-based study (Deb et al., 2011). Some of the previous studies carried out in China observed similar situation. For example, Chinese students consider high parental...
expectation to be the number one source of academic pressure, followed by self-expectations and peer competition (Lei, Sun, Li, Guo, & Zhang, 2007; Zhao, Zhu, & Xia, 2009).

In addition to anxiety, emotional adjustment and self-confidence was also found to be significantly low among adolescents who experience parental pressure (Deb et al., 2010). So far as social adjustment is concerned, although mean score of the adolescents was higher who experienced parental pressure, it was not statistically significant compared to their counterparts i.e. the adolescents who did not experience parental pressure for better academic performance. At the same time, emotional and social adjustments of adolescents are equally important for good mental health. Poor adjustment capacity because of some underlying reasons will have negative effect on personality and socialization process. Therefore an adolescent might become introvert and withdrawn in nature. Similarly, poor self-confidence also makes an adolescent introvert. Further the study observed low self-confidence among adolescent students who experienced parental pressure.

Unfortunately, the magnitude of mental health problems of children and adolescents has not yet been recognized sufficiently by the policy makers in many countries (Faraone, Brown, Gatt & Tsuang, 2002). Unexplained headaches, migraines and hypertension are becoming alarmingly common among teenagers often as an outcome of their stressful lives. Even recreational activities like sports, music, painting or swimming have become as competitive as studies (Mukherjee, 2010a; 2010b). In another study, Deb et al., (2011) observed psychiatric problems in 32.6% of the adolescent subjects who experienced academic stress. A number of previous studies reported psychiatric illnesses among children (Malhotra, 2005; Patel, Flisher, Sarah & McGorry, 2007). These students require immediate psychiatric attention for improving their mental health status along with counseling for their parents. This issue also requires special attention of school authorities and education policy makers.

In India, every day 6.23 students commit suicide because of academic failure as reported (National Crime Records Bureau, 2000). In order to reduce academic stress on students and parents, the current Human Resource Development Minister, Government of India made Class X Board Examinations optional. As a result, the CBSE has made the secondary examinations optional. Hopefully, the shift of paradigm in the style of education will improve the situation and students will feel comfortable and enjoy their studies.

Conclusion

More than two-fifth adolescents (46.2%) experienced parental pressure for better academic performance. In this regard, significantly more number of female (53.2%) experienced parental pressure compared to males (39%) (p<01). However, no significant difference was observed between 11th (47.3%) and 12th (45%) standard adolescent students with respect to parental pressure. Parental pressure has been found to have negative effect on anxiety, emotional adjustment and self-concept and self-confidence.

Limitations of the study

Given the universe of the higher secondary student population in Kolkata, the sample size was small. Therefore, it would not be wise to generalise the findings of the study. Secondly, responses are based on self-report. However, the findings give some idea about prevalence of the parental pressure in case 11th and 12th standard adolescent students in Kolkata and its impact on anxiety, adjustment, self-concept and self-confidence. To further validate the findings, another study with a larger sample covering both rural and urban areas is recommended.

Recommendations

Findings of the present study speak in favor of sensitization program for parents pertaining to issues like child development, negative effects of academic pressure and quality parenting. Strategically, school is the ideal platform for parents' sensitization program. Secondly, it is very important to start school-based life skills intervention program for adolescents to enhance their coping capacity for dealing with stressful situations in life.

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Children’s Rights in India: Parents’ and Teachers’ Attitudes, Knowledge and Perceptions

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Abstract
Individuals’ attitudes influence their behaviour towards children, including whether children’s rights and welfare are promoted. The attitudes generally present in a society shape a culture of how children are perceived and treated. This study explored the attitudes and knowledge of 300 Indian parents and teachers regarding children’s rights, and their perceptions about whether selected rights were secured in reality. Findings revealed that most parents and teachers had positive attitudes about children’s rights, including rights to health and education, and freedom from child marriage and inappropriate work. Yet, about one quarter of participants did not think children should have the rights to freedom of expression and association. Knowledge of laws promoting children’s rights was poor. Most parents and teachers perceived a denial of seven key rights in Indian children’s lived experience. Overall, findings suggest a need to heighten awareness of children’s rights and needs, which can improve attitudes towards the treatment of children. Efforts to heighten awareness and attitudes towards children’s rights are needed across society and in key sectors to enhance children’s lived experience.

Keywords
children’s rights; India; attitudes; knowledge; parents’ and teachers; law; maltreatment

Introduction

In 1962, severe child physical abuse was identified as a phenomenon of significant concern in the United States of America (Kempe et al. 1962). This breakthrough helped to usher in a new era of concern for children who have suffered various forms of maltreatment: physical abuse, sexual abuse, psychological or emotional abuse, and neglect. Since the 1960s, researchers across the world have engaged in numerous studies regarding child maltreatment, particularly...
regarding its consequences, and also its prevalence (May-Chahal and Cawson, 2005; Finkelhor et al. 2010) and causes (Gilbert et al. 2009; Ronan et al. 2009). Such studies have been particularly common in Western nations. However, they have also emerged elsewhere, including in Asian nations (Yeatsman et al. 1976; Bhattacharyya, 1979; Mehta et al. 1979; de Silva, 1981; Segal, 1992, 1995) and research has continued in more recent times (Hyder and Malik, 2007; Nguyen et al. 2010). These studies have illuminated the dire conditions endured by many children in the world, and the often lifelong consequences of their suffering.

These developments in the field of child maltreatment accompanied other advances in understanding children’s qualities, vulnerabilities and needs, helping to catalyse a heightened concern for child welfare generally. This general concern for children’s welfare crystallised into landmark global recognition when the United Nations Convention on the Rights of the Child (UNCRC) entered into force on 2 September 1990, and was ratified soon after by nearly every nation state in the world. Before the 1990s, many nations had introduced legislation and policies promoting children’s rights, but the UNCRC heightened sensitivity to the need for domestic legislation, policy and practices to promote children’s rights generally, including protection from maltreatment. India, for example, which acceded to the UNCRC on 11 December 1992, has enacted numerous statutes promoting children’s rights since the early 1990s, while having earlier enacted legislation about specific elements of children’s welfare.

Despite these advances in knowledge regarding child maltreatment and progress in the broad field of children’s rights, very few researchers have explored the attitudes, knowledge and perceptions of parents and teachers about children’s legal rights. Some work has been done in South Asia and surrounding regions (Ben-Arieh et al. 2006; Chen et al. 2007; Hannum et al. 2009), and studies elsewhere are more frequent, but are still relatively rare (Casas et al. 2006; Day et al. 2006; Bunting et al. 2010). The general scarcity of research includes a lack of research in India. Yet, exploring the attitudes and knowledge of parents and teachers about children’s rights is important for many reasons. First, a child’s parents possess the fullest and most direct power and responsibility to not only promote or infringe a child’s rights, but also to teach the child about who she or he is and what her or his rights are as a human being. Second, since the home and the school are the two places where children generally spend most of their time, it is in these two spaces that children are able to have their rights promoted or infringed by the people who occupy and govern those contexts. Third, it is known that most child maltreatment occurs in the home, physical abuse (Gershoff, 2002; Lansford et al., 2002; Springer et al., 2007), sexual abuse (Chen et al., 2010; Paolucci, Genuis & Violato, 2001; Putnam, 2002; Tyler, 2002), psychological abuse (Egeland, 2009; Vissing et al., 1991), and neglect (Hildyard & Wolfe, 2002; Perry, 2002).
and at school. Fourth, alongside parents, teachers exert an enormous proximal impact and influence on the individual child's life. Fifth, the influence of parents and teachers on the life of all children in a society is also arguably very strong. Finally, attitudes towards a phenomenon are a powerful influence on actual behavior (Ajzen, 2005; Ajzen and Fishbein, 2010). As was recently stated in the context of harsh parental discipline, 'Culture helps form parental attitudes about how children should be disciplined' (Runyan et al., 2010, p. 708), and education to enhance knowledge and interpersonal skills has been shown to be effective in improving gender attitudes in young Indian men (Verma et al., 2006). Adults' attitudes towards children's place in society and their rights are inextricably related with a society's culture, including how it perceives and treats children. In this regard, the attitudes and knowledge of all adults are important, but some sectors of the adult population are particularly influential. Parents and teachers are two such sectors, along with others such as those in medical and human services professions, politicians and policy leaders. Hence, for many reasons, parents' and teachers' attitudes and knowledge regarding children's rights are extremely important social forces. They are significant through their impact on a particular child's security and rights, and in a broader sense through the influence of the general state of parents' and teachers' attitudes, knowledge and behavior on a whole society and its children.

In the context of child maltreatment prevention in India, Segal (1992, p. 890) has asserted that it is vital to ascertain the perceptions of those with greatest capacity to intervene, since it would be premature to develop intervention programs if key individuals do not identify selected acts as abusive; awareness-raising would first be required. Similarly, it may be particularly important to understand the nature of Indian parents' and teachers' attitudes and knowledge towards children's rights, so that insights can be gained into the general culture regarding children. In turn, this evidence can illuminate aspects of the culture which may be able to be enhanced, and can inform both the nature of effective strategies to better secure particular children's rights, such as the right to education, and effective prevention programs against child maltreatment. This article first describes the general context of children's rights and child maltreatment in India. It then synthesises key Indian laws regarding children's rights and welfare. Finally, it reports the results of an empirical study of parents' and teachers' knowledge and attitudes regarding children's rights in India, and draws some conclusions about future strategies to enhance children's rights in India.

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An 'attitude' can be defined as 'a disposition to respond favorably or unfavorably to an object, person, institution, or event' (Ajzen, 2005, p. 3). While the field of research on attitudes is large and complex, it is reasonable to operate on the basis that attitudes are generally accepted as being an important influence on behavior (Ajzen & Fishbein, 2010).
The Indian context of child welfare, maltreatment, and some fundamental children’s rights

*Poverty and malnutrition*

Influenced by widespread poverty, malnutrition is an issue of national urgency. Around three in ten (28 percent) children are born with low birth weight (UNICEF, 2008). In 2008, 1.8 million children under 5 died, with undernutrition causing between one third and one half of these deaths; 1 million were neonates (Black et al. 2010). Of all children under age 5, almost half are stunted, 43 percent are underweight, and about 20 percent have wasting (International Institute for Population Sciences et al. 2007). Over 56 percent of adolescent girls in India are anaemic (International Institute for Population Sciences et al. 2007). Street children are especially vulnerable to malnutrition, and to associated problems such as maltreatment, substance abuse, sexually transmitted infections and HIV (Mathur et al. 2009; Bal et al. 2010).

*School attendance*

The national census in 2001 found a total population of 1.028 billion, which included 163 million children aged 0 to 6 and 199 million children aged 7 to 14; combined, there were 362 million children aged 0 to 14, representing 35.3 percent of the population (Office of the Registrar General, Government of India, 2001). Until recently there was no legal requirement to attend school. National data indicate that only 73 percent of children attend school to the end of primary school (UNICEF, 2008). An estimate of one quarter of those of primary school age not completing primary school therefore equates to 40 to 50 million children being denied an opportunity to gain an education, vastly limiting life chances.

*Childhood marriage*

An analysis of the 2006 National Family Health Survey-3 showed that among women aged 20-24, more than two fifths had been married before age 18 (Raj et al. 2009). Nearly half of these women were married before age 16. A majority of 71.6 percent of women without any formal education were married as a child, and only 5.8 percent of those without any formal education remained unmarried by age 20-24. In addition, a majority of 58.5 percent of those with only primary education were also married when still a child. In contrast, of

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3 The Right of Children to Free and Compulsory Education Act was passed on 4 August 2009, providing for free and compulsory education for children aged 6-14, as required by Article 21A of the Constitution.
those with secondary education, a smaller but still significant proportion of 32.3 percent were married as a child; only 2.5 percent of those with higher education were married as a child. These data are important not only because child marriage is illegal, but because it is associated with multiple adverse health risks for girls, especially during pregnancy and childbirth, and for their offspring (Raj et al. 2009).

Nature and extent of child abuse

Child abuse and neglect are serious problems, influenced by many factors including poverty, over-population, unemployment, lack of education, cultural beliefs and practices, gender bias, patriarchy, and ineffective implementation of legal protections. Several studies have indicated the nature and extent of child maltreatment in India. Most recently, a national study revealed widespread maltreatment (Ministry of Women and Child Development, 2007). This study obtained self-report data from children in 13 States from 12,447 children aged 5-18. Results showed that 69 percent of children reported being physically abused (p. 44) and 65 percent of children attending school suffered corporal punishment (p. 52). Regarding sexual abuse, 53 percent of children reported having been abused in some way, and 20.9 percent reported severe forms. Unusually, boys were more likely than girls to be victimized (p. 77-79). Emotional abuse was reported by 48.3 percent of children (p. 106). The study also collected data on neglect of girls, and found that 70.5 percent of girls reported having been neglected by family members; almost half the girls stated they at least sometimes wished they were boys (p. 114). Another study of 500 rural mothers found that almost half reported use of severe verbal discipline, and 42 percent reported using severe physical discipline. Moderate verbal discipline was reported by 75 percent, and moderate physical abuse was reported by 76.4 percent (Hunter et al. 2000). A study in 1998-99 interviewed mothers in 14 rural, urban slum and urban non-slum areas across seven locations, and found substantial harsh verbal discipline (over 60 percent) and substantial harsh physical discipline (almost 20 percent) (Runyan et al. 2010). The study found a high incidence of harsh physical discipline including striking

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4 It is necessary to be mindful of the fact that not all cultures perceive the same acts as abusive or neglectful (Korbin, 1980). For the purposes of this article, the acts we are concerned with can be classed as constituting maltreatment in the Indian context, based on legal standards and commitments. Due to features of the Indian context, including poverty and a lack of social welfare, it seems reasonable not to regard many cases of mild and even moderate malnutrition as neglect.

5 'Severe' forms of sexual assault were defined as assault, including rape and sodomy; touching or fondling, exhibitionism; and photographing a nude child. 'Other forms of sexual abuse' included forcible kissing, sexual advances during travel and marriage situations; exhibitionism; and exposure to pornographic materials: Ministry of Women and Child Development, 2007, p. 73.
the child with an object (over 40 percent). There were very high levels of both moderate verbal discipline (almost 90 percent), and moderate physical discipline (almost 80 percent). Physical punishment has also been found to be widespread in the middle and upper middle class; this may reflect a broad social acceptance of violence towards children (Segal, 1995).

Working children

Many millions of children work in various industries, with most working in the agricultural sector. A 2001 study regarding 100 such children found not only dangerous working conditions (such as daily exposure to chemicals and lack of protective clothing, and even water), but also frequent physical and verbal abuse, effects from exposure to toxic products, and deprivation of the opportunity to attend school (Physicians for Human Rights Child Rights Group, 2003). These children were usually working in debt bondage, an illegal practice of paying off family debt. The authors asserted that an estimated 15 million children work to service family debt. The 2007 national study of child maltreatment also found a substantial incidence of overworked children, and found that over 50 percent of children who were classed as 'children at work' worked seven days per week (Ministry of Women and Child Development, 2007, p. 58). The employment of children in urban families as domestic assistants is a major source of survival for poor children, where they experience exploitation and maltreatment (Deb, 2005). Indeed, children from low socio-economic backgrounds, and from minority groups, are discriminated against in all respects, being particularly likely to be deprived of primary education, medical care, adequate nutrition, and personal safety (International Institute for Population Sciences et al. 2007).

Indian legislation about children’s rights and maltreatment prevention

A range of federal legislation promotes children’s rights generally, and is aimed at reducing and responding to child maltreatment. Legislation promoting children’s civil and social rights is most notably embodied in the Constitution of India. Article 14 guarantees equality before the law and article 15 prohibits discrimination based on gender, caste, race and religion. Article 21A directs all States to provide free and compulsory education to all children between the ages of six to fourteen years. Article 24 prohibits children under 14 from being

5) When data was collected (2008) the legislation setting down the machinery for this had not been enacted. The Right of Children to Free and Compulsory Education Act was passed on 4 August 2009.
employed in factories and mines, and from working in any hazardous employment. Article 23 prohibits the trafficking of human beings and forced labour. Freedom of religion is conferred by article 25. Article 39 directs policy to ensure that children are protected from inappropriate work, and from all forms of exploitation. Other federal statutes also contain provisions promoting children's rights and welfare. The Juvenile Justice (Care and Protection of Children) Act, 2000 makes it an offence to procure a child for employment (section 26), and to use a child for begging (section 24). The Child Labour (Prohibition and Regulation) Act, 1986 prohibits the employment of children under 15 in certain occupations. The Child Marriage Restraint Act, 1929 prohibits males under 21 and females under 18 from marrying. Numerous other statutes promote commitments to child health (the Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992) and the elimination of discrimination (Persons with Disabilities (Equal Opportunities, Protection of Rights, and Full Participation) Act, 1995).

Legislation aimed at reducing and responding to various manifestations of child maltreatment includes the Indian Penal Code 1860, which contains provisions regarding the prosecution of offences, which apply where the victim is a child. The Juvenile Justice (Care and Protection of Children) Act, 2000 establishes certain offences including cruelty against a juvenile. Several statutes including the Immoral Traffic (Prevention) Act, 1956 and the Juvenile Justice Act address child trafficking, which is a significant problem in India (Sen, 2005; Ghosh, 2009; Deb et al. 2011). As well, there are general national laws and policy frameworks which profess a commitment to children's rights and welfare. The National Charter for Children 2003 Article 9 states that all children have the right to be protected against neglect, maltreatment, injury, trafficking, sexual and physical abuse of all kinds, corporal punishment, torture, violence, and degrading treatment. The National Policy for Children, 1974 expresses the national government's commitment to providing adequate services to children, both before and after birth, to ensure their full physical, mental, and social development. The Commissions for Protection of Child Rights Act, 2005 provides for a National Commission and State Commissions for the Protection of Child Rights and Children's Courts, aiming to provide speedy trials in cases of offences against children or violations of child rights. Aiming to address the particularly heinous custom of sex-selective abortion (and abandonment) caused by the distinct societal preference across social, religious and economic strata for male births, the Pre-natal Diagnostic Techniques (Regulation and
Prevention of Misuse) Act, 1994 prohibits the determination and disclosure of the sex of foetuses.8

As well as these domestic laws, India has expressed a commitment to children’s rights through its accession to the UNCRC, the core international legal instrument in this context. Among a range of fundamental rights, States parties are committed to the promotion and implementation of children’s rights to: education (article 28); health and medical care (article 24); freedom of expression (which includes the right to obtain information) (article 13); freedom of association (article 15); rest, leisure, play, and participation in cultural and artistic activities (article 31); protection from economic exploitation and work that threatens his/her health, education and development (article 32); and the right of children from minority communities and indigenous populations to enjoy their own culture and to practice their own religion and language (article 30). The UNCRC also obliges States parties to take all appropriate legislative, administrative, social and educational measures to protect children from all forms of abuse and exploitation (article 19).

It is imperative to understand the attitudes and knowledge of parents and teachers about children’s fundamental rights. The lack of evidence in this field impedes both the development of a positive culture regarding children, and effective programs promoting child welfare and preventing child maltreatment. It seems reasonable to postulate that greater knowledge of children’s rights in legal instruments, together with more positive attitudes towards those rights and to children’s welfare generally, is conducive to the generation of a more positive societal culture regarding children. This in turn is more likely to promote children’s rights in lived experience (such as the right to education), and to produce a reduction in abusive behavior. As well, finding evidence about the state of parents’ and teachers’ attitudes and knowledge in these domains can illuminate whether there is any need for further awareness-raising, and can perhaps even inform effective interventions. Hence, the broad objective of the study was to explore the attitudes and knowledge of Indian parents and teachers about children’s rights. A related objective was to explore their perceptions with regard to the lived experience of certain rights.

Method

The study was conducted in Agartala City, Tripura. Tripura is a small state of 3 million people in northeastern India. Hindus form the majority religious

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8 The Indian judiciary declared 2007 the ‘Awareness year of female foeticide’. Legislation enacted in 1994 and 2003 prohibited sex selection technology and sex-selective abortion. The preference for male births is a particularly concerning Indian custom (International Institute for Population Sciences et al., 2007; Puri et al., 2011).
group. Relative to the rest of India, Tripura has low socio-economic conditions. However, the literacy rate is 73.1 percent, (81.0 percent for males and 64.9 percent for females), higher than the national rate of 63.0 percent (Government of Tripura, 2007). As well, there was substantial improvement in school attendance between 1991 and 2001. The proportion of children in the age group of 6-14 years not attending school has halved during this decade, from 43.4 percent in 1991 to 23.0 percent in 2001, and there have been major increases in attendance rates in rural areas, including among girls. For example, among 6-14 year-old children, 62.0 percent of girls in rural areas attended school in 1991; by 2001, the proportion had risen to 74.0 percent (Government of Tripura, 2007).

A group of 150 parents (135 mothers and 15 fathers) and 150 teachers (61 male and 89 female) from eight randomly selected English and Bengali medium schools in Agartala, Tripura participated in the study voluntarily. Permission from the authorities of eight different schools was obtained. Parents were also contacted on the school premises when they came to attend parent-teacher meetings. Incidental sampling was used to generate the sample. The Questionnaire for Parents/Teachers (QPT), a semi-structured instrument, was developed by the first author in 2007 to gather information about the attitudes, knowledge and perceptions of parents and teachers regarding children's rights. The QPT has three sections. Section 1 gathered demographic and socio-economic information. Section 2 contained items gathering information about attitudes towards children's rights. This section has eight items exploring attitudes towards certain rights, and it also explored perceptions about the lived experience of children regarding certain rights. Section 3 contained six items exploring participants' knowledge of Indian laws regarding children's rights and protection from maltreatment. The draft QPT was checked by three experts for clarity, accuracy and content validity. Informed by feedback, changes were made and it was then piloted with 30 subjects (15 parents and 15 teachers) to further assess these features. Informed by pilot study findings, final modifications were made and this final version of the QPT was used in the main study. Data were collected from participants from March to August in 2008 by self-administration of the QPT. Participants were assured of confidentiality and anonymity and data was stored in a secure location. The data were collected, entered, and aggregated to generate descriptive statistics. Chi-square testing was used for analytical comparison between the two groups.

Results

Demographics

Almost half of the parents (48.6 percent) were aged 36-45 years. The teachers were generally older, with 53.3 percent aged over 45. The educational
background of both parents and teachers was very high relative to norms in Tripura and India, as about half were post-graduates and one-third to two-fifths were university graduates. Most of the parents (over 90 percent) were involved in relatively prestigious employment positions. Accordingly, literacy rates were above the national averages of 79.9 percent in urban areas and 58.7 percent in rural areas (Office of the Registrar General, Government of India, 2001). About one-third (37.3 percent) of the parents had two children while 45.3 percent and 17.3 percent of the parents had two or three and above children, respectively; hence, families were relatively small compared with the national mean family size of 4.8 (International Institute for Population Sciences et al. 2007). All the teachers were parents, with more than half having one child, two-fifths having two children, and the rest (4.0 percent) having three or more children; again, showing a tendency to relatively small family size (Table 1). Overall, relative to the national population, the sample was of above average age, highly educated and literate, and with small families.

Table 1: Demographic characteristics

<table>
<thead>
<tr>
<th></th>
<th>Parents (n = 150)</th>
<th>Teachers (n = 150)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 35 years</td>
<td>8</td>
<td>5.3</td>
</tr>
<tr>
<td>36–40 years</td>
<td>32</td>
<td>21.3</td>
</tr>
<tr>
<td>41–45 years</td>
<td>41</td>
<td>27.3</td>
</tr>
<tr>
<td>46–50 years</td>
<td>28</td>
<td>18.7</td>
</tr>
<tr>
<td>51 years and above</td>
<td>41</td>
<td>27.3</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below graduate</td>
<td>12</td>
<td>8.0</td>
</tr>
<tr>
<td>Graduate</td>
<td>62</td>
<td>41.3</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>76</td>
<td>50.7</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>45</td>
<td>30.0</td>
</tr>
<tr>
<td>Govt. service</td>
<td>37</td>
<td>24.7</td>
</tr>
<tr>
<td>Work in private organisation</td>
<td>31</td>
<td>20.7</td>
</tr>
<tr>
<td>Practicing lawyer</td>
<td>6</td>
<td>4.0</td>
</tr>
<tr>
<td>Business</td>
<td>17</td>
<td>11.3</td>
</tr>
<tr>
<td>Unemployed/Housewife</td>
<td>14</td>
<td>9.3</td>
</tr>
<tr>
<td>Number of children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>56</td>
<td>37.3</td>
</tr>
<tr>
<td>Two</td>
<td>68</td>
<td>45.3</td>
</tr>
<tr>
<td>Three or more</td>
<td>26</td>
<td>17.3</td>
</tr>
</tbody>
</table>
Attitudes about children's rights

Participants were first asked a general question about whether they thought a child should have some rights. A majority of participants (74.0 percent) agreed with this proposition (Table 2). However, about one in four (26.0 percent) answered in the negative. Parents were more likely than teachers to hold an attitude that children should not have some rights, but this difference was not statistically significant. Results are shown in Table 2.

Next, parents and teachers were asked about their attitudes towards whether a child should have seven specific rights, which are embodied in the UNCRC. Somewhat inconsistently with the results from the first general question, these questions exploring participants' attitudes towards specific rights revealed unanimous agreement regarding several rights. For others, there were differences in attitude, with some rights not being the subject of such strong attitudes. All participants believed children should have the rights to health care, education, to leisure, play, and participation in cultural and artistic activities, and to be protected from work that threatens health, education and development. There was very strong support for children from minority communities and indigenous populations having the right to enjoy their own culture and to practice their own religion and language; however, a minority of nearly one in six parents and one in ten teachers were opposed to this right. In contrast, for the right to freedom of expression (which includes the right to obtain information), while 70.0 percent of parents and 74.0 percent of teachers had a positive attitude towards this right, 3 in 10 parents and almost one in four teachers did not. Similarly, while 73.3 percent of parents and 65.3 percent of teachers had a positive attitude towards the right to freedom of association, almost one in four parents and one in three teachers did not. Results are shown in Table 3.

Table 2: Attitudes of parents and teachers towards children's rights

<table>
<thead>
<tr>
<th></th>
<th>Parents (n = 150)</th>
<th>Teachers (n = 150)</th>
<th>Total</th>
<th>Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Do you think</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that a child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>should have</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>some rights?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>105</td>
<td>70.0</td>
<td>117</td>
<td>78.0</td>
<td>222</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>30.0</td>
<td>33</td>
<td>22.0</td>
<td>78</td>
</tr>
</tbody>
</table>
Table 3: Attitudes towards children's rights as defined in the UNCRC

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Parents (n=150)</th>
<th>Teachers (n=150)</th>
<th>Chi-square p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think a child should have the right to express his/her views, obtain information, and make ideas or information known, regardless of frontiers?</td>
<td>Yes 105 70.0</td>
<td>115 76.7</td>
<td>1.70 0.1917 (NS)</td>
</tr>
<tr>
<td></td>
<td>No 45 30.0</td>
<td>35 23.3</td>
<td></td>
</tr>
<tr>
<td>Do you think a child should have the right to meet others, irrespective of background and to join or form associations?</td>
<td>Yes 110 73.3</td>
<td>114 76.0</td>
<td>0.28 0.5954 (NS)</td>
</tr>
<tr>
<td></td>
<td>No 40 26.7</td>
<td>36 24.0</td>
<td></td>
</tr>
<tr>
<td>Do you think a child should have the right to the highest standard of health and medical care attainable?</td>
<td>Yes 150 100.0</td>
<td>150 100.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>No - -</td>
<td>- -</td>
<td></td>
</tr>
<tr>
<td>Do you think a child should have the right to education, and the state's duty is to ensure that primary education is free and compulsory?</td>
<td>Yes 150 100.0</td>
<td>150 100.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>No - -</td>
<td>- -</td>
<td></td>
</tr>
<tr>
<td>Do you think children from minority communities and indigenous populations have the right to enjoy their own culture and to practice their own religion and language?</td>
<td>Yes 126 84.0</td>
<td>135 90.0</td>
<td>2.39 0.1223 (NS)</td>
</tr>
<tr>
<td></td>
<td>No 24 16.0</td>
<td>15 10.0</td>
<td></td>
</tr>
<tr>
<td>Do you think a child should have the right to leisure, play and participation in cultural and artistic activities?</td>
<td>Yes 150 100.0</td>
<td>150 100.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>No - -</td>
<td>- -</td>
<td></td>
</tr>
<tr>
<td>Do you think a child has the right to be protected from work that threatens his/her health, education and development?</td>
<td>Yes 150 100.0</td>
<td>150 100.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>No - -</td>
<td>- -</td>
<td></td>
</tr>
</tbody>
</table>

NS: Not significant
Table 4: Knowledge of the existence of laws promoting children's rights and welfare

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Parents (n=150)</th>
<th>Teachers (n=150)</th>
<th>Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you aware of provisions in the Indian Constitution protecting child rights?</td>
<td>Yes 18 12.0</td>
<td>31 20.7</td>
<td></td>
<td>0.0423**</td>
</tr>
<tr>
<td>No 132 88.0</td>
<td>119 79.3</td>
<td>4.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you aware of legal measures for the protection of child rights in India?</td>
<td>Yes 55 36.7</td>
<td>61 40.7</td>
<td></td>
<td>0.2769</td>
</tr>
<tr>
<td>No 95 63.3</td>
<td>89 59.3</td>
<td>0.51 (NS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you heard of the UN Convention on the Rights of the Child?</td>
<td>Yes 22 14.7</td>
<td>35 23.3</td>
<td></td>
<td>0.0297**</td>
</tr>
<tr>
<td>No 128 85.3</td>
<td>115 76.7</td>
<td>4.74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NS: Not significant; * Significant at 0.01 level; ** Significant at 0.05 level

Knowledge of children's rights in Indian law

Knowledge of mere existence of key legal measures
Participants were first asked about their knowledge of the mere existence of key legal measures regarding children's rights and welfare. These measures were of three types: constitutional provisions, other Indian laws, and the UNCRC. Findings revealed that the majority of the participants (88.0 percent of parents and 79.3 percent of teachers) did not know about the existence of the Constitutional provisions. More than half of the parents (63.3 percent) and teachers (59.3 percent) had no awareness of other Indian laws protecting children's rights. Very few participants were aware of the UNCRC; less than one in six parents and around one in four teachers had heard of it. Results are shown in Table 4.

Knowledge of specific legal measures
Those who did have some knowledge of the mere existence of such general measures (55 parents and 61 teachers) were asked about their awareness of the existence of nine specific pieces of Indian legislation. Responses showed that awareness differed by statute. Awareness of the Child Labour Act was highest,
followed by the Child Marriage Restraint Act, the Pre-Conception and Pre-natal Diagnostic Technique Act, and the Juvenile Justice Act. In general, teachers' knowledge was significantly better than that of parents, except for three laws (Juvenile Justice Act, Prohibition of Sex Selection Act, and the Penal Code). There was lowest awareness of the Persons with Disabilities Act, the Penal Code, and the Infant Milk Substitutes Act. Results are shown in Table 5.

Table 5: Knowledge about specific Indian laws about children's rights and welfare

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Parents (n=55)</th>
<th>Teachers (n=61)</th>
<th>Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Labour (Prohibition and Regulation), Act, 1986</td>
<td>Yes</td>
<td>29</td>
<td>52.7</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>26</td>
<td>47.3</td>
<td>17</td>
</tr>
<tr>
<td>Child Marriage Restraint Act, 1929</td>
<td>Yes</td>
<td>25</td>
<td>45.5</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>30</td>
<td>54.5</td>
<td>19</td>
</tr>
<tr>
<td>Commissions for Protection of Child Rights Act, 2005</td>
<td>Yes</td>
<td>9</td>
<td>16.4</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>46</td>
<td>83.6</td>
<td>40</td>
</tr>
<tr>
<td>Immoral Traffic (Prevention) Act, 1956</td>
<td>Yes</td>
<td>11</td>
<td>20.0</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>44</td>
<td>80.0</td>
<td>34</td>
</tr>
<tr>
<td>Indian Penal Code, 1860</td>
<td>Yes</td>
<td>8</td>
<td>14.5</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>47</td>
<td>85.5</td>
<td>52</td>
</tr>
<tr>
<td>Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992</td>
<td>Yes</td>
<td>7</td>
<td>12.7</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>48</td>
<td>87.3</td>
<td>44</td>
</tr>
<tr>
<td>Juvenile Justice (Care and Protection of Children) Act, 2000</td>
<td>Yes</td>
<td>27</td>
<td>49.1</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>28</td>
<td>50.9</td>
<td>28</td>
</tr>
<tr>
<td>Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995</td>
<td>Yes</td>
<td>6</td>
<td>10.9</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>49</td>
<td>89.1</td>
<td>42</td>
</tr>
<tr>
<td>Pre-Conception and Pre-natal Diagnostic Technique (Prohibition of Sex Selection) Act, 1994</td>
<td>Yes</td>
<td>24</td>
<td>43.6</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>31</td>
<td>56.4</td>
<td>19</td>
</tr>
</tbody>
</table>

NS: Not significant; * Significant at 0.01 level; ** Significant at 0.05 level
Perceptions of children's rights in practice

The third goal of the study was to identify parents' and teachers' perceptions about children's lived experience of seven key rights promoted in legislation and the UNCRC. Participants were asked whether they thought that in general, children in India enjoyed certain rights. The rights they were asked about were the rights to freedom of expression; freedom of association; medical care; primary education; freedom from discrimination based on culture, language or religion; leisure and play; and protection from excessive or dangerous work.

Responses from parents and teachers were very similar. Of the seven listed rights, the majority of both parents and teachers thought none were generally enjoyed by children in India. The right most often thought to be enjoyed was freedom from discrimination based on minority culture or language, but even was thought by only 37.3 percent of parents and 48 percent of teachers to be generally enjoyed. The right least likely to be perceived as enjoyed in lived experience was the right to free primary education, with only 13.3 percent of parents and 10 percent of teachers perceiving this to be generally enjoyed. The lived experience of all five other rights was perceived similarly, and consistently negatively. Parents' positive responses to the lived experience of these five rights ranged from 21.3 to 30.0 percent, and teachers' positive responses ranged from 18.7 to 34.7 percent. Results are shown in Table 6.

Discussion

This study obtained evidence of a sample of Indian parents' and teachers' attitudes towards children's rights, knowledge of children's rights in Indian and international law, and perceptions of children's rights in lived experience. Relative to the national population, participants were middle and upper-middle class: highly literate, highly educated, had high levels of employment and income, and were in small families. From these demographic features of the sample, it is plausible to draw three conclusions. First, there is no reason to conclude that the attitudes of these participants towards children's rights are less positive than those of the general population. In fact, the attitudes of these respondents are probably as or more positive than those of the general population. This is likely to be so because of their education and socioeconomic status, the fact they had children attending school, and because of their middle class status, which enables the possibility of upwards mobility denied to the genuinely poor, and not required by the
Table 6: Perceptions of the lived experience of children's rights in India

<table>
<thead>
<tr>
<th>Perception of the lived experience of children in general in India</th>
<th>Parents (n=150)</th>
<th>Teachers (n=150)</th>
<th>Chi-square p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think children enjoy the right to express their views, obtain information, and make ideas or information known?</td>
<td>Yes 35  23.3</td>
<td>42  28.0</td>
<td>0.86  0.3548</td>
</tr>
<tr>
<td>No 115  76.7</td>
<td>108  72.0</td>
<td>(NS)</td>
<td></td>
</tr>
<tr>
<td>Do you think children are allowed to meet others irrespective of background, and to join or form associations?</td>
<td>Yes 32  21.3</td>
<td>40  26.7</td>
<td>1.17  0.2795</td>
</tr>
<tr>
<td>No 118  78.7</td>
<td>110  73.3</td>
<td>(NS)</td>
<td></td>
</tr>
<tr>
<td>Do you think children receive necessary medical care?</td>
<td>Yes 38  25.3</td>
<td>35  23.3</td>
<td>0.16  0.6865</td>
</tr>
<tr>
<td>No 112  74.7</td>
<td>115  76.7</td>
<td>(NS)</td>
<td></td>
</tr>
<tr>
<td>Do you think all children get free primary education?</td>
<td>Yes 30  13.3</td>
<td>15  10.0</td>
<td>0.81  0.3685</td>
</tr>
<tr>
<td>No 130  86.7</td>
<td>135  90.0</td>
<td>(NS)</td>
<td></td>
</tr>
<tr>
<td>Do you think children from minority communities are discriminated against in the enjoyment of their culture and the practice of their religion and language?</td>
<td>Yes 56  37.3</td>
<td>72  48.0</td>
<td>3.49  0.0618</td>
</tr>
<tr>
<td>No 94  62.7</td>
<td>78  52.0</td>
<td>(NS)</td>
<td></td>
</tr>
<tr>
<td>Do you think children get leisure time or time for play and recreation?</td>
<td>Yes 32  21.3</td>
<td>28  18.7</td>
<td>0.33  0.5627</td>
</tr>
<tr>
<td>No 118  78.7</td>
<td>122  81.3</td>
<td>(NS)</td>
<td></td>
</tr>
<tr>
<td>Do you think children are protected from work that threatens their health, education and development?</td>
<td>Yes 45  30.0</td>
<td>52  34.7</td>
<td>0.75  0.3876</td>
</tr>
<tr>
<td>No 105  70.0</td>
<td>98  65.3</td>
<td>(NS)</td>
<td></td>
</tr>
</tbody>
</table>

Second, participants' knowledge of laws regarding children's rights is likely to be at levels at least equal to, and probably higher than those of the general population. Third, the sample's perceptions of the quality of children's

elite. While further study would be needed to explore this interesting and important topic, it is plausible that because of the influence of class, caste and culture, that those in the middle class have the most positive attitudes towards rights. The upper class may be less favourably disposed towards children's rights generally, on the basis that they are the preserve of the elite. Among the poor, there may not be a spirit of protest and a demand for rights (and hence an absence of strong attitudes favouring rights); poorer people may have a fatalistic passivity or a sense of resignation about their station in life, and perhaps a lack of awareness of even the
lived experience are at least representative of the population's perceptions, and if anything exceed actual reality.

**Attitudes to children's rights**

There were strong attitudes towards children possessing 'some rights' in general, with three in four participants favouring this. However, one in four participants had a negative attitude towards children's possession of 'some rights' in general. Given the inconsistent answers to the subsequent questions about specific rights, it is difficult to interpret this finding. One possibility is that participants had a preconceived notion of the concept of 'rights' — for example, they may have imagined it to include a right to freedom from corporal punishment, or a freedom to do whatever they liked — which may have coloured their response. So, this response may reflect general cultural attitudes to parental discipline, and subservience to parental authorities. Nevertheless, since the question was framed as whether the person believed children should have 'some rights', the proportion of responses in the negative is concerning. If one in four people have an attitude that children should not possess any rights, then that is a matter of great concern.

Responses to the questions about attitudes towards specific children's rights were more positive. There were unanimously positive attitudes towards children possessing rights to education, health, protection from inappropriate and damaging work, and to leisure, play and participation in cultural and artistic activities. There was also strong support for rights to freedom of expression and association, although this was not unanimous with three in 10 parents and one in four teachers having attitudes against freedom of expression, and one in four parents and one in three teachers had attitudes against freedom of association. The extent of negative attitudes towards freedom of expression may also reflect attitudes to discipline of children (including a general acceptance of corporal punishment), subservience to parental authorities, and the cultural framework which places heavy reliance on conformity with the dictates of patriarchy, religion, culture and class. The extent of negative attitudes towards freedom of association may reflect attitudes to social separation based on cultural standards regarding class, gender and religion.

**Perceptions of the lived experience of children's rights**

The unanimously positive attitudes towards children possessing rights to education and health, and to protection from inappropriate and damaging work,
form a striking counterpoint to evidence about the actual lived experience of many millions of children in India. There could not be clearer or stronger support for the conferral of these rights, not only in the abstract, but in reality. Connected with this, it was notable that the participants' perceptions of children's lived experience of these rights showed that in every case, the majority perceived that the right was not enjoyed by children generally. The right to free, primary level education was the right least likely to be perceived as enjoyed. The right to health was perceived by three in four participants as not being generally enjoyed. Two other fundamental civil rights of freedom of expression and association were also perceived by most as not generally enjoyed, and this seems congruent with reality. The evidence described in the review in this article demonstrates that these perceptions accord with reality, and probably underestimate it. Finally, protection from inappropriate work, and a related right to leisure and play, were also perceived as generally not enjoyed. This also seems congruent with the reality reflected in the literature reviewed here, and other evidence. Many urban children are deprived of leisure time because of strict routines in life from early childhood, which are often the result of intense academic pressure from families, schools and private tutors to perform at high academic levels. There is an extremely competitive academic environment in which children compete with others for scarce higher educational opportunities, and this may particularly affect children in the middle class, who aspire to higher social mobility (Deb et al. 2010). This academic pressure influences the alarming frequency of suicide: national data in 2009 indicate over 2000 people suicided with the listed cause of 'failure in examination', and of these, 291 were aged under 15 (National Crime Records Bureau, 2010, p. 180). Hence, many children are forced to study very long hours, which affects their freedom to enjoy leisure time, play and participation in activities. As well, there is a lack of adequate spaces, parks and playgrounds in urban areas, and parental reluctance to allow children to mix with other children also works to deprive children of these rights.

The positive attitudes towards key rights, and the perceptions that they are not enjoyed in general by children in India, are reinforced by evidence about the actual experience of children in India. This suggests there are some key social policy measures that may be particularly important for India and the nation's children. While the promotion of all rights is important, there may be some which need even more priority than others, since they may be even more

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a) There are other extremely competitive exams for admission to senior high school (Class X First Board Examination) and university (Class XII Final Board Examination), and for government and college positions; coaching schools are widespread.

b) Hundreds more in this age group and the age group 15-19 had an unknown cause, so the data are conservative.
essential to life, security and opportunity. Accordingly, based on the most fundamental needs of any human being, the rights to health, and to free primary school education, appear to be the most urgent concerns to be considered and addressed. Other rights are connected with these, including freedom from inappropriate and damaging work, and freedom from childhood marriage.

Knowledge of legal frameworks promoting children's rights and welfare

This study found very low levels of knowledge of the mere existence of three groups of general legal measures. Namely, there was very low knowledge of constitutional provisions (about one in eight parents and one in five teachers), higher (but still low) knowledge of the existence of other legal measures (about two in five for both parents and teachers), and extremely low awareness of the mere existence of the UNCRC (less than one in six parents, and around one in four teachers). Of the 55 parents and 61 teachers who did have some awareness of other legal measures in Indian law for the promotion of children's rights and welfare, there were differing levels of knowledge of key statutes. Knowledge of legislation regulating child labour was highest, likely due to prominent media coverage of these initiatives. Knowledge of legislation restraining child marriage was next highest. The legislation regarding sex selection was relatively well-known, probably influenced by efforts to raise awareness of the practice and its prohibition; all government hospitals and private nursing homes display a board in the front door titled 'sex determination is not done here'. Juvenile justice legislation was relatively well-known and the legislation prohibiting trafficking was well-known by teachers (but not by parents); both statutes also received special media attention because of recent reported incidents of child sexual abuse and abandonment of new born children across the country. There was far less familiarity with the legislation regarding health promotion, anti-discrimination, and penal code provisions, perhaps indicating that fewer resources had been devoted to these principles and initiatives and sustained awareness-raising of them.

Overall, the findings of this study indicate a need to improve attitudes towards children's rights generally, with a particular focus on selected rights. In association with this, there is a need to raise awareness of domestic and international laws which seek to promote these fundamental rights. Awareness-raising needs to occur at a societal level, with additional emphasis within the most influential groups: parents and teachers. Given that there are some fundamental rights which are frequently breached with great cost caused to children and society — such as the rights to health and education, and the prohibitions of child marriage and inappropriate child labour — it would be most profitable to also direct resources towards improving attitudes towards children in those industries.
While it is not the purpose of this article to develop a model for enhancing attitudes and knowledge, various strategies to disseminate information about children's rights could be employed to raise awareness, both across the populace and within key groups. Focused campaigns could be launched regarding key rights and practices, such as child health, primary education, child marriage, and labour. Within particular sectors, reform efforts could be tailored to maximise exposure to the nature and benefits of key rights. Parents could have prenatal and postnatal support which provides information on child development and the effects of injurious practices, and advice on methods of discipline which do not involve harmful physical and emotional violence. Teacher training curriculum should include subject matter on the nature of children's rights, child development, child maltreatment, and the health effects of certain practices. Children should also be educated about their rights in school, and parents should be included in these educative efforts. At a population-wide level, the vast enterprise of Indian television – there are over 100 television channels in India – and other media could be used to broadcast culturally sensitive educative programs and information. Such awareness-raising, if done effectively and with enough exposure and consistency, can be a powerful method of developing knowledge and changing attitudes, which can then influence behaviour. In addition, it has been persuasively theorised that the development of human rights norms in the Western world was powerfully influenced by the use of literature and drama which instilled in people a sense of empathy for those denied rights (Hunt, 2007). Accordingly, profound benefits may flow from the use of culturally-appropriate vehicles such as stories and plays about those who are denied rights.

There is clear evidence that some of the rights enacted in Indian legislation, such as the prohibitions on child marriage, and on forced labour, are widely ignored. The new right to education is also yet to be implemented with sufficient breadth. Rights to personal safety are clearly also widely breached, and in the field of child maltreatment, India was recently assessed as having a 'low to zero' degree of implementation of child protection measures to establish a basic level of child protection (Svevo-Clanci et al. 2010). This study found that in the child maltreatment context, those nation's systems which were more successful were characterised by two social programs: a child protection infrastructure comprising legislation and services, and a minimum of one information-based intervention support program. As well, professional training and public awareness-raising were concluded to be critical steps in improving child protection from abuse and neglect.

As well as raising awareness and developing better attitudes towards children's rights, there are clear needs for strong implementation of key
legal rights. Legally-recognised rights can help to create a positive culture towards that right, but such rights must be implemented to the greatest extent possible. Basic healthcare needs to be provided, especially to neonates. The new right to free primary education must be accompanied by measures to ensure it is implemented. Child marriage, forced labour, and inappropriate labour practices must also be minimised. While there is a need to recognise that perfect attainment of these rights is perhaps an unrealistic target, agencies charged with implementing these rights must be appropriately trained and resourced to ensure the rights are broadly secured in lived experience and that continual efforts are made to sustain incremental gains. Proper governance and accountability, including periodic monitoring and evaluation of the laws' implementation, and publication of results, is essential. There have been some recent significant proposals to implement children's fundamental rights, including plans for renewed systemic commitments to child health, especially in the first two years of life (Paul et al. 2011), and a proposal to develop an Integrated National Health System (Reddy et al. 2011). As well, there are proposed guidelines for the recognition and management of child abuse in pediatric settings (Aggarwal et al. 2010). These are just some of the essential advances in what must be a sustained, patient campaign to improve the lived experience of children in India.

Limitations

This study was carried out with 300 participants from urban areas in one state, who were highly educated, securely employed, of high income and in small families. Therefore, the findings cannot be generalised. To gain a more comprehensive insight into attitudes towards children's rights, knowledge of children's legal rights, and perceptions of children's lived experience, it would be desirable to conduct a study with a sample from both urban and rural areas, which more closely represents average levels of education, employment, income and family size. As indicated earlier, it would also be desirable to explore the attitudes, knowledge and perceptions of people of different classes. As well, since India is a socially and demographically diverse nation of 28 states and seven union territories, it is possible that there are differences between jurisdictions in attitudes, knowledge and perceptions. Therefore, it would also be desirable to conduct a study in multiple different states and territories. Finally, this empirical study was conducted before 2009, when new legislation conferred the right to free primary school education. The advent of this legal right may have had an impact on people's attitudes and knowledge towards children's rights.
References


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Academic-related Stress among Private Secondary School Students in India

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Abstract

This study aimed to examine the prevalence of academic stress and exam anxiety among private secondary school students in India as well as the associations with socio-economic and study-related factors. Participants were 400 adolescent students (52% male) from five private secondary schools in Kolkata who were studying in grades 10 and 12. Participants were selected using a multi-stage sampling technique and were assessed using a study specific questionnaire. Findings revealed that 35% and 37% reported high or very high levels of academic stress and exam anxiety respectively. Having four or more tutors was significantly associated with academic stress. Extra-curricular activity was associated with lower levels of examination anxiety. Findings of the present study speak in favour of sensitization programs for the parents.

Keywords: Academic stress, exam anxiety, secondary school, India

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1.0 Introduction

Secondary students’ mental health, especially with regard to academic burden and related problems, has become a serious public health issue among researchers, policy makers and authorities of educational institutions worldwide (Lei et al., 2007; Zhao et al., 2009; China Youth Social Service Centre, 2008; Liu & Tein, 2005). Academic burden is a major source of stress among school students worldwide (Brown, Teufel, Birch, & Kancheria, 2006; Christie & MacMullin, 1998; Dodds & Lin, 1993; Gallagher & Millar, 1996; Huan, See, Ang, & Har, 2008; Tang & Westwood, 2007). Academic stress is a significant issue among students attending secondary schools as it is associated with mental health problems, such as depression, anxiety and suicidal ideation (Anderman, 2002; Ang & Huan, 2006; Bjorkman, 2007; Field, Diego, & Sanders, 2001; Kouzma & Kennedy, 2000). Latest available data indicates that more students in Asian countries like India, China, Singapore, Korea, Japan and Chinese Taiwan are victim of academic stress compared to students of Western countries (Deb et al., 2011; Mitra & Deb, 2011; Dunne et al., 2011; Hansen, 2010; Ang, Huan, & Braman, 2007; Crystal et al., 1994; Lee & Larson, 2000; Lei, Sun, Li, Guo, & Zhang, 2007; Zhao, Zhu, & Ma, 2009). This difference in academic stress might be related to differences in demographics, socio-economic variables, education systems and perceived cultural value of education (Ang & Huan, 2006a; Bossy, 2000; Lin & Chen, 1995; Lu, 2008). It is therefore important to better understand the prevalence of academic stress in Asian secondary schools as well as potential risk factors for academic stress in this population.

In India, academic pressure for better performance is a common phenomenon. One Kolkata-based study covering grades 11 and 12 students revealed that nearly two-thirds (63.5%) of the students reported stress because of academic pressure— without significant differences across gender, age, grade, and several other personal factors, and over 80% reporting examination related anxiety (Deb et al., 2011). The high level of distress of these students was manifested by the finding that about one-third of the students were symptomatic of psychiatric caseness. Similarly the extent of academic pressure is clearly evident from the reports of suicide among Indian students. Every day 6.23 Indian students commit suicide because of academic failure as reported by the National Crime Records Bureau (2008).

In terms of potential risk factors, about two-thirds of grade 11 and 12 students report parental pressure for better academic performance (Deb et al., 2011). Deb et al. found that the incidence of parental pressure differs significantly with differences in the educational levels of the parents, mother’s occupation, number of private tutors, and academic performance. Fathers possessing a lower education level (non-graduates) were found to be more likely to pressurize their children for better academic performance. Similarly, another Kolkata-based study reported negative effects of parental pressure on mental health (Deb & Bhattacharya, 2012). In this study the authors observed parental pressure for better academic performance in 46.2% of the adolescents and female adolescents (53.2%) experienced more pressure than that of male adolescents (39.0%). Parental pressure for better academic performance caused high anxiety among the adolescents and had negative effects on emotional adjustment, self-concept and self-confidence (Deb & Bhattacharya, 2012). While there is emerging evidence of the link between parental pressure and academic stress in Indian secondary school students, there is also a need to further examine the association between other potential demographic and psychosocial risk factors. This study will therefore aim to explore the association between a range of demographic variables and academic stress, examination anxiety and parental pressure.
The educational system in Indian secondary schools involves major examinations at the end of each school year, in addition to weekly and monthly examinations and homework assignments. The outcome of these examinations influences the decision to promote the student to the next grade. Critical board examinations are held at the end of the 10th and 12 year. The Grade 10 Board Examination is important because it determines, to a very large extent, whether a student would get to specialize in his/her preferred stream of education and this large impact on the choice of education and employment following secondary school, with little flexibility for changing choice in the Indian educational and employment systems. The outcome of the grade 12 examinations influences students’ admissions to colleges and universities. While this is the case in most countries, high population compared with relatively low number of good quality tertiary education facilities produces enormous competition for high academic results. In addition, in India, good academic performance is also attached with social status, which also contributes to academic stress. The pressure of preparation for examinations creates a high degree of anxiety in many Indian students (Raina, 1983). As such, there is particular pressure on Indian secondary school students in their 10th and 12th years. There is also prevalent notion among Indian parents is that private schools extend more quality education than that of government schools and so most parents aspire to send their children to private schools, despite high tuition fees and capitation charges. Therefore this study will examine the prevalence of academic stress, examination anxiety and parental pressure in Indian private secondary school students in years 10 and 12, as well as investigating the associations between a range of demographic variables and these three variables.

2.0 Method

2.1 Site

The city of Kolkata, formerly known as Calcutta, is the capital of the State of West Bengal located in Eastern India with a hinterland of over 220 million residents. The urban agglomeration of Kolkata itself is home to more than 14 million people, making it India’s third-largest metropolitan area after Mumbai and Delhi (Census of India, 2011) and the eighth-largest metropolitan area in the world (United Nations, 2006). People from various neighbouring states move to Kolkata for educational, vocational, and employment purposes. Kolkata’s schools are administered by the state government or private, including religious and philanthropic organisations. The medium of instruction in schools is predominantly Bengali or English and, to a lesser extent, Hindi and Urdu. Kolkata has nine universities with numerous affiliated colleges. The literacy rate in West Bengal (77.1%) is slightly higher than that for India overall (74.04%) literacy rate (Census of India, 2011).

2.2 Design

This study involved a cross-sectional study of grade 10 and 12 students studying in private secondary schools in Kolkata city.

2.3 Participants

Participants in the study were a group of 400 adolescents, 206 males and 196 females, aged 15-18 years (mean =16.08 years, SD= 0.98). Out of 400 adolescent students, 216 and 184 were from grade 10 and grade 12 respectively. Participants were selected using a multi-stage
sampling technique such that the final sample was drawn from five English speaking private secondary schools in Kolkata city. The characteristics of the participants are shown in Table 1 below.

2.4 Measures

2.4.1 Study Specific Questionnaire: The Study Specific Questionnaire, developed by Dr. Sibnath Deb (2011), collects information about demographic and socio-economic background of the subjects, their perception about stress of adolescents, anxiety related to examination, communication skills, future aspiration, involvement in extra-curricular activities and academic performance. The questionnaire was reviewed by two experts who gave feedback on the utility of the questions, the face validity and language of the questions. There are five sections of the questionnaire:

Section I: Demographic and socio-economic section comprised of six items on issues like age, gender, education, parents’ education and occupation, and family income.

Section II: Perception about Stress of Adolescents. This section is comprised of eight questions. One question asked if the participants feel academic stress (yes or no), while a second asked the participant to rate their level of academic stress on a four point likert scale (low, moderate, high, very high). Single item questions also asked about the whether or not the participants experienced academic pressure from their parents (yes or no), who the source of this pressure was (mother or father or both), whether the participants had a private tutor and the number of tutors, whether they experienced stressed due to having too many tutors?

Section III: Anxiety related to Examination section is comprised of three items on nature and level of examination-related anxiety and perception about coping strategies. The first question asked ‘Do you have any anxiety related to examination?’ (response = yes/no. Participants were also asked to rate on a 4 point likert scale their level of anxiety during examinations (low, moderate, high and very high), as well as indicating the strategy they use to manage their examination anxiety.

Section IV: Communication skills and Future Aspiration. This section is comprised of three items on proficiency in English and future aspiration.

Section V: Involvement in Extra-curricular Activities and Academic Performance. This section is comprised of four items on nature of involvement in extracurricular activities, reasons for not participating in extra-curricular activities and details of the latest academic performance.

2.5 Procedure

A prior appointment was made with school authorities from English medium schools in Kolkata to apprise them of the objectives of the study and to obtain their permission for data collection. Afterwards, a tentative schedule for data collection was developed in discussion with the authorities. Data were collected with the voluntary consent of the adolescent participants.
3.0 Results

3.1 Sample Description

The demographic characteristics of the sample are presented in Table 1. There were 206 (51.5%) male and 194 (48.5%) female students. The age ranged from 15 to 18 years with a mean of 16.07 and a standard deviation (SD) of 0.98. Age and school year were closely related with the majority (92.6%, 213/230) of 15-16 year-olds were Grade 10 and virtually all (98.2%, 167/170) of 17-18 year-olds were Grade 12 students. The educational level of parents in this sample was very high with 53.3% and 36.3% of fathers and mothers holding a postgraduate degree (Table 1). Among 368 students with both parents' education status available, 107 (33.2%) had both parents and 107 (29.1%) had one parent having a postgraduate degree, and parents of 139 (37.8%) students had an education level of undergraduate or lower. There were slightly more students having fathers in service occupation than those having fathers in business or self-employed (Table 1). Most (72.5%) participants' mothers were housewives while a small proportion was doing service (17.5%) or business (9.8%, Table 2).

Table 1
Demographic Characteristics of the Sample (N = 400)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
<td>Father occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>Business</td>
<td>169</td>
<td>42.3</td>
</tr>
<tr>
<td>Male</td>
<td>206</td>
<td>51.5</td>
<td>Service</td>
<td>208</td>
<td>52.0</td>
</tr>
<tr>
<td>Female</td>
<td>194</td>
<td>48.5</td>
<td>Unemployed</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>Don't know</td>
<td>22</td>
<td>5.5</td>
</tr>
<tr>
<td>15</td>
<td>160</td>
<td>40.0</td>
<td>Mother occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>70</td>
<td>17.5</td>
<td>Business</td>
<td>39</td>
<td>9.8</td>
</tr>
<tr>
<td>17</td>
<td>153</td>
<td>38.3</td>
<td>Service</td>
<td>70</td>
<td>17.5</td>
</tr>
<tr>
<td>18</td>
<td>17</td>
<td>4.3</td>
<td>Housewife</td>
<td>290</td>
<td>72.5</td>
</tr>
<tr>
<td>Family income level</td>
<td></td>
<td></td>
<td>Don't know</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>151</td>
<td>37.8</td>
<td>Less than 20 K</td>
<td>57</td>
<td>14.3</td>
</tr>
<tr>
<td>Post graduate</td>
<td>213</td>
<td>53.3</td>
<td>20-40 K</td>
<td>104</td>
<td>26.0</td>
</tr>
<tr>
<td>Don't know</td>
<td>23</td>
<td>5.8</td>
<td>&gt;40 K</td>
<td>180</td>
<td>45.0</td>
</tr>
<tr>
<td>School year</td>
<td></td>
<td></td>
<td>Don't know</td>
<td>59</td>
<td>14.8</td>
</tr>
<tr>
<td>Lower than college degree</td>
<td>13</td>
<td>3.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>189</td>
<td>47.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post graduate</td>
<td>145</td>
<td>36.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don't know</td>
<td>26</td>
<td>6.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N = number of participants
Academic Performance and Activities

The proportions of students who had an average scores on their tests of <60, 60-69, 70-79 and ≥80 were 13.3%, 35.3%, 29.8% and 21.8%, respectively. Combining the first two categories as “low” and the last two as “high”, the proportion of high grades was significantly higher in male and Grade 10 students than their female and Grade 12 counterparts, which was similar across other demographic variables (Table 2).

Table 2

<table>
<thead>
<tr>
<th>Academic Performance and Activities across Demographic Variables among a Sample of Indian Students (N = 400)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>School year</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>Parental education *</td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Middle</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>Father’s occupation</td>
</tr>
<tr>
<td>Business</td>
</tr>
<tr>
<td>Service</td>
</tr>
<tr>
<td>Mother’s occupation</td>
</tr>
<tr>
<td>Business</td>
</tr>
<tr>
<td>Service</td>
</tr>
<tr>
<td>Housewife</td>
</tr>
<tr>
<td>Family income level</td>
</tr>
<tr>
<td>Low (&lt;40 K)</td>
</tr>
<tr>
<td>High (≥40 K)</td>
</tr>
</tbody>
</table>

Note. N = number of participants; M = mean, SD = standard deviation

* For parental education: Low = both parents had an educational level of undergraduate degree or lower; Middle = one parent had a postgraduate degree; High = both parents had a postgraduate degree

Between-group comparisons were made using Fisher exact test and independent t-test or one-way ANOVA (for number of tutors only). * p < .05; ** p < .01, *** p < .001

In terms of English proficiency, the majority (95.8%, 383/400) reported that they were able to communicate their views and opinions properly in English. Only five (1.3%) students considered their proficiency as “not clearly” and 74 (18.5%) as “moderately”. Most students considered their English proficiency in communication as “clearly” (46.5%) or “very clearly” (29.5%). We combined the last two groups as “high” and others as “low” proficiency. The proportion of high proficiency differed significantly between parental education, mother’s occupation and family income levels (Table 2). Students whose parents had high educational levels and those from high income families were more likely to report high English
proficiency. Those having a housewife mother were less likely to have high English proficiency (Table 2).

Private tutoring was found to be very common. The vast majority (96.3%) reported having ever had a tutor in the last year and currently to help them with their academic learning. This proportion was similar across all demographic variables except school year. Grade 12 students were more likely to have private tutor(s) than Grade 10 students (Table 2). The mean number of tutors was significantly higher in males and Grade 12 students than females and Grade 10 students did (Table 2). Students from relatively poorer families had more tutors than those from rich families (Table 2).

Extra-curricular activities at school such as games and sports, cultural programs, national social service and others were also popular with 72.3% of students having ever been involved. More than one-third (36.5%) had attended games and sports and 28.0% had attended culture programs; while only 3.3% had attended national social service. High parental educational level, business occupation of father or mother and high family income had a significant positive effect on attending such activities (Table 2).

**Prevalence of Perceived Stress, Pressure and Anxiety Related to Study**

Eighty-two percent (328/400) students felt stressed to some extent because of academic pressure. Low, moderate, high and very high level of stress was reported by 4.5%, 42.5%, 30.5% and 4.5% of students, respectively. Assigning each level a score (0 – 4) generated a mean (SD) of 2.0 (1.1). As shown in Table 3, both the proportion of having stress and stress score were only significantly related to academic grades with low grade students were more likely to have stress or had higher stress.

Over half (53.0%) felt that their parents gave them pressure for better academic performance. The proportion was significantly higher among low grade students (Table 3). Additionally, among 385 (96.3%) students who ever had a tutor, 132 (34.3%) reported having pressure from their tutor(s) and 114 (29.6%) thought there was no need to have many private tutors.

Three quarter (74.3%) students reported having anxiety related to examinations. The proportion of having low, moderate, high and very high anxiety was 7.3%, 30.0%, 28.8% and 8.3%, respectively. The overall proportion of having examination anxiety was similar across all demographic and study factors but attending extra activities, with those who attended activities more likely to report examination anxiety. After giving each level a score (1 – 4), a mean score (SD) of 1.9 (1.3) was obtained. There was no significant difference across all variables (Table 3).
Table 3

Perceived Academic Stress and Pressure across Socio-economic Variables among a Sample of Indian Students (N = 400)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Academic stress n (%)</th>
<th>Stress score M (SD)</th>
<th>Parental pressure n (%)</th>
<th>Exam-anxiety n (%)</th>
<th>Anxiety score M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>206</td>
<td>165 (80.1)</td>
<td>2.0 (1.2)</td>
<td>116 (56.3)</td>
<td>156 (75.7)</td>
<td>1.9 (1.3)</td>
</tr>
<tr>
<td>Female</td>
<td>194</td>
<td>163 (84.0)</td>
<td>2.0 (1.1)</td>
<td>96 (49.5)</td>
<td>141 (72.7)</td>
<td>1.8 (1.3)</td>
</tr>
<tr>
<td><strong>School year</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>216</td>
<td>178 (82.4)</td>
<td>2.0 (1.1)</td>
<td>113 (52.3)</td>
<td>160 (74.1)</td>
<td>1.8 (1.3)</td>
</tr>
<tr>
<td>XII</td>
<td>184</td>
<td>150 (81.5)</td>
<td>2.0 (1.1)</td>
<td>99 (53.8)</td>
<td>137 (74.5)</td>
<td>1.9 (1.3)</td>
</tr>
<tr>
<td><strong>Parental education</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>139</td>
<td>114 (82.0)</td>
<td>1.9 (1.1)</td>
<td>78 (56.1)</td>
<td>100 (71.9)</td>
<td>1.8 (1.3)</td>
</tr>
<tr>
<td>Middle</td>
<td>107</td>
<td>89 (83.2)</td>
<td>1.9 (1.1)</td>
<td>51 (47.7)</td>
<td>81 (75.7)</td>
<td>1.9 (1.3)</td>
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<tr>
<td>High</td>
<td>122</td>
<td>97 (79.5)</td>
<td>2.0 (1.2)</td>
<td>65 (53.3)</td>
<td>94 (77.0)</td>
<td>1.9 (1.3)</td>
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<tr>
<td><strong>Father's occupation</strong></td>
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<tr>
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<td>139 (82.2)</td>
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<tr>
<td>Low (&lt; 40 K)</td>
<td>161</td>
<td>132 (82.0)</td>
<td>2.0 (1.1)</td>
<td>92 (57.1)</td>
<td>117 (72.7)</td>
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<td>194</td>
<td>166 (83.6)</td>
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<tr>
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<td>82 (85.4)</td>
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<td>229 (75.3)</td>
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<td>5 (33.3)</td>
<td>12 (80.0)</td>
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<tr>
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<td>317 (82.3)</td>
<td>2.0 (1.1)</td>
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<td>285 (74.0)</td>
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<td>51 (45.9)</td>
<td>72 (64.9)</td>
<td>1.7 (1.5)</td>
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<td>239</td>
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<td>161 (55.7)</td>
<td>225 (77.9)</td>
<td>1.9 (1.2)</td>
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</tbody>
</table>

Note. N = number of participants; M = mean, SD = standard deviation
*For parental education: Low = both parents had an educational level of undergraduate degree or lower; Middle = one parent had a postgraduate degree; High = both parents had a postgraduate degree

Between-group comparisons were made using Fisher exact test and independent t-test or one-way ANOVA (for stress and anxiety scores). **p < .05; ***p < .01, ****p < .001

4.0 Discussion

An overwhelming number of students (82.4%) reported that they felt stressed because of academic pressure and more than one-third (35.0%) experienced high and very high level of stress. Findings of the present study add to a growing body of literature that Asian students experience high levels of academic stress (Sun, 2011; Lee & Larson, 2000; Lei, Sun, Li, Guo, & Zhang, 2007; Zhao, Zhu, & Ma, 2009). However the results from this study, suggest that the level of academic stress in private secondary school students in India may be less than...
that found in some other Asian countries. A recent multicultural survey (Lei, et al., 2007; Zhao, et al., 2009) found that Chinese students have the highest academic pressure among four participating countries. Nearly ninety percent (86.6%) of the Chinese participants feel high or very high pressure, while 69%, 74.8% and 67.1% of Japanese, Korean and US students perceive the same (Beijing Evening, 2010; Jia, 2010).

While other studies also reported that females usually report more academic stress than males (Jones & Hattie, 1991b; Xie, 2007; Zhao & Yuan, 2006b), the present study only found a non-significant trend for female secondary students to experience more academic stress compared to male students. One reason previously suggested for this gender difference is that females are more likely to regard school performance as very important, and therefore they worry more about academic failure (Jones & Hattie, 1991b). As such it may be that such gender differences in perception of importance of school performance might not be so strong in Indian private schools.

Academic stress was found to be more prevalent among students with non-working mothers. Since non-working mothers remain at home, it is possible that they may spend more time supervising their children’s homework and providing more encouragement to do well. It is also possible that fathers whose employment is in the public service, may have greater personal experience with the benefits of a good education in helping to secure good employment and so instil greater expectations upon their children to do well academically in the hope that they will then gain good future employment.

So far as parental pressure is concerned, the results of the present study corroborate with some of the previous studies carried out in Kolkata, India (Deb et al., 2011; Deb & Bhattacharyya, 2012). In regard to this issue, some of the previous studies carried out in China observed similar findings. For example, Chinese students consider high parental expectation to be the number one source of academic pressure, followed by self-expectations and peer competition (Lei, Sun, Li, Guo, & Zhang, 2007; Zhao, Zhu, & Ma, 2009). India, like China, has an economic advantages and challenges of a large population. In India, about 40.4% of population are children out of the total population of 1.21 billion (Census of India, 2011). Since there are a relative small number of so called “good” secondary schools there is always a huge competition among children at the entry level to primary school. In India economic and social development itself is under great pressure and this is keenly felt by the middle class who are under greater stress to hold their ground, protect their social position and to move ahead (Ganguly-Scrause & Scrause, 2009). Therefore, insisting children gain good academic performance is a very common phenomenon among parents of middle class families.

In India, the main documented cause of anxiety among school children and adolescents is parents’ high educational expectations and pressure for academic achievement (Deb, 2001). The findings of the present study revealed 37.0% of students reported high and very high level of examination anxiety. Students with high parental education background experience more examination anxiety. The consequences of school based anxiety are important. Anxiety is associated with substantial negative effects on children’s social, emotional and academic success (Essau, Conradi & Petermann, 2000) and anxiety leads to school avoidance, decreased problem-solving abilities, and lower academic achievement (McLoone, Hudson & Rapee, 2006; Rapee, Kennedy, Ungram, Edwards & Sweeney, 2005). As such it is important for future research to explore interventions to reduce academic anxiety. It is likely that such
Interventions will need to target parental expectations and how parents communicate these expectations to their children.

So far as academic performance is concerned, it has been found to be better in males especially among Grade 10 students (p < .05). The high grade students are those students as defined in the present study who got more than 70% marks in the last examination. In this regard, mothers’ educational level and occupation played a significant role. Presumably mothers with higher levels of education and occupations that require higher levels of education, value education more and so provide stronger encouragement to their children to attain higher educational standards. Another observation from the study is that students with poorer academic performance experience significantly more academic stress. More than half of the students experienced pressure from parents for better academic performance especially the students with lower grades. Association between low academic grades and academic stress have been reported by some of the previous studies (Bjorkman, 2007; Li, et al., 2007). Bjorkman (2007) found a strong correlation (r = -0.42) between total grade point average (GPA) and perceived level of academic stress among 268 Grades 6-8 students in the US. Among 538 Chinese junior high school students, Li and colleagues (2007) found that students with lower grades reported significantly more academic pressure than those with middle or higher academic achievement. As such there is a particular need for interventions that target students with lower academic grades. Again this is likely to involve interventions that assist parents in providing appropriate communication with their children.

In order to improve the academic performance most of the parents and/or guardians look for private tutors for giving additional academic inputs to their children which is common across socio-economic groups in Kolkata as well as across India. That means that children attend a double educational system, i.e. formal (school classes) and non-formal (private tutors or coaching centres) after the school hours and/or during vacation.

The present study also revealed that 96.3% Grade 10 and 12 standard (science) students had private tutors and 42.0% of them had four or more private tutors. Significantly more number of Grade 12 standard students had more than four private tutors compared to Grade 10 students (p < .01). Since good performance in Grade 12 final examination is going to ensure admission in preferred stream, parents appoint more private tutors. More male students had four and more number of private tutors than that of their female counterparts, which shows the special care from parents for male students. In general, male children tend to receive special care and attention from the parents perhaps because of expectation of parents that during their old age they might get care and support from their male children. However, some Indian studies have found a contradictory picture in this regard in other geographical location i.e., females receive better care (Deb & Bhattacharyya, 2012; Deb & Chatterjee, 2008). Another interesting observation is that parents with low socio-economic background invest more money in appointing more private tutors for better performance. Perhaps they wish to see that their children lead a better life through good education which will in turn bring a change in the family in terms of social status and upliftment of economic condition of the family.

About one-third of the students having private tutors reported experiencing pressure for better performance. Having four or more tutors was significantly associated with high academic stress and examination anxiety. Interestingly about one-third (29.6%) of the students attending the private tutors are of the opinion that there was no need to have private tutors. It is the parental insistence for which they had private tutors. Excessive workload for attending
four and above private tutors or coaching centres after the school may cause more stress and psychological problems. There is therefore a need to carry out another in-depth study to find out whether there is any positive relationship between having four or above private tutors and good performance, if so, what is the proportion of students are benefitted and/or victimised from this type of double education system.

In the present study, extra-curricular activities were found to be very popular as about two-third of the students (72.3%) were involved in games, sports, cultural programs and so on. Fathers and mothers who work in business related areas, appeared to have children who were significantly more involved with extracurricular activities. This could be because educated fathers and mothers understand the value of extracurricular activities in overall child development better than their counterparts. Extra-curricular activities was not found to be a mitigating factor for academic stress, but it was found to be beneficial for mitigating examination anxiety. In another Kolkata-based study, extra-curricular activities were also not found to be mitigate academic stress (Deb et al., 2011). As such extra-curricular activities may be an effective intervention for examination anxiety but not general academic stress in Indian secondary school students.

4.1 Limitations of the Study

Given the universe of the secondary and higher student population in Kolkata, the sample size was small. Therefore, it would not be wise to generalise the findings of the study. Secondly, responses are based on self-report. However, the findings give some idea about prevalence of the academic stress among secondary and higher secondary students in Kolkata and its association with parental pressure, number of private tutors and examination-related anxiety. To further validate the findings, another study with a larger sample is recommended.

4.2 Conclusion

More than four-fifths of the Grade 10 and 12 private secondary students in this study experience academic stress to some extent, while more than one-third experienced high and very high level of academic stress. Approximately half of the students in this study reported experiencing parental pressure for better academic performance. The proportion was significantly higher among low grade students. The vast majority of the students (96.3%) have had private tutors and 42% had four or more tutors. Having four or more tutors was significantly associated with a higher percentage of feeling high or very high academic stress and exam anxiety. Three quarters of students reported having anxiety related to examinations while 37.0% students reported high and very high level of anxiety. The presence of stress and anxiety among male and female students across Grade 10 and 12 were found to be similar. Extra-curricular activities were found to be very popular among students as 72.3% were involved in it. Although extra-curricular activities were not found to be a mitigating factor for academic stress, it was found to be associated with lower examination anxiety.

4.3 Recommendations

School-based intervention program should be taken up for the students to train them as to how to manage stress and exam anxiety. Secondly, intervention programs for the parents should also be organised in the school to sensitize parents about negative consequences of academic stress, over expectation and their role in terms of encouragement, monitoring of progress of study of their children, and quality parenting.
Acknowledgements: The authors wish to acknowledge their gratitude to all the school authorities for giving permission for data collection. Students who participated in the study voluntarily and shared their valuable views and opinions about the issue also deserve special appreciation.

References


Academic Stress, Parental Pressure, Anxiety and Mental Health among Indian School Students

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&

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Abstract

This work investigates the academic stress and mental health of Indian students studying at the higher secondary level and the association of stress with various psychosocial factors. A total of 190 students from grades XI and XII (mean age: 16.72), of three government-aided and three private schools in Kolkata, India, were covered in the study. Data were collected using a specially designed structured questionnaire and a standardised psychological test. Nearly two-thirds (63.5%) of the students reported stress because of academic pressure - with no significant differences across gender, age, grade, and several other personal factors. About two-thirds (66%) of the students reported that their parents pressurize them for better academic performance. Incidence of parental pressure differed significantly with differences in the educational levels of the parents, mother's occupation, number of private tutors, and academic performance (p<0.05). Fathers possessing a lower education level (non-graduates) were found to be more likely to pressurize their children for better academic performance. About one-third (32.6%) of the students were symptomatic of psychiatric caseness and 81.6% reported examination-related anxiety. Academic stress was positively correlated with parental pressure and psychiatric problems, while examination-related anxiety also was positively related to psychiatric problems (p<0.05). Academic stress is a serious issue which affected 63.5% of the students in Kolkata. Measures for combating the challenges of academic pressure are suggested.

Keywords: Academic stress, anxiety, parental pressure, mental health, higher secondary students.

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Introduction

Academic stress is 'mental distress with respect to some anticipated frustration associated with academic failure, anticipation of such failure, or even an awareness of the possibility of failure' (Verma & Gupta, 1990, p.7). During the school years, stress may show in any aspect of the child's environment: home, school, neighbourhood, or friendship (Anderson, Jimerson & Whipple, 2005; Hess & Copeland, 2006). Kouzma and Kennedy (2004) reported that school-related situations - such as tests, grades, studying, self-imposed need to succeed, as well as that induced by others - are the main sources of stress for Australian high school students. The impact of academic stress is also far-reaching; high levels of academic stress have led to poor outcomes in the areas of exercise, nutrition, substance use, and self-care (Weidner et al., 1996). Again, fourth, fifth and sixth-grade girls who have higher levels of academic stress are more likely to experience feelings of depression (Wenz-Gross & Siperstein, 1997).
The Indian Education System

In a resource-challenged nation, partly due to the large scale non-availability of audio-visual aids and other technology that encourages practical learning and application of knowledge, and partly due to an inability to switch from the colonial methods of education, the Indian school education system is textbook-oriented, where the stress is on rote memorisation of lessons— that requires systematic study for long hours every day. The elaborate study routines that ensue occupy a student from the morning till late evening hours, leaving hardly any time for socialization and recreation.

In India, the school education system is governed by two major categories of educational boards recognised by the Government of India. The first category includes the All-India Boards, like the CBSE (Central Board of Secondary Education), the CICSE (Council for the Indian School Certificate Examinations) and the National Open School. The second category includes the State Level Boards, who are authorised to carry on their activities within the states where they are registered. The education system in India is highly competitive because of a lack of an adequate number of good institutions to accommodate the ever-expanding population of children. Hence children face competition at the entry level of pre-primary education, and thereafter, at the end of every year, in the form of examinations that determine their promotion to the next grade. In classrooms, teachers attempt to cover all aspects of a vast syllabus, often disregarding the comprehension level of students (Raina, 1983). Xth grade terminates with first board examination—in which the competition expands from the school-level to the state, and even the national level.

Performance on the Xth grade board examination is important for a number of reasons. It determines, to a very large extent, whether a student would get to specialize in his/her preferred stream of education, and whether from the institution of his/her choice. Since the job prospects for students from the science stream is somewhat better than that for students of humanities and commerce, the popular choice for most of the students and their guardians is the science stream in Grade XI. Again, the choice made is often irrevocable. Unlike the situation in many Western industrialised countries, in India, it is difficult for a student to switch stream of education after leaving school, more so for the students specializing in Commerce and Humanities.

The XIIth grade, and school life, terminates with the second Board examination. The performance in the XIIth grade final examination is crucial for getting admission in courses of one’s choice in preferred colleges. The poor ratio of number of available institutions to the aspirants for college education ensures that the students face tremendous competition in getting admission in the colleges. In addition, the majority of the science students undergo intense stress as they appear in different entrance examinations for admission in engineering, medical and other specialized professional courses. The pressure of preparation for examinations creates a high degree of anxiety in many students, especially in those who are unable to perform at a level that matches the potential they have shown in less stressful situations (Raina, 1983).

Punishments and fear of punishments at school is also a potent factor that may contribute to academic stress and mental tension. In Indian schools, punishments range from non-corporal forms such as time-outs, suspension, calling the parents to school and verbal reprimands to corporal forms such as caning, spanking or making the student hold ears or perform sit-ups. Understandably, the nature and the intensity of the punishments vary with the student’s age and the gravity of the offence. However, in recent times, there has been an increasing protest against the practice of physical punishment in schools, and corporal punishments have been banned in schools across India in an effort to protect children from its harmful effects (“Indian Government bans”, 2010).

Anxiety as a disorder is seen in about 8% of children and adolescents worldwide (Bernstein & Borchardt, 1991; Boyd, Kostanski, Gullone, Ollendick & Shek, 2000). There are a still larger percentage of children and adolescents in whom anxiety goes undiagnosed owing to the internalized nature of the symptoms (Tomb & Hunter, 2004). Anxiety has substantial negative effects on
children's social, emotional and academic success (Essau et al., 2000). Depression is becoming the most common mental health problem suffering college students these days (Arehart-Treichel, 2002) – caused by poor social problem-solving, cognitive distortions and family conflict (Becker-Weidman et al., 2009) with, as well as alienation from parents and peers, helpless attribution style, gender, and perceived criticism from teachers (Smith et al., 2009). Mental health problems among children and adolescents are frequent in India too (Narang, 1994; Verma & Singh, 1998).

Psychiatrists have expressed concern at the emergence of education as a serious source of stress for school-going children - causing high incidence of deaths by suicide (D'Mello, 1997). Many adolescents in India get referred to hospital psychiatric units for school-related distress – exhibiting symptoms of depression, high anxiety, frequent school refusal, phobia, physical complaints, irritability, weeping spells, and decreased interest in school work (Rangaswamy, 1982; Verma et al., 2002). Fear of school failure is reinforced by both the teachers and the parents, causing children to lose interest in studies (Siah, 1991; Verma & Gupta, 1990). This is similar to the scenario in the East Asian countries, where psychiatrists use the terms ‘high school senior symptoms’ or ‘entrance examination symptoms’ to indicate mental health problems among students (Lee & Larson, 2000).

The self-worth of students in the Indian society is mostly determined by good academic performance, and not by vocational and/or other individual qualities (Varma, 1998). Indian parents report removing their TV cable connections and vastly cutting down on their own social lives in order to monitor their children’s homework (“As much as exam for parents”, 1999). Because of academic stress and failure in examination, every day 6.23 Indian students commit suicide (National Crime Records Bureau. 2000) – raising questions regarding the effects of the school system on the wellbeing of young people.

Ganesh & Magdalin (2007) found that Indian children from non-disrupted families have higher academic stress than children from disrupted families. It is likely that the children from disrupted families get less attention and guidance from their parents regarding academic matters than do their counterparts in non-disrupted families. This, paradoxically, reduces their academic stress -- thus highlighting the negative impact of the parental vigilance and persuasion on the academic lives of their children.

Given the said background, our purpose is to find out the academic stress of XIth and XIIth grade Indian students, its association with various psycho-social factors and its effect on mental health.

Research Questions

1. Do adolescent boys and girls differ significantly with respect to academic stress and examination-related anxiety?
2. Is educational level of the parents positively associated with parentals expectations and pressure?
3. Does the nature of academic stress vary with socio-economic status?
4. Do adolescents of different age groups suffer from similar stress?
5. Is there any relationship between academic stress, number of private tutors and examination-related anxiety?
6. Is there any relationship between communication skills in English and examination-related anxiety?
7. Are adolescents involved in extra-curricular activities less prone to academic stress?
8. Is there any impact of academic stress on the mental health of adolescents?

Method

Sample

The study was conducted on a group of 190 XIth and XIIth grade adolescent students from six schools – three, government-aided, and three, private – in Kolkata, one of the largest metropolitan cities in India, following the multi-stage sampling technique. Ten schools were officially approached. Four schools declined to give permission on account of examination and syllabus load.
The sample included 49 boys (25.8%) and 141 girls (74.2%) aged between 16 and 18 years (mean age: 16.72 years and SD=.77). Several students could not provide information about their parents' educational background and income. About 41.3% of the students had fathers who were non-graduates while for the majority of them, the fathers were graduates and post graduates (58.8%). 59.4 and 40.6% of the mothers were non-graduates and graduates/post graduates respectively. 52.5% of the fathers were in government services while 47.5% of them were engaged in business. 52 subjects had working mothers – self-employed or employed in the government or private sector.

**Study Tools**

The present study used one structured questionnaire and one standardised psychological test.

(1) **Structured Questionnaire**: This questionnaire, developed by Dr. Sibnath Deb, has five sections:
- **Section I**: Demographic and Socio-economic Information comprised of six items on issues like age, gender, education, parents' education and occupation, and family income.
- **Section II**: Perception about Stress of Adolescents comprised of eight items on feeling and level of academic stress, source of academic pressure, number and necessity of private tutors and its effects. An example of academic stress related question is as follows: 'Do you feel stressed because of academic pressure?' Subjects are asked to respond in terms of either 'yes' or 'no'.
- **Section III**: Anxiety related to Examination, comprised of three items on nature and level of examination-related anxiety and perception about coping strategies. An example is provided: 'Do you have any anxiety related to examination?' Subjects are asked to respond in terms of either 'yes' or 'no'.
- **Section IV**: Communication skills and Future Aspiration, comprised of three items on proficiency in English and future aspiration.
- **Section V**: Involvement in Extra-curricular Activities and Academic Performance comprised of four items on nature of involvement in extracurricular activities, reasons for not participating in extra-curricular activities and details of the latest academic performance.

For some items, the mode of response was dichotomous (yes/no), while others were multiple choice items. The face validity and socio-cultural admissibility of the semi-structured questionnaire was ascertained.

(2). **General Health Questionnaire (GHQ-28) – Goldberg and Hiller (1979)**:

The GHQ is a 28 item self-administered screening test aimed at detecting short-term changes in mental health among respondents. It consists of 4 subscales: (i) somatic symptoms; (ii) anxiety and insomnia, (iii) social dysfunction and (iv) severe depression. Each sub-scale consists of seven items and each item has 4 response alternatives.

Scoring was done by Likert method (0-0-1-1) (Goldberg & Williams, 1988). The total score for the questionnaire ranges from 0 to 28 and the score for each subscale ranges from 0 to 7. Threshold for case identification was taken as 4/5, i.e., scores of 4 and below signifies a non-psychiatric case and scores of 5 and above signify psychiatric caseness.

**Procedure**

Written permission was obtained from all the schools after explaining the objectives of the study to the school authorities. At the time of data collection, students were briefed about the objective of the study and its justification in simple terms and were assured about confidentiality of the information. Only those students who had given informed consent for participation were covered in the study.
Data Analysis

In addition to the descriptive analysis of data, Pearson’s chi-square test and/or Fisher’s Exact Test was applied to ascertain the associations between the mental health measures and the demographical and academic factors. Several logistic regressions were conducted to further examine the relationships between psychiatric caseness and academic stress and/or examination-related anxiety. All analyses were conducted using SPSS for Windows 17.0 (SPSS Inc, Chicago, IL). Statistical tests used were two-tailed with a significance level of $\alpha=0.05$.

Results

Table 1 display the frequency and percentages for all demographic variables considered in this study.

Table 1: Description of the Sample (N = 190)

<table>
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<th>Sex</th>
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<th>Father’s occupation</th>
<th>Count (%)</th>
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<td>49 (25.8)</td>
<td>Business</td>
<td>77 (47.5)</td>
</tr>
<tr>
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<td>141 (74.2)</td>
<td>Service</td>
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<td>Age (years)</td>
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<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XI</td>
<td>116 (61.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XII</td>
<td>74 (38.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-graduate</td>
<td>82 (59.4)</td>
<td>Proficiency in English</td>
<td>103 (54.5)</td>
</tr>
<tr>
<td>Graduate/Post graduate</td>
<td>56 (40.6)</td>
<td>Not proficient</td>
<td>86 (45.5)</td>
</tr>
<tr>
<td>Father’s education</td>
<td></td>
<td>Extra-curricular activity</td>
<td>122 (64.2)</td>
</tr>
<tr>
<td>Non-graduate</td>
<td>66 (41.3)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Graduate/Post graduate</td>
<td>94 (58.8)</td>
<td>No</td>
<td>68 (35.8)</td>
</tr>
<tr>
<td>Mother’s occupation</td>
<td></td>
<td>Academic performance</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>29 (21.5)</td>
<td>Good/Very good</td>
<td>56 (29.8)</td>
</tr>
<tr>
<td>Service</td>
<td>23 (17.0)</td>
<td>Moderate</td>
<td>100 (53.2)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>83 (61.5)</td>
<td>Not so good</td>
<td>32 (17.0)</td>
</tr>
</tbody>
</table>

Note: Sample sizes for each category were not necessarily equal due to missing data.

Academic Stress and Risk Factors

Most of the students (63.5%) reportedly felt stressed because of academic pressure (Table 2). As shown in Table 3, education level of the father was significantly associated with academic pressure ($\chi^2(1, N=159)=5.96, p=0.015$); participants whose fathers were non-graduates were found to be more likely to report academic pressure. There were no significant differences in academic stress across gender, age, class, and other factors.

Parental Pressure and Risk Factors

About two-thirds (66.0%) of the students reported that their parents pressurize them for better academic performance (Table 2). Students whose parents were non-graduates ($\chi^2(1, N=158)=16.33, p<0.001$ for father education level; $\chi^2(1, N=136)=8.15, p=0.004$ for mother education level); whose mothers were self-employed ($\chi^2(2, N=133)=6.30, p=0.043$); who had none or at the most 1 or 2 private
tutors ($\chi^2(2, N=188)=11.07, p=.004$); and who had an average level of academic performance ($\chi^2(2, N=186)=10.53, p=.005$) were more likely to experience parental pressure than their counterparts.

Examination-related Anxiety and Risk Factors

More than four-fifths (81.6%) of the students had some anxiety related to examination (Table 2). Female students ($\chi^2(1, N=190)=6.53, p=.011$) and those who were not proficient in communicative English ($\chi^2(1, N=189)=4.97, p=.026$) were more prone to examination-related anxiety than male students and those who were proficient in English respectively.

Table 2: Prevalence (%) of Academic Stress, Parental Pressure, Examination Anxiety and Psychiatric Caseness across Demographic Variables (N = 190)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Academic stress</th>
<th>Parental pressure</th>
<th>Examination anxiety</th>
<th>Psychiatric caseness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>120 (63.5)</td>
<td>124 (66.0)</td>
<td>155 (81.6)</td>
<td>62 (32.6)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>27 (55.1)</td>
<td>35 (74.5)</td>
<td>34 (69.4)</td>
<td>10 (20.4)</td>
</tr>
<tr>
<td>Female</td>
<td>93 (66.4)</td>
<td>89 (63.1)</td>
<td>121 (85.8)</td>
<td>52 (36.9)</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>50 (56.2)</td>
<td>54 (60.0)</td>
<td>76 (84.4)</td>
<td>27 (30.0)</td>
</tr>
<tr>
<td>17</td>
<td>45 (70.3)</td>
<td>45 (72.6)</td>
<td>51 (79.7)</td>
<td>24 (37.5)</td>
</tr>
<tr>
<td>18</td>
<td>25 (69.4)</td>
<td>25 (69.4)</td>
<td>28 (77.8)</td>
<td>11 (30.6)</td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XI</td>
<td>67 (58.3)</td>
<td>75 (64.7)</td>
<td>97 (83.6)</td>
<td>39 (33.6)</td>
</tr>
<tr>
<td>XII</td>
<td>53 (71.6)</td>
<td>49 (68.1)</td>
<td>58 (78.4)</td>
<td>23 (31.1)</td>
</tr>
<tr>
<td>Mother’s education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-graduate</td>
<td>60 (73.2)</td>
<td>65 (81.3) **</td>
<td>60 (73.2)</td>
<td>28 (34.1)</td>
</tr>
<tr>
<td>Graduate/Post graduate</td>
<td>33 (60.0)</td>
<td>33 (58.9)</td>
<td>46 (82.1)</td>
<td>15 (26.8)</td>
</tr>
<tr>
<td>Father’s education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-graduate</td>
<td>50 (75.8) *</td>
<td>55 (85.9) ***</td>
<td>53 (80.3)</td>
<td>20 (30.3)</td>
</tr>
<tr>
<td>Graduate/Post graduate</td>
<td>53 (57.0)</td>
<td>52 (55.3)</td>
<td>75 (79.8)</td>
<td>28 (29.8)</td>
</tr>
<tr>
<td>Mother’s occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>19 (65.5)</td>
<td>24 (88.9) *</td>
<td>23 (79.3)</td>
<td>8 (27.6)</td>
</tr>
<tr>
<td>Service</td>
<td>16 (72.7)</td>
<td>17 (73.9)</td>
<td>20 (87.0)</td>
<td>8 (34.8)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>55 (66.3)</td>
<td>53 (63.9)</td>
<td>60 (72.3)</td>
<td>26 (31.3)</td>
</tr>
<tr>
<td>Father’s occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>51 (66.2)</td>
<td>54 (71.1)</td>
<td>61 (79.2)</td>
<td>17 (22.1) *</td>
</tr>
<tr>
<td>Service</td>
<td>51 (60.7)</td>
<td>51 (60.7)</td>
<td>71 (83.5)</td>
<td>32 (37.6)</td>
</tr>
<tr>
<td>Family income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than Rs. 20,000 p.m.</td>
<td>78 (63.4)</td>
<td>85 (69.7)</td>
<td>96 (77.4)</td>
<td>36 (29.0)</td>
</tr>
<tr>
<td>Rs. 20,000 to 40,000 p.m.</td>
<td>21 (72.4)</td>
<td>21 (72.4)</td>
<td>25 (86.2)</td>
<td>13 (44.8)</td>
</tr>
<tr>
<td>Number of private tutors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>13 (81.3)</td>
<td>15 (93.8) **</td>
<td>12 (75.0)</td>
<td>8 (50.0)</td>
</tr>
<tr>
<td>1-2</td>
<td>43 (68.3)</td>
<td>46 (74.2)</td>
<td>54 (85.7)</td>
<td>21 (33.3)</td>
</tr>
<tr>
<td>3-4</td>
<td>64 (58.2)</td>
<td>63 (57.3)</td>
<td>89 (80.2)</td>
<td>33 (29.7)</td>
</tr>
<tr>
<td>Proficiency in English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not proficient</td>
<td>56 (65.1)</td>
<td>61 (71.8)</td>
<td>76 (88.4) *</td>
<td>32 (37.2)</td>
</tr>
<tr>
<td>Proficient</td>
<td>64 (62.7)</td>
<td>62 (60.8)</td>
<td>78 (75.7)</td>
<td>29 (28.2)</td>
</tr>
<tr>
<td>Extra-curricular activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>42 (61.8)</td>
<td>42 (61.8)</td>
<td>59 (86.8)</td>
<td>22 (32.4)</td>
</tr>
<tr>
<td>Yes</td>
<td>78 (64.5)</td>
<td>82 (68.3)</td>
<td>96 (78.7)</td>
<td>40 (32.8)</td>
</tr>
<tr>
<td>Academic performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not so good</td>
<td>19 (59.4)</td>
<td>19 (59.4) **</td>
<td>28 (87.5)</td>
<td>13 (40.6)</td>
</tr>
<tr>
<td>Moderate</td>
<td>67 (67.0)</td>
<td>75 (76.5)</td>
<td>79 (79.0)</td>
<td>35 (35.0)</td>
</tr>
<tr>
<td>Good/Very good</td>
<td>32 (58.2)</td>
<td>29 (51.8)</td>
<td>46 (82.1)</td>
<td>14 (25.0)</td>
</tr>
</tbody>
</table>

Note: Sample sizes for each group were not necessarily equal due to missing data.

$^* p < .05; ^{**} p < .01; ^{***} p < .001$
Mental Health and Risk Factors

About one-third (32.6%) of the students obtained a high score (i.e., five and above) in GHQ which is above the threshold for psychiatric caseness (Table 2). Gender is found to be associated with examination-related anxiety and psychiatric caseness (p<.05). At the same time, gender ($\chi^2(1, N=190)=4.49$, $p=.034$) and father’s occupation ($\chi^2(2, N=162)=4.64$, $p=.031$) were significantly associated with increased GHQ score – with female students and students whose fathers were employed in service reporting more health problems than male students and students whose fathers were engaged in business respectively (Table 2).

Relationships between Academic Stress, Parental Pressure, Examination-related Anxiety and Mental Health

Academic stress was positively correlated with parental pressure ($\chi^2(1, N=187)=11.89$, $p=.001$) but not examination anxiety ($\chi^2(1, N=189)=1.99$, $p=.158$). There was no significant relationship between parental pressure and examination-related anxiety.

Several Logistic regressions were conducted to examine the relationships between academic stress, parental pressure, examination-related anxiety and psychiatric caseness (Table 3). Results showed that academic stress (OR=2.3, 95% CI: 1.2 – 4.6) and examination anxiety (OR=2.7, 95% CI: 1.1 – 7.0) were significantly associated with psychiatric caseness. When the impact of gender was controlled, the relationship between academic stress and mental health remained significant (Adjusted OR = 2.2, 95% CI: 1.1 – 4.4). Parental pressure also had a positive but not statistically significant association with psychiatric caseness (Table 3).

Table 3: Associations between Academic Stress, Parental Pressure, Examination Anxiety and Mental Health (N = 190)

<table>
<thead>
<tr>
<th></th>
<th>Prevalence of psychiatric caseness (%)</th>
<th>OR (95%CI)</th>
<th>Adjusted OR (95%CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic pressure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>15 (21.7)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yes</td>
<td>47 (39.2)</td>
<td>2.3 (1.2 – 4.6)</td>
<td>2.2 (1.1 – 4.4)</td>
</tr>
<tr>
<td><strong>Parental pressure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>16 (25.0)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yes</td>
<td>45 (36.3)</td>
<td>1.7 (0.9 – 3.4)</td>
<td>1.9 (0.9 – 3.8)</td>
</tr>
<tr>
<td><strong>Examination-related anxiety</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>6 (17.1)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yes</td>
<td>56 (36.1)</td>
<td>2.7 (1.1 – 7.0)</td>
<td>2.4 (0.9 – 6.3)</td>
</tr>
</tbody>
</table>

Note: OR = Odds ratio; CI = Confidence interval

*Adjusted for gender.

Discussion

The mental health of students, especially in terms of academic stress and its impact has become a serious issue among researchers and policymakers because of increasing incidence of suicides among students across the globe. The present study reveals that 63.5% of the higher secondary students in Kolkata experience academic stress. Parental pressure for better academic performance is found to be mostly responsible for academic stress, as reported by 66.0% of the students. Majority of the parents criticize their wards by comparing the latter’s performance with that of the best performer in the class. As a result, instead of friendship, there develops a sense of rivalry among classmates. Some parents even tend to demean the achievement of the top scorer of the class by stating that he/she might have been favoured by the teacher (Mukherjee Pandey, 2010a).
There are instances of nervous breakdown of students before secondary (Xth grade final) or higher secondary (XIIth grade final) examination. Pushed by the parents to 'be the best' in art or music lessons and under pressure to score well in school, some students cannot cope with the demands anymore and collapse when the stress is high. Constantly pushed to perform better in both academic and extra-curricular activities, some children develop deep rooted nervous disorders in early childhood (Mukherjee Pandey, 2010b).

Parents pressurize their wards because of reasons like too much competition for getting admission in reputed institutions in a preferred discipline after the board examinations. The overall unemployment situation in India also provokes parents to pressurize their children for better performance. Some of the parents wish to fulfil their unfulfilled dreams through their children. All these have made a normal pursuit for adolescents (Varma, 1998) – leaving them to deal with the demands of the school as well as that of their tutors. More than half of the parents appoint 3 to 4 private tutors or even more for their wards. On days when there are no academic tuitions, there are art or music lessons. The students hardly get time to watch TV, to play or to interact with neighbours freely or even to get adequate sleep. Naturally such students end up being nervous wrecks when the examination pressure mounts.

The data revealed that parents with low level of education i.e., non-graduates, pressurize their children more than the parents with graduation and post graduation background do. This apart, mother's occupation, number of private tutors and academic performance of the students are some of the other factors associated with academic pressure. People from lower and middle class social strata want their children to do well in studies since this is often the only means to an honourable vocation for them. In a review of studies from low and middle income countries, Patel & Kleinman (2003) confirmed the association between indicators of poverty and the risk of common mental disorders. Academic anxiety is found to be the least in case of adolescents from high socio-economic classes – which may be partly attributed to their secured future at least in material aspects. As Kaplan & Sadock (2000) reported, the prevalence of anxiety disorders tends to decrease with higher socio-economic status. Another study also reported that social disadvantage is associated with increased stress among students (Goodman et al., 2005).

In the present study, examination-related anxiety has been reported by 81.6% of the students, especially the female students who are coming from Bengali medium schools and are not proficient in English. The students from the lower socio-economic strata get admitted in government-sponsored schools and study primarily in the local language – since in government schools in West Bengal, English education is introduced in Class VIII. Compelled to learn a foreign language at a late age and then to study all other subjects in that ill-mastered language, the students in these schools face communication and comprehension problems, which affect their academic performance as well as their self-confidence. This leads to anxiety – causing school avoidance, decreased problem-solving abilities, and lower academic achievement (McLoone et al., 2006; Rapee et al., 2005).

In the present study, gender is found to be significantly associated with examination-related anxiety and psychiatric caseness (p<.05), i.e., female students experience more examination-related anxiety and psychiatric caseness than their male counterparts. This confirms previous findings: adolescent girls report a greater number of worries, more separation anxiety, and higher levels of generalised anxiety than do boys of the same age (Campbell & Rapee, 1994; Costello et al., 2003; Poulton et al., 2001; Weiss & Last, 2001). Deb et al., (2010) too reported higher anxiety among female students in Bengali Medium schools in India.

It is believed that extra-curricular activities could be one of the mediating factors for academic stress. More than three-fifths of the students reported to be involved in extra-curricular activities like games and sports, cultural programmes, National Cadet Corps (NCC) and National Social Service (NSS) and so on. No significant difference is found between the academic stress of students who are involved in extra-curricular activities and who are not. It could be because of lack of meaningful involvement in extracurricular activities or involvement for an insufficient period of time. This issue requires
attention of school authorities so that there is a meaningful involvement of students in extracurricular activities.

Unfortunately, the magnitude of mental health problems of children and adolescents has not yet been recognised sufficiently by the policy makers in many countries (Faraone et al., 2002). Unexplained headaches, migraine and hypertension are becoming alarmingly common among teenagers – often an outcome of their stressful lives. Even recreational activities like sports, music, painting or swimming have become as competitive as studies (Mukherjee Pandey, 2010b). In the present study, psychiatric problems are found to present in 32.6% of the subjects, which is a serious issue of concern for policy makers. A number of previous studies reported psychiatric illnesses among children (Malhotra, 2005; Patel, Flisher et al., 2007). These students require immediate psychiatric attention for improving their mental health status – along with counseling for their parents.

Academic stress is found to be positively correlated with parental pressure and psychiatric problems. Examination-related anxiety is also observed to be related to psychiatric problems. It is important to remember that mental constitution or coping capacities vary from one child to another. Therefore, children with poor coping capacities become more prone to anxiety, depression and fear of academic failure.

The understanding of a child’s development has presently shifted from just a marks-based assessment to a holistic assessment of students’ performance in Kolkata schools because of numerous reported incidents of academic failure among students. Even schools affiliated to the WBBSE (West Bengal Board of Secondary Education), the State Board in Kolkata, India, have done away with ranks in report cards. In order to reduce academic stress on students and parents, the current Human Resource Development Minister, Government of India, Mr. Kapil Sibal has mooted afresh a proposal to make the Class X board examinations optional (“23 years on, same test”, 2009). As a result, the CBSE has made the secondary examinations optional. Hopefully, the shift of paradigm in the style of education will improve the situation and students will feel comfortable and enjoy their studies.

In fine, it may be stated that 63.5% of the students in the present study are stressed because of academic pressure. There were no significant differences in academic stress across gender, age, class, and other factors. Two-thirds of the students reported that their parents pressurize them for better academic performance. Incidence of reported parental pressure differed significantly by parental education levels, mother’s occupation, number of private tutors, and academic performance. More than four-fifths of students suffer from examination-related anxiety, especially female students and those who are not proficient in English. About one-third (32.6%) of the students are indicative of psychiatric caseness. In this regard, gender and father’s occupation were significantly associated. Academic stress was found to be positively correlated with parental pressure and psychiatric problems. Again, examination-related anxiety was positively related to psychiatric problems – which emphasises the need for psychological intervention.

On the basis of the findings of the study, the following steps are suggested:

- Immediate attention of mental health professionals is required for the students whose scores on the GHQ are indicative of psychiatric caseness for improving their mental health status.
- At school, adolescents should be trained on how to manage stress and anxiety.
- Knowledge about mental health and academic stress should be promoted among the parents of the adolescents.

Limitations of the Study

Given the universe of the higher secondary student population in Kolkata, the sample size was small. Therefore, it would not be wise to generalise the findings of the study. Secondly, responses are based on self-report. However, the findings give some idea about prevalence of the academic stress among
higher secondary students in Kolkata and its association with parental pressure, number of private tutors and examination-related anxiety. To further validate the findings, another study with a larger sample is recommended. The present study did not take into account the effect of punishment or threat of punishment in schools on the mental health of the students – keeping in view the recently imposed blanket ban on corporal punishments in Indian schools, and also the fact that punishments are not usually deemed necessary in the Higher Secondary classes, as students are seen as mature enough to follow rules and regulations themselves. However, further investigation is needed to ascertain if the ban has been implemented effectively, and also to ascertain the impact of non-corporal punishments – such as scolding, suspension or withdrawal of facilities – on students. There are no or very few missing data in case of most variables except for parental education, and occupation, and family income. The percentage of missing data ranged from 14.7% for fathers’ occupation to 28.9% for mothers’ occupation (Table 2). Missing rates were significantly higher among females, especially for Grade XI students or for those aged 16 or below. However, for the major outcome measures, most rates did not significantly differ between the groups indicating no great influence on inferential analyses.

Acknowledgements: The authors wish to acknowledge their gratitude to all the school authorities for giving permission for data collection. Sweta Sonthalia deserves special appreciation for her assistance in data collection. Students who participated in the study voluntarily and shared their valuable views and opinions about the issue also deserve special appreciation.

References


As much as exam for parents. The Tribune (1999, March 8), p. 4.


Mukherjee Pandey, J. (2010b, July 12). Kids driven to breaking point. Pushed by parents to be all rounders, the perform-or-perish pressure on school kids is turning them into nervous wrecks. The Times of India, 10, Kolkata.


