ACADEMIC STRESS AND ADOLESCENT DISTRESS:

THE EXPERIENCES OF 12TH STANDARD STUDENTS IN CHENNAI, INDIA

by

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DEDICATION

This dissertation is dedicated to my mother, Hema, my father, V. Subba Rao, and my grandmothers, Saraswati Bai and Malati Rao.

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ABSTRACT

Media reports and interviews with counselors indicate that academic stress and adolescent distress is a significant problem in India, but little systematic research has been conducted on the issue. A combination of quantitative and qualitative methods was used in the current study – surveys assessed the prevalence of academic stress and adolescent distress, and interviews with 12th standard students explored their perceptions of the issue and their understanding of the role of parents.

In the survey part of the study, the prevalence of the problem was assessed with the use of scales that measured depression and anxiety. Surveys were completed by 12th standard students ($n = 588$) from the south Indian city of Chennai. A majority of students reported that they were stressed by the coming school year, and rates of depression and anxiety were very high in the sample. In contrast with previous research and contrary to expectations, few gender, academic track and school type differences were found. Further analyses indicated that different groups of students appeared to experience distress in different ways.

Semi-structured interviews were conducted with 12th standard students ($n = 24$) to explore their perceptions of academic stress and adolescent distress. Their perceptions could be categorized into six themes: busy schedules, experience of stress, somatic symptoms, attitudes and beliefs about 12th standard, the role of God vs. hard work, and education reform. The same interview data was also used to understand the role of parents. Analysis suggested that parents were involved in their child's education in five ways – they had specific expectations for achievement, they put pressure on their children, they compared their child to others, they controlled the study environment, and

they were supportive of their children. Some categories appeared to be associated with a greater experience of academic stress and adolescent distress than others. The interview data was also explored for gender, academic track, and school type differences.

Jointly, these findings suggest that academic stress and adolescent distress is indeed a significant problem in Chennai, India. A variety of interventions are suggested to address the issue.

CHAPTER 1

INTRODUCTION

Academic stress refers to the pressure to perform well in final school

examinations and competitive college entrance examinations that is experienced by 12th

standard students. For some students, the experience of academic stress leads to a sense

of distress, which is generally manifested in a variety of psychological and behavioral

problems. The experience of academic stress and adolescent distress has been identified

and explored by researchers in Korea (Lee & Larson, 1996, 2000) and Japan (Hill, 1996;

Lock, 1988; Schoolland, 1990).

With the exception of a few research studies (Verma & Gupta, 1990; Verma,

Sharma & Larson, 2002), academic stress and adolescent distress has not been explored

in great detail in India. It is important to note that this issue is one that affects a small

proportion of Indian youth, i.e., those who are fortunate enough to attend and graduate

from high school (about 12-15 million students per year) (Shukla, 2005). Mental health

professionals in India, however, have identified academic pressure as an acute stress

factor that leads to mental distress, and in extreme cases, to suicide. "Children,"

psychologist Dr. Matthew Kurien says, "are under pressure to deliver at school; they are

under pressure to appear for competitive exams" (Iype, 2004). Around exam time and

when exam results are announced, when academic stress is very high, suicide hotlines in

many cities across the country are swamped with calls. "I get hundreds of calls from

students who are contemplating suicide because they could not achieve the good scores

expected by their parents," says phone counselor Elizabeth Vadakkekara (Iype, 2004).

Youth suicide, however, is only the tip of the iceberg, which masks the generalized anxiety and depression experienced by many high school students. Studies conducted in Korea and Japan have found that students who experience academic stress express their distress in a variety of ways, including in terms of depression, anxiety, and somatic symptoms (Lee & Larson, 1996; Schoolland, 1990). Research studies in India have not explored these particular forms of distress with respect to academic stress, so the extent and prevalence of the problem is unknown. Furthermore, there have no been no studies, conducted in India or elsewhere, that explore the issue from the perspective of the student, so the experience of academic stress and adolescent distress remains relatively unexplored.

Research suggests that there are many sources of academic stress. Students may feel stressed, and as a result distressed, by their own high academic expectations. In addition to their personal experiences of stress and distress, studies identify many other sources of academic stress, including parents, teachers, school administrators, and larger societal origins (Lee & Larson, 2000; Schoolland, 1990; Verma & Gupta, 1990; Verma et al., 2002). A large body of research suggests that parents have a particularly strong influence on their child's education in a variety of ways. Studies conducted with western samples have found that parents may have high expectations for their child's future, hold positive beliefs about their child's abilities, and involve themselves in their child's education (Eccles, Jacobs, & Harold, 1990; Jodl, Michael, & Malanchuk, 2001). Studies conducted with East Asian immigrant families have identified other ways in which parents may be involved in their child's education. For instance, researchers have found that many parents make financial and social adjustments to their lifestyle in order to

advance their child's academic and professional outcomes, or create an environment that promotes academic achievement (Kim, 1993; Schneider & Lee, 1990). While Indian parents are known to be deeply involved in their children's education (Larson, Verma & Dworkin, 2000), at present, little is known about the role of parents in the student experience of academic stress and adolescent distress.

Research studies suggest that academic stress can have serious consequences for students. Very little is known, however, about the topic in India, which suggests that it requires urgent investigation. This is a particularly interesting moment in Indian history in which to explore the issue, because there has been significant social change in India since the early 1990s. According to Inkeles (1998), there are four forces that lead to societal change. These forces can be technological, which are changes in the structure of the economy; ecological, which are changes in the way people use space; legal, which are changes in governance and institutions; and cultural, which are changes in norms and values. In the following chapters, it will be evident that all four forces of change are currently in the process of occurring in India. These changes are slowly altering the traditional social hierarchy and creating new educational and professional opportunities for youth (especially for the underrepresented), but are also responsible for a sense of anxiety about these changes. The influence of these changes on the topic of study will be explored to create a context for the experience of academic stress by 12th standard students in Chennai.

<div align="center">Research Goals</div>

The present study aims to describe the individual and parental conditions from which academic stress emerges, and to determine the effect of this stress on adolescent

mental health outcomes. The purpose of this study was to explore and describe various aspects of academic stress and adolescent distress in Chennai, India. Three research goals were addressed in this dissertation: first, to assess the extent and prevalence of academic stress and adolescent distress in 12th standard students (mostly aged 16-18); second, to understand the experiences of academic stress and adolescent distress in 12th standard students; and third, to understand the unique role of parents in the issue. Each research question will be further explored for gender, school type and academic track differences. A multiple-method approach was used to address the research goals of this dissertation in order to gain a comprehensive understanding of the topic.

The purpose of the first research goal was to assess the extent and prevalence of the issue in terms of depression, anxiety, and somatic symptoms. Participants were 12th standard students (n = 588) from Chennai, India. The participants were recruited from five schools that were selected on the basis of location, language of instruction, medium of instruction, curriculum, and other important characteristics. The participants completed surveys that gathered demographic and descriptive information, and assessed levels of depression and anxiety. Basic descriptive analyses revealed the extent and prevalence of academic stress and adolescent distress, and the data was further analyzed for group differences using a series of independent t-tests that and bivariate ANOVAs.

The purpose of the second research goal was to understand student experiences of academic stress and adolescent distress. This aspect of the topic has not been explored in previous research studies, but is clearly required to develop a comprehensive understanding of the issue. The purpose of the third research goal was to understand, according to students, the role of parents in the promotion or buffering of academic stress

and adolescent distress. While previous research studies have identified several ways in which parents are involved in their child's education, few studies have specifically attempted to explore how parents may contribute to the phenomenon.

The participants for the second and third research goals were 12th standard students (n = 24) from three schools in Chennai, India. Because the experiences of academic stress and adolescent distress are assumed to be shaped by personal characteristics, attempts were made to represent a range of backgrounds in order to represent different experiences of the issue. The students were individually interviewed at a time and place of their choosing, so that they would be comfortable discussing their personal experiences.

The analysis of the interview data was guided by the principles of Grounded Theory (Strauss & Corbin, 1990). Because previous studies have not explored academic stress and adolescent distress from a qualitative perspective, it was necessary to be open to as many relevant concepts and categories as possible, to develop these concepts and categories according to their properties and dimensions, and to repeat the process until a rich and complex understanding of the topic was developed (Strauss & Corbin, 1990).

The purpose of this dissertation was to empirically explore the topic of academic stress and adolescent distress in Chennai, India. Because empirical research on this topic is limited, two methodological approaches were used to understand different aspects of the issue. While the survey assessed the prevalence and extent of the depression and anxiety in a sample of 12th students, the personal interviews explored the individual experiences of academic stress and distress in 12th standard students, and explored the unique role of parents.

In chapter 2, the social, political, and economic setting in which the current study was conducted is described, and chapter 3 explores the three theoretical perspectives – education, human development, and social change – that inform the study. In chapter 4, the relevant literature on academic stress and adolescent distress is reviewed and research goals will be identified. Chapter 5 describes the methods that were used in the study, and includes details of participants, measures, and procedures. The results of the current study are presented in Chapters 6, 7, and 8. In chapter 6, the results of the survey data are presented, and in chapters 7 and 8, findings based on the interview data are presented. Chapter 9, the final and concluding chapter, discusses the results of the quantitative and qualitative analysis, examines the contributions of the current study to theory, discusses the limitations of the study, and proposes further areas of research.

CHAPTER 2

SETTING

In order to explore the topic of academic stress and adolescent distress, it is

necessary to understand the conditions from which it arises. In this chapter, the influences

of macro-level factors such as social and cultural expectations, legal factors, educational

systems and the media, and the influences of micro-level factors like families and schools

will be explored. The chapter will begin with a description of the physical setting in

which the current study was conducted, and of the unique factors which make this

location well-suited for the study. This will be followed by a brief description of the caste

system and the role it plays in the educational system. The educational system and

process of college admissions will also be described. The role of tuitions and coaching

classes, which have become an increasingly important part of the educational experience

in India, will be described. Unique familial factors that play a role in the educational

experiences of students will be described. The chapter concludes with a discussion of

how the media represents academic stress.

Location

Chennai is the largest city in south India, and the fourth-largest city in the

country, with about 7 million residents. It is the state capital of Tamilnadu, which has a

population of 63 million (approximately 6% of India's population). Tamil is the official

and widely spoken local language. Tamilnadu is one of the most prosperous states in the

nation. The adult literacy rate in Tamilnadu is 73%, and in Chennai it is 80% (Tamilnadu

Department of Education, 2001) both of which are much higher that the overall adult

literacy rate in India of 61% (UNDP Human Development Report, 2004). Tamilnadu is

one of the most urbanized states in the country, with 44% of the state population living in cities. It is one of only three states in the country with a negative birth rate, and is ranked third in the human development index (which includes factors such as child mortality rates, school enrollment, and access to clean water and electricity) of all the states in India. It is the second most industrialized state in India (major industries include automobile manufacturing, textiles, electronics, and information technology), has the third largest economy of all Indian states, and is one of the fastest growing states in the country. The status of women in Tamilnadu (measured in terms of literacy, years of education, employment, ratio of women to men, and other related factors) has become, in recent years, one of the highest in India (Government of Tamilnadu, 2003).

Expectations of educational performance are generally high all over India, rooted in the cultural beliefs about the value of education, and the belief that educational achievement is the pathway to future success. In my personal observation, however, academic expectations appear to be especially high in the southern states. Tamilnadu, in particular, stands out for a number of reasons. It is possible that the relatively high levels of school attendance, literacy, industrialization, and urbanization in the state have likely led to heightened expectations for education and employment. There is a historical tradition of academic excellence in Tamilnadu, and there is a strong presence of professors and scientists from Tamilnadu throughout the country and the world. Both of India's scientific Nobel Laureates, C. V. Raman and Subramanyam Chandrashekhar, were originally from the state. Unlike other states where other modes of success are valued (e.g., success in business or art), in Tamilnadu, academic and professional achievement are considered the hallmarks of success.

Although there are other states that have greater literacy rates (e.g., Kerala) or greater industrial development (e.g., Maharashtra), Tamilnadu has a unique combination of structural factors (like high literacy, development, and urbanization) and cultural factors (valued modes of success, history of academic achievement), which make the pressure to perform well in academics particularly high in Tamilnadu.

Reservations

A significant factor in the education system in India, and especially in Tamilnadu, is the practice of a form of affirmative action known in India as 'reservations'. Reservations are based on the caste system, which is a system of social stratification practiced in India. According to the system, there are four major caste groupings or 'varnas'. At the top of the hierarchy are the Brahmins, who were traditionally thought to make the best teachers, scholars, and temple priests (although many were, and continue to be, agriculturists). Below them were the Kshatriyas, or warrior caste, which generated rulers and kings. The Vaishyas, or the merchant caste, came next in the caste hierarchy. At the lowest rung were the Shudras, who were service providers and agricultural laborers for the higher castes. There are also two major groups, the Dalits and Adivasis, who exist outside of the caste system. The Dalits are considered 'untouchable' and even lower than the Shudras, due to the nature of their work (with unclean carcasses or excrement), and the Adivasis are from indigenous tribes throughout India. The Brahmins, Kshatriyas and Vaishyas are considered to be upper castes and the Shudras, Dalits and Adivasis are considered lower castes.

While the caste system is described in ancient texts, and was casually practiced by Indians, it was under the rule of British colonizers that the caste system grew rigid,

because they reified caste boundaries for administrative purposes (Hobson, 2001). These caste boundaries came to benefit the Brahmins, and they grew to have increasing power under the British, while Dalits became further oppressed (Hobson, 2001). Following independence in 1947, discrimination on the basis of caste was made illegal in 1950[1]. According the latest surveys, the lower castes (Shudras, Dalits, and Adivasis) comprise 64% of the population of India, and the upper castes (Brahmins, Kshatriyas and Vaishyas) make up the remainder (National Sample Survey, 2000).

It is a legacy of the caste system in India that certain lower-caste groups are under-represented in the public sphere as political leaders, activists, judges and lawyers, writers, scientists and in other positions of power. In order to remedy this situation, the Government of India has implemented reservations with a goal of uplifting citizens of lower castes. To achieve representation of lower castes in education, 49.5% of seats in the public educational institutions at the post-high school level were legislated to be set aside for members of the lower castes in 1990[2]. This requirement was extended to private educational institutions in 2006. Reservations are included as a criterion for college admissions, because a college degree is assumed to lead to fair employment, which will eventually lead to fair representation. The passing of these laws were accompanied by anti-reservation student protests all over the country, mostly by upper-caste students, who feared lowered educational standards and increased competition for college seats.

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[1] Nevertheless, caste still plays a major role in Indian politics, where many regional political parties and vote banks are caste-driven, and is evident in daily life, where most marriages are still largely within caste.
[2] In addition to reservations for members of lower-caste communities, college seats in public institutions are further reserved for members of underrepresented (the disabled, ex-servicemen) or desired (athletes, children of non-resident Indians) communities.

The issues of caste and reservation are particularly significant In Tamilnadu. Lower castes comprise 87% and upper castes comprise 13% of the state population, which makes it the one of the most unevenly balanced states in the country (National Sample Survey, 2000). Even though they comprise only 13% of the state population, reservation policies make it harder for upper-caste students to gain admission to state institutions in Tamilnadu because they comprise a much greater proportion of high school graduates. The Brahmins, in particular, constitute only 3% of the state population, but there is a long history of anti-Brahmin movements in Tamilnadu due to the influence of early political leaders who considered the Brahmins responsible for the oppression of the lower castes. For these reasons, Tamilnadu was the first region in the country (while still under British rule) to practice reservation beginning in 1921. The percentage of reserved seats in Tamilnadu was 49% as early as 1971, and was increased to 69% by 1989 by successive state governments in order to satisfy the large proportion of lower castes. Following the central 1990 government legislation, the Supreme Court of India instructed the Tamilnadu government to limit reservations to 50%. This ruling has been challenged in court; in the meantime, the state has continued to practice 69% reservation.

In many states, there were protests by upper-caste students following the 1990 and 2006 legislations, but protests were not seen in Tamilnadu, where students have long been accustomed to high reservations. In fact, due to the history of reservation in the state, lower castes are over-represented and upper castes are under-represented in various spheres of public life. Continuing support for the high reservation rate is ensured by the political parties in power. In order to negotiate the high reservations in Tamilnadu, many upper-caste students apply to universities and colleges that are in other states (especially

in neighboring states such as Karnataka). As is evident, the practice of reservation in Tamilnadu is striking both in its longevity and its strength, which makes it an especially interesting location in which to conduct research on topics related to education.

Educational System

A British-style education system was developed in India during colonial rule, and remains largely in place today. Students enter kindergarten at age 3, start elementary school (1st-5th grade) at age 5, and then enter secondary school (6th-10th grade) at age 10. In Tamilnadu, students then enter senior or higher secondary school (11th-12th grade) at age 15 (in other states, the last two years of school have other titles, such as 'junior college') (Educational Institutions Research Bank, 1998). Upon completing 12th grade at age 17, they take school-finishing exams that are similar to the British O-levels. These exams, which are called board exams in India, are described below.

Of the 12-15 million students who graduate high school each year (Shukla, 2005), only about half attend college. These students attend college immediately following high school for all fields of study, including medicine and law. They apply not just to a particular institution, but to a specific field of study as well (the concept of an 'undeclared' major is unknown in India). The field of study that students apply for, usually, closely follows the subjects that they studied in the final two years of high school.

School Curricula

Most schools in India follow one of two main education systems after the kindergarten years, set by the state government (State Board: SB) or the central government (Central Board: CB). While this is not necessarily the case in other parts of

the country, there are a comparable number of State and Central Board schools in Chennai. These systems differ in curricula, syllabi, offered and tested subjects, and approaches to learning and examinations. State Board schools gear students towards college admission in Tamilnadu, while Central Board schools gear students towards college admission throughout India. Central Board schools and examinations are widely considered more challenging than State Board schools and examinations. This is evident from the counseling centers that have specifically been set up for students of the Central Board system in order to address the issue of academic stress (Pasmantier, 2005).

In Chennai, CB and SB schools attract slightly different student populations. For instance, many upper-caste students prefer to attend CB schools which prepare them for college admission throughout the country, because the reservation system in Tamilnadu introduces barriers for upper-caste students who wish to attend college in the state. On the other hand, many female students are more likely to attend SB schools. This is because many parents prefer to send their daughters to more conservative single-sex instead of co-educational schools. These schools are more likely to follow SB curriculum. As a result, most co-educational schools have fewer female students than male students.

Academic Track

In CB and SB schools, until the 10th grade, all students learn mathematics, natural sciences (physics, chemistry, biology), social sciences (history, geography, civics, economics), and languages. At the end of 10th grade, students take exams which will determine the academic track that they pursue for 11th and 12th grade. Based on their performance in these exams, students are guided into one of three 'tracks' – a science track, commerce track, or arts track. Students with the highest marks can choose to

pursue any track, but are encouraged to pursue the science track, which focuses on physical sciences and mathematics, in addition to biological or computer sciences. Students aiming towards admission in competitive engineering or medical school are required to take the science track. Students who earn lower marks are guided towards the commerce track, which includes subjects such as accountancy, economics, and business. Students with the lowest marks take the arts track, which varies from school to school, but generally includes social sciences and fine or performing arts. Most schools, however, offer only the science and commerce tracks. SB schools, additionally, include the study of a language (usually Tamil, Hindi, Sanskrit, or French). According to this 'tracking' system, the science track is considered more challenging than the commerce or art tracks. Although girls and boys generally perform equally well in the 10th standard exams, in most schools, females are slightly underrepresented in the science track, and slightly overrepresented in the commerce track.

The 10th standard exams allow schools to weed out underperforming students, and provide intense academic training for the remaining students. Several schools in the city persuade students who do not perform well to leave the school and attend another school for 11th and 12th grades. By keeping and training only high performing students, these schools are better able to place their students in prestigious academic institutions. This increases the reputation of the school, which, in turn attracts highly qualified students, who believe that attending such a school will increase their chances of admission to the college of their choice.

The tracking and weeding out processes described above likely contribute to greater levels of academic stress, because there is the stress of adjusting to a new

environment for those students who have to change schools (in a state where most schools run from kindergarten through 12th grade), and an especially demanding academic environment awaits those who stay in the same school. While these practices have long occurred in schools in Chennai, they have intensified in recent times. These processes shift the focus from individual student achievement to school achievement, so students are, in effect, not just responsible for their own academic success but also for the academic success and reputation of their school.

Board Exams

Students complete the board exams at the end of their senior year of high school. This consists of five exams for Central Board students (for a maximum of 500 marks) and six exams for State Board students (for a maximum of 1200 marks). The scores on these exams are based only on the board exam performance, and do not take into account performance throughout the school year; the class tests that students take throughout the year are intended only as practice for the board exams. As exam time approaches, many schools organize 'special' classes outside of school hours so that students may spend more time in practice and revision. A score of 95% or higher is earned by few students and is considered extremely good, and will increase the likelihood of admission to prestigious institutions.

The board exams are administered once a year over the course of two weeks in March. Each exam is three hours long and is not in multiple-choice format; instead, students are required to answer questions in full detail and show the process through which they arrive at their answer. The exams are sent for grading to stations throughout the state (for SB exams) or the country (for CB exams), and the results of the exams are

announced two or three months later, around the end of May or the beginning of June. This period of time, however, is hardly relaxing for most students; they wait anxiously for their scores and prepare their college applications which are typically due in June or July.

If a student does not earn passing grades in all the exams, the chances of being admitted to college are very low. Until recently, students were not given another opportunity to pass the exam until the following year, forcing them to lose a year of study. In recent years, however, students have been allowed to take the exam within three months of the original exam, so that a whole academic year need not be lost. Scores on these exams partly determine the location and prestige of the institution that one can hope to attend. Exam results from recent years indicate that female and male students perform equally well on the board exams.

College Admission

A professional education is widely considered a stepping stone to success in India. This includes the fields of engineering, medicine, computer science, law, and recently, other related fields (such as biomedicine, biomedical engineering, etc.). An education in one these fields (henceforth called 'traditional' fields) are considered prudent in terms of professional and financial stability. The study of physical sciences, social sciences, humanities, and arts (henceforth called 'non-traditional' fields) are not widely considered prudent long-term professional and financial choices, because there are few careers available to those who pursue these fields of study. The competition to get into professional schools starts at an early age, especially among those in the urban upper classes. Parents encourage even young children to work towards entry into an

engineering or medical school. It is not uncommon, in fact, in south India for an 8-year old child of urban, educated parents to declare, "When I grow up, I want to go to IIT (Indian Institute of Technology)." By the time they get to high school, many of these children have internalized this message of educational and professional achievement.

In addition to board exams, students must also take 'entrance exams' in order to attend professional school, such as medical, engineering, or law school. Professional schools weigh the board exam and entrance exam performances equally in evaluating applications for admission; performances on school tests are not included in the criteria. Admission to other fields, such as humanities or social sciences, is less competitive and does not usually require entrance exams. Although they may require students to show an aptitude for certain fields (such as art or writing), admission to institutions offering these degrees is based mostly on board exam performance.

Entrance Exams

Entrance exams may be administered by a consortium of institutions (such as the AIEEE, or the All India Engineering Entrance Examination), or by individual institutions. These are typically administered only once a year (following the board exams, usually in May or June), on an appointed date and time. A combination of board exam and entrance exam scores (usually weighed equally) determines the prestige of the institution that a student can attend.

To illustrate the competitiveness of the entrance exams, it is helpful to have a look at the numbers of students who took, for example, engineering entrance examinations. Of the 525,000 candidates who completed the national level All India Engineering Entrance Examination in 2006, only 45,000 (fewer than 10%) were admitted to colleges

throughout India. If one were to narrow the numbers down to only the most prestigious institutions, such as the Indian Institutes of Technology (IIT), the percentage of admitted students is even lower. State level entrance exams are less competitive than national level entrance exams. At the state level, over 150,000 students took the Tamilnadu Professional College Entrance Examination in 2006. With over 200 private professional colleges in Tamilnadu, most students were admitted to some college in the state. However, the competition to get in the most prestigious of the state institutions (such as the renowned Anna University in Chennai) remains intense (Asha Foundation, 2003). For entrance to medical or law school, students take similarly competitive national level entrance exams. In recent years (for which data is available), comparable numbers of male and female students have taken these entrance exams, and they appear to perform equally well.

As mentioned previously, the CB and SB syllabi are respectively geared towards national- and state-level exams, so CB students who wish to pursue professional school generally prepare for national-level exams and their SB counterparts tend to prepare for state-level exams. It must be noted, however, that there is occasional overlap and crossover, with CB students taking state-level exams and SB students taking national-level exams.

Private Colleges in India

As late as the 1980s, the Indian government was responsible for almost 80% of the spending on higher education, and the majority of educational institutions in the country were public institutions. Since then, however, as a result of reduction in government spending on education, self-financed private facilities have greatly expanded

and overtaken the higher education industry. Most private institutions in India, however, are still partially publicly financed by central and state governments, and as a result, are legislated by central and state laws (e.g., laws regarding reservation) (Gupta, 2004).

The growth of private institutions has been especially notable in southern states, since these states were already more developed than many other parts of the country, and they had historical, cultural and socio-political factors that were conducive to the growth of the private education industry (Gupta, 2004; South Asian Voice, 2004). For instance, in 2001, the southern state of Andhra Pradesh (neighboring Tamilnadu) had 95 self-financing engineering colleges and only 11 public engineering colleges (Gupta, 2004). Similarly, in 2003, Tamilnadu had about 200 private, but only 16 public engineering colleges (Asha Foundation, 2003). Tamilnadu, in fact, has the highest number of engineering colleges per capita (South Asian Voice, 2004). The many private colleges and universities that have sprung up in recent years, however, suffer from a variety of problems, such as lack of infrastructure, lack of trained personnel, and corruption, and many have been shut down due to their lack of facilities (Asha Foundation, 2003; Overland, 2002; South Asian Voice, 2004).

Management Quota

Based on their caste and their performance in the board and entrance exams, applicants to public institutions may be admitted as 'free' or 'merit' students or as 'payment' students. The former receive an education that has been highly subsidized by the government, paying only about 20% of the fees (around Rs 10,000 per year, which is about one month's income for a lower-middle class family). The latter pay non-subsidized fees, which are still fairly affordable for middle-class families (the equivalent

of 2-3 months' salary for most middle-class families). Private institutions have an additional 'management quota,' which indicates that the college can fill those seats in any way it sees fit. Some of these seats are often filled on the basis of political or family connections. Many of the remaining seats, in some institutions, can be 'bought' for a price, which depends on the quality of the institution and the popularity of the program (Overland, 2002). Admission to medical college, for example, can cost many hundreds of thousands of rupees (around US$10,000 and up to US$25,000, the equivalent of several years' income for even upper middle class families), and families may even go into debt in order to pay the fee required to buy a seat in college. Furthermore, wealthy families may even 'donate' large amounts of money to private institutions that help their children obtain a seat in that institution. There is little published data or information on the 'management quota,' so it is not known whether the parents of male or female students are more or less likely to ensure a college seat for their child in this manner.

Criticisms of the Current Educational System

High schools strongly emphasize performance in the board and entrance exams at the expense of all other activities, because most educational institutions typically depend only on board exam and entrance exam scores as criteria for admission. Other criteria, such as letters of recommendation, personal statements, and extra-curricular activities are not included in the assessment. The evaluative process for admission which is dependent on just one factor – exam performance – has led to intense competition in order to get the 'highest marks' or the best scores necessary for admission.

The flurry of media attention that surrounds the exam and college admission process betrays dissatisfaction with the current system, and there is general agreement

that it is in need of reform. The emphasis on board and entrance exams, in particular, has come under a great deal of criticism from many quarters, including students, parents, teachers, and educational reformers. Educational reformers have suggested general syllabus reforms in order to encourage students to engage in critical thinking rather than rote learning. They have also made specific recommendations to improve the current exam system, including increased frequency of exams, to decrease dependence on and reduce anxiety surrounding one-time exams, and increased grading at the school site, to reduce the ineffectiveness and inefficiency of the current exam bureaucracy. The emphasis on board and entrance exam performances as the primary criteria for college admission has also been criticized, since it excludes assessments of a student's other skills, abilities, or interests.

The management quota system has come under particular fire, because with little official oversight, is often widespread with corruption. Critics charge that the management quota system has become a golden egg for private institutions, and administrators complain that when all the reserved and management seats have been filled, there are few merit-based seats to admit truly qualified students (Overland, 2002).

The educational system, however, has remained essentially unchanged for many years, and there are many reasons for this. Defenders argue that in a centralized educational system (whether at the state or national level) in which students follow a standardized curriculum, the board and entrance exams are the fairest way to judge students. In such a system, they argue, it does not matter where a student comes from or what his or her background is; the student's exam performance stands alone. In other words, the current system ensures a true meritocracy. The vast and anonymous

bureaucracy that administers the curriculum and exams is necessary to maintain objectivity. Administering the board and entrance exams only once a year reduces the likelihood of corruption by offering fewer opportunities for 'leaking' of the exam prior to testing time, cheating during the exam, and irregularities in grading or publishing of scores.

There is also little incentive to change the system, because, in its current form, it supports an extensive bureaucracy, as described above. It also supports a vast private industry including tuitions, coaching classes, publishers of study guides and question banks, etc. Legislation in recent years has curbed the excesses of the management quota system, by limiting the number of such seats that a private institution can offer, by requiring that admitted students meet minimum qualification standards, and by shutting down institutions that abuse the system. Nevertheless, the management quota system survives because defenders argue that government money is insufficient for the expansion and improvement of educational institutions; the 'donations' that management quota students contribute serves this purpose.

Tuitions and Coaching Classes

To further aid the probability of a good performance on the board exams or entrance exams, many high school students take out-of-school classes called tutorials for several years. Researchers have described the emergence of tuitions as a "new and expanding context of [this] negative experience," referring to the already academically stressful lives that students lead (Verma et al., 2002, p. 507). The goal of most tutorials is for the student to score well on the board or entrance exams and to gain admission to prestigious institutions. Tutorials are typically independent of any academic institution,

and provide specialized training in two ways – they either train students in specific subjects, such as math or physics, in order to prepare for the board exams (tuitions), or they prepare students for a particular exam, such as the engineering, medical, or law entrance exam (coaching classes). Depending on their future goals, most students take one or the other, although some attend both tuitions and coaching classes. The tutorials may begin before school hours or continue afterwards, and many are taught over the weekends. Although there is little specific data on this, anecdotal evidence suggests that students may spend up to 12 hours a day in school, tutorials, and commuting from one place to another.

Tuitions are usually taught by current and retired school teachers who have some knowledge of a particular subject and/or experience with the board exams. The classes are taught in a variety of locations, such as in classrooms following regular school hours, rented rooms, or private homes. The size of a tuition class (which ranges from two to forty students per instructor) depends on the exclusivity of the instructor, and the cost of the tuition (which ranges from Rs. 200 to Rs. 400 per month per tuition, or US$5 to $10, which is between 1% and 4% of the income of a lower-middle class Indian family) depends on the reputation of the instructor. The classes are generally divided evenly between male and female students. Students may start taking tuitions for particular subjects as early as middle school. Coaching classes are more commercialized than tuitions and operate out of large spaces. Students work with several instructors to help them prepare for different sections of the exam. The coaching classes are usually larger and provide less individualized attention, but are typically more expensive (ranging from Rs. 500 to Rs. 1000 per month, or US$ 12 to $25). Although this was not the case even a

decade ago, in recent years, relatively even numbers of female and male students attend coaching classes. The tutorial business is largely unregulated, but is highly lucrative and competitive. Students generally attend coaching classes for their 11th and 12th standards. Tuitions are rarely advertised, and students pick tuitions based on word-of-mouth references, particularly when a teacher is known to have produced good exam results. Coaching classes, however, advertise widely in newspapers, posters, and billboards.

During tutoring sessions, instructors in tuitions and coaching classes teach only material that is relevant to the board or entrance examinations. In addition to learning test-taking and problem solving strategies, students practice the solutions to possible examination questions. As exam time approaches, they complete examinations from previous years in exam-like situations. They also spend more time at tutorials in order to squeeze in some last minute practice and revision. Many tutorials are often run like formal academic institutions, with expectations for attendance and regular tests. In the case of coaching classes, students who are not expected to perform well on the competitive entrance examinations may be asked to leave the class. The remaining students, who are likely to perform well in the entrance exams, enhance the reputation of the tutorial instructor or the institution. This, in turn, attracts similarly qualified students in following years.

As was the case with schools, these processes lead to a shift in emphasis from individual student achievement to tutorial achievement. Students are similarly responsible for not only their own academic success, but also for the academic success and reputation of the tutorials. Students devote extraordinary amounts of time to attending tutorial

classes and preparing for tutorial tests and exams, further increasing their exposure to academic stress.

The stress associated with the board and entrance exams begins before students even enter the 12th standard. Most students begin taking tuitions and coaching classes in preparation for the board exams in 11th standard, although some students may begin even earlier. In school and in tuitions, students start the 12th standard curriculum towards the end of 11th standard itself, and continue to take classes during the summer between the two years. The curriculum for the 12th standard is usually completed about five months before the board exams, and the remainder of the school year is used for practice and revision. Students take their board exams in March and April, and their entrance exams in the following months.

Family Factors

There are several factors unique to Indian families which are necessary to discuss as part of the setting, since they have a significant influence on the academic expectations and experiences of 12th standard students. Other influential family factors will be discussed further in Chapter 4.

Family Relationships

Children are taught to respect, trust and obey their parents and elders from a young age (Bharat, 1997). In fact, a common prayer in India recommends that children must respect, in order, their mother, father, teacher, and God, suggesting that parents must be respected above all others. Even as they grow older, children tend to defer to their parents when it comes to choosing careers and even marital partners. However, relationships between Indian youth and their parents are also characterized by a great deal

of closeness and warmth. In their study of Indian youth, Larson, Verma & Dworkin (2000) found that Indian adolescents spent more time with their family and less time with their peers than youth in the United States. Although this is at least partially due to cultural norms that discourage youth (especially girls) from spending time away from the home or in the absence of adult supervision (Sarswathi, 1999), the adolescents in the study genuinely appeared to enjoy spending time with their families and chose to spend time with them even when there was little parental constraint. Furthermore, they appeared to prefer spending time with their family rather than their peers, and reported feeling happier in their company than their American peers (Larson et al., 2000).

Research indicates that the family structure in urban India is moving from a traditional hierarchy to a more democratic one. Adolescents reported that their parents were not authoritarian, and that their voice was heard in the family. Those who had an educated or employed mother experienced their family as even more democratic (Larson et al., 2000). The presence of an educated mother was especially significant for daughters, who reported experiencing a more favorable family climate in terms of status in the family (Larson et al., 2000); the current study did not explore if the presence of an educated or employed mother also influenced the daughter's educational or professional goals. Increased democratization, however, did not lead to increased conflict – the authors add that they found "little undercurrent of rebellion or distrust," and that adolescents and parents had very similar points of view (Larson et al., 2000).

Although extended families are smaller than they once were, many Indians still live in multi-generational families or remain in close contact with extended family members (Bharat & D' Cruz, 2001). In addition to their parents, Indian youth, therefore,

often grow up or are in close contact with their grandparents. In some families, especially those in which the grandparents were themselves educated and members of the professional class, they also have an influence the academic expectations of the student. They tend to urge their grandchildren to pursue fields which offer professional and financial stability, such as engineering, medicine, or law. The presence of extended family affects girls and boys differently. Girls experienced the extended family climate in less positive terms than boys – they found the family more hierarchical and participated less in family conversations (Larson et al., 2000). It is possible that grandparents and other elders emphasize the marital role of girls, rather than an educational or professional one (Saraswathi, 1999).

Social Comparison

When the results of board and entrance examinations are released, scores are reported with an ID number for privacy. Students, however, quickly find out how their classmates performed, because the results are openly discussed. Parents also have little reticence in finding out how their child's peers performed, usually through their child. There is great pride within the families of the good performers, and their results are remembered (and brought up for comparison) for many years. In Indian families it is common to compare the academic performance of the child with that of older siblings, cousins, and friends. While parents usually find out about their child's peers indirectly, they will explicitly find out, or be told, the scores of immediate family members.

Although the comparisons may begin in younger years, it intensifies in the high school and college admission years. It is common to hear exam scores discussed within families as a way of encouraging the child to perform better (for instance, parents may

say, "Your cousin got 92.3%, we're sure you can do as well!") and to inform them that they no less is expected of them. Similar comparisons are also made with respect to college admission ("If our neighbor's son can get into IIT, why not you?").

Lifestyle changes

It is a common observation that many parents make lifestyle changes during the last two years of their child's education to accommodate their study needs. Their goal is to remove all distractions, and to create an environment that will allow the student to focus on their academic work. For instance, parents may suspend magazine or cable TV subscriptions (and, in more recent years, students' mobile phone connections). Parents reduce their social commitments and attend fewer events; even when they do, the child is not expected to attend these events. This is a significant sacrifice in India, where children routinely accompany their parents to social events, even into adulthood. Where possible, parents may make changes to their work schedules in order to be available to their children (for instance, in families where both parents work, one parent may choose to stay at home). Parents may use the time to make especially nutritious meals for their children, to ferry their children between home, school, and tutorials, to take over whatever household chores the children used to perform (this factor is especially relevant for girls, who are likely to have performed more chores to begin with), or to simply provide company when their children are studying. Both parents, and especially mothers, fret about their child's performance, and worry if they have done enough to support their child. While some of these lifestyle changes may differ by social class (e.g., only some families can afford to have one parent choose not to work, and only some parents are in a

position to make changes to their work schedules), almost all parents make whatever sacrifices they can.

When a child achieves academic success, it is considered to reflect well on the entire family, because it indicates that the parents and children took the necessary steps and made the required sacrifices for success, and that the family is one in which academic achievement is valued and attained. The pride in a child's academic achievement extends outside of the family as well, and parents will share the news with acquaintances and strangers. Conversely, the performance of students who do poorly is rarely discussed openly, and in some families, it becomes a matter of shame.

Effect of Gender

It has been noted throughout this chapter that female and male students attend tuitions and coaching classes in relatively equal numbers, they perform equally well in board and entrance exams, and they are equally likely to pursue degrees in professional fields. The common goals that female and male students share are a relatively recent occurrence, and are largely applicable only to those who are urban and come from middle-class families.

Traditionally, girls and boys have had very dissimilar experiences with respect to education and employment – while boys were encouraged to pursue an education and career that would allow them to fulfill their role as the primary breadwinner of the family, girls were urged to learn skills (e.g., cooking and sewing) that would allow them to fulfill their role as a homemaker. Until recently, even when girls did earn a college degree, it was usually in a non-professional field, and only to increase their value as a potential bride. Few girls actually pursued a career after college, fewer still after marriage, and

almost all quit the workforce once they had children. They lived with their parents until marriage, and with their husband's family afterwards; it was considered socially taboo for an unmarried woman to live alone.

In recent years, however, girls are increasingly pursuing careers after college, and in large urban areas, it has become common for young, unmarried, college-educated women to live on their own. They attempt to postpone marriage, and while open to the idea of traditional arranged marriages, also seek the freedom to find their own mates. They view this period of independence as a chance to develop their personality and self-confidence (Sengupta, 2007). The reasons for these remarkable changes in Indian society will be explored further in the following chapter.

Media Coverage

For several months in a year, a considerable amount of press in Tamilnadu is devoted to board and entrance exam related topics. These articles are published in a predictable pattern. As students complete the 12th standard curriculum and start to focus intensively on exam preparation, newspapers publish exams from previous years to allow students to practice taking exams, and conduct interviews with high-scoring students from previous years about test-taking strategies. This is followed by columns written by educational counselors, who provide suggestions for optimum preparation, which usually include suggestions like setting a strict study schedule and working through the exams from previous years. Additionally, for parents who worry about their child's performance, there also columns to help them reduce *their* stress. Parents are urged to make necessary lifestyle changes to accommodate their child's needs, but they are also encouraged to step back and not put pressure on their child.

When students take exams in April and May, there are columns in the newspapers on test-taking tips, in which students are reminded to sleep well the night before the exam, to answer questions in a certain order, and to keep aside 30 minutes for checking the work before the exam is submitted. At the end of the exam season, psychologists and counselors write articles in which students are reminded that poor scores do not determine their future, and that many fields of study are open to them. After exam scores are announced, congratulatory advertisements are taken out by schools and tutorials, in which the exam scores and pictures of high-scoring students are published. These serve to publicize the quality of the school or the tutorial, and to recruit students for the following years. These advertisements are printed alongside reports of suicides committed by students who failed the exams, or perceived that they did not do well enough to get admitted to the institution of their choice. Parents write letters to newspapers bemoaning the systems which lead to these fatal outcomes, and editors worry about how to report on such sensitive topics. These are followed by a few reports of last-minute attempts to gain admission into prestigious institutions, followed by stories of students settling into their academic institutions. See Appendix C for examples of some of these articles.

These media reports contribute to the academic stress experienced by the students. Students may unrealistically come to believe that academic success is assured if they follow the recommendations made by high-scoring students and educational counselors, or if they attend the schools and tutorials that guarantee academic success. Counselors and editors worry that they may also be influenced by the reports of suicides, making them aware of a 'way out' in case of a disappointing performance. The constant reporting

about examinations in the media and the presence of examination-related suicides clearly identify academic stress and adolescent distress as a significant issue in modern India.

Summary

The above descriptions suggest that in Chennai, academic stress has many sources. Some of these sources are macro-level factors, such as the social and cultural emphasis on a professional education and career, the national and regional educational systems, and media reports, but other sources are micro-level, including stresses introduced by parents, schools, tutorials, and the students themselves. Student academic achievement is not only about individual success, because it also reflects on the student's family, and the educational institutions that he or she attends. While much research is necessary to explore the unique influence of each of these factors on academic stress, in the current study, the emphasis remains on the students' experience of academic stress and distress and on their views of their parents' involvement.

CHAPTER 3

THEORY

Because the topic of academic stress and adolescent distress is multi-dimensional, it needs to be viewed from multiple perspectives. Three major perspectives are most relevant to the exploration of this topic: social change, education, and human development. It is necessary to analyze the social changes that were described in Chapter 2 in terms of a theoretical framework that explores the influence of processes such as globalization on individual student expectations and beliefs. The views of the French sociologist Pierre Bourdieu on education will be discussed next, with particular emphasis on the influence of social and economic factors on academic expectations. Finally, Bronfenbrenner's Ecological Systems Theory will be used to better understand academic stress and adolescent distress from the perspective of human development. Each theoretical perspective will be individually discussed, and each section will conclude with an application of that perspective to the Indian setting. The chapter will conclude with a description of how these theories contribute to understanding different aspects of academic stress and adolescent distress.

Social Change

Until recently, theories of social change were related to the effects of industrialization on the family, but more recent research explores the impact of globalization, a more modern form of social change. Globalization broadly refers to social and cultural changes that are generally triggered by the economic liberalization of a country. Economic liberalization generally refers to the loosening of economic restrictions and government regulations in order to allow private entities to participate in

the economy of a country (Maitra & Ray, 2004). Until the late 1980s, the Indian economy was largely socialized. In the early 1990s, however, a series of economic reforms were initiated in order to receive loans from international lending agencies to face a looming financial crisis. The most significant of these reforms were the lifting of government regulations on public industries, which allowed private investors to enter hitherto closed markets, and the easing of duties and tariffs on foreign goods, which allowed the entry of foreign investors (Maitra & Ray, 2004). These reforms, in other words, led to the growth of the indigenous private industry, and it led to trade and exchange of good and services with other countries, and created a global economy.

The opening of economic boundaries between countries has also led to social and cultural exchanges. It was expected that these exchanges would lead to the development of a global culture, but the exchanges have generally been one-sided, and global culture has come to be represented by Western culture (Georgas, 2006; Lukose, 2005). The spread of Western culture throughout the world is evident from the spread of internationally recognized food brands, clothing, music, speech patterns and television shows that are easily identified across the world (Lukose, 2005).

Researchers in India have found that economic liberalization and cultural globalization has led to two major changes – the rise of the consumerist middle class, and alterations in gender and class relations (Fernandes, 2006; Oza, 2006). Although little is known about the impact of liberalization and globalization specifically on youth, these two major changes will be explored in further detail, because they have an influence on the educational expectations and aspirations of Indian youth.

The transition of the economy from a socialist, state-based system to a capitalist, global one has had a significant impact on lifestyles. Recent economic data from India suggests that, because of the reforms, there have been improvements in the overall standards of living for all kinds of households: rural and urban, lower- and upper-caste, and male- and female-headed (Maitra & Ray, 2004). The liberalization of the Indian economy has led to the entrance of multinational companies and the growth of Indian companies that cater to international markets. This change has been associated with an increase in jobs available to educated youth. In pre-globalization days, the Indian economy consisted mostly of state-run companies and organizations in which positions were frequently filled on the basis of family connections or caste. These jobs were coveted due to their security, benefits, and pension after retirement. The liberalized economy, however, has led to a competitive marketplace, in which individuals are employed on the basis of their skill and qualifications rather than their background.

Although these changes have allowed lower social classes and castes to pursue higher education, compete for white collar employment, and act in other traditionally 'middle class' ways (Oza, 2006), it is important to note that they have most benefited the educated and urban middle-class citizens, who were best poised to take advantage of the liberalized economy. The reforms created about 1.5 million jobs in the technological sector, but contributed much fewer to traditional industries such as agriculture and manufacturing (Ahmed & Devarajan, 2007).

These improvements have led to the creation of a large and significant middle class population, who are notable for their consumerist attitudes and spending power. Luxury items such as automobiles, air conditioners, refrigerators, and washing machines

are now advertised and owned as necessities (Fernandes, 2006; Oza, 2006). The Indian

middle class now aims to live a Westernized middle class lifestyle, complete with an

independent house, cable TV and internet, and an automobile. The effects of

liberalization on the rural and lower classes has largely been indirect, and as a result of

the creation of a wealthy middle class – for instance, the urban poor fill the new need for

chauffeurs, maids, nannies, and cooks, and rural citizens migrate to the cities to provide

labor for the booming construction industry.

A greater number of women have also started entering the workforce in order to

support the middle class lifestyle described above. Where matrimonial advertisements

once sought 'homely' (i.e., domestically inclined) girls who would become homemakers

following marriage, they now seek 'educated' and 'employed' girls who can contribute

financially to the family and allow the family to lead a middle-class lifestyle (Prasad,

2006).

Cultural globalization has pushed the boundaries of sexuality. Newsmagazines

now carry articles on the sexual habits and sexual behavior of Indians, effectively

bringing sex out of the closet. Western clothes have become common, events like

Valentine's Day are celebrated with the use of greeting cards, flowers, stuffed animals,

and romantic dinners (Oza, 2006) and young college-going and working upper-class

urban men and women dance in clubs and drink in bars. Following the success of Indian

beauty queens on the international arena in the mid- to late-1990s, Western-style beauty

pageants have become popular throughout the country (Lukose, 2005; Oza, 2006).

These changes suggest that the economic liberalization and cultural globalization

that has occurred in India has led to the breaking down, or the possibility of the shuffling

of traditional gender, class and caste boundaries. The rise of the Indian middle class as a group based on economic power has led to a backlash from the traditional caste-based middle class (Oza, 2006). Legislation that was intended to increase representation of lower-castes in the educational institutions, for instance, has been met with protests by members of upper-caste communities (as described in Chapter 2). The increasing visibility of women in the workplace has also troubled conservatives. There have also been attempts to curb women's independence, such as legislation intended to prevent women from working at night (Oza, 2006). Although advertisements proclaim the rise of the 'modern Indian woman,' who works outside the home, wears fashionable clothes and avails of cosmetic procedures, the same advertisements, however, also show the woman fulfilling her duty as a wife, mother, and daughter-in-law, who is still responsible for the maintenance of the home (Oza, 2006).

There has been a strong reaction to the pushing of the boundaries of sexuality. Conservative groups have burned copies of magazines that publish information about sex, demonstrated against Valentine's Day, and picketed beauty pageants (Oza, 2006). In many parts of India, police are given the moral and legal authority to disrupt any display of public affection between members of the opposite sex, including relatively mild behaviors such as hand-holding (Oza, 2006). In contrast to Western-style pageants, organizers now conduct Indian-style pageants, which celebrate traditionally feminine traits such as modesty in clothing and behavior, and display an understanding of the local culture. It is evident that women's sexuality is seen as particularly threatening (Lukose, 2005).

Both Fernandes (2006) and Oza (2006) have explored in great detail the effects of globalization and economic liberalization on Indian society, and specifically, the Indian middle class. The effects of globalization on Indian youth have been less explored, but ethnographic work with Indian youth from the southern state of Kerala suggests that the adoption of global culture (wearing certain clothes or listening to certain music) plays a significant role in the lives of adolescents, for whom it forms the basis of social relations and self-presentation. Like adults, these adolescents, who came of age during economic liberalization, are savvy consumers who challenge norms of gender and sexuality (Lukose, 2005). Little is known about how these changes affect Indian youth on a personal level, in terms of their future ambitions and constructions of the future, and how they view the risks and opportunities available to them.

The research conducted by Lukose (2005), Oza (2006) and Fernandes (2006) suggests that globalization has a profound effect on individuals and communities. For Indian youth, globalization offers new opportunities for the future (new fields of study, forms of self expression). Although the benefits of globalization are most striking for those who are urban, educated, and middle class, youth from traditionally underrepresented groups such as women, and members of lower castes and classes have also benefited to some degree. These benefits, however, also come with anxieties about obtaining and keeping jobs in the competitive marketplace, and negotiating gender, caste and class in the new social order. These anxieties, experienced by many youth in high school, are pertinent to the current research study.

Education

It is apparent from a description of the issue that education, and specifically examination performance, plays an important and central role in the lives of students and their parents. The influence of the large social, cultural, and economic changes described above are further filtered through the lens of social class. The sociologist Pierre Bourdieu has written widely about the role of education in French society and has paid particular attention to the intersections of these fields. His ideas, however, are easily transferable to the Indian context.

Bourdieu suggests that education provides 'capital' (1973). The term 'capital' refers to resources that, within social relations, are a source of power or status. There are different kinds of capital, such as economic capital (e.g., financial assets), social capital (e.g., resources associated with group membership, relationships, and influential social networks), and cultural capital (e.g., particular forms of knowledge, skill, education or qualifications that provide high social status). Clearly, the three kinds of capital are strongly interrelated and convertible, and access to or possession of one kind of capital can translate into another. For instance, an individual who earns a professional degree (M. D.) from a prestigious institution (Harvard) is likely to have a great deal of economic (in terms of income), social (in terms of alumni networks), and cultural capital (in terms of the status conferred by such an education). While the study of education and educational systems is linked to all three kinds of capital, they are most closely related to the concepts of cultural and social capital.

According to Bourdieu, parents can provide their children with cultural capital by having high expectations for them (1986). Even if parents do not own capital, they may

create it by providing encouragement and support to their children, and providing an environment in which education and educational achievement is valued. Cultural capital can be embodied in family socialization practices, where it is learned over time. For instance, parents can promote certain patterns of speech, encourage certain activities, or send their children to particular schools where they are further exposed to certain forms of cultural capital. Cultural capital can also be institutionalized in academic credentials and qualifications. The value of these qualifications is largely determined by economic factors, such as how much a certain kind of degree is worth in the marketplace.

Research indicates that Indian parents are deeply involved in their child's education, and that they try to create an environment in which academic achievement is valued and expected. They do so by enrolling their children in classes that improve their academic skills and performance. Parental involvement is intensified when children are in their high school years, when many parents go to great lengths to create a study setting with few distractions so that their children can focus on their academic work. They do this by compromising to their own lifestyles or making sacrifices. This research, which will be further described in the following chapter, suggests that Indian parents attempt to create cultural capital.

While the concept of cultural capital may be value neutral, Bourdieu recognized that factors like class can influence the value and the type of cultural capital that is imparted to children. Students from higher classes are more likely to be socialized in the academic culture, because they are more likely to want their children to perpetuate the family name by following certain academic or professional pathways (Bourdieu, 1996). As noted above, such parents may read to their children, encourage them to speak in a

refined manner, or enroll them in private classes. Students from higher classes are also more likely to benefit from social capital, or their membership in certain communities or networks, because it may set them up to gain them admission to particular institutions. Bourdieu felt that these social networks and training provided an advantage to higher class students during examinations, which value certain kinds of knowledge over others. These factors allow children from the higher classes to perform better on examinations than those from lower class backgrounds, who may be equally capable in terms of potential, but lack the same academic networks or socialization. While higher class families are likely to value professional qualifications, lower class families are both likely to value non-professional work and perceive that professional qualifications are improbable for them. Consequently, children frequently follow in their parents' footsteps, because they are both encouraged to pursue certain fields of study and work, and discouraged from following others (Bourdieu, 1996).

The class differences that Bourdieu described are applicable to the Indian setting, where, in addition to class, caste is a powerful force. As described in Chapter 2, there are significant caste differences at all levels of Indian society which greatly influence the educational and professional pathways of students. In Chennai, lower-caste students are more likely to attend State Board schools and upper-caste students are more likely to attend Central Board schools. The curricula for these schools prepare students, respectively, for state-level and national-level institutions; educations at these institutions, in turn, lead to different professional lives.

Bourdieu has also written critically of the role of examinations in the French education system. Examinations are believed to be neutral assessments of knowledge and

an objective measure of merit, a democratic exercise in which all students have an equal chance of succeeding. Those who succeed in examinations are celebrated for their natural ability. Contrary to these beliefs, Bourdieu suggests that examination performance is clearly inseparable from characteristics like social class, for reasons such as those described above, and gender (1990). Although he did not elaborate on this idea, Bourdieu also argues that it is absurd that examinations taken in late adolescence have such significant long-term academic and professional consequences (1990). Similar criticisms have been made about the Indian education system as well.

Bourdieu's views on the role of parents in education, class differences, and competitive examinations are based on his observations of the French education system. His ideas, nevertheless, are applicable to the Indian context, where parents are deeply involved in their child's education, there are significant class (and caste) differences in educational outcomes, and where examinations play an inordinately large role in the education system. Although Bourdieu did not explore the issue of academic stress, his ideas provide a broad framework from which approach the study of educational issues in Indian society.

In addition to this perspective, it is necessary to include theoretical perspectives that draw a link between the broad, social frameworks described above, and the individual. This human development perspective is best represented by Bronfenbrenner's work (1979).

Human Development

Most early theories of human development tended to focus on child development. The notion that development occurs not just in childhood, but over the entire lifespan, is a

relatively recent one. Development, according to childhood theorists (such as Piaget) and lifespan theorists (such as Erikson), was based on innate qualities of the individual. The role of parents, community, and culture, while acknowledged, was thought to be peripheral to the study of individual development.

While Bronfenbrenner was not the first theorist to recognize the importance of the environments in which the individual was raised, his Ecological Systems Theory (1979) was one of the first theories to clearly identify the ways in which different environments influenced individual development. According to this theory, a child is nested in a series of environments, and the norms and expectations of each environment can influence the child's development. This entire system is further influenced by the passage of time (see Figure 1). The child at the center and the environments can bi-directionally influence each other. High school students in India function in a number of environments, suggesting that Ecological Systems Theory (1979) is clearly suited for the study of educational issues in the current study. Bronfenbrenner identified four types of environments in which the child is nested.

The most proximal environment is called the Microsystem, which includes environments with which the child has regular contact. Indian high school students have contact with several Microsystems, including parents, peer groups, and schools. These interactions may influence student interests and activities, current and future expectations for performance, and student behaviors. The most distal environment is called the Macrosystem, which includes larger contextual factors such as cultural values, laws, and social conditions. In the Indian setting, Macrosystems include large contextual factors such as cultural values, laws, and social conditions. For instance, cultural values such as

the emphasis on certain kinds of educational and professional choices, laws such as those pertaining to reservations for lower castes, and social conditions such as socio-economic class, all influence the educational experiences of a 12th standard student. Furthermore, another macro-level factor that has had an influence on education is the significant social and economic changes that have recently occurred in India, which have had an impact on the educational and professional opportunities that are available to Indian youth.

In between the Microsystems and Macrosystems are the Mesosystem and Exosystem. The Mesosystem consists of interconnections between Microsystems (such as PTA meetings between parents and teachers, or interactions of the peer group within the classroom). In India, teachers may discuss student performances with parents, or parents may compare the student to his or her peers. The Exosystem consists of environments in which the child is not directly involved, but nevertheless influence the child. Exosystems like the parental workplace may indirectly influence the student, because parental occupation and autonomy in the workplace may affect the parental involvement or guidance. Although these interactions may not directly involve the individual, they are play a role in the educational experiences of students.

In addition to recognizing the environments in which the individual functions, it is necessary to understand the quantity and quality of interactions that the individual has with his or her environments. Over the course of an individual's life, relationships that the individual has with his or her environments change – some become more important, and others become less important. Individuals tend to have frequent and involved interactions with the parents in childhood, peers in adolescence, and romantic partners in adulthood. Proximal environments, with which the individual has regular contact (such

as Microsystems), tend to have a stronger influence on the individual then distal environments (such as Macrosystems and Exosystems). The whole system, furthermore, is affected by the passage of time; cultural norms may evolve, historical events may occur, economic conditions may improve or decline, and social customs may change. All of these events, experienced by the individual through the filter of mass media, community norms, and family and peer relationships also influence individual development.

Summary

The general relevance of Bourdieu's ideas on education, Bronfenbrenner's Ecological Systems Theory, and the effects of social change on the educational landscape in India has been described in this chapter. Although based on his observations of French society, Bourdieu's views on the parental socialization of cultural capital, his criticism of the examination system, and his description of the conditions which give rise to class and gender differences in academic performance, are all relevant and applicable in the Indian setting. Ecological Systems Theory illustrates how environments of varying proximity can impact the educational experiences of Indian students. While proximal environments like parents, schools, and peer groups have the greatest influence on students, indirect environments like the parental workplace, and distal environments like cultural norms, laws, and social environments also shape the educational experiences of students. Recent social and economic changes in India have led to the rise of a consumerist middle-class, and the breaking down of traditional gender and caste boundaries. While these changes have introduced new educational and professional opportunities for Indian youth, they have also introduced new anxieties about academic and career success. Although these

theories and studies do not specifically address the issue of academic stress and

adolescent distress, they all contribute unique and necessary perspectives to the study of

this topic.

CHAPTER 4

LITERATURE REVIEW

South India has one of the highest youth suicide rates in the world, and

researchers have found that one of the contributing factors is academic failure (Aaron et

al., 2004). Suicide, however, is an extreme manifestation of distress, which suggests that

for every reported suicide, it is likely that many mental illnesses go undiagnosed, and

even more distress that is overlooked. This is an issue that needs to be systematically

explored, so that effective interventions and education reforms can be implemented.

The following literature review will be organized in the following manner: first

the research on academic stress, which has mostly been limited to Korea and Japan, will

be reviewed, because it is most relevant to the current research study. Next, research on

the topic of academic stress which suggests that most students experience distress as

depression, anxiety, or in the form of somatic symptoms will be discussed. Finally,

parents are known to play a role in the experience of academic stress and influence the

expression of adolescent distress, so their contribution to the issue will be explored.

Particular attention will be paid to gender differences in these areas of research. In each

section, where relevant, research conducted in India will be discussed. Each section will

conclude with a discussion of the limitations of the literature.

Some of the studies that are discussed in the following review, especially those

conducted in India, are dated, and not always directly related to the topic under study. It

was necessary to draw on older research, and to use research studies that were indirectly

related to the topic, because limited research has been conducted on academic stress and

adolescent distress in India.

Academic stress and adolescent distress

The impact of academic stress on students has been well documented in East Asian countries, where it is referred to as 'examination hell' (Kiefer, 1970; Hill, 1996). In several countries such as Japan, Korea, and China, students take extremely competitive exams at the end of their schools years in order to be admitted to prestigious post-secondary institutions (Woronov, 2007). Preparation for these exams is undertaken with military fervor, as indicated in the Japanese term '*juken senso*' or 'examination war' (Hill, 1996).

The entire schooling systems in Japan and Korea are designed around these competitive entrance examinations. The preparation for these exams may begin as early as middle school (Hill, 1996; Schoolland, 1990). Rather than spending time discussing the material, class time is used to practice potential examination questions and memorize material, because it is believed that these exercises better prepare the student for the college entrance examinations (Lee & Larson, 2000; Woronov, 2007). Throughout the 12th grade, students take frequent and regular tests and exams to prepare them for the exams, and the scores and grades on these tests and exams are often publicly posted with the students' names in order to motivate them (Lee & Larson, 2000). In Japan, the pressure to perform well on the exams is so intense that many students take an extra year or two after school to prepare for the exam and maximize their chances for success (Hill, 1996; Schoolland, 1990).

This single-minded focus on exam performance extends outside of school hours as well; students attend private cram classes, called *hakwon* in Korea and *juku* or *yobiko* in Japan, and spend almost all of their free time studying (Hill, 1996; Lee & Larson,

2000; Schoolland, 1990). In both Korea and Japan, proverbs relating to the number of hours of sleep that a high school student needs suggest that four hours is sufficient, and that five leads to exam failure. By reducing sleep to fewer than five hours a day, students are able to spend 14-18 hours a day studying (Hill, 1996; Lee & Larson, 2000; Schoolland, 1990).

This kind of intense academic stress has consequences for students' mental health. Mental health professionals in Korea use terms like 'high school senior symptoms' or 'entrance examination symptoms' to describe the depression, anxiety, somatic symptoms, and general negative affect they see in youth (Lee & Larson, 2000). In the following literature review, this constellation of symptoms is described generally as 'distress.' Although in the psychological literature depression and anxiety are treated as distinct disorders, in reality anthropologists have observed that patients do not distinguish between their experiences of the two disorders (Kirmayer, 1989; Sen & Williams, 1987). As a result, they suggest that researchers and clinicians draw attention to the emotional distress that underlies these symptoms.

Ethnographies that have been conducted in the Japanese school systems have found that students have very high rates of depression, behavioral problems, and suicide (Schoolland, 1990). One study that was conducted with Korean high school seniors (n = 385) five months before university entrance exams found that over half the students reported feeling 'extremely stressed', and that mean levels of depression and physical symptoms were much higher compared to high school seniors in the United States (Lee & Larson, 1996). Boys reporting experiencing more stress than girls, but girls reported more physical symptoms than boys (Lee & Larson, 1996). Another study comparing high

school seniors in Korea (n = 56) and the United States (n = 62), conducted five months

prior to university entrance exams, found that Korean students had significantly higher

depression scores and were more than twice as likely to score in the range for clinical

depression than their American counterparts (Lee & Larson, 2000). Unlike the previous

study, no gender differences were found in this study. The negative affect from academic

stress was not limited to time spent in academic activities, because it appeared to spill

over into other spheres of life as well. Korean adolescents, for instance, reported more

negative emotional states during daily activities, and they spent much less time

socializing and engaged in passive or active leisure than their American counterparts,

which may further magnify the effects of academic stress (Lee & Larson, 2000).

Academic Stress and Adolescent Distress in India

Although the topic of academic stress and adolescent distress is less well

documented in India, several reports in academic journals and newspaper stories reveal a

similar story to the research in Japan and Korea. There is only a limited understanding of

the extent and prevalence of the problem, because few large-scale surveys or other

ethnographic explorations have been conducted. Nevertheless, the existence of the issue

is well known, and it is frequently discussed in the popular press (Chawla, 1997; Sundar,

2003).

There are obvious parallels of the educational curricula and school systems in

India, which are also designed around the board exams, to the systems in place in East

Asia. Although the terms like 'examination war' are not heard commonly here, the

sentiment is familiar; 12th standard students prepare for the year as though the board and

entrance exams were a military battle that was to be won by planning, strategizing, and

practicing. In school, class time is spent practicing for the board exams rather than developing an understanding of the material. Students take regular and frequent tests in each subject following the completion of a chapter or topic (called 'cycle' tests) throughout their last two years of school, and the results of these tests are publicly posted at school as a form of motivation.

School administrators, who are invested in having 'good results' (i.e., having a large number of students perform well in exams), put pressure on teachers to extract good performances from their students. Teachers, in turn, constantly reinforce the importance of doing well in school. Outside of school hours, many students take private tutorial classes. At home, cross-cultural studies indicate that middle-class high school students in India spend more time doing homework (about 4-5 hours a day) than their counterparts in other countries such as Japan (2-3 hours a day) or Korea (3 hours a day) (Larson & Verma, 1999).

Psychologists in India have speculated that academic stress leads to adolescent distress (Iype, 2004). For instance, a study conducted by a mental health organization in 150 educational institutions in New Delhi found that 40% of students feel overwhelmed by exams. Another study conducted by a non-governmental organization with 850 students found that 57% were depressed and 9% had considering committing suicide as a result of academic stress (Pasmantier, 2005). The studies did not include descriptions of the sample, methods, and analysis.

Few studies conducted in India have assessed adolescent distress in terms of depression or anxiety, but several studies have documented the link between academic stress and negative affect. Researchers investigated school stress throughout the school

year using the Experience Sampling Method (ESM) in a sample of one hundred 8th

graders from the north Indian city of Chandigarh (Verma et al., 2002). In this study,

participants were given alarm watches that they wore for a week. When the watches

signaled the participants, which they were randomly programmed to do seven times a day

(between 7:30 am and 9:30 pm), participants recorded their current activity and

emotional states of mind. They found that students had negative affect when they were

doing school work; they were less happy, cheerful, and friendly than when they were

doing other activities, and they were also less relaxed or excited. Schoolwork was also a

source of severe discomfort, and caused students to feel lonely, disappointed and worried

(Verma et al., 2002). Girls appear to have a unique and contradictory experience –

although they reported better performance at school, they also reported more academic

anxiety and externalizing symptoms than boys (Verma et al., 2002). The researchers,

however, did not discuss or explain this finding. Furthermore, the Experience Sampling

Method, which focuses on present and fleeting states of being, may not capture the

overall experience of academic stress or adolescent distress and therefore has limited

explanatory power.

Another study explored academic stress in a sample of 254 students aged between

12 and 15 in the north Indian city of Chandigarh (Verma & Gupta, 1990). The study did

not include information about recruitment location or about what time of the year the

study was conducted. It was found that the stress of examinations, homework, and the

expectations of teachers and parents resulted in a variety of somatic symptoms. Students

suffered from headaches, stomach aches, nausea, and fevers, in addition to behavioral

problems such as aggressiveness, temper tantrums, and adjustment difficulties. They also

experienced tension, anxiety, withdrawal, irritability, and sleeplessness. The symptoms were found to be a greater in younger rather than older students (Verma & Gupta, 1990). This is likely because younger adolescents are more likely to express somatic symptoms of distress, such as those described above, than older adolescents who tend to express themselves in psychological terms.

Both of the above studies, which were conducted with middle school students, reveal that academic stress is a common experience for students in middle school, suggesting that the negative affect associated with school is evident well before high school. While 8th standard students are hardly preparing for board or entrance exams, it appears that general expectations for academic achievement are already high and a source of adolescent distress.

One study found that the effects of academic stress appear to be most severe in students who performed well in school (Rangaswamy, 1982). The sample in the study consisted of twenty 'high-achieving' students aged 15-18 from the city of Chennai who had visited a clinical psychologist with complaints of experiencing 'tension headache'. Based on his examination, the researcher suggested that their headaches were caused by "constant worries, tension, overconcerned attitude… prolonged strain, and disproportionate goal-setting" (p. 72) regarding their academic work. Compared to a sample of 'normal' adolescents, the high-achieving students were found to experience greater adjustment difficulties and emotional disturbances (Rangaswamy, 1982). While the study did not provide information about gender in the experimental or control group, about the control sample recruitment location, and did not explain what was meant by adjustment difficulties and emotional disturbances (Rangaswamy, 1982), the findings

clearly indicate that high academic expectations can lead to academic stress, which, in turn, lead to expressions of somatic and psychological distress.

The experience of academic stress may have consequences for future performance. Based on her review of studies that examined the biochemical consequences of examination stress, Raina (1983) found that when anxiety caused by stress reached clinical or sub-clinical levels, it interfered with the ability of the student to perform at their potential. This inability to perform, in turn, led to a greater sense of distress. It must be noted, however, that none of the studies reviewed by the author were conducted in India, so it is unclear how applicable these findings would be in the Indian setting.

There are also several unanswered questions in the literature. For example, in one study, middle-school age boys report that parents have higher expectations of them than girls (Verma & Gupta, 1990), which is consistent with what might be expected in a country where sons have been traditionally expected to develop a professional career to support their families. In another study with a similar sample, however, girls are found to experience greater distress as a result of academic stress (Verma et al., 2002). This contradiction has not been explained. The influence of factors other than gender has not been explored. For instance, none of the studies examine class differences in the experience of academic stress, even though Bourdieu (1990) has shown that social class plays a significant role in academic expectations.

Our knowledge of examination stress in Indian adolescents is extremely limited. There have been only a few empirical studies of the topic, and some of these studies do not provide sufficient detail about samples or methodology, and frequently do not discuss

the results. Many of these studies have also been conducted with middle-school samples, and some with clinical populations. It appears that no systematic study of the topic has been completed, especially for students in 12th standard. Furthermore, there have been no qualitative studies that attempt to understand the experience of being a 12th standard student from the perspective of the student.

<div align="center">Depression and anxiety</div>

Because the literature reviewed above suggests that students who experience academic stress most often express themselves in the form depression, anxiety, and somatic symptoms, the following section will review the literature in these areas.

Adolescent Depression and Anxiety

Adolescent depression has been widely researched in the West, and a review of the literature suggests that depression is one of the most significant problems of adolescence (Petersen, Compas & Brooks-Gunn, 1993). Depending on how it is defined (in order of increasing severity as depressed mood, depressive syndrome, or clinical depression), up to a third of all adolescents suffer from low self-esteem and feelings of worthlessness, which suggests that depression is prevalent in adolescence. About 7% of adolescents can be diagnosed with clinical depression, which is comparable to adult rates (Petersen et al., 1993). Clinical depression has an effect on adjustment during adolescence, (for e.g., poor peer relationships, substance use); additionally, the effects last well into adulthood, because evidence indicates that depression is associated with poorer educational outcomes, recurrent unemployment, and early parenthood. These effects were equally likely for males and females (Fergusson & Woodward, 2002).

A longitudinal study of a birth cohort of 1265 children in New Zealand found that depression has a high co-morbidity with other emotional disorders (such as anxiety and eating disorders) and behavioral syndromes (such as somatic complaints) (Fergusson & Woodward, 2002). Like depression, anxiety can be experienced at varying levels of severity. In its least severe form, anxiety is found to be a frequently reported psychopathology. In an epidemiological community studies conducted with participants aged between 8 and 17, one in six adolescents reporting anxiety symptoms (Kashani & Orvaschel, 1990), and in its most severe form, 8.7% of adolescents could be diagnosed with an anxiety disorder (Kashani & Orvaschel, 1988).

Studies that have explored depression in India have typically combined adolescents with participants of other ages. For instance, several studies on depression do not report findings disaggregated by age (Gupta, Singh, Verma & Garg, 1991; Saxena, Nepal, & Mohan, 1988; Sen, 1987). The few studies that have specifically investigated depression in the Indian adolescent population consistently find that Indian adolescents have much higher rates of depression than their Western peers. One study conducted with high school students from a variety of backgrounds (n = 818, aged 14-17) in the southern Indian state of Kerala found that nearly 12% of the students could be diagnosed with depression (Nair, Paul & John, 2004). Another study conducted with an equal number of male and female college students, aged 16-20, in the north Indian state of Punjab (n = 200) reported that participant scores on depression scales were significantly higher than their peers in the United States (Upmanyu & Upmanyu, 2000). These studies suggest that rates of depression in Indian adolescents are much higher than what has been found in U. S. samples.

There have been fewer studies that have explored anxiety in India, whether in adult or adolescent populations. One study that was conducted with an equal number of male and female college freshmen in the east Indian city of Bhubaneshwar (n = 380) found that male students scored higher on a scale of manifest anxiety than female students (Singh & Singh, 1989). The authors acknowledge that the result is unusual, but do not attempt to explain the finding. Another study also measured manifest anxiety in a sample of 11th and 12th standard students from Karnataka state (n = 725), and found that, consistent with the anxiety literature, female students scored higher than males (Zareena, Khan, & Phadnis, 1988). In both of these studies, insufficient details were given about the samples. Although an operational definition of the term 'manifest anxiety' was not provided by the authors, from the sample items that were described, it appears to be a measure of general anxiety.

Differences in Depression and Anxiety

Studies conducted in western countries have found that rates of depressed mood, depression and anxiety are higher in adolescent girls and young women than in boys and young men (Allgood-Merten, Lewinsohn & Hops, 1990; Kashani & Orvaschel, 1990; Ohannessian, Lerner, Lerner, & von Eye, 1999; Nolen-Hoeksema, 1991; Petersen et al., 1993). Researchers suggest that one possible explanation for the gender difference is due to differences in coping styles; it has been observed that boys are encouraged to develop active, instrumental coping styles, while girls tend to develop a ruminative one. Consequently, girls may see themselves as less resourceful and self-efficacious, which may contribute to their higher rates of depression (Allgood-Merten et al., 1990; Nolen-Hoeksema, 1991; Ohannessian et al., 1999). The gender difference in depression is found

in India as well, with girls having higher rates of depression than boys (Nair et al., 2004; Upmanyu et al., 2000), although researchers have not attempted to explain this difference.

It is important to note that depression affects the academic achievement of males and females differently, but anxiety does not. In Western samples, depression in boys is associated negatively with academic achievement, while a similar relationship has not been found in girls (Petersen et al., 1993). A similar relationship between gender, academic achievement and anxiety has not been found. In a study conducted with 75 adolescents in 6th grade, the relationship between anxiety and academic competence was not found to be gendered; for both girls and boys, academic competence was negatively associated with anxiety (Ohannesian et al., 1999). It is not clear, however, whether a similar relationship between anxiety and academic competence exists for older students.

Fewer studies have explored gender differences in the relationship between depression or anxiety and academic achievement in India, but the results are parallel. One self-esteem study conducted with an equal number of male and female students in 10th grade (n = 80) found a relationship between positive self-esteem and academic achievement for boys, but not for girls (Mishra, 1992). Although self-esteem may not be comparable to depression, the pattern (relationship for boys, but not for girls) was similar to what has been found in studies conducted in the United States (Petersen et al., 1993). The study, however, did not include information on where or how the study sample was selected. A study conducted in northern India found a curvilinear relationship between anxiety and academic achievement, with high anxiety being associated with poor

achievement for both males and female. This study included an equal number of male and female high school students aged 15-17 (n = 700) (Sharma, 1970).

In Western samples, depressed mood and anxiety increase throughout the teen years, and is at its highest in late adolescence (17-18 years old), which coincides with the last years of high school, after which it declines again to adult levels (Allgood-Merten et al., 1990; Petersen et al., 1993). In India, however, the incidence of depression in adolescents and young adults compared to other age groups is not known, because, as described above, most studies do not disaggregate findings on the basis of age.

A review of the adolescent depression and anxiety literature reveals that little is known about the topic in India. A few existing studies suggest that the rates of depression in Indian adolescents are much higher than in Western samples (Nair et al., 2004; Upmanyu & Upmanyu, 2000). Consistent with studies conducted with Western samples, girls are found to have higher rates of depression than boys. Both of these studies, however, are brief research reports and do not discuss their findings in great detail. Even less is known about anxiety in Indian adolescents, and their findings are contradictory. It is not known what role academic stress plays in these outcomes. I seek to address these shortcomings in the current study.

Distress and Somatization

In the psychological literature reviewed above, depression and anxiety are treated as distinct disorders. In reality, however, anthropologists have observed that patients do not distinguish between their experiences of the two disorders, and often present with undifferentiated somatic symptoms (Sen & Williams, 1987). As a result, anthropological

work has focused on the presentation of somatic symptoms and the emotional distress that underlies the expression of these disorders (Kirmayer, 1989).

Somatization refers to the process by which an individual focuses on the physical symptoms of distress and minimizes or denies the associated cognitive or affective states. It has historically been the manner in which distress was conveyed, whether emotional or social, and it is widely considered to be a powerful way of expressing distress (Katon, Kleinman & Rosen, 1982; Kirmayer, 1989). Somatization is ubiquitous; in fact, it is the most common clinical expression of emotional distress in the world, and it is widely correlated with depression and anxiety (Kirmayer & Young, 1998). Throughout the world, somatic expressions of distress tend to center around headaches, weakness, palpitations, and gastrointestinal troubles (Jenkins, Kleinman & Good, 1990; Kirmayer & Young, 1998; Sethi & Sharma, 1984).

The presentation of somatic symptoms is influenced by individual characteristics such as culture, socio-economic status, gender, and age. Studies conducted in India have found that lower socio-economic class and lower educational level tend to be associated with more somatization. One study, for instance, involved 100 patients who were diagnosed with depression at a psychiatric clinic in north India. Most of the patients were of lower socio-economic class, and few spontaneously expressed internal, psychological feelings; in fact, they did not even necessarily experience their distress as an internal state (Puri, Kumar, Malhotra & Puri, 1995).

Women consistently report more somatic symptoms than men, and also tend to have more vague and diffuse concerns than men (Wool & Barksy, 1994). Several explanations have been offered to understand why women may somatize more than men.

Women may be more willing to admit to distress, may be more willing to seek medical attention for their distress, are more likely to have psychiatric conditions with prominent somatic features (e.g., depression and anxiety), are more likely to be exposed to trauma as a child, and they may simply be more sensitive to somatic distress than men (Wool & Barksy, 1994). Studies conducted on somatization in India have not specifically explored gender differences (Chaturvedi & Bhandari, 1989; Puri et al., 1995; Raguram, Weiss, Keval & Channabasavanna, 2001; Sen & Williams, 1987; Srinivasan, Murthy, & Janakiramaiah, 1986).

Katon et al. (1982) suggest that younger individuals are more likely to somatize their distress than older individuals, because they may be unable to articulate their distress. Another review of the somatization literature also indicates that somatic symptoms tend to peak in late childhood and early adolescence, after which they decline (Campo & Kritsch, 1994). This was found to be the case in a community study of anxiety conducted in the United States with children aged 8, 12, and 17, in which it was found that the older adolescents somatized their distress significantly less than the younger adolescents (Kashani & Orvaschel, 1990). As is the case with adults, studies suggest that girls are more likely to report somatic symptoms than boys (Campo & Kritsch, 1994). Additionally, a community study of somatization with a sample of 540 children and adolescents found that girls also score significantly higher than boys on a somatization inventory (Garber, Walker, & Zeman, 1991). Little is known about the about gender differences in somatization in India, but one study suggests, consistent with research conducted in Western countries, that younger children are more likely to somatize than older children (Malhi & Singhi, 2004).

The experience and expression of distress can be affected by familial factors. Nichter (1981) illustrates how family factors can play a role in the experience of distress. His analysis of case histories of rural Indian female patients visiting an indigenous practitioner revealed that many of the patients were troubled by family concerns such as impending family partitions, economic crises, or marital issues (Nichter, 1981). Other studies have also found that patients can often identify family conditions such as financial problems, marital concerns, or health issues that underlie their distress (Raguram et al., 2001).

Larger socio-cultural factors, such as the social change and industrialization that is occurring in India, may also play a role in the experience of distress. It may, in fact, even be identified as the cause of distress. For instance, Indian mothers whose children had moved away from villages to pursue their careers in cities identified urbanization as the cause of their distress (Nichter, 1981). In other words, a patient's somatic complaints may include a subtext of social predicaments, moral sentiments, or other unexpressed emotions (Kirmayer & Young, 1998). While not related to the topic of academic stress, the above studies illustrate important lessons that could be applied to the current study. For instance, many 12th standard students are pressured by parents and other family members to perform at a certain high level on examinations. The social and developmental changes that are taking place in India have created new opportunities for Indian youth, but have also created a competitive and uncertain marketplace, which are an additional source of worry for students.

The somatization literature reviewed above suggests that little is known about the topic with respect to Indian adolescents. The current study aims to address this gap in the

literature by exploring somatic expressions of distress in Indian adolescents as a response to academic stress. Somatization is frequently grounded in social realities, and as such, it expresses not only psychic suffering, but also social suffering (Kirmayer, 1986), and as researchers, it is important to be able to recognize the factors that influence the experience of distress. In the current study, attention was paid not only to verbal expression of distress, but also to any possible somatic symptoms that might indicate distress.

<div align="center">Parental Involvement</div>

Ethnographic research conducted in Japan and with Korean immigrants in the United States has found that parents are deeply involved in the education of their children, and are often responsible for some of the academic stress that is experienced by the students (Kim, 1993; Schoolland, 1990). Indian parents are found to be similarly involved in their child's education, and researchers suggest that parents play a role in academic stress (Verma & Gupta, 1990). In all of these studies, the origins of academic stress appear to be high parental expectations for exam performance and college admission. These findings suggest that in order to understand the issue of academic stress and adolescent distress, it is necessary to explore the role of parents, particularly in relation to their level of involvement with their child's education. This is consistent with Ecological Systems Theory, which suggests that proximal environments with which the individual has frequent interactions (such as the parental microsystem) have a strong influence on the individual.

A large body of research conducted in the United States shows that parents have a strong influence on their child's education, and they do so both directly and indirectly.

Parents may directly influence their child by being role models, for instance, by reading to the children or helping with homework. The educational attainment of the parents is strongly related to their expectations and their children's expectations for the child's educational attainment (Wilson & Wilson, 1992). By being exposed to these behaviors, children both imitate and normalize them. In doing so, parents are creating an atmosphere that promotes educational achievement, and are therefore creating cultural capital (Bourdieu, 1986).

Research in the area of parental involvement, guided by Eccles et al. (1982) Value-Expectancy Model (see Figure 2) indicates that parents may also influence their child's education indirectly, by being expectancy socializers. This model suggests that the academic expectations and attitudes of socializers (such as parents and teachers) affect the academic expectations and attitudes of the child. Parents convey expectations about their child's abilities, the difficulty of tasks, the importance of various activities (Eccles et al., 1982; Phillips, 1987), educational aspirations for their child (Wilson & Wilson, 1992) and by making causal attributions (Frome & Eccles, 1998). They may also socialize self-perceptions, interests, and skill acquisition (Eccles et al., 1990), and foster activity choices (Jodl et al., 2001).

This kind of expectancy socializing has a significant impact on the child. In fact, research consistently suggests that children's concepts of their ability, their expectancies for success, and their concepts about the relevancy or difficulty of tasks are more directly related to their parent's beliefs about their aptitude and potential than their own past performance (Eccles et al., 1982; Frome & Eccles, 1998; Phillips, 1987).

To date, little research has explored parental involvement in the child's education in India. A significant amount of research, however, has been conducted with immigrant populations in the United States which may be relevant (Asher, 2002; Kim, 1993; Liu, 1998; Schneider & Lee, 1990). These studies used different samples and multiple methods to explore their research questions. Asher (2002) interviewed ten Indian-American high school students from New York City. Kim (1993) conducted an ethnographic exploration of career choice among 40 second-generation Korean-American college students, and Liu (1998) investigated the same topic among 30 Chinese-American college students. Schneider and Lee (1990) explored academic success in middle-school aged children of immigrant parents from Korea, China, and Japan (Schneider & Lee, 1990). These studies will be described in further detail below, but generally, in all of these immigrant communities, parental influence and involvement in education was found to be strong. Educational and professional achievement was a highly valued mode of success, and expectations for children's performance were high because educational achievement was considered to afford upward mobility.

The involvement of East Asian immigrant parents in their child's education is mostly indirect. Nevertheless, it is a powerful mechanism through which the parents influence their children. These parents, who are from Korea, China, and Japan, spend less time than white American parents tutoring their children and make fewer visits to school, but they structure the learning environment of the child to maximize expectations. They start training the child before the child starts kindergarten and sustain a high level of interest, monitoring and control throughout the child's education (Schneider & Lee, 1990). East Asian and Indian immigrant parents constantly emphasize the importance of

studying well and performing well on examinations in order to be admitted to prestigious institutions (Asher, 2002; Kim, 1993; Liu, 1998; Steinberg et al., 1992).

According to an ethnographic study conducted in Japan, parental involvement is especially heightened during the high school years and during exam preparation (Schoolland, 1990). Korean immigrant parents took care of all of the children's needs and minimized all distractions, so that their children could pour their energies into studying (Kim, 1993). While parents enrolled their children in activities that increased their likelihood of admission to a prestigious institution (Kim, 1993), participation in extra-curricular activities was generally considered a waste of time, and time taken away from 'real' work (Liu, 1998). In both Korean-American and Indian-American communities, only achievement in certain academic fields, such as law, medicine, engineering or business, was considered real achievement. These include high prestige, high income professions such as law, medicine, engineering or business, while success in the social sciences or the arts was frowned upon and discouraged (Asher, 2002; Kim, 1993).

These parental messages about academic achievement do not go unheeded. In comparison with American children, Indian-American children have a high degree of concern regarding their parent's expectations for achievement and are willing to accept their parents' advice (Asher, 2002). Like their parents, children of East Asian immigrants believe that studying and performing well on examinations is very important to their future (Kim, 1993). They are more likely than their peers to believe in the consequences of poor school performance, such as non-admission into college or limited career opportunities. In order to avoid these consequences, they devote more time and effort to school work (Steinberg et al., 1992).

The factors discussed above – parent expectations, parental control of the study environment, children's acceptance of the parental influence – are combined in a model developed by Schneider and Lee (1990), which attempts to provide a cultural explanation for academic achievement in East Asian immigrant populations in the United States (see Figure 3). According to this model, socio-cultural factors such as cultural characteristics and socio-economic status influence interpersonal interactions involving the student, and parents, teachers, and peers of the student. These interactions influence effort and persistence on the part of the student, which affects the student's aspirations and academic achievement.

A significant socio-cultural factor with respect to some East Asian countries is that of family pride. There is great pride associated with a child performing well in school and earning admission to a prestigious college; inversely, there is also shame and disappointment when the child does not perform well or pursue an expected career in a professional career (Kim, 1993). In her ethnographic exploration of the 'examination hell' phenomenon in Japan, Kiefer (1970) found that the pride or shame of examination performance is not experienced by the students and families alone, but in the face of the larger community as well, because "success or failure in the examinations reflects seriously on the pride of the children's family and their 'face' in the community" (p. 67) Parents may put pressure on their children to succeed according to cultural norms. Because many families make great sacrifices for the child's education, the children may feel responsible to live up to expectations of their parents (Kim, 1993; Liu, 1998).

The studies described above all involve Asian immigrant populations in the U. S, but little is known specifically about Indian youth in India. To date, there have not been

any ethnographic studies with Indian students which explore parental involvement. Personal observations, however, suggest that above findings ring true in India. Parents are also intensely involved throughout the child's education, and they also emphasize the importance of studying hard to perform well on examinations that will earn them admission to prestigious institutions (Larson et al., 2000; Ramalingam, 2005; Verma & Gupta, 1990). Furthermore, only achievement in certain fields, such as medicine and engineering, are encouraged (Asher, 2002). Students are discouraged from spending time in leisure activities, and urged to spend all their time in study (Ramalingam, 2005). Because Indian children are generally deferential to their parents, especially with respect to important decisions such as education and career, they are willing to accept guidance of their parents (Larson et al., 2000)

In many families, parents often reduce their social engagements and try to spend more time at home in order to create a home environment in which academic achievement is possible. Many Indian parents also make sacrifices, both professional and personal, for their child's education. As a result, just like the children of East Asian immigrants, Indian children may feel pressured to live up to the expectations of their parents.

Research suggests that high expectations for performance and the pressure that parents put can have a negative impact on the welfare of their children. Those who are constantly reminded to perform well may feel overwhelmed and fearful. Kim (1993) describes how Korean-American students who do not conform to their parents' expectations have a strong sense of frustration and guilt. In India, students who do not live up to the expectations of their parents may feel that they have failed their parents

(Pasmantier, 2005). The situations described above could lead to mental health problems, social delinquency, and estranged parent-child relationships (Kim, 1993; Thompson & Bhugra, 2000).

Based on their observations of immigrants in the UK, Thompson and Bhugra (2000) formulated a model in order to conceptualize factors influencing self-harm in young south Asians (see Figure 4). This model is consistent with the literature about parental expectations, restrictions, and pressure discussed above. According to the model, factors such as high parental expectations, school performance anxiety, peer pressure, parental restrictions, and poor social relationships contribute to poor self-esteem and self-identity. This leads to stress, which in turn leads to deliberate self-harm and suicide.

Gender and Expectancies

The influence of gender on expectancies has not been significantly explored in Asian populations. Kiefer (1970) and Schoolland (1990) both note that in Japan, mothers are more influential than fathers, and that expectations are higher of sons than daughters. This is due to the gendered nature of Japanese society, in which men are expected to be the primary breadwinners, and women are expected to stay home and nurture the children. In the Korean immigrant community in the United States, daughters are encouraged to perform well in school but not to pursue demanding careers, so that they may later balance family and work (Kim, 1993), although it is likely that these attitudes have changed in the years since the study was conducted. Research in India finds similar gender differences, with sons reporting that parents have higher expectations for them than daughters (Verma & Gupta, 1990). Similarly, however, it is likely that expectations

are no longer as gendered due to the recent social and economic changes in India that have led to the availability of new jobs for women.

Studies conducted in the United States have found that girls have lower expectancies for themselves than boys, especially in what are typically construed as masculine-typed subjects like math. Even though boys and girls do equally well in math courses and standardized tests and report equal time doing homework, boys have higher self-concepts and greater expectancies for success than girls. Girls report that they find math more difficult, find it harder to do well, consider it less important, and suggest that they depend on effort rather than talent to do well (Eccles et al., 1982; Eccles et al., 1990; Frome & Eccles, 1998)[3].

Little is known about academic expectancies in India, but in a study conducted with an equal number of male and female psychology college students in north India (n = 131), females had lower generalized expectancies at an anagram task than males (Murphy-Berman & Sharma, 1986). It is not clear whether these lower expectancies transfer to the academic arena, but the authors expect that it does, because such an expectation could "reflect a realistic appraisal of societal structures in India that promote male achievement more than female achievement" (Murphy-Berman & Sharma, 1986, p. 615).

In the United States, the gender of the child has an impact on parent expectancies. Again, this is especially true in masculine-typed subjects like math. Compared to parents of sons, parents of daughters rated their child's abilities lower, reported that their daughters found math more difficult, had to work harder to do well, considered it less

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[3] Although the gender gap does not exist in lower grades, in later years, girls tend to fall behind their male peers in math and physical sciences.

important, and depended on effort rather than talent to do well (Eccles et al., 1982; Eccles et al., 1990).

The body of literature that has been reviewed here clearly suggests that parents have a considerable influence on their children's education in a variety of ways, both direct and indirect. Their unique influence on the experience of academic stress and adolescent distress, however, has not been explored in detail. When exploring the role of parents in the issue of academic stress, it is necessary to be aware of the pathways through which they exert their influence.

<center>The Present Study</center>

The above literature review suggests that academic stress and adolescent distress is commonly experienced in India. Little is known, however, about the extent to which academic stress is experienced, or how distress is expressed by 12th standard students. To date, few studies have explored the topic from the perspective of the students, and there have been few attempts to understand the unique role of parents. The current study was designed to address some of the limitations of the literature.

The research questions were guided by prior research, theory, and an understanding of the Indian educational system. Three major research questions and three hypotheses were articulated, and both quantitative and qualitative approaches were used to understand the topic.

It has been noted that the topic has not been accurately assessed, so the first research question was,

1. What is the extent and prevalence of the experience of academic stress and adolescent distress?

In order to answer this question, surveys measuring depression and anxiety were completed by students in their final year of high school. Three specific hypotheses were tested:

    a. Girls would experience greater academic stress and adolescent distress than boys

    b. Central Board students would experience greater academic stress and adolescent distress than State Board students

    c. Science students would experience greater academic stress and adolescent distress than Commerce students

Few studies have explored academic stress from the perspective of the student, so the second research question was,

2. How do 12th standard student describe their experiences of academic stress and adolescent distress?

Interviews with 12th standard students were used to understand the students' experiences. Students were asked about their academic pressures, symptoms, future expectations, parental expectations, and the role of parents. This provided some valuable descriptive information about academic stress and adolescent distress. The interview data was also explored for gender, class, and academic track differences.

The third research question concerns the role of parents:

3. What is the role of parents in the experience of academic stress and adolescent distress?

The literature review and theory suggest that parents play a significant role in their children's educational experience and are a significant influence on their children.

Their role and their influence will be primarily explored using data from student

interviews.

CHAPTER 5

METHODS

This chapter describes the methods that were used to explore academic stress and adolescent distress in 12th standard students in Chennai, India. I begin with a discussion of the influence of my identity as a fieldworker on the research process, which is followed by a description of the schools in which data was collected. A description of the participants, measures, procedures, and analytic plan for each part of the study will be provided. The chapter will conclude with a description of data collection from key informants. The research was conducted in the summer of 2006, at the onset of the school year. A variety of methods were used, including surveys (n = 588) and semi-structured interviews (n = 24) that were administered to 12th standard students at the onset of the school year.

The decision to conduct the study at the beginning of the year was made because although it was likely that academic stress would be relatively low at this time, it also made it possible to approach the principals about conducting research at their sites. It is likely that it would have been more difficult to obtain permission to conduct research at the end of the school year, when teachers would have been trying to complete the curriculum, and students would have been busy with board and entrance exam preparation.

Positionality

My interest in academic stress and adolescent distress arises largely from my personal experience of having completed high school in Chennai in the years following economic liberalization. The last two years of high school were especially busy as my

peers and I attended tuitions and special classes at school, and cut back on extra-curricular activities. There was a sense of excitement, as new fields of possible study were opening up to us, but also a sense of anxiety about the challenges that we needed to overcome (board and entrance exams, reservations, etc.) in order to achieve our goals. Discussions between students were frequently about homework, tuitions, and our expectations for the future.

My own interests were in the less competitive fields of humanities and social sciences. Because my parents were relatively open-minded about my academic and professional goals, my own experience was less distressing than that of many of my peers. I was aware, nevertheless, of the expectations placed upon students who aimed to enter more competitive programs, by themselves, and their parents, teachers, and peers. Increases in news reports about 'exam stress' and subsequent suicides also increased my interest in the topic. My personal background and fluency in Tamil, the local language, made me more accessible to students.

My identity as a Ph. D. student from a university in the United States also had a positive effect on my interactions with the adults involved in the research (parents, principals, teachers, and the tuition instructors). They asked me about my career path, my research interests, and my future expectations. Many of the school administrators had advanced degrees in education, and shared their own interests with me. Some even confided that they were happy to have a 'researcher' with whom they could have a conversation about these issues. I visited each school two or three times, and having these conversations allowed me develop a rapport with these individuals, which usually led to permission for me to conduct research. My gender appeared to play a role in the research

process as well. Most of the adults with whom I interacted were female, which likely made it easier for me to develop a rapport with them. It is possible that this provided me with greater access to the students in their schools.

My identity also had an influence on my relationships with the students. I dressed in Indian clothes which made no indication of my social class or background when I visited schools and met with students. I was introduced by the school principal or teachers to the students as a Ph. D. student in Family Studies and Human Development from the United States who had come to study academic stress in Chennai. The students appeared interested and curious when my field of study and level of education was mentioned, and some students asked me questions about these topics later. I would describe myself further by mentioning that I had grown up in Chennai, and by identifying the high school that I had graduated from. (Because this is an old and well-known school in the city, the students would usually nod in recognition.) This allowed the students to understand that the topic that I was investigating was one that was deeply familiar to me, and allowed me to develop an initial rapport with them. In general, the female students responded with overt enthusiasm to the study and were willing participants. The male students initially appeared less interested, but this was a façade; their participation in the study was equally enthusiastic.

Finally, it is necessary to mention the role of my mother in this research. She is an educational social worker who works in low-income communities in Chennai. She accompanied me to some of schools where I eventually conducted research. While she did not personally know the principals or administrators, and she did not play a direct role

in convincing them to permit me to conduct research, her presence provided a 'foot in the door' because many principals were interested in her work.

Schools

Seven schools (four State Board, three Central Board) were selected for recruitment based on a variety of criteria. The schools where the research was conducted were urban, co-educational, enrolled at least 50 students in 12th standard, used English as the medium of instruction, and offered Science and Commerce academic tracks. I graduated from one of these schools, and this was the first school to permit me to conduct research. I discussed my research study with the principal, who is a well-known school administrator in the city, and she suggested two other schools where she felt I could conduct research. Administrators at both these schools agreed to participate. I approached administrators of six other schools on the basis of the criteria described above, and five of them agreed to allow their 12th standard students to participate. The letter of permission from this principal conferred a sense of legitimacy on my research, and allowed me to approach the administrators of other schools as well. All administrators were visited during open office hours by the researcher, where I explained the purpose of the study and sought permission from the principals to recruit participants on the premises of the school. All letters of permission are included in Appendix D.

Although the selected schools may not have been truly representative of the city schools, they included a range of backgrounds. All schools were within one hour of the researcher's residence, and were located in south, western and central Chennai. They were all co-educational private schools that used English as the medium of instruction. The students at these schools ranged in socio-economic class from lower-middle to

upper-middle class. Unlike institutions of higher education, schools do not have reservations, although many schools preferentially admit the children of alumni. The schools were administered by a variety of private institutions, such as secular organizations, Sikh organizations, Hindu foundations, and Christian missions. Schools were also located in a variety of settings; for instance, one school was located in a densely populated Muslim-dominated neighborhood, another was located next to a major Hindu temple, and the others were located in residential neighborhoods of varying social class. In spite of these differences, however, the majority of the students in all of these schools were Hindu (all but one of the students who participated were Hindu) and from middle-class families, so they were more similar to than different from each other.

Some schools were built over several acres of land, and included large playing fields, while others were built on small patches of land and did not include recreational areas. The buildings were typically three- our four-storey buildings in which the lower floors were occupied by administrative offices and elementary school students, and the higher floors housed the middle and high school students. Between classes, uniformed students could be seen walking through the hallways and playing fields. The administrative offices in all the schools looked similar, housing pictures of Gods and Goddesses, religious and political leaders, and often, portraits of the founders of the school. Inspirational quotes by notable individuals such as Mahatma Gandhi, Martin Luther King, Jr., Nelson Mandela and Dr. Abdul Kalam (the then popular president of India) dotted the walls. Display cases held trophies that students had won for athletic, cultural, or academic achievement. In several schools, large wooden boards that included the names and scores of the students who had earned the highest board exam scores (i.e.,

'toppers') over the previous years, were displayed. In some schools, these boards went back over 30 years. Although the State Board and Central Board schools did not significantly differ in their appearance, the latter were more likely to display these boards.

Prevalence of Academic Stress and Adolescent Distress

    Participants. Because the first research goal was to assess the prevalence of academic stress and adolescent distress, it was necessary to survey a large number of students. Permission was granted by five of seven principals (2 SB, 3 CB) for surveying the 12th standard students, and the entire 12th standard populations of these six schools were recruited for participation. The other principals chose not to participate in this phase of the study because they did not want their students to be troubled during school hours. Of the 680 surveys that were distributed, 634 were returned (a return rate of 93%). Of the returned surveys, only 588 surveys had complete information and could be used in analysis (a final response rate of 86.5%). In the discarded surveys, students had not completed all the measures, or had completed them improperly (such as checking all possible answers instead of selecting one answer).

    The participants ranged in age from 15-19. The mean age of the students was 16.34 ($SD = .62$) and the median age was 16. Other demographic information is included in Table 2. There were more males (71.2%) than females (28.8%), which was consistent with what was observed at the schools (school enrollment data was not obtained). This is also consistent with most co-educational schools in Chennai, which have about twice as many male students as female students, because many female students attend girls-only schools. It is possible that girls who attend co-educational schools differ in important

ways from girls who attend girls-only schools. Parents who enroll their daughters in a co-educational environment, for instance, may hold more progressive views on women's education, employment, and marriage. Girls in co-educational schools are also more likely to be Hindu, because, in Chennai, many Christian and Muslim girls attend convents that are run by missionaries. These differences need to be taken into account when discussing the results of the current study, because the girls in the sample may not be representative of 12th standard female students in the city. There are also a greater number of Science students (71.1%) than Commerce students (28.9%). Female students comprised 19% of SB students and 38% of CB students, and 26% of Science students and 38% of Commerce students. An equal number of students attended State Board (47.8%) and Central Board (52.2%) schools. All of these figures are generally representative of co-educational high schools in Chennai.

Measures. The survey was comprised of three parts, each two pages in length (see Appendix E). Part 1 gathered general information about the students, such as age; gender; grades; academic performance relative to classmates; tuition and coaching class attendance; hours spent each week in tuitions, coaching classes, and leisure; and post-high school plans. They were also asked if they had changed schools for 11th and 12th standard. Stress was measured with a single item: *Do you think that the coming year (12th standard) will be stressful?* Students could answer *Yes* or *No*. They were asked what they wished to study in college, whether it was likely they would get into a program of their choice, what their parents wished for them to study in college, and whether it was likely they would get into a program of their parents' choice. Part 2 was a modified form of the

Beck Depression Inventory (BDI)[4] and Part 3 was the State-Trait Anxiety Inventory

(STAI). Both scales have been translated into many languages and have been used

successfully in other cultures. These scales were not used for diagnostic purposes.

The BDI is a 21 item self report scale which measures manifestations of

depression (Beck, Steer & Brown, 1996). It is frequently used in the diagnosis of

depression. Items were rated using a 4-point Likert-type scale ranging from 0 to 3 on

each item. An example item is *(0) I get as much satisfaction out of things as I used to*, to

(3) I am dissatisfied or bored with everything. Scores on the BDI ranged from 0-57, with

scores below 10 representing normal moods, 11-20 representing mood disturbance, and

above 20 representing clinical levels of depression. The BDI is a highly reliable measure,

with internal coefficients ranging from .73 to .92. The BDI was selected for use because

it has been used previously in studies of depression in Indian adolescent samples, and has

been found to be a reliable measure of depression (Basker, Moses, Russell & Russell,

2007; Nair et al., 2004; Upmanyu & Upmanyu, 2004).

The State-Trait Anxiety Inventory (STAI) is a 40 item self report scale

(Spielberger, 1983). It measures both 'state' anxiety, or temporary, situation-based

anxiety, and 'trait' anxiety, or more stable, personality based anxiety. An example item

for state anxiety is "*Right now, at this moment: I feel calm*" [reverse coded] and an

example item for trait anxiety is "*Generally: I feel worry too much over something that*

doesn't really matter." Items were rated using a 4-point Likert-type scale ranging from 1

(Not at all) to 4 (Very much so) on each item. Because the STAI is not a clinical measure,

it does not have a clinical cut-off score. Scores on the state and trait anxiety scales each

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[4] Two questions relating to sex and suicide were removed due to the sensitive nature of the topic, in order
to receive consent from the Institutional Review Board.

range from 20-80 ($M = 40$, $SD = 10$), with higher scores representing higher levels of anxiety. The test-retest coefficients for the trait anxiety scale range from .65 to .86, and for state anxiety from .16 to .62. The low test-retest coefficient for state anxiety is to be expected because state anxiety is transitory, and does not remain the same at different times. The STAI was selected because it is a popular measure of anxiety used in cross-cultural research studies (Spielberger & Diaz-Guerrero, 1986). It has also been found to be a valid measure in Indian settings (Chowdhury, 1989; Spielberger, Sharma, & Singh, 1973). In the current study, the emphasis was on state anxiety rather than trait anxiety, because it was expected that a stable personality characteristic was less likely to be influenced by temporary, situational-based anxiety such as that caused by 12th standard academic stress.

Procedures. All high school students in India typically have one class period per week 'off,' when no regular instruction is scheduled. This period is generally called 'general class,' 'moral instruction' or 'religious instruction.' The time is usually used for lectures, short workshops, cultural programs, or to allow teachers to catch up on class material. The permission of the principals was sought to allow students to complete the surveys during this class period. In two of the five schools, principals took students out of regular class hours to complete the survey. Parental assent was not sought for this part of the study because it is typical in India for school principals to provide consent with respect to research that take place at school.

The researcher introduced herself in English to the students as a doctoral candidate who was exploring academic expectations and examination stress in 12th standard students in Chennai for dissertation purposes. Students were told that the survey

took about 30 minutes to complete, and that participation was completely voluntary. They were assured of the confidentiality of their answers, and the care with which the data would be handled. The students were also assured that their surveys would be seen only by the researcher and research assistants. They were strongly urged to report on their own experiences, and not copy from their neighbors, a common problem in India. If students had any questions, they were encouraged to ask the researcher. The top sheet of the survey was a letter that included all of the above information and contact information for the researcher and local counselors. It made clear that by completing the survey, the students were consenting to participate in the study. Participants retained the top sheet of the survey and returned the remainder. The researcher and one teacher stayed in the classroom until all students completed the surveys.

Over 90% of the students completed the surveys. It is possible that the presence of the teacher and the researcher in the classroom influenced the high response rate, because there is a strong respect for authority figures in Indian society. Most students took the task seriously, asked questions to clarify doubts (for e.g., "What does 'jittery' mean?" "What do you mean by 'guilty'?"), and turned in carefully completed surveys. Some surveys were not properly completed and were not included in analyses. Upon turning in the surveys, many students approached the researcher to ask questions about the research study, about studying the social sciences, because this is not a popular career choice in India, and about studying in the United States. The researcher answered questions briefly, and suggested that students contact her via email or phone for more details. Three students contacted the researcher via email in order to discuss the issue further. Students asked for more details about the research study, information about different kinds of

social sciences (for e.g., many did not know the difference between psychology and sociology) and possible career paths in the social sciences. They also asked about preparing for the SAT (Scholastic Aptitude Test) and TOEFL (Test of English as a Foreign Language), applying to institutions in the United States to complete their undergraduate studies, and about life in the United States.

After collecting the completed surveys, the researcher announced that she was interested in interviewing students about the issues addressed in the survey. The students were told that the interview would take about 45 minutes, and would require the consent of their parents. The researcher left fliers in each classroom with this information, and urged to contact the researcher if they were interested. Teachers also encouraged their students to respond to the request.

Analytic Method

The student surveys were coded and entered into SPSS 12.0 by a team of undergraduates who earned research credit for their effort. All analysis was done by the researcher. The data was analyzed in order to explore the prevalence of academic stress and adolescent distress. First, the proportion of students who reported that they expected the 12th standard to be stressful was calculated using chi-squares, and any gender, academic track, and school type differences in perceptions of stress were noted. Next, the mean scores on the BDI and STAI were calculated, and assessed for severity. With respect to the BDI, the findings were also used to assess what percentage of students fell into the clinical range for depression, and what percentage were considered to have 'mood disturbance.' These figures were compared to studies conducted in India and other

countries. Gender, academic track, and school type differences in BDI and STAI scores were tested using independent T-tests and bivariate ANOVAs.

Student Experiences

    Participants. Permission was granted by three principals (2 SB, 1 CB) for recruiting interview participants. Rather than offer a period of school time, some principals chose to make their students available to interviews, because those were to be conducted outside of school hours. Twenty-three 12th standard students were recruited from three schools for participation in the interviews. One student, who attended a school outside of the schools where research was conducted, happened to be my neighbor, and was recruited to participate in the study. There were equal numbers of male and female participants (13 females and 11 males), taking science and commerce tracks (12 science and 12 commerce) and attending State Board and Central Board schools (12 SB and 12 CB). See Table 4 for a description of interview participants. While the gender and academic track representation in this sample is not representative of the overall population of the schools they were recruited from, they are important dimensions that shape the experience of academic stress and adolescent distress, and so recruitment was done in a manner that would present all experiences of the issue.

    Measures. Interviews were conducted in a semi-structured manner. Participants were asked about their typical weekdays and weekends, future expectations, parent expectations, academic pressures, influence of peers, teachers, and tuitions, and changes in lifestyle and health since the beginning of 11th standard. Newspaper reports about exam stress were referred to during the interview, in order to draw responses. The

interviews lasted between 15 minutes and 1 hour, averaging about 30 minutes (the instrument is included in Appendix F).

Procedures. Using fliers to recruit students for interviews did not appear to be a successful strategy, because only three students initiated contact. I returned to each of the schools several times and requested the assistance of the teachers and school administrators in recruitment. I also requested that they recruit both male and female students, students taking science and commerce tracks, and students who were both low- and high-achieving. Teachers and school administrators agreed to strongly urge students to participate in interviews. The perceived approval from school authorities resulted in 21 additional students agreeing to participate in the interviews.

It is possible that including teachers and administrators in the recruitment process may have influenced the nature of the data that was collected. For instance, students may have felt pressured into participating by school authorities. It is also possible that the teachers and administrators may have urged more outgoing and articulate students. There was some concern that the students who agreed to speak may be those who were experiencing a lot of extremely high or low academic stress. However, some students chose not to participate, and those who agreed spoke honestly, sometimes criticizing the school. Several of the interviewed students were indeed outgoing and articulate, but some were also shy and less talkative; similarly, the academic stress experiences of the interviewed students ranged from high to low stress. This suggests that the involvement of the school authorities in the recruitment process may not have influenced the data. The active recruiting by the teachers, however, did draw some students who mentioned that they had found the research interesting, but had been too shy to contact the researcher.

Participants were met at their schools and the nature of the interview was clearly explained to all participants verbally and in the printed consent form (see Appendix G). Meeting times and locations were mutually agreed upon, and participants were asked to bring the consent form signed by the parent and themselves to the appointment. Participants were reminded of their appointment by cellular text messages and phone calls. Interviews were conducted in a variety of locations such as participants' homes, cafes, temple backyards, beaches, school libraries, school clinics, and empty schoolrooms. If the setting allowed it, students were offered a drink (coffee or a soda). Some students were initially shy, but eventually opened up. Notes were also taken about non-verbal information communicated by the student (posture, gestures, etc.). At the end of the interview, all participants were thanked for their participation and given gift certificates to a popular book and music store in the amount of Rs. 100 (approx. $2.20).

Analytic Method

All interviews were conducted in English, although a few students occasionally used phrases or sentences in Tamil to express themselves or to emphasize a point. All the student interviews were conducted, transcribed and coded by the researcher. NVivo 2.0 qualitative data analysis software was used for analysis. The data also included field notes about the participants; for instance, where relevant, information about their body language (foot-tapping, leaning back confidently, wary eye-contact, etc.) was included. Student interviews were analyzed in order to explore the second and third research questions; first, the interviews were analyzed to understand student experiences of 12th standard, and next, the interviews were analyzed to investigate the role of parents in academic stress and adolescent distress.

Analysis of the data was guided by Grounded Theory methodology, as described by Strauss and Corbin (1990). The aim of exploring new phenomena is to discover conceptual categories, and to develop these categories according to their properties and dimensions. It is important to be open to as many relevant categories and concepts as possible, so Strauss and Corbin recommend that the researcher should not structure interviews or reading of the transcriptions too tightly (1990).

Each participant interview was carefully examined for recurring themes or conceptual categories, which were then organized into sub-categories on the basis of their unique characteristics. Subsequent interviews were then analyzed for their contribution to the already identified categories and sub-categories, or for identifying new categories and sub-categories. This process was repeated multiple times, leading to a conceptual framework that arose naturally from the data. In creating a conceptual framework, the emphasis was on comments that were frequent and specific, although comments that were especially impassioned or unique were also included. The results of the analysis were examined for group differences (based on gender, academic track, or school type), and the findings were interpreted with respect to the setting, survey findings, theoretical framework, and literature. The categories that emerged from the data were illustrated with relevant quotes and explanations.

Key Informant Interviews

Key informant interviews were conducted with parents (n = 4), a school principal (n =1), tutorial instructor (n = 1) and a psychiatrist (n = 1). The consent forms for the key informants are included in Appendix G. In the consent form for the student interviewees from Study 1, parents were asked to check a box if they were also interested in

participating in the study, in which case they were asked to provide contact information. Six parents (including two couples) responded. The parents were called and a time and place for the interview was arranged. The research study was explained to the parents and their consent was sought. Three interviews were conducted at home and the fourth interview was conducted at a workplace. Parents were asked about involvement in child's education, future expectations, and the influence of peers, teachers, and tuitions. Newspaper reports about the role of parents in exam stress were referred to during the interview, in order to draw responses. The parents who volunteered to participate were interested in the study and were candid, and the interviews lasted between 30 minutes and 1 hour.

One of the school principals who had been approached about conducting research in her school agreed to be interviewed about academic stress. She was asked about school atmosphere, school expectations, and the influence of tuitions on education. While the principal was not asked about parental involvement and influence, the topic arose naturally during the interview. A guidance counselor at the same school provided contact information for a tutorial instructor. This instructor consented to be interviewed about the role of tutorials in the lives of 12th standard students and academic stress. She was asked about the purpose of tuitions and the role of tuitions in the education system. Each of these interviews lasted about 30 minutes. The psychiatrist is well known throughout the country for her work with adolescents and suicide. She manages a hotline to reach out to individuals considering suicide, and maintains a practice in Chennai. She does not make appointments for non-clinical purposes, so the researcher spent several hours in her waiting room until she agreed to be interviewed for five minutes. The psychiatrist was

asked only one question, about what she thought were the main factors contributing to the issue of academic stress and adolescent distress. Because this was a question that she had been asked often, she answered the question quickly but thoroughly.

All interviews, with the exception of one, were conducted in English. One parent interview was conducted in Tamil. The interviews were transcribed and coded using the NVivo 2.0 qualitative data analysis software. In the analysis, information was primarily drawn from student surveys and student interviews. The key informant data was used to contextualize and add richness of detail.

CHAPTER 6

PREVALENCE OF ACADEMIC STRESS AND ADOLESCENT DISTRESS

The aim of this chapter is to assess the extent and prevalence of academic stress and adolescent distress among adolescents in Chennai in contemporary India. The first part of this chapter provides a quantitative description of the results. In this part, first, the demographic characteristics of the sample will be described. Next, a general description of the results will be given with respect to stress, depression, and anxiety. These results will then be explored for gender, academic track, and school type differences. It was hypothesized that girls, science, and CB students would experience more academic stress and express greater adolescent distress than boys, commerce, and SB students. Finally, the results of further analyses will be reported in order to make sense of some inconsistencies in the results. The chapter will conclude with a summary of the survey results.

Results

The survey was completed by 588 students in 12th standard and included more males (71.2%) than females (28.8%), and more science students (71.1%) than commerce students (28.9%). An equal number of State Board and Central Board students completed the survey (see Table 1 for demographic information).

The mean age of the students was 16.34 ($SD = .62$). Academically, on average, the students rated themselves as earning 'Mostly Bs' in their classes. Compared to their classmates, 23% thought they did worse, 39% thought they did better, and 38% thought they performed at about the same level as their classmates. A majority of students attended tuitions (84.8%), at which they spent an average of 9 hours a week ($SD = 6.7$).

Compared to SB and commerce students, a greater proportion of CB students ($\chi^2 = 43.10$, $p < .01$) and science students ($\chi^2 = 8.144$, $p < .01$) attended tuitions. There were no gender differences in tuition attendance. Fewer students attended coaching classes (22.8%), at which they spent an average of 8 hours a week ($SD = 8$). There were no gender, school type, or academic track differences in coaching class attendance.

Most students wanted to attend college after school (92.2%). Most students wanted to study engineering (24.1%), computer sciences (12.4%), or commerce (16.2%) in college, and reported that their parents wanted the same as well (26.7%, 9.9%, and 17%, respectively). The remainder of the students wished to pursue a number of fields, such as medicine, law, physical sciences, social sciences, and the arts. The students were confident that they would be admitted to the program of their choice; only 6.3% of the students did not think it was likely that they would be admitted to a program of their choice, while they believed 15.6% of parents did not think it was likely that they would be admitted to a program of their choice (see Table 2 for descriptive information).

Self-reported academic performance ($\beta = -1.034$, $t(518) = -5.039$, $p < .01$) and perceived relative academic performance ($\beta = -1.674$, $t(535) = -4.608$, $p < .01$) negatively predicted scores on the Beck Depression Inventory. In other words, students who reported that they earned higher grades in class and perceived that they performed better than their classmates had lower scores on the BDI than students who reported earning lower grades or perceived performing worse than their classmates. Neither academic performance nor relative academic performance predicted scores on the State or Trait Anxiety scales.

Although most students thought that it was likely they would get admitted to a program of their choice, a majority of students (77.5%) reported feeling stressed about their senior year. School type was not significantly related to stress, but gender ($\chi^2 = 8.63$, $p < .05$) and academic track ($\chi^2 = 17.40$, $p < .05$) were significantly associated with stress, with a greater proportion of females than males (86% vs. 75%) and Science than Commerce students (82% vs. 66%) reporting stress. These findings are consistent with prior research, which suggests that female students are more stressed by academic expectations (Verma et al., 2002). The findings are also consistent with expectations that science students would be more stressed than commerce students because the former are more likely to be preparing for the extremely competitive entrance examinations required for admission to professional school.

Table 3 presents the descriptive statistics for scores on the Beck Depression Inventory and the State-Trait Anxiety Inventory. The scores on the Beck Depression Inventory ranged from 0-57, and the mean was 12.55 ($SD = 8.44$); notably, these scores indicate that 'mild mood disturbance' is typical in this sample. Little less than half the sample could be considered 'normal,' and 15.6% of the sample scored in the clinical range. This suggests very high rates of depression in this sample of high school seniors. Although previous research strongly consistently indicates that females are more likely to be depressed than males, this difference was not found in this sample. Expectations that science students and CB students would be more depressed than commerce students and SB students were also not met.

On the State-Trait Anxiety Inventory, scores on the State Anxiety scale ranged from 37-64, with a mean of 50.79 ($SD = 3.87$), and the scores on the Trait Anxiety scale

ranged from 39-62, with a mean of 50.75 ($SD = 3.43$). See Table 1 for all means.

Compared to Western norms for high school students (Spielberger, 1983), these scores

indicate that the participants experienced high levels of state and trait anxiety. Commerce

students ($M = 51.61$, $SD = 3.94$) scored significantly higher on the state anxiety scale

than Science students ($M = 50.52$, $SD = 3.84$). CB students ($M = 51.05$, $SD = 3.07$) were

significantly more trait anxious than SB students ($M = 50.39$, $SD = 3.80$). There were no

significant gender differences in state or trait anxiety.

Overall, these results suggest that this sample of high school seniors is highly

stressed, depressed, and anxious. Contrary to expectations, however, female, CB, and

science students did not score significantly higher than their male, SB, and commerce

counterparts. Although a greater proportion of female and science students did report

being stressed than male and commerce students, the overall hypotheses that female, CB,

and science students, would show more signs of adolescent distress than male, SB, and

commerce students were not supported. These results indicated a lack of expected main

effects.

In order to investigate the possibility of interaction effects, a series of bivariate

ANOVAs in which combinations of the three independent variables (gender, academic

track, and school type) were used to predict the outcome variables (i.e, two-way

interactions) were tested. This also failed to reveal significant relationships. The absence

of main effects or two-way interaction effects was unanticipated, and inconsistent with

previous studies and expectations, and required further investigation.

Depression scores were found to be negatively correlated with state ($r = -.12$, $p <$

$.05$) and trait anxiety ($r = -.18$, $p < .05$), and state and trait anxiety scores were not

significantly correlated to each other ($r = .04$, *ns*). These findings are inconsistent with previous studies that indicate that depression and anxiety are strongly and positively correlated with each other (Kashani & Orvaschel, 1988; 1990; Petersen et al., 1993), and that the two anxiety scales are strongly and positively correlated (Spielberger, 1983). The negative relationship between depression and trait anxiety was especially surprising because some studies suggest that the trait anxiety scale may even be used as a proxy for a depression scale.

Furthermore, the negative relationship between depression and anxiety extended to the findings on stress as well. Students who reported feeling stressed had significantly higher depression scores ($M = 12.64$, $SD = 8.15$) than students who did not report feeling stressed ($M = 9.96$, $SD = 8.91$; $t = 3.22$, $p < .05$). However, the reverse was found for the anxiety scales: students who reported feeling stressed, compared to those who did not report feeling stressed, had lower state anxiety at the trend level ($M = 50.64$, $SD = 4.01$ vs. $M = 51.39$, $SD = 3.32$; $t = 1.73$, $p < .1$) and significantly lower trait anxiety scores ($M = 50.57$, $SD = 3.51$ vs. $M = 51.42$, $SD = 3.13$; $t = 2.20$, $p < .05$). While these results are unexpected, they are consistent with the above findings. This led to consideration of the possibility that different groups of students experienced distress in different ways (i.e., some students may be more stressed and depressed, while others may be more anxious).

To test the possibility that different groups of students experienced distress in different ways, and to make sense of the lack of expected main and two-way interaction effects, bivariate ANOVAs in which all three independent variables were used to predict the outcome variables were performed. The three-way interactions were found to be

significant in predicting depression (F (1, 558) = 4.54, p < .05) and state anxiety (F (1, 458) = 6.42, p < .05), but not trait anxiety (F (1, 447) = 1.05, p < .05).

A series of two-way interactions predicting depression, state anxiety and trait anxiety were tested using two of the three independent variables (gender, school type, academic track), and splitting the data by the third variable. These tests suggested that female gender (F (1, 158) = 3.93, p < .05), science academic track (F (1, 495) = 3.87, p < .05), and CB school type (F (1, 281) = 5.41, p < .05) each moderated the prediction of depression scores by the two remaining independent variables. Female gender (F (1, 132) = 4.08, p < .05) also moderated the prediction of state anxiety by academic track and school type.

Post-hoc tests were conducted to explore these moderated relationships further. Significant post-hoc test results indicate that within CB students, female science students (M = 14.55, SD = 11.99) had significantly higher depression scores than female commerce students (M = 9.75, SD = 5.96), but had lower state anxiety scores (M = 49.86, SD = 3.81) than female commerce students (M = 52.21, SD = 3.27). This interaction is visually depicted in Figure 5. Female science students (M = 14.55, SD = 11.99) also had higher depression scores than male science students (M = 11.12, SD = 7.91), but lower state anxiety scores (M = 49.86, SD = 3.81) than male science students (M = 51.35, SD = 3.76; see Figure 6). There were further differences within male students, which are depicted in Figures 7 and 8. Science SB students (M = 49.96, SD = 3.89) had significantly lower state anxiety scores than commerce SB students (M = 51.77, SD = 3.59) and science CB students (M = 51.35, SD = 3.76). Science SB students (M = 13.04, SD = 11.50) also had, however, higher depression scores than commerce SB

students (M = 12.18, SD = 9.14) and science SB students (M = 11.12, SD = 7.91), although these results were not statistically significant. These findings confirm the expectation that different groups of students experience their distress in different ways; some students appear to show more symptoms of depression, and others, symptoms of anxiety.

<div align="center">Summary of Results</div>

Most students self-reported that they earned mostly As and Bs (i.e., over 70%) in school. Generally, they believed that their academic performance was better than, or about the same as, their classmates, but a significant minority believed that their performance was poorer. Students appeared to spend many hours in structured study outside of school. A majority of students attended tuitions, and spent, on average, 9 hours a week in tuitions. Fewer students attended coaching classes, and those who did spent an average of 8 hours a week at the classes.

With respect to after-school plans, a large majority of students (over 90%) wished to attend college. Of the remainder, most students were unsure about their future; only a few students reported that they wanted to attend vocational school or get a job. In college, most students expected to study one of three fields – engineering, computer sciences, or commerce – and they were confident that they would be admitted to a program of their choice. The students reported that their parents also expected them to study the same fields, and were also confident that they would be admitted to a program of their choice.

Over three-quarters of students reported that they thought the 12th standard would be stressful. Consistent with expectations, a greater proportion of females reported that they were experiencing stress than males, and a greater proportion of science students

reported that they were experiencing stress than commerce students. Students from CB and SB schools were equally likely to report stress.

The depression scores pointed to three notable results. The first result was the high mean score on the BDI ($M = 12.55$, $SD = 8.44$) which pointed to a typical experience of 'mild mood disturbance' for 12th standard students. According to the BDI, although, on average these students did not meet the threshold for clinical depression, they could also not be considered 'normal.' To understand the lived experience of such a label, this experience of distress will be further explored in the following chapter. The second result was the significant proportion of the sample (15.6%) that could possibly be diagnosed with clinical depression. The third result is that over half the sample earned a score of greater than 10 on the BDI, indicating that they did not fall on the 'normal' end of the scale. No support was found for the hypothesized group differences – i.e., girls, Central Board students, and science students did not have higher depression scores than boys, State Board students, and commerce students.

The scores on the STAI were also high, and significantly higher than the norms for Western samples. Here too, the lack of gender differences is surprising, because previous research suggests that girls are more prone to being anxious than boys. CB students were found to be more trait anxious than SB students, which indicates that the former have a more stable, personality-based anxiety. Commerce students were found to be more state anxious than SB students, which indicates that they have a more temporary, situation-based anxiety.

There seems to be little doubt that this sample of high school seniors is highly stressed, depressed, and anxious. The lack of expected group differences, however, is

surprising, given the strong empirical and theoretical basis for the hypotheses. It is possible that the search for group level differences obscured within group differences. It is also possible that the Beck Depression Inventory and the State-Trait Anxiety Inventory did not capture the experience of distress in the current sample. There were, however, other unexpected findings. Depression and anxiety were both assumed to be manifestations of distress arising from the same source. Contrary to expectation, it was found that the depression scores were negatively associated with the state and trait anxiety scores, and that the two anxiety scales were not positively associated with each other. Furthermore, the stress measure was differently associated with the depression and anxiety scales. Compared to students who did not report being stressed, students who reported being stressed had significantly higher scores on the depression scale and significantly lower scores on the anxiety scales.

This led the researcher to suspect that different groups of students experienced distress in different ways. Because the stress and depression measures did not seem to be associated with the anxiety measures in anticipated ways, it was speculated that different groups of students expressed distress in different ways. For instance, it is possible that some students may express their distress in terms of stress or depressive symptoms, while others may express themselves in terms of anxiety. If indeed this were the case, it would also explain why there were no significant between-group differences.

Upon performing bivariate ANOVAs to test for 3-way interactions, this speculation was supported. When all three predictor variables – gender, school type and academic track – were all taken into account, they were found to predict depression and state anxiety scores. While trait anxiety was not predicted, this is not unexpected,

because, unlike the other outcomes, it is a stable trait and least likely to be affected by academic stress.

Within female CB students, science students had significantly higher depression scores than commerce students, and significantly lower state anxiety scores. A similar pattern was found within science CB students – female students had significantly higher depression scores, but lower state anxiety scores than their male counterparts. There were further distinctions within male students. Within SB students, science students had significantly lower state anxiety scores but higher depression scores than commerce students, and within science students, SB students had significantly lower state anxiety but higher depression scores than CB students. These results suggest that it is indeed the case that different groups of students experience distress in distinct ways.

The results summarized above will be discussed in greater detail in Chapter 9. While these results describe the overall levels of stress, depression and anxiety in 12th standard students, they do not capture their experiences of academic stress or identify other modes of distress. In the following chapter, student experiences are explored through interviews with 12th standard students, in which dimensions of stress and somatic symptoms of distress are further described.

CHAPTER 7

STUDENT EXPERIENCES

Although students experiencing severe academic stress show their distress in a variety of ways, most students show symptoms of depression or anxiety, or somatic symptoms. Little, however, is known about the general experience of 12th standard students in India. To understand their experiences, and to explore their understandings of their experiences, semi-structured interviews were conducted with 12th standard students. In the interviews, they were asked about a number of factors that were pertinent to their experience, such as parents, peers, schools, and tutorials; in this chapter, however, the focus remains on student descriptions of their internal and personal experiences.

Five major themes were identified in analysis: busy schedules, the experience of stress, somatic symptoms, attitudes and beliefs about 12th standard, and the role of God and hard work. At the conclusion of the interview, students were asked if they wished to comment on an issue that they felt had not been covered. This led to the sixth theme, educational reform. While the first five themes are based on remarks made by all the students, the final theme is based on remarks made by only a few students. The themes are not organized in any particular order, and are only presented in the manner in which the topics arose during the interviews.

In the following analysis, sentences in bold indicate that the researcher is speaking. The themes and sub-themes apply to all groups, unless it is indicated that there are gender, school type, or academic track differences. The analysis will be followed by a summary of the findings.

Results

Student Schedules

As was expected, the students spent most of their daily hours in study, both structured and unstructured. The survey results indicated that a majority of students attended tuitions, and a substantial minority attended coaching classes. When asked what a typical weekday was like, a male computer science student at a CB school reported, "After school… I reach home by 3:30, and again by 5:30 I have class. That goes until 8:30, so I get home by 9." Upon returning, he spent a few more hours doing homework related to school and coaching class. He went to bed at midnight, and woke up every morning by 5. His experience was a representative one; after school, most students had a short break, after which they attended tuitions or coaching classes in the evenings. They would then study on their own for a few hours before going to sleep, and wake up 4-6 hours later. Most of these students had only about two hours of free time each day. For some students, the day began even before the start of the school day, because some tuitions and coaching classes were scheduled before the start of school hours. They reported that they attended classes at 6 in the morning, which ended at 7 or 7:30, in time for school.

Most of the students who attended coaching classes were male students in CB schools who were preparing specifically for admission to IIT (Indian Institute for Technology). The entrance exam for IIT involved sections on math, physics, and chemistry, so students who attended coaching classes generally attended classes in all three subjects. A male computer science student at a CB school reported that he spent his Sundays attending IIT coaching classes. He said, "I have maths in the mornings, 7-10:30,

chemistry I've got from 2-5:30. And then physics I've got from 5:30-8:30." The only female students who attended coaching classes were two commerce students (1 CB and 1 SB) who attended coaching classes for admission to law school. These classes were scheduled on one day a week for a period of three hours.

Although most students attended tutorials close to their home or school, several students reported that they spent a lot of time commuting between their home, school, and tutorial classes, which were located far away from each other. One student estimated that he spent an extra five hours a week in commuting. These busy study schedules were not limited to those attending tutorials, because even those students who did not attend tuitions or coaching classes reported that they had similar schedules, except that they spent more hours in self-study. Only one student appeared to have a distinctly less busy schedule than his peers. This student, a male commerce student at an SB school who did not attend tuitions, said that he spent only two hours in self-study each day.

Some students tried to schedule their weeks in such a way that they had at least a few days off from tutorial classes. One student, a female biology student in a SB school, tried to keep her Sundays free so she could go out with friends, watch a movie, or simply 'hang out'. For most students, however, a tutorial-free day still involved study – a male computer science student in a CB school said, "Weekends are actually the days where I really take some rest… Even though I study 10-12 hours a day, it's still relaxing… I don't have the need to pressure up myself. I can relax." Even though this student spent most of his day in study, he considered studying on his own schedule less stressful than attending tutorials.

Several students tried to ensure that they received at least eight hours of sleep, but

found that it was not possible to finish all their work in time to allow them to do so. All of them were acutely aware of the fact that they were not getting sufficient sleep, and many used whatever free time they had to catch up on some sleep. These attempts did not always go smoothly - one student, a male computer science student at a CB school, tried to study at 4 in the morning following only four or five hours of sleep, but often found himself too tired to study. He would go try to go back to sleep, but he could not do so, because he found himself guiltily thinking, "I have to study. I have to study."

Some students reported that they maintained at least a few hours of leisure time each week, which they used to sleep, catch up with their friends online and on the telephone, listen to music, dance, watch television, or play sports. Several students, however, did not appear to engage in leisure activities; they reported that they spent their free time catching up on schoolwork. When asked what he did in his free time, a male computer science student from CB said, "I finish my IIT homework, study for my IIT tests, read up some physics books…" Similarly, another student, a male computer science student from a SB school replied, "Just study, complete records…" referring to the detailed laboratory reports that students submit each week in several subjects (computer science, physics, chemistry, biology).

<div align="center">Experience of Stress</div>

Most of the students experienced some degree of stress, although some students experienced more stress than others. A typical response, when asked if they were feeling stressed, was that of a male computer science student in an SB school who said, "I am little stressed, but not uh... you can't exactly call it dying with stress. That I'm not."[5]

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[5] This student's choice of words, "dying with stress," is especially notable given the significant issue of academic stress related suicides in Chennai.

Because they were being interviewed at the beginning of the school year, several students reported that they were not currently stressed, but expected to be become more stressed as the year progressed. The school year in India typically runs from June-April. Instead of teaching the material over the course of the year, teachers in most schools complete the 12th standard curriculum by October or November (often by starting in 11th standard), and spend the remainder of the year practicing and revising the completed material. A male computer science student from a SB school felt that he would become stressed in a few months when the syllabus, or "portions" were completed. His peer in a CB school also reported that he was currently "slightly stressed," but felt that, in two months, "towards the end, I'll surely get stressed." These students appear to have what can be called 'anticipatory' stress.

In contrast to these students, some students were already highly stressed. The interview was usually started with the student being asked to describe a typical weekday, and most students responded to this question with descriptions of waking, sleeping, eating, and class times. One student, however, quickly responded by saying, "It's very stressful." Even when he was guided to answer the question differently, he returned to this theme. The student, a male computer science student in an SB school, explained, "It [is] very… stressful throughout the week… Because of tensions at school. All the work at school. Always thinking about studies, books…Because it's 12th standard, no, so life must be… Concentrate more on studies… tensions." He was so stressed (or at least felt that he *should* be very stressed, because he was in 12th standard), that he could not answer a simple question or complete a sentence.

For some students, their stress made them doubt their capabilities. A male commerce student in an SB school, after indicating that he thought was confident about achieving his goals, said, "But then, I get, you know... sometimes I get very... tense, whether I can get into [college of his choice]. [I feel] doubtful of whether I'm capable of doing this…" Another student also felt that stress had severely affected her ability to perform well. She said,

> 12th I'm really worried, actually. I mean, right now, my average is going down in work, and then, I black out because there's a whole lot of stress, and then I study... I have a big problem with this blacking out thing. I always black out, and then I get confused. When I'm writing the paper I get confused because I black out. That's... that brings my marks down... it's really bad.
>
> **What do you mean by 'blacking out'?**
>
> Suddenly I just forget. I know it [the material] so well, but then, it just won't come, you know? And I'll just stare at the paper, the blank paper, and it makes me feel even worse. And then somehow, and then my friend is like, 'I know you're blacking out,' and then she'll murmur something and then I'm like, Oh yeah, and then I'll write something. That's just how it is.
>
> **Did you used to black out before 12th?**
>
> Yeah, whenever there's so much pressure. The worst was in 11th and 12th. I mean, only the last 2 years I've been doing all this crap. I don't usually crack under pressure, I'm more of this calm person, but yeah, now I'm really cracking. I'm getting scared and getting worried.
>
> <div align="right">Female, Commerce, CB</div>

This student, who reported that she had previously been more balanced, had been

surprised by the intensity of her stress. She felt that her anxiety and worry about 'blacking out' perhaps led to further such incidences. Although not necessarily in such a severe fashion, several students reported that their stress arose from their own motivations and fear. Girls were much more likely to report this kind of self-pressure.

> I apply a lot of pressure on myself. It's always been like that. I think since an early age, it's like, I have to do this and I will start doing it, and I, you know, have actually stayed up through the night for exams in 7th and 8th. I used to stay up through the night!

> Female, Commerce, CB

This student had been applying pressure to herself from a young age, even when not necessary, because performances in the 7th and 8th standards are not highly consequential. Although this student was applying pressure on herself, she was quite confident that she would be able to achieve her goals (she was aiming for law school).

Other students who applied pressure to themselves, however, were not equally confident.

> I swore to myself I'll go up on stage on Prize Day. When I was seeing all those 12th standard people getting prizes, I was swearing to myself – I'll be there next year. But if I have to get there next year, I have to work hard, you know? And there's something called aptitude also. I might not have the aptitude to do so well in math. I don't think I have the aptitude for getting 100 and all in math, which is what I actually wanted to do (laughing). It's just... I don't know, I feel like a politician, making false promises to myself.

> Female, Commerce, CB

As an 11th standard student, she had watched her seniors earn awards on Prize

Day. (This is an annual event at which students who have excelled in academic, artistic, and athletic pursuits are awarded, although the focus is firmly upon academic achievement.) She had been inspired to earn such awards the following year, but she was starting to doubt that she could put in the effort or that she had the ability to pull off such an achievement; she felt that she was setting herself up for failure.

Somatic Symptoms

Almost all the students mentioned the acute lack of sleep that they were experiencing. Most students appeared to get no more than six hours of sleep each weeknight. Weekends were also filled with tuitions and coaching classes, allowing little time to rest or catch up on sleep. When a female biology student at a CB school was asked how well she was sleeping, she responded, only half jokingly, "I want to sleep right now." The following student, was sleeping whenever he got a chance.

> Every possible moment I get, I try to sleep. Like I'll sleep in the car when I go for classes, I'll sleep during my PT period sometimes, I'll sleep during my practicals... every free moment I get, when I'm not near a book or something, I try to sleep.
>
> **Sounds like you're going to be really exhausted by the end of this year.**
>
> I am already exhausted, but the same trend is going to continue.
>
> Male, Computer Science, CB

This student was utilizing his gym class (PT stands for Physical Training) and his laboratory classes (practicals) to take naps.

When asked about the quality of sleep, many students reported that their exhaustion resulted in deep, dreamless sleep. As the following student, a female biology student from a SB school said, "It's like you're totally tired… there's no way of opening

your eyes… Not only for me, for every 12th standard student, as soon as they go next to the bed, they'll be flat. Because that much of stress is there." An equal number of students, however, reported that their sleep had become much more disturbed and filled with dreams. The following students, for instance, identified the pressures of 12th standard as the reason that they experienced lighter sleep and more interrupted sleep.

> I've become a very light sleeper. If you open the door I wake up, you drop a coin, I wake up - that kind of thing. It's very interrupted… Since I've started 12th I've become confused about times. My body clock doesn't know what 1 is and what 4 is. So I wake up at 1 thinking it's 4, wake up at 4 thinking it's 1… and I can't go back to sleep.
>
> Female, Biology, CB

I'm not sleeping enough, I go to sleep much later than I would like to, and my sleep is kind of disturbed.

Do you think it's become more disturbed lately?

Yeah, yeah. Definitely. There is much more pressure on me. I mean, I can feel it now. I can feel the heat. And I don't like it.

> Male, Computer Science, SB

Compared to the number of students who reported sleep problems, fewer students reported other somatic symptoms such as headaches. Unlike those with sleep problems, however, only a few of these students thought that their headaches were a result of school pressures. When asked if there was a connection between school and his headaches, a male computer science student in a CB school said, "I never really thought about it. I just thought, I'm having a headache, alright. Never really thought why I'm getting it and all

that. Just thought I didn't get enough sleep the previous night or something." Another student thought there could a variety of factors leading to a headache:

It could be a bad day at school, it could be a fight with my friend, it could be a fight with my parents, anything. So, if it's a day like that, my legs pain, my whole body pains, my back pains, my head pains... it depends from day to day. I mean... it could be a very stressful day at school, we have lots of work and lots of homework and it all gets to you. And you end up having a headache.

Male, Computer Science, SB

In his explanation, however, it is evident that he interprets school-related factors as having the greatest impact on his experience of headaches.

Almost none of the students reported that they experienced stomachaches; many of them, however, reported that they had lost a significant amount of weight in the last year. One student, a male commerce student at a SB school, identified stress as the primary reason for his weight loss of 6 kgs (13 lbs.) in the two months since he had started 12th standard. Most students felt that their weight loss was because they simply had no time to eat, due to the time spent in school, tutorial classes, and commuting. The following exchange illustrates how the lack of time leads to poor eating:

Have your eating habits changed at all?

Yeah... usually you have more time to eat, and when you have more time to eat you tend to eat a lot more. So now you don't have the time to snack in-between, so now I don't have breakfast in the morning because there's no time. And lunch in school... there's so much record submission that in the break you're doing your record. You don't get to eat that much. If I eat, I eat after school, and then dinner. So that's all.

Have you lost weight?

About 10 kilos (22 lbs.).

Because you haven't been eating as much as you used to?

Practically, it sounds stupid, but there's just no time to actually sit down and eat.

<div align="right">Female, Biology, CB</div>

This student had stopped eating breakfast and snacks, and her lunch break at school was spent completing her records (detailed laboratory reports). Many of the other students reported that their eating habits had changed in similar ways.

<div align="center">Attitudes and Beliefs about 12th standard</div>

Just as students experienced varying levels of stress, they expressed differing levels of confidence about their about ability to do well in the 12th standard board exams and college entrance exams. When asked how confident they felt about the coming year, some students did not express much confidence. A male computer science student in a CB school said that he did not feel confident, but was just going along with what was expected of him. Two students laughingly (but resignedly) responded with another question; a female commerce student in a CB school asked, "Do you have to ask that question?" and her peer in biology asked, "Are negative scores allowed?" The latter followed up, "Currently, I'll be really surprised if I pass my 12th, so if I actually get into a program out there somewhere, I'd get a heart attack and I don't think I'll be able to attend the program." Some students expressed a great deal of confidence. A female commerce student at a SB school said, "I should not boast [about] myself, that I'm very good," but she felt certain she would perform well. Her peer, who was a biology student, also felt "pretty sure" about her admission into medical school.

Students suggested several factors which they felt boosted their confidence. For instance, some students said that the quality of their tutorial instruction would aid them in their ability to do well, and a few believed that when the time came, an "adrenaline rush" would assist them. Other students felt that their confidence came from having the right frame of mind (optimistic, determined). Most students who felt confident suggested that success was just a matter of hard work. For instance, a male computer science student from a CB school said, "I'm pretty confident I'll do well. Because it's just hard work. If you do it, you'll get it." Similarly, a female commerce student from a CB school said, "I could get into it [the college of her choice] through intense preparation starting from this month." There was a strong belief, held by many students, that hard work, as measured by time spent in study, practice and revision, would be sufficient for them to do well in the examinations. The students who felt that they were not working sufficiently hard, or at least not as hard as their peers, felt very anxious. One student said,

> I don't study much... There are some people like me, but not everyone is like me. Most of the people study, most of the time. Yeah, I study at home, but I don't... I can't try to get my concentration high, you know? So... it's definitely not the same.
>
> **Do you feel this is different from you classmates?**
>
> Yeah. Their [schedule is] definitely better than mine. I'm trying to get into their schedule... of studying majority of the day.

When asked why he felt that he should be emulating his peers, he replied,

It's my life... it depends on it… nothing's going to come easy. If I don't do well this year, it's very tough. If I get good marks, the rest of my life is going to be easy. If I don't get good marks, it's going to be very tough.

Male, Computer Science, SB

In this quote, one can see his strong belief that the 12th standard is a watershed year, on which the rest of his life hinges. While the 12th standard weighed heavily on the minds of most students, not all students gave in to the surrounding expectations. These students did not view 12th standard as a 'do-or-die' year, and they continued to spend time in leisure and other activities. One student, for example, said,

I want exposure in life. I feel, I don't know why, but education is just part and parcel of life. 12th… is just a part, it's not my life for me. So, it's very different… Frankly speaking, few of my friends say that I have an indifferent attitude, but I feel that's good, that's what is more important in life.

Male, Computer Science, CB

This student had scheduled his week so that he would not have to attend any classes on Sunday, and he also refused to study at home on that day. He spent his Sundays playing online games, playing and listening to music, and just generally relaxing. His friends worried about him, but he felt that his life had balance that theirs did not. Another student did not have the same philosophical opposition to constant study, but simply did not see the need to study constantly. This student said,

I am busy, but I don't take it, like, 'the world has come to an end and I have to study' and all. I take it cool - if I have to study, I have to study, you know? It's like that. It's not like I HAVE to study.

Female, Commerce, CB

Another factor that appeared to influence the experience of 12th standard was student views of learning. One student, a male computer science student in a CB school, was aiming to attend the prestigious and highly competitive Indian Institute of Technology (IIT), and was therefore attending the relevant coaching classes. In contrast to other students aiming for IIT, who felt that they would do whatever it took to attend such an institution, he maintained that his "main objective is to learn something." While his peers also said that they would be quite distressed if they did not earn admission to IIT, this student said, "No, I won't be disappointed, because people who get in [are] somebody better than you. So, you get what you deserve." This student was one of the few participants who expressed such an attitude, but it must be noted that he spoke with the easy confidence of someone who would, indeed, earn admission to whichever institution he desired.

<div align="center">The Role of God vs. Hard Work</div>

Because the 12th standard board exams and college entrance exams are so competitive and career defining, many students (and their parents) pray for a good performance on these exams. In Chennai, it is common for Hindu students to visit a temple on the day of an important exam. On the morning of the exam, one can see many students at temples, praying to ensure a good performance on the exam. The students who visited temples can also be identified later in the day by the presence of vermillion and ash on their foreheads, which is commonly given at temples. Most of the students who were interviewed were moderately religious, and prayed regularly. Several students spoke passionately about their belief about God, and others spoke equally passionately about their lack of belief in God. Besides their religious beliefs, however, their answers to this

question, illustrated their beliefs about the role of hard work, luck, self-sufficiency, and fate.

Some students had visited the temple regularly for many years, and their frequency had not changed as a result of being in 12th standard. Others tried to visit the temple as often as possible, but found that they lacked the time due to their other commitments. A female commerce student at an SB school echoed other students when she said, "I used to go on Sat [and] Sun, but now as I'm going to classes and all for law and stuff, that time's gone. 11th it was like normal, since I had lots of time. But 12th it's come down."

Most prayers were fairly non-specific. For instance, a female commerce student from an SB school admitted that she prayed that she would do well in the exams. A male student of computer science at a SB school, who said he was from a religious family, regularly visited temples with his mother. He said, "We'll go to any temple, pray for God that I study constantly for good marks. I pray to God that I am a good student." Some students, however, made more specific requests of God. When asked what they prayed for, a female student of biology at a SB school said she visited the temple every Saturday, lit a lamp, and prayed for a spot in medical school. A male commerce student in a SB school said, "I just pray [that]... I should not forget the things which I have read, and only that should come on the exam." Another student, a female commerce student from a SB school replied, similarly, "Mostly I would pray that whatever I've read should be reproduced properly in my paper." The latter students prayed that the material they were familiar with would appear in the exam, and that they would be able to explain themselves clearly.

A few students bargained with God, either by performing certain rituals in advance, or by promising to do them afterward, to receive a certain result. The following student had performed well in her 10th standard exams, and she believed it was because she had then engaged in the following rituals: before her exams, she circumambulated the idol in her temple 16 times (although three are usually sufficient), and prayed specifically to the elephant-headed God, who is considered a remover of obstacles to help her.

> In 10th standard I would say, frankly, before and when my boards were going on, everyday morning before my board exam that day, I would go to this temple, I would do 16 [prakarams]. And I would say some mantra, okay, about Ganapati. And I would... I felt that it would help me, I don't know why. And I used to go everyday, before the board exam.
>
> Female, Commerce, CB

As a result of her previous success, she expected to engage in these rituals again as her 12th standard exams approached. A female commerce student at a SB school, rather than praying to ensure that certain questions would not appear on the exam, promised to circumambulate the idol once her wishes were granted. She said, "I never used to prepare badly, but sometimes, one or two questions might be difficult for me… I used to think - That question should not come, please, please! If it doesn't come, I will do three rounds for you!" Unlike the two previous students, who prayed for specific outcomes in return for their prayers, one student made non-specific bargains with God. The student, a male computer science student at a CB school, prayed, "Oh God, I know you're there. Just help me out, I'll do my work properly, you do your work properly."

For the students described above, who prayed specifically for academic success, prayer appeared to be an important mechanism for coping with academic stress. Although

they prayed in different ways, they appeared to engage in prayer for two reasons – to lower their anxiety and to 'cover their bases.' Some of the students who prayed, however, did not pray for outcomes related to study and performance; their prayers were more general, and reflected a certain hope that God would keep an eye out for them, especially in times of need. The following quotes illustrate this:

Whenever I feel I need Him, you know, I need… support, I just put in that extra voice and say a silent prayer. That's about it… It's always a general prayer [for well-being]…

Female, Commerce, CB

Actually, frankly speaking, I do not visit temples, and I do not pray and do not do pujas to God. I do not even go the puja room in my house. All I do is at times when I'm really stressed and at times when I'm really tense.

Male, Computer Science, CB

I just treat God as my friend… I just talk to Him, just for a few seconds or something. I just say, "Oh, please, let my day be good today, and just be with me today."

Female, Commerce, CB

Some students did not believe that prayers alone would help them do well in their examinations. These students said that a belief in God could only supplement, but never substitute, hard work. This belief is evident in the following quotes.

I go to church, but I don't go to church to pray for good marks…God cannot give my good marks, right? It is... it's all up to me. He can help me study… but even if He helps me, it's my willpower. Just by praying to God I don't think it's possible

to get... praying to God and doing your work you can good marks. If you just pray to God and then don't... it's not going to get you anywhere.

Male, Computer Science, SB

I don't believe in all that stuff. It's like, okay... It is you - if you study well, you'll score well; if you don't study well, you don't score well. Simple. God has got to do nothing. Maybe he'll give you the motivation or the confidence level in you, provided you study well.

Female, Biology, SB

Yeah, I also do like that [go to the temple, make promises], but I am very sure I will get in on merit, on my own hard work.

Female, Computer Science, SB

I don't... promises and all I don't make, but I believe in God. I believe… I perform, I get the mark; I don't work, I don't get it.

Male, Computer Science, CB

Some students felt that God had *nothing* to do with their performance, which they believed was based entirely on their own work.

It's crap. I've never believed in God, I mean – Who's God? What's God? I don't see any God. Do I see any God? NO! I look in the mirror and I see my face, so whatever I do I'm blaming myself, right? I don't want to blame anyone or ask anyone to do anything for me. That's how it works, I mean...

Female, Commerce, CB

Several students said that they would step up their visits to the temple before the exams, or when they felt it was necessary to have a little extra help. A male computer

science student at a CB school said, "I'll pray to God the day before my IIT exam, but not now." Another student said,

I used to... go to the temple only when needs come to me. I used to go to God only for my purpose, when I want something to be done, I used to go. And when I have my exams, not routine ones, but quarterly, half-yearly and main public exam, I used to go daily to the temple.

Female, Commerce, SB

I've been scoring the first rank from my 11th till now. Every time I finish my exam, I get very nervous, whether I'll be able to retain my first rank. There's close competition in my class. So if I didn't do any exam properly, like physics for example, and others have done well, I'll get a bit nervous and go to the temples and sit there for one hour, pray to God that I should get good marks and all that.

Male, Commerce, SB

If there is an exam you will see hordes of people with kumkumam and vibhuti, and definitely I have [done the same].

Female, Biology, CB

The last quote refers to the small amounts of vermillion and ash which temple visitors apply to their forehead. On exam day, it is common to see many students indicating, in this way, their visit to the temple.

One student vividly described a superstition which she believed affected performance:

There's a superstition that if you see a mail van, you cross your fingers of both your hands, and once you cross them, make a wish. And then once you see the

next black car, you remove your cross… Every time that whole year, since I came to know about that superstition or whatever, what I used to do was only just say that I get above 85% in my boards. And I got exactly 86. I just started believing it, you know? I still do that (laughing).

Female, Commerce, CB

Finally, a few students believed that doing well in the 12th standard was not a result of hard work or fervent prayers, but rather, of fate. One student spoke especially expressively about his belief:

Have you started going to the temple more regularly because you're in 12th standard?

No. I don't believe in all that. There's a little statue at home, and if I have to pray, I'll pray to that, otherwise I won't. And I'm not even the type that does regular prayer and all that. I don't... I don't believe in all that. I don't think all that helps in any way. It's all destiny.

It's all destiny or is it all hard work?

Yeah, it's all destiny. I mean, if you do hard work... whatever you do, it's all, like, pre-planned. It's like a film. The screenplay is ready, and you're just enacting your life. That's the movie of your life.

Male, Computer Science, SB

This student wished to become a movie director, and his dramatic analogy reflected his career goal. His response was surprising, because he had described during the interview how hard he had worked to pursue his dream (by writing, directing, and acting in plays and short films, drawing storyboards, getting advice from film directors, researching film

schools, etc.). Nevertheless, he believed that his future career success did not lie in his hands, and he said this as though it were obvious this were the case.

Education Reform

At the end of the interview, students were asked if there was anything that they wanted to say about their 12th standard experience that was not covered during the interview. Most students did not feel like they had anything to add, but a few students, who had clearly thought about the issue previously, used the chance to speak about the flaws of the Indian educational system.

A major criticism that many of the students identified was the traditional and heavy emphasis on theoretical knowledge rather than practical application. A female commerce student from a CB school said that "12th is so completely illogical and impractical. It's all crap. I don't see the point in doing any of it. So then, when I don't see the point, I just can't do it, you know?" Because the curriculum did not appear to have much relevance to real life, she did not feel like it was worth knowing, a thought echoed by several other students.

To remedy this problem, a few students suggested that the material be taught differently. One student recommended,

I think you should be tested more on conceptual basis rather than mugging the textbook... I mean, my physics tuition teacher, he teaches in American International School. Over there, our portions are more or less the same, but his tests are totally different. He brings up interesting questions which you might actually want to try answering, not, 'Oh, this neutron is traveling at this speed,

calculate the force it's creating on this electron' kind of thing…Things which might make you think, and actually *want* to think.

Female, Biology, CB

This student did not want to 'mug' (memorize) her textbook, as was the common practice among students. She enjoyed learning from her tuition teacher, who appeared to have some knowledge of Western pedagogical methods. He taught the material in a way that seemed interesting and relevant, in a manner that made her *want* to learn.

The following student did not have an issue with the material that was being taught, but he did feel that the method of testing and societal ideas about success needed to change. He said,

I feel these board exams should not at all be there. Because if you see, compared to some really developed country like America, they don't have so much of pressure. They don't have exams regularly. Maybe they have assignments, they're more project oriented, all that stuff. There, a board exam doesn't decide your life; here, a board exam decides your life. You perform well, you end up in a good college. Otherwise, a lousy college. There, a carpenter's really respected, you have to study carpentry or something. But in India - Oh, you're a carpenter. If you say you're an electrician - Oh, you're an electrician. That's the nature of the society. There if you're a carpenter or an electrician, that also is respected.

Male, Computer Science, CB

He felt that the expectations and pressure surrounding the board exams were unnecessary; instead, he thought testing should happen on a more regular and varied basis. He also criticized the emphasis on one-time board exams as setting the course of one's life.

Finally, he objected to the societal expectations according to which certain careers were valued and others were viewed with contempt.

In contrast to the students quoted above, who did not fundamentally want to alter the Indian education system as much as they wanted to reform it, the following student wished to change the system entirely. He felt that the Indian education system failed the students on several counts:

I'd like to revolutionalize the whole Indian system. There's so much theory, theory, theory, theory, there's so much importance given to marks, the children don't even have much exposure. For heaven's sake, my friend who gets 100/100 in maths says, 'I cannot come and stay somewhere outside my house, I cannot handle situations alone, I cannot travel to another place alone.' What's the point in having education? We are in 12th, and yet one… fights against another... I mean, it's just an open fight, using open words, against a fellow student whom you've been with for the last 13 years. Well, an education which cannot teach you all this is not an education. That's how I feel. I mean, these molecules and these formulas are not going to tell me how to talk to a stranger in the future.

Male, Computer Science, CB

He begins by reiterating the complaint about theory made by other students, but goes on to identify other problems. According to this student, the point of education was not just to gain knowledge, but to learn how to be a better person. He narrates an anecdote about a friend to show that students graduate with academic knowledge, but lacking life skills. He also describes how, at the very end of their school careers, students fight with each other and hurt each other; in other words, students did not learn cooperation and

communication. He felt that an education that did not teach these basic skills was insufficient and incomplete.

Summary of Results

The perceptions and descriptions of 12th standard students fell under six major themes. Students discussed schedules, experiences of stress, somatic symptoms, attitudes and beliefs about 12th standard, the role of God in their exam performance, and education reform. While the first five themes were discussed by all students, educational reform was discussed by only a few students in response to an open-ended question.

As anticipated, the students reported that they spent most of their working hours in study. Most students attended tuitions or coaching classes before and after school hours, and reported sleeping between four and six hours each night. Even when they tried to get at least eight hours of sleep each night, they found that they could not afford to do so. Some students additionally reported spending several hours a week in commuting. Of all the students attending coaching classes, most were male computer science CB students who were aiming for admission to the Indian Institute of Technology, and two were female commerce students who were preparing to take the law school entrance exam. Most students had only two free hours each day, which they used to watch television, listen to music, play games, or catch up with friends. Several students, however, used even their free time to catch up on schoolwork. A few students attempted to bring some balance to their life by ensuring that they did not have structured study at least one day a week; most of them, nevertheless, spent that day in self-study.

All the students reported that they experienced stress to some degree, although there was some variation in their experience. Because the students were interviewed at

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All the students reported that they experienced stress to some degree, although there was some variation in their experience. Because the students were interviewed at

the beginning of the school year, some reported that they were not currently stressed, but expected to become more stressed as the year progressed. Other students, however, were already feeling very anxious and worried about the coming year. A few students felt that the stress that they were experiencing was affecting their ability to perform well. One student for instance, reported that she frequently found herself 'blacking out' or frozen in test situations, unable to remember any of the information she had learned. Currently, her friends or neighbors were nudging her awake, but she worried about the board exams, which are much more closely monitored. A few students, mostly females, had high expectations of and exerted a great deal of pressure on themselves. They convinced themselves that they had to achieve certain goals (such as winning prizes) and they worked very hard to achieve these goals (by studying all night long), but they were not always convinced that they would do so.

Students were asked about somatic symptoms associated with academic stress, such as changes in sleeping and eating patterns, and headaches and stomachaches. Almost all students reported a significant lack of sleep, and as a result, tiredness and exhaustion. When they did sleep, students either reported falling into very deep, dreamless sleep as a result of the exhaustion, or they reported having fitful sleep punctuated by dreams, as a result of the stress. Several students also reported changes in eating habits, but these changes were a result of lack of time rather than a response to stress. Because students were so busy with school, classes, tutorials and whatever little sleep they could have, they often did not have time to eat, and as a result, these students had lost weight. Few students reported experiencing headaches or stomachaches as a

result of stress. Although they did not identify stress as the cause of these pains, their descriptions indicated that academic stress was indeed the likely cause.

The students held a range of beliefs and attitudes about the 12th standard. Some thought that they were poised to do well that year, and other felt the opposite; some believed that the 12th standard was a 'do-or-die' year, while others refused to believe this. It was in this theme that there were clear group differences between school types. Although there were confident students in both CB and SB schools, fewer students from CB schools felt highly confident about the board and entrance exams, and more students expressed doubt about their abilities. SB students, on the other hand, were more likely to believe that their performance on the board and entrance exams would set the path for the rest of their lives. Because it might be expected that those who believe that the year is a turning point in their lives would be more likely to be anxious, these contradictory findings are unexpected and will be explored further in discussion.

Student beliefs about the role of God in their academic performance also revealed, in many cases, beliefs about hard work. There was one marked school type difference: Compared to CB students, SB students were more likely to visit temples regularly and pray for specific outcomes, such as a seat in medical college or a certain question on an exam. CB students were more likely to pray irregularly, and to pray for non-specific outcomes, such as support or well-being. The only students who said that they did not believe in God were also from a CB school. Irrespective of their religious behavior, however, most of the students believed that hard work was absolutely necessary to perform well; prayers could supplement, but not replace hard work. There was an academic track difference with respect to hard work, with science students more likely to

believe in the necessity of hard work than commerce students. There were no differences in their willingness to bargain with God to ensure certain results, or in their expectation that they would step up their prayers as exam time approached.

In response to an open-ended question, a few students suggested that the Indian educational system was in need of significant reform. Some students suggested that the curriculum required change, while others felt that testing methods needed change. A common complaint made by students was about the excessive emphasis on theoretical knowledge rather than practical application, which made the material seem irrelevant and uninteresting to the students. These students also suggested that new teaching methods be introduced to the classroom. He felt that students needed to learn social skills and self-sufficiency. One student felt that disproportionate weight was laid on board exam performances. Instead, he suggested that students were tested throughout the year in a variety of ways. Another student also felt that the curriculum needed to include basic life skills in addition to academic knowledge. Several of these students referred to how things were done in the in 'America,' and felt that these Western ideas about education needed to be imported to Indian schools. All of these suggestions were made by CB students in the absence of directed questioning.

CHAPTER 8

PARENTAL INVOLVEMENT

The literature review detailed the many ways, both covert and overt, that parents are involved in and shape the educational experiences of their children. Less is known, however, about their role in academic stress. The goal of this chapter is to explore this aspect of parental involvement. To facilitate an understanding of parent involvement and academic stress, semi-structured interviews were conducted with students in the 12th standard. Based on these interviews, five major ways in which parents were involved in their child's education were identified: by having specific academic and professional expectations, by controlling the study environment, by exerting pressure to perform well, and by comparing them to other students, and by being supportive. Although all students experienced at least one kind of involvement, not all of them experienced all types.

Several sub-themes unique to each major theme emerged in analysis (see Figure 5). Just as in the previous chaptetr, the themes are not organized in any particular order, and are only presented in the manner in which the topics arose during the interviews. The major characteristics of each theme will be discussed, followed by a discussion of each sub-theme. The interviews were further explored for gender, school type, and academic track differences. Sentences in bold indicate that the researcher is speaking. The themes and sub-themes apply to all groups, unless it is indicated that there are gender, school type, or academic track differences.

Results

Parent Expectations

Most students reported that their parents had high and traditional expectations for them. In most cases, there was a high degree of agreement between the parents and children in their expectations for the future, so children did not necessarily see their parents' involvement as being stressful. Parents indicated their expectations by providing guidance, directing them to the right path, or by wishing that their children fulfill the parents' desires.

Guidance

One of the ways in which students perceived that their parents were involved was in their influence on educational goals and by guiding their child in what they considered to be the right direction. According to students, parents encouraged their child to focus on their studies and reminded them of their responsibilities as a student. The students did not necessarily perceive the guidance to be excessive, and in most cases it was accepted respectfully and was not considered stressful.

When asked if their parents put pressure on them to study or simply urged them to study, most students responded that their parents did not put pressure, but did indeed urge them to study. For instance, a male student of computer science in a CB school said, "No, no, they don't put anything [pressure]. They are asking me to generally study and then do whatever I want. But concentrate more on studies… They encourage [me to study] a lot." Similarly, another student with the same background responded, "Uh... pressure as such is not there, but they do want me to do well, so... if at all they find me like straying away, then they'll tell me to stop and just come back and focus on work."

This student indicated that when he was 'straying away,' (i.e., when he was distracted or not focusing on his work), his parents would guide him back to his work. These quotes suggest that parents guided students in an overt manner, reminding them to focus on their work. Some other parents only reminded students of their general responsibilities as student. A female student of computer science in an SB school said, for example, "In my house, it's like nobody tells us to read, read, read. It's just our... they don't even know if I've got my report card or not. But they just tell me, you should read well, it's your thing, all that..."

Sometimes, the guidance was very overt and directed. In the following case, the student was interested in pursuing engineering, but was guided into studying engineering *at IIT* as his goal. He did not question his parents' guidance, and, in fact, saw their guidance as based on reasonable assumptions.

Did your parents have any dreams that you should go to IIT?

They assumed that when I wanted to go to these classes, I wanted to go to IIT.

They never personally pushed you in that direction.

They said, Now that you've taken computer science and you're a science student, might as well do IIT. Like, if I'd taken commerce or something, they wouldn't have said anything. They never pushed me to take science. They said... but once I have taken science, they asked me to do this.

Male, Computer Science, CB

It appeared that most of the students who experienced this form of guidance were students of computer science. This may be because earning admission to commerce-based programs in college was not considered as competitive as admission to science-based programs, and therefore in need of greater focus and concentration. As one

commerce student said, "Their preparation is always more intense. You can't say commerce is more inferior or stuff, but still you have to admit that their preparation is more intensive. They're always writing, you know, a lot of exams."

The Right Path

This category overlapped with the 'guidance' category, but while the previous category emphasized good study habits, the emphasis here was on students choosing and pursuing a 'sensible' career path. The 'sensible' path, however, was usually a traditional career field, like engineering or medicine (for science students) or chartered accountancy (for commerce students). Similar to the 'guidance' sub-theme, however, few parents overtly demanded that their children pursue these traditional fields; their influence was generally more covert. Parents directed students away from non-traditional to traditional careers, or directed them towards 'safer' careers within a certain field.

For instance, a female student of computer science in a CB school perceived herself as creatively inclined, and wished to pursue a career in art or music. The parents encouraged her interest in the arts, but urged her to pursue a safer career in engineering. She said,

> They want me to practice music hard, they want me to go into painting. But again, a lot of people say that these days, painting, music is not going to get you anywhere. Artists... I mean, you have to have a main profession. So they're trying to get me to study well now and keep the other stuff aside, optional… They want me to pursue engineering or computer science right now. They see me as an engineer, something to do with computers, and then side by side, art, music...

Do they actually urge you to take engineering?

They don't urge me, they just tell me, I think it will be better if you do that.

The student, who elsewhere in the interview suggested that a career in engineering did

not excite her, was nonetheless willing to consider and follow her parents' wishes,

because she also perceived that a career in a non-traditional field would be difficult to

pursue.

Sometimes, the expectations about future careers were not set by the parents, but

by extended family members. In the following case, a female student of biology in a CB

school wished to pursue a career in the social sciences. She and her parents had explored

educational opportunities and careers in psychology, sociology, and journalism by

collecting information on programs in these fields and attending college open houses. Her

parents were agreeable to these career paths, but her extended family urged her to follow

a more traditional path. While most of the students made their academic and professional

decisions on their own and with the advice of their parents, this was one of the few

students who acknowledged that her extended family played an important role in her

decisions. This closeness and influence is not unusual in India, where until recently

families lived in large families and individuals were raised by extended family members.

This student was especially close to her grandparents, and she chose to be interviewed at

their home. She said:

> My grandparents are kind of... against the idea. I mean, they're not used to the
>
> concept of studying... social sciences and things like that, journalism. Actually,
>
> journalism's okay because one part of my family only deals with journalism,
>
> newspaper company and stuff. So there's one part of the family... my

grandparents on both sides and great-grandparents, all of them they're not too faithful... they don't put too much of faith in sociology and things like that. I mean, I said I wanted to do psychology as a course, but they're under the impression that psychology doesn't take you anywhere. You just stay there and you don't do anything apart from that. They want me to do something like medicine or law or engineering...

So do your grandparents push you in any direction?

Well, my grandparents keep hinting gently that, Hello, not psychology, engineering *please*. But, I mean... hinting gently in the sense... I have an uncle who one told me, gave me this very profound statement - I don't mind even if you become an acrobat in the Russian circus, I just want you to study engineering and do whatever the hell you want to with your life later [laughing].

So they want you to have that qualification.

They want me to have something which they know for sure will get me a job. I don't have any... guarantee. I don't have any guarantee for getting a job if I want to do sociology. But engineering, I mean, everybody will get a job. No, like, dearth of jobs.

Even in a family such as hers, which has a background in journalism and publishing, her desire to follow in that path was discouraged. She said that her grandparents were "not too faithful" about careers in these fields (i.e., they did not believe that these careers provided financial stability). Instead, they urged her to earn a qualification that they (and she) believed would afford her more financial and professional stability. Surprisingly, even in a situation such as this, where the extended family was overtly urging her to

follow a certain path, the student did not perceive it as pressure; instead, she insisted that they only "hinted gently."

The two examples described above are quite similar, involving female students in CB schools who wished to pursue non-traditional fields, but were urged to pursue fields perceived to be more traditional and economically stable by their parents or families. The students, however, responded differently. While the first student accepted her parents' advice, the second student remained resistant to the advice of her family.

Sometimes, the parents were generally supportive of their children's academic goals, but nevertheless urged them to follow more financially viable careers within a certain area. A female student of computer science in a SB school was interested in design, and particularly fashion design. Rather than encouraging her particular interest in fashion design, however, her mother was encouraging her to take up web designing. It must be noted that both of these careers were hardly available in India until the 1990s, so the very argument about the merits of web design versus fashion design is itself indicative of the recent changes in the country. Nevertheless, the mother's emphasis was on web design, because a qualification in this field was considered to offer more financial stability and opportunity, and could lead to careers in a variety of reliable industries, while a career in the fashion industry was much more unpredictable.

Similarly, in the following case, the student was interested in studying the physical sciences (which earns a B.Sc., or a Bachelor of Science, in India), but was urged by his parents to pursue engineering (or a B.E. degree), and to study the physical sciences as a graduate student abroad. The following quote illustrates how a non-engineering

degree is perceived as a 'gamble,' while an engineering degree – any engineering degree – is perceived as a safe bet.

> They're saying that if you take pure sciences, right, big gamble in India. And they're under the impression that... I want to go to the U. S., right, that if I major in a pure science degree, then it will be really hard to get into a U. S. college. So they want me to do my engineering in anything I want.
>
> Male, Computer Science, SB

Some students reported that their parents allowed them to pursue any career they wished, as long as it was within what they called 'reasonable' limits, where 'reasonable' appeared to refer to professionally and financially stable careers. This third sub-theme, in which students are actively discouraged from pursuing non-traditional careers, is illustrated in quotes such as that of a male student of computer science in a SB school who said, "They'll ask me to do something that is worthwhile. They won't let me let me go into acting or something like that." His peer in a CB school echoed, "They just want me do something good… They don't want me to do something absolutely rubbish and end up getting screwed in life and all, they would obviously advise me." In both of these examples, the students wished to pursue degrees in engineering.

In the following case, there was no expectation that the student should pursue a certain field of study, but the parents had still placed some limits on what they considered acceptable areas of study. Even in a situation where the parents appear to be quite liberal, there is an emphasis on a career that is financial stable and 'safe' –

> My parents are okay with whatever I choose as long as it's not some extremely vague idea like feeding the under-poverished (sic) in south Africa or something. They want me to do something I'll be happy in, at the same time will make sure

I'm fine with... I mean, I'm in good health and things like that… and financial stability… I'm well-to-do, but I also like what I'm doing. Not doing it because I need the money to stay alive… My parents aren't the least bit bothered about what stream I take as long as it's safe for me.

<div align="right">Female, Biology, CB</div>

The following example is different from the previous examples, but nevertheless, falls under the category of the 'right path'. In this example, the student wished to pursue a more traditional career than his parents. The parents, especially the mother, wished for the son to pursue a career as a pilot, while the son wanted to become an engineer. But in this case as well, rather than expressing their desire in obvious terms, the parents strongly urged their child to pursue one field rather than another.

My mom wants me to be a pilot... Basically, they want me to do what I want to do. So... they're not telling me to do anything. My mom... she doesn't *want* me to do anything. She's telling me, you'll make a good pilot and you have what it needs. So she's just advising me that I can be a pilot. She's not telling me... like, they don't have any... they just want me to do what I like doing… Even I know I will be a good pilot... but I think it will be safer to be a computer engineer.

<div align="right">Male, Computer Science, SB</div>

Although the mother does not explicitly tell her son to become a pilot, she nevertheless makes it clear that it is what she wishes her son would do by making him aware of his skills (the student had taken flying lessons) and aptitude. While it is not clear if the mother is urging her son to become a pilot because of market forces (i.e., she is aware of the significant shortage of trained pilots due to the boom in the private aviation industry),

or because she wants him to pursue his passion for flying, the son still opts, however, for a more traditional and safe career.

Parental Wish Fulfillment

In this category, parents who did not succeed in a professional aspect of their life appeared to project their desires upon their children. Sometimes their lack of success related to something they attempted, but failed, to achieve, and in others it is related to something that they did not have the opportunity to pursue. Some students did not appear to recognize that their parents were engaging in wish fulfillment. Depending on the circumstances, the students responded in different ways to their parents' wishes and expectations, but most agreed to their wishes without argument.

One student, a male computer science student in a SB school, spent a lot of time playing cricket, a sport that he enjoyed. His father had hoped in his youth to play cricket professionally, but had not been allowed to do so by his mother; now, he was hoping that his son would pursue a career in the sport. His mother urged him to spend more time studying. While the son did not particularly expect to become a professional sportsman, he nevertheless complied with his father's wishes and invested a lot of time in the sport because he expected that this would aid him when he applied for college.

Some students took their parents' wishes very seriously. A male student of commerce in an SB school decided to pursue a career in chartered accountancy, just like his father, and as his parents desired. When asked what he would like to study if he could pursue anything he wished, he replied, "I want my parents' wish to be fulfilled." He had been socialized to follow in his father's footsteps, even though he asserted that he had made the decision to study commerce on his own.

One student had been aiming for and dreaming of admission into the Indian Institute of Technology, an extremely competitive institution, to study engineering since he was in the 6th grade. His father had attempted to gain admission into the same institution but had not succeeded, and now hoped that his son (a computer science student in a CB school) would accomplish what he had failed to do. Because it is improbable that an 11-year old student had already decided what and where he would study, it appears that the father's wishes strongly influenced the path that this student wished to pursue.

Some of the reasons that students may wish to fulfill their parents' wishes can be poignant. One of the participants had lost her father just a few months previously, and during his illness, he had expressed the desire that she would pursue medicine. Her own experience in dealing with his illness had made her agreeable to pursuing that career path. She said,

> My father actually passed away 3 months back… my father was like, he wanted me to go into something related to medicine. Since he was a diabetic patient, I was used to all those medicines and injections and my family doctor, he used to teach me how to do all this stuff, so I'm not scared of all those stuff. So I said, okay, let me try for medicine, [because] he wanted me to try for medicine.

<div align="right">Female, Biology, SB</div>

While these students generally accepted their parental wishes without protest, one student accepted her parents' wishes unhappily. Prior to the formal start of the interview, she showed a great deal of interest in my field of study and asked several questions about careers in the social sciences. Specifically, she mentioned that she was interested in psychology. During the course of the interview, however, she did not bring up this up,

even upon urging. When asked if her parents would be disappointed if she didn't pursue engineering, she said,

> Yeah. I mean, uh, they haven't thought of anything other than engineering. They've set their mind like that. My daughter is going to do engineering. That's it. No other course. Like B. Sc. doesn't have much scope these days, and I don't know, because I'm going to be the first engineer in my family. So, they are very much bent on making me do engineering.

> **But if you could study anything you wanted to study?**

> [Pause] Engineering? Haven't thought of anything else… [from a young age itself, I have been...] brought up like that, saying you will be an engineer.

<div align="right">Female, Computer Science, SB</div>

Throughout the interview, she indicated that several choices she had made (about school, academic track, leisure activities, etc.) were according to the wishes of her parents, and not her own desires. When asked if she argued with her parents about these issues, she answered that she used to, but had given up to avoid criticisms and comparisons to her more docile sister.

It is evident that there are a range of responses from students who were expected to live up to parental desires. While all of them agreed to pursue the wishes of their parents, they did so for a variety of reasons and accepted the parental influence to varying degrees.

<div align="center">Parent Pressures</div>

This major theme overlaps in many ways with the previous theme of 'parental expectations.' There are, however, two key differences: while in the previous category, parents generally expressed their expectations in a covert manner that was not perceived

as stressful by their children, in this category, parents put pressure in a more overt manner, and the students appeared to experience stress due to this pressure. Parents pressured their children in three major ways – by expressing disappointment in case of failure, by asking them to focus on their studies to the exclusion of other activities, and by excusing their demands by reminding their children that their advice was for their own good.

Disappointment

This theme appeared consistently and strongly in student interviews, in which students perceived that their parents would be disappointed if they did not perform well in their exams or get into a prestigious university. Students reported that their parents "will be definitely disappointed," (male, computer science, SB), and that even if they ended up at another institution, "the initial disappointment will be there" (male, computer science, CB). The parents of a female biology student at a CB school were especially explicit – she said, "They've put it in my hands. They've said to me, I have to do well, and they'll be disappointed with me if I don't. So I have to do well… The onus is totally on me."

The students themselves, interestingly, did not appear to be exceedingly stressed by exams and college admissions. When asked if they would be disappointed if they did not get into the institution of their choice, one student responded, "I can always study in another college. Maybe not a better college, but some second level college" (male, computer science, SB). Another student said, philosophically, "No, I won't be disappointed, because people who get in [are] somebody better than you. So, you get what you deserve. No use being disappointed if you're not going to get, no?" (male,

computer science, CB).

Those students who had experienced the disappointment of their parents in the past viewed the potential for future disappointment as motivation. A female computer science student in an SB school said, "I got bad marks in 11th, and my parents felt bad, so now I'm getting good marks." Another student explained,

> [My father] was asking me for 1100 or so for 10th, but I got 1019/1100 so he was upset… He would always say, never be contented with what marks you get. Even if I get 99, [he would say] why don't you get 100?... So I have to make his hope come true.

<div align="right">Female, Commerce, SB</div>

Time Wasting

Many parents felt that their children were distracted and not spending sufficient time studying. The students believed that their parents wanted them to study *all* the time. They said that whenever they engaged in some sort of leisure activity, their parents urged them to return to their books. The students, however, felt that they already spent all their time studying to the exclusion of all other activities, and did not know how they could possibly study more. They resented their parents for taking away the little time spent in relaxation, as is clear in the following quote:

> **So you said your parents freak out if you're doing too much reading or art. Do they think you're taking time away from doing something else?**
>
> Yeah, like, when I sit and watch TV, they're like, "You're not supposed to be watching TV." It's just so not fair!... What rot. They don't let me watch TV. And then when I've had a hard day, I've been in school, and then I've been studying, study, study, study, and my head is feeling totally heavy and all stressed out and I

just want to cool off and watch TV, because they're refusing to let me read books. So I work, right, and then I'm watching TV for sometime, and then I walk into my room and again study. That's all I have. And my parents are like, "Why the hell are you in front of the TV?" So, that's not fair.

Female, Commerce, CB

The time spent in study at home is intended to be spent in practice of material learnt in school or in tuition (a message echoed by the teachers and tuition instructors as well). But students who spend their entire day shuttling from class to class complain about simply not having any more time to study. One participant, a female computer science student in an SB school said, "They feel I waste lot of time. But actually, I have no time to waste! I go, it's like, so hectic! But still they feel like I waste time." Another student explained the same issue in greater detail:

My father always says, "You have to work. You have to work out lots of account sums, it doesn't just come like that. Even if you get the concept right, you have to do lots of... you have to practice, you have to practice, practice." When do I practice? I don't have the time to practice! There's tuition, there's school, and then there's homework, and then there's test everyday. So when the hell do I practice? So that's how it goes.

Female, Commerce, CB

Although this student strongly objected to her father's insistence on constant study and fought with him about it, she nevertheless appeared resigned to the expectation that she should study throughout the day.

Rationalization

According to the students, parents rationalized their guidance or pressure by arguing that it was for the good of their own child's future that they were putting some pressure to perform well now. Some of the students disagreed with their parents' actions, and made it clear that they were quite aware of what they needed to do. Many of the students, however, even when self-aware, understood why their parents were pressuring them, and accepted their rationalization. They usually responded in terms similar to the following quote by a female biology student in a CB school: "Recently, yeah, they've started [to push me] because I'm in 12th standard. So they said you just have to do well… so at least my board marks are enough to get me into a good college. That's the only thing" (female, biology, CB).

One of the students spoke in some detail about the reasons that her parents put pressure on her. She was already a student who ranked at or near the top of her class, but was reminded by her parents (especially her father) that she needed to rank at or near the top of the state in her board exams.

So, do your parents put any pressure on you a little bit?

(Laughing) I don't mean to say that they're putting pressure on me, but my father expects me to stay put on my rank and he expects me to go for state rank. He expects, and believes I could go for it, that I have the capacity to go for it… He says, "Because I didn't learn I'm in this position, for Rs. 9000 salary, you have to understand that. So do not waste your time unnecessarily. When you settle in life, I will be happy, that will be contented for me. Think of me, what I'm doing, so.... just put the efforts, you have the capacity. I didn't have the capacity and no one to

guide me. I'm here to guide you, so why don't you just pressure up and you can get the state rank."

So do you feel pressured by all this?

No, he won't pressure me, but he just makes me understand the necessity for me to learn much more because for a girl, study is going to be my future rather than before…

<div align="right">Female, Commerce, SB</div>

In contrast to the other students, who viewed the parental rationalization with weariness or even skepticism, this student was in agreement with her parents and even appeared to be providing an excuse on their behalf. The interview with this student illustrated a number of interesting ideas that were not seen in interviews with other participants. First, in addition to the father advising his daughter for her own good, the father is also framing his expectations as being for his own satisfaction and contentment, or for *his* own good. Most parents likely want the same thing for their children and themselves, but no other parent was as explicit about their expectations as the father of this participant. Second, the desire for upward mobility is clearly evident in this family. Her parents, who were a homemaker and a mechanical engineer, were not highly educated themselves (both parents had only completed 12th grade), but they had invested a lot of effort to ensure that their daughter would be in a better socio-economic position than they were. While this sentiment may have been implicit in the expectations of other parents, it was, once again, most clearly stated by this father. Finally, this was the only interview in which gender was raised as a relevant issue with respect to education. In the interviews, although many of the participants reported that their mothers were homemakers, none of the female participants viewed themselves as future homemakers, and all of them had professional

goals. This will be the first generation in which most urban, educated girls will find themselves in the workplace (this recent social change has led to some cultural upheaval; see Sengupta, 2007), and therefore the first generation of financially independent women. While this point was not made by any of the participants, because education and employability that have become necessary matrimonial requirements for urban women, it is likely that this also plays a role in their desire to study and work.

<div align="center">Parent Comparison</div>

Because exam scores and college admissions are easily known and freely discussed between students, parents could easily compare their child to their peers or other students who have been through the process of completing school and being admitted to college. Students reported that parents who engaged in comparison did so as a manner of encouragement.

Straightforward comparison was relatively infrequent, and when it did occur, students accepted this comparison as a manner of encouragement. For example, one student reported that he was compared to his cousin, who had just finished school two years previously. The student, a male computer science student in an SB school, explained why his parents did this: "They say he's very studious, so you must compare with him. He secured 1140… He also did well in the entrance exams. They say you must score marks like him. So they compare me to him." This student's cousin had earned 1140 points out of a possible 1200 (95%), and had also earned admission to prestigious institutions, and his parents were hoping that the student would perform similarly. While this student recognized that his parents were comparing him to someone else, the comparison did not appear to bother him.

In a case similar to the previous one, a female computer science student in a SB school said, "I think… they want me to get good marks, like my sister, get into some good engineering college in merit. So I always have that stress to perform at that level." This student recognized that her parents were engaging in straightforward comparison. While she also wanted to earn admission on the basis of merit, she did not accept their comparison without argument. She said, "She takes whatever my parents say, that's it… But I'm like, very... more independent. So I always voice my opinions. If I don't like means I don't like. That's it." Her independence came at a cost, because these arguments led to a great deal of conflict.

More common, however, was a situation in which the parent engaged in comparison, but the student did not recognize that they were being compared. As a female biology student in a CB school said, "My parents don't compare me. If they do compare me, they only compare me with the students who are better, not with the ones who are worse." Another student explained, in more detail:

No, sometimes they go and see, "That kid does well, why can't you?" some crap, but usually they're not much comparing. As long as I don't tell them anything they don't compare. If they find out something about some kid who did really well... there's one cousin of mine, he went to this, A-level… and then, from there he got into Cambridge, all on merit, and then from Cambridge on exchange, he went to Harvard or something, and then got back to Cambridge. He graduated as some No. 1 student. His dad anyway has lots of cash, so they could afford a Cambridge education anyway, but then he still did it on merit. They keep taking

his example and saying, "Why can't you be like that?" Otherwise, that's it. Not much comparisons otherwise.

<div align="right">Female, Commerce, CB</div>

In the two previous quotes, the phrase 'on merit' appears often, which indicates that the person the participant is being compared to was able to earn admission to prestigious universities without the benefit of connections or money; in other words, his or her achievements were based purely on his or her own capabilities. The above quote indicates that this participant is being compared on two levels – one, in terms of being admitted to extremely prestigious institutions, and two, in terms of doing so on the basis of one's own abilities and hard work. What is important to note here is that she did not appear to recognize that she was being compared to her cousin.

When students recognized that they were being compared, however, they did not always perceive it to be helpful or necessary. At best, they viewed the effectiveness of comparison with skepticism, and at worst, with distress. When a female student of biology in a CB school was asked if her parents compared her to high-achievers as a form of encouragement, she answered doubtfully, "I suppose…" The parents of another student used two forms of comparison, but neither appeared to have the desired effect on the student's motivation:

Do your parents compare you to anyone in family or friends who are close to your age?

My mom tries to avoid this topic, but my dad... like, he doesn't compare me, he asks me to learn from...like, he doesn't want me to feel bad when he compares me to anyone. But he... actually he does, but he's trying to hide it…

So he tries to do it more as a motivating...

Yeah. But he actually makes me feel bad.

Is that because you feel… like you understand that he's doing it for your own good?

I am understanding why he's doing it, but it's not working. ..

Your mother, you said, doesn't do it.

My mother doesn't do it. Because she knows... I think it happened to her, so for that reason she doesn't compare. She just wants me to compare me with myself. Like... that's the secret of success, somewhere I read it. You're supposed to compare you to yourself.

So that's what your mother tries to do.

She's trying to get *me* to do it.

Male, Computer Science, SB

Although the father attempted not to compare his son to others, and appeared to do so unwillingly, he was nevertheless engaging in straightforward comparison. The son understood why his father comparing him, but he was distressed rather than motivated by the comparisons. The student's mother was trying a new kind of comparison – instead of comparing him to other students, she was encouraging him to compare himself to his own potential. This moved the responsibility for the comparison from the parent to the child. The student seemed more inspired by this advice and was willing to try this, but had not yet succeeded.

Parent Control of Environment

Students reported that their parents made many adjustments, and in some cases, sacrifices, to their own lifestyles in order to provide their children with an ideal study environment. This ideal environment was one without distractions, in which student

needs were anticipated and met, so that the student's time was spent in uninterrupted and focused study. Parents controlled the environment by restricting time spent on social engagements, by providing transportation to make it easier for their children to travel between school, tuitions, and home, by taking great effort to provide their children with whatever tools were necessary to improve their performance, and by giving up some of their own comforts so that their attention would be focused on their child. Both mothers and fathers made concessions on their time, but they made different contributions towards control of the environment, which will be further discussed below.

Restrictions on SsocialEengagements

Participants reported that many parents limited their social engagements, both inside and outside of their home. In a society in which relatives and friends frequently drop in on each other without prior notice, and in which families are invited to and attend many social gatherings, this is a significant lifestyle change. For example, it is not considered unusual for an entire family to miss events such as weddings when there is a 12th standard student in the family. Even when parents continue to attend the occasional social engagement, there is no expectation that their 12th standard child would do so – this is also a significant lifestyle change in a society where children (even adult ones) typically accompany their parents.

By cutting down on their own socializing, and lowering expectations of their child's socializing, parents were able to find more time for their child to study, and provide an environment free of distraction. A female computer science student in an SB school explained how her family restricted internal activity: "They've restricted my relatives coming home. We already have very [few] relatives because we live in one part

of the city and the others are there on the other side. But now they have restricted, seeing to that, like, not much of disturbance I have." The family of a female biology student in an SB school restricted their external activity so that she could focus on studying. She said, "Earlier every Sunday we would be going out, but now, monthly once, like that only." These students accepted and sometimes appreciated these lifestyle changes.

A few students objected to with these limitations on their social life, but nevertheless accepted them and even lived by the wishes of their parents. A male computer science student in an SB school who enjoyed going to clubs and parties said, "I love dancing, but I'm not allowed to. I'm not complaining, not once have I questioned them when they said 'Don't go'. Now I don't even ask them." Although he understood why his parents did not allow him to go out, he was still disappointed. He said, "I don't blame them, I know they're right, but sometimes you feel like - ugh, why? Why do I have to study? Why can't I watch that movie instead? Why can't I go out? That kind of thing."

Some students used the fact that they were in the 12th standard to their advantage, by using it to excuse themselves from social engagements. One student said,

Well, I'm excused from a lot of things. For example, usually when I say, "Look dad, I cannot come to your friend's house, look mom, I cannot come to the temple now, I don't want to do this..." and stuff, they won't excuse me. They [would] say, "Look, if you're free, just come. Don't act like you're a big guy or grown-up." Whereas now, even if I want to play computer, I'll say, Mom, I need to study – they'll say okay.

So they don't push you to do things, then.

They just don't push me into things where I do not like. I say, Dad, I do not like

this. He says, Okay - done. Because I'm in 12th.

Male, Computer Science, CB

Before he was in 12th standard, he was frequently persuaded to accompany his parents even when he did not wish to do so; now he excused himself – even when he did not have to work – and his parents did not attempt to convince him otherwise.

Transportation

The typical 12th standard student spends much of his or her day outside the house, attending school, tuitions, and coaching classes. Many tuitions and coaching classes are located far away from the student's home and school, because the instructors find it cheaper to rent space for their classes on the outskirts of the city. As a result, the students spend additional time commuting between several locations. Students reported that some parents made adjustments to their work schedules and even cut down on their work-related commitments in order to be available as a source of transportation. They did this often at professional and financial cost to themselves, but believed that the time and effort it saved their children would translate into more time spent studying instead of waiting around in bus stops. Transportation was mainly taken care of by fathers, who are more likely to be drivers on Indian roads.

When asked if their parents had made any changes to their lifestyles because they were in 12th standard, a male student of computer science in a CB school said,

My dad usually sits in the office for a long time, whereas now whenever I call him and say, 'Dad, I need to go for this tuition,' he just cuts whatever work he has and comes to the place where I am in 15 minutes, just to drop me.

This father owned his own consultancy business, so he was in a position to alter his schedule without too much difficulty. Fathers who were not in a position of leadership,

however, also took on the responsibility of providing transportation for their children, often making changes to their workplace schedule in order to do so. For instance, one father had made arrangements with his workplace so that he could transport his son around the city. His son, a male computer science student in a SB school said of his father, "My father has made some changes. He's taken some permission from the office for me [to pick me up or drop me off]."

In some other families, parents altered their work schedules so that a car with a driver would be available to their child. A female biology student in a CB school explained that her parents planned their day around the availability of the car. Her mother would finish her meetings by a certain time during weekdays, and both her parents avoided working on weekends, so that the car was available to pick her up or drop her off when needed.

Parents who could afford it took steps to ensure that their child would not waste time and effort in transportation by making a vehicle wholly devoted to them, even when it cut into their own needs. One student explained,

> I have to travel so much, being a resident of Kotivakkam [a suburb located on the outskirts of the city], I have to travel a lot to school, to tuitions, I travel like pretty much all around the city, so… one car is specially kept for me. So, they'll manage their own travel themselves.
>
> Male, Computer Science, CB

Transportation was often raised as a relevant issue for computer science students, who are more likely to be enrolled in multiple tuitions or coaching classes, and therefore spend more time in commuting.

Giving up Luxuries

Students reported that some parents had made adjustments to their own lifestyle so that the home would be an ideal environment for study. In order to do so, many parents gave up small luxuries such as cable television or afternoon siestas for the time that their children were in 12th standard. These changes were made mostly by mothers. Several students reported the following sentiment:

> My mother gave up seeing TV. Because she's an housewife, so she don't have any other source for entertainment but for my sake, she told okay, 'I'll adjust, that's nothing, only one year, not more than eight months, okay, adjust. She has to get good marks.'

Female, Commerce, SB

Most mothers considered giving up television or waking up early for one year a small sacrifice in order to encourage their children to study. But some mothers made greater changes to their lifestyles. The following quote is a striking example of a mother who went above and beyond small sacrifices – she gave up watching television, and took on all the responsibilities of the household, so that her child could study undisturbed. Her daughter described these changes:

> Like, she is... she gave up on a lot of stuff. Like basically, she's a housewife, she watched TV like anything. She doesn't watch TV nowadays. Earlier… I used to help her. Nowadays I don't even take a tumbler and keep it over there, she does all the work. She's like, 'You just enter inside, study, eat, sleep... everything I'll do. You just do - study. Your work is to study, your job is to study. I have no other work.' Even taking a phone call, attending a phone call, opening the door, everything she's like – 'Even if I'm sleeping, I'll come and do. You sit and study.'

She's like, she doesn't want me to blame her, telling that I wasn't able to study because she made me work. She doesn't want to take that thing on her. She's changed totally. She used to go for walking and all, and she gave up on that. 'Because some phone calls will come, I have to go pick up the phone'… she used to sit back. Mornings because I've got tuitions… for my sake, by 6 she will get up, she'll prepare food and everything, she'll pack up lunch, so she's changed her life entirely for my sake.

<div align="right">Female, Biology, SB</div>

Even though mothers take care of most household responsibilities in Indian households, this is a fairly extreme example, in which the mother has taken on *all* the responsibility for running the household, and does not allow her daughter to do any chores. The mother has made it unnecessary for her daughter to ever leave her room or her desk, even for simple tasks like getting a glass of water or answering the phone. Without regard to her own health or rest, she makes sure that her daughter does not do have to do any housework.

The mother, interestingly, does not appear to have made these changes out of a sense of concern for her 12th standard daughter, but to *not be held responsible* for her daughter's ultimate performance. Furthermore, if the daughter did indeed perform well in the board exams and earn admission to a prestigious institution, her success would reflect well upon the mother as well. In exchange for not having any household responsibility, the daughter has taken on an even larger responsibility – to study *all* the time. While the student was appreciative of the study environment her mother had created, she also seemed anxious about the burden that had been placed upon her.

Some parents also made what could be considered financial sacrifices. Many parents sent their children to the best schools, tuitions and coaching classes they could afford, and as described previously, several fathers reduced their professional responsibilities. But students and parents did not perceive these behaviors to be a financial sacrifice, perhaps because it is expected that parents will provide the best they can afford, and because it is considered an investment that will pay off eventually. A few students, however, did recognize that their parents had made some additional financial sacrifices. For instance, a female computer science student in an SB school said, "They want us to study well, they'll buy us any amount of books, they'll spend any amount of money, like... they got me a new laptop this year and all." Even though she appeared to be from a lower-middle class family, she was describing how her parents would spend any amount of money on herself and her sister (who was a year older) to support them in their studies.

The personal, financial, and professional sacrifices which often comprise the lifestyle changes that many parents make in order to accommodate the needs of their 12th standard children can be a source of stress for the parents as well. Like most parents, these parents were deeply invested in their child's academic and professional success, but it is likely that their desire to see their children succeed was also driven by a need to feel that they had done all they could to support their child.

Parent Support

Over half the students reported that their parents were openly supportive of any field or profession they wished to pursue. When asked what their parents wished them to study, a female commerce student at a CB school said, "[My] parents have basically left

the door open," and she knew this to be true because her parents had let her older sister pursue sociology, a field of her choosing. Her peer in a SB school said, similarly, "They said it's your wish, so they... they're like encouraging whatever I want to do. Whatever I want to do, full-heartedly they'll agree." Both of these students wished to become lawyers, a goal that their parents strongly supported. A female biology student in an SB school said, "My mom's like, whatever you're comfortable with, go. Anything and everything is fine. If you want to go abroad and study, fine." She wished to become a doctor, or if she was unable to earn admission to medical college, she had decided to pursue biomedical engineering. A male computer science student in a CB school said, "My parents are open to anything… Even if I want to go do some visual communications and gaming now, they don't mind it." In his description, studying communications or gaming are considered to be non-traditional fields, and he was suggesting that his parents would even support him in such an endeavor (he was, in any case, pursuing engineering). In the above examples, even though students desired to go into traditionally rewarding professions such as law, medicine, or engineering, they felt that their parents would have supported any other goals as well. It is possible, certainly, that the students felt supported by their parents precisely because they had chosen traditional professions.

In some other families, students and parents did not necessarily agree on their future expectations. When the students were asked how they would negotiate this difference, some students were confident that their parents would come around to their goals. For instance, male computer science student in a CB school said, "Whatever I say, they'll accept that," and his peer said, with equal confidence, "I'll just do what I want, they will go with it in the end." Another student spoke emphatically on this issue:

How did you convince them?

I don't know. It was a miracle. It's just that I told them, basically point-blank, that I'm not going to engineering, so let's not even talk about that because it's a waste of time. No matter what you say, you're not going to change my mind. And if you force me into doing something like that, it's going to ruin my life, and I don't want to ruin my life… My funda was that, 18 years of my life I'm listening to you, after that I'm on my own, so I do what I want. And it would be nicer if you would support me in that, rather than tell me that it's wrong, because that will make life difficult for you and me.

Male, Computer Science, SB

This student wanted to become a film director, and so wanted to attend film school immediately after school. While his parents supported his eventual goal, they first wanted him to earn some sort of dependable qualification (such as a degree in engineering). The student's 'funda' (argument or case) was that he had spent his life up to this point listening to them; now, he wanted to strike out on his own. Throughout the interview, it was clear that he considered turning 18 a defining moment in his life. For instance, at that point he wanted to live on his own, hang out wherever he wanted, and be friends with whomever he wished. It is clear that he also considered it a moment when he could pursue his own career goals, even if it meant disagreement his family. His declaration, however, was mostly bravado. He was close to his parents and recognized that he would need their financial support, and so he sought their cooperation in his decision.

In contrast to parents who engaged in behaviors that were not considered supportive by their children, the parents described above, whether naturally or through coercion, were generally supportive of their children. While most of these students did

not wish to pursue non-traditional fields, they nonetheless felt that their parents would be supportive anyway. This theme of parental support appeared almost exclusively in interviews conducted with students from CB schools. Of the few SB students who expressed that their parents provided support, all but one had spent most of their lives in CB schools, and had only changed to SB schools for the last two years of high school.

A possible reason that parents of most CB students appeared more supportive than parents of SB students was because CB students seemed more confident about their future. The CB students appeared to be more likely to come from educated families, where they were likely socialized into having high expectations for success. For instance, a female computer science student in a CB school said, "[My parents] think I'm going to be this really well-settled person in life, really successful, after seeing my horoscope and all that. But they think I'm a pretty level-headed person, so... they feel I'll end up somewhere." This quote suggests that the student and her parents have good faith in the future; there seems little doubt in their mind that she will succeed no matter what she pursues. This sentiment was evident in many of the interviews with CB students, but few of the interviews with SB students.

Summary of Results

There are five major ways in which students report that parents influence their education. Parents encourage their children to maintain high expectations, pressure their child to perform well in school, compare their child to other students, control the study environment of their child, and support their child. Not all students experienced all kinds of involvement, and not all student experienced parental involvement in the same way. Although it is possible that the parents have a differing view of their own involvement,

the focus of the current study is limited to adolescents' own descriptions of parental involvement. As a result, this analysis may not fully capture the range of ways in which parents influence their children's educational and professional experiences. For the study of academic stress and adolescent distress, however, it is more important to focus on student perceptions of sources of academic stress.

It is possible that by having strong expectations, exerting pressure, comparing or by controlling the environment, parents may be considered to be contributing to the experience of academic stress by students. However, these behaviors were not necessarily related to the experience of academic stress by students; only parental pressure and parental comparison were, in some cases, described as a source of distress. While some students were indeed stressed by the involvement of their parents, most viewed their parents' involvement in their education positively even when there was disagreement.

Generally, students appreciated the regulation provided by their parents, and viewed it as natural that their parents had certain expectations for them, even when these expectations involved fulfilling a parental ambition. When students were guided into some careers over others, they understood that they were being guided into careers that would be financially and professionally reliable. But such acceptance was not universal – some students did not want to have a 'safe' career, and others only reluctantly went along with their parents. In spite of this, none of these students had any significant conflict with their parents, and parental expectations were not associated with the experience of distress.

Parental pressure, in some cases, was associated the experience of academic stress and distress. Many students reported that their parents would be disappointed if they did

not perform well in their board and entrance exams, and they wanted to avoid disappointing their parents. Students felt unfairly criticized about how much time they spent in leisure activities; while some argued that they needed an occasional break from study, others suggested that they could not be wasting time when there was simply not any time to waste. Students reported that their parents rationalized their behavior by suggesting that it was 'for their own good'; in other words, they believed that it would lead to improved performances on the board and entrance exams. While some students agreed with this rationalization, others did not, and for them, it often led to distress.

Several parents compared their children to students who had recently completed high school and gained admission to college successfully. Parents identified a role model (usually a close relative) who had earned high scores on the board and entrance exams due to their admirable study habits, and urged their own child to be more like the role model. Many students did not recognize that their parents were comparing them. Of those who recognized that they were being compared, some accepted the comparison without argument, and others disliked the comparison. In the latter case, parental comparison was a source of distress. Students supposed that their parents compared them to others as a form of motivation, but did not view parental comparison as having the desired effect.

Many students described the changes that their parents had made to their lives due to the presence of a 12th standard student at home. Parents restricted their social engagements so that they could provide a study environment free of distractions, and arranged transportation so that their children would not waste time in long commutes. Some fathers had reduced their professional responsibilities so that they could be available to their children, and several mothers had altered their lifestyles so that their

children would have more time to study. In return for these sacrifices, students were expected to devote all their energies towards study. The students were strongly aware of the efforts their parents had put into providing a good study environment, and they were appreciative of these efforts.

The final manner in which parents were involved in their child's education was by providing support. Some students explicitly reported that their parents were supportive of their future goals. In almost all cases, these students wished to pursue traditionally rewarding careers in law, medicine, and engineering, but they believed that even if they pursued non-traditional careers such as gaming, visual communications, or jewelry design (all mentioned by students), their parents would continue to remain supportive. A few students had to earn this support by convincing their parents that their career goals, while non-traditional, had been carefully reasoned. This was the only type of parental involvement in which there was a strong academic track difference, with CB students far more likely to describe parental support than SB students.

CHAPTER 9

DISCUSSION

The issue of academic stress and adolescent distress in 12th standard students was explored in the large south Indian city of Chennai, India. The current study had three major research goals – to assess the prevalence of academic stress and adolescent distress, to describe the experiences of 12th standard students, and to develop an understanding of the unique role of parents. In order to explore the topic, a combination of quantitative and qualitative methods was used. The quantitative analysis was based on surveys that were completed by 588 students in five schools (3 Central Board, 2 State Board), and the qualitative analysis was based on interviews conducted with 24 students from three schools (2 State Board, 1 Central Board).

In the first part of this chapter, the results of the quantitative and qualitative analysis (Chapters 5, 6, 7) will be discussed. This section will be organized in the manner of the research questions; first, the prevalence of the experience of academic stress and adolescent distress will be assessed. This will be followed by a description and analysis of students' personal experiences of 12th standard. To conclude, the unique role of the parents will be explored. These results will reflect upon gender, academic track, and school type differences. In the second part of the chapter, the contributions of the current study to Bronfenbrenner's Ecologocial Systems Theory (1979), Bourdieu's ideas on education, and social change will be discussed. The chapter will conclude with a description of the limitations of the current study and suggestions for future research.

Like their peers in Korea and Japan, a large proportion of students in the current study attended tutorial classes, spending, many hours per week in structured study outside

of school. Similarly, they also reported being tired and sleep deprived. These findings suggest that the academic situation for 12th standard students in India is similar to what has been described in Japan and Korea (Hill, 1996; Lee & Larson, 2000; Schoolland, 1990). Although terms like 'examination hell' or 'examination war', common in Korea and Japan (Hill, 1996), did not emerge in the current study, the experience of academic stress was a very real and relevant issue in the Indian setting, and this was evident in the constant references to the 'stress' and 'tension' of 12th standard.

Prevalence of Academic Stress and Adolescent Distress

A large majority of students reported that they experienced stress due to the 12th standard. Female students reported experiencing stress more than male students, which is consistent with what previous research studies have found (Verma et al., 2002). Science students were also more likely than commerce students to report that they experienced stress. This was also consistent with expectations, because most science students generally apply for admission to highly competitive programs in engineering or medicine. Contrary to expectations, students from SB and CB schools were equally likely to report academic stress. It is possible that within the context of their own schools, most students may indeed experience stress, irrespective of school type.

Based on studies conducted with Western populations, Petersen et al. (1993) have concluded that depression is one of the most significant psychological problems of adolescence. Although only a small proportion of adolescents experience clinical depression (about 7%), up to one-third of all adolescents can experience milder forms of depression, such as depressed mood or depressive syndrome (Petersen et al., 1993). The

current study suggests that depression is a significant problem for Indian adolescents as well.

Scores on the Beck Depression Inventory indicated three notable results. The first result was the high mean score on the BDI ($M = 12.55$, $SD = 8.44$) which pointed to a typical experience of 'mild mood disturbance' for 12th standard students. This indicates that the average experience of 12th standard is one that is not, according to the BDI, 'normal' or healthy. This is consistent with previous studies involving Indian adolescents who completed the BDI. In the study conducted by Upmanyu and Upmanyu (2000), the mean score on the BDI was 12.99, which is comparable to the mean of 12.55 in the current study. The second result was the significant proportion of the sample (15.6%) scored above the clinical cut-off score for depression. This is also consistent with a study that has been conducted with Indian adolescents. According to the Nair et al. (2004) study, about 12% of the sample was found to score above the clinical cut-off score for depression, which, while lower than the rate of 15.6% found in the current study, is fairly comparable. These rates are considerably higher than the rate of 7% that is generally found in U. S. adolescent samples (Petersen et al., 1993). The third trend is that over half the sample earned a score of greater than 10 on the BDI, indicating that they did not fall on the 'normal' end of the scale. This third result has not been previously reported in adolescent samples in India, and is, potentially, the most worrying. It is consistent with research conducted by a non-governmental organization, in which more than half the interviewed teenagers reported that they felt depressed (Pasmantier, 2005), but is much higher than the rates of one-third that have been found with Western samples (Petersen et al., 1993).

Rates of depression for women are generally found to be higher than for men, and this is found to be the case with adolescent populations as well. Studies conducted with Western and Indian adolescent samples have consistently found that girls have higher rates of depression than boys (Allgood-Merten et al., 1990; Nair et al., 2004; Petersen et al., 1993; Upmanyu & Upmanyu, 2000). In the current study, surprisingly, female students did not score higher on the depression measure than male students. Other expected group differences were not found to be significant either, because CB students and science students did not score significantly higher on the depression measure than SB students and commerce students.

Less is known about anxiety problems in adolescence. Kashani and Orvaschel (1988) have found that up to one-fifth of Western adolescents can be diagnosed with an anxiety disorder, which suggests that a greater proportion of adolescents experience milder forms of anxiety. To date, little research has been conducted with the Indian adolescent population. One study found that boys scored higher than girls on a scale that measured manifest anxiety (Singh & Singh, 1989), but another found the reverse to be true (Zareena et al., 1988), so little is known about the prevalence of anxiety and anxiety disorders in this population. In the current study, mean scores on the State-Trait Anxiety Inventory for Indian students were found to be much higher than the mean scores for their Western peers (Spielberger, 1983).

In his development of the State-Trait Anxiety Inventory, Spielberger (1983) found that Western high school students scored, on average, a mean of 40 ($SD = 10$) on the state and trait anxiety scales. In the current study, however, scores on the state ($M = 50.79$, $SD = 3.87$) and trait ($M = 50.75$, $SD = 3.43$) anxiety scales were found to be much

higher. The female students were not found to be more state or trait anxious than the male students, which is contrary to what previous research suggests (Kashani & Orvaschel, 1990; Ohannesian et al., 1999). Also contrary to expectations, commerce students scored significantly higher on the state anxiety measure than Science students.

These results suggest that a significant proportion of 12th standard students in the current sample express their distress through symptoms of depression and anxiety. There were, however, some unexpected findings; depression and anxiety are known to be highly positively correlated (Kashani & Orvaschel, 1988; Fergusson & Woodward, 2002; Petersen et al., 1993), but in the current study, scores on the depression and anxiety measures were found to be negatively correlated. This unexpected finding was confirmed by the finding that students who reported experiencing stress scored high on the depression measure but low on anxiety measures; the reverse was true for those who did reported not experiencing stress.

These findings led to consideration of the possibility that 12th standard students expressed their mental distress in different ways; perhaps some students expressed their distress in the form of depressive symptoms, and other students in the form of anxiety. Further tests were conducted to test this possibility. When all predictor variables – gender, school type, and academic track – were taken into account in analysis, it was possible to predict depression and state anxiety scores. This confirmed the expectation that different groups of students expressed their distress in different ways.

In summary, a majority of students in the current study reported feeling stressed, and the rates of depression and anxiety were found to be very high in the sample. The survey results further revealed the experience of distress depended on the gender,

academic track and school type of each student. In Japan, academic stress has led to high rates of depression, behavioral problems, and suicide (Schoolland, 1990) and studies have found that Korean high school students have report high levels of stress, depression, anxiety, and general negative affect (Lee & Larson, 2000). Consistent with these findings and other studies conducted in India (Pasmantier, 2005), the conditions of intense academic stress led to negative mental health outcomes for the students in the current study.

Student Experiences

Student experiences of 12th standard could be categorized into six themes – student schedules, experiences of stress, somatic symptoms, attitudes and beliefs about 12th standard, beliefs about the role of God and hard work, and educational reform. The following section will briefly describe each category with respect to the relevant literature.

The students spent most of their waking hours in structured and unstructured study. Most students slept no more than six hours a night, and reported having only two hours of free time each day. Although most students used their free time to sleep, catch up with friends, watch television, or listen to music, for several students, even this 'free' time was spent in study. Some students attempted to balance their lives by scheduling one 'study-free' day in their week or by trying to ensure that they slept eight hours each night, but most of these students found that it was not possible to complete their schoolwork unless they studied on their 'free' day or slept fewer hours each night. This is consistent with studies conducted in Japan and Korea, in which students report having little free

time and sleeping for fewer than five hours each night (Hill, 1996; Lee & Larson, 2000; Schoolland, 1990).

Almost all the interviewed students reported that they experienced stress related to 12th standard. Some students reported that they were not yet stressed because it was the beginning of the school year, but they also expected to become more stressed as the year progressed. Consistent with the literature reviewed by Raina (1983), some students felt that their stress negatively affected their performance ability. One student, for instance, reported that she frequently 'blacked out,' or couldn't remember important information, during a testing situation. Although this student's experience appears to be unique, it is a vivid example of the effects of academic stress.

The quantitative results above suggest that depression and anxiety is common and deeply felt by many 12th standard students. Researchers suggest, however, that emotional distress is usually expressed not as psychological symptoms, but as somatic symptoms. In fact, across the world, somatization is the most common expression of emotional distress, and it is strongly associated with depression and anxiety. (Katon et al., 1982; Kirmayer & Young, 1998). Somatic symptoms of distress, especially in Indian samples, usually include headaches, weakness, and gastrointestinal problems (Sen & Williams, 1987; Sethi & Sharma, 1984). There appears to be a class difference in the presentation of symptoms in India – individuals of lower socio-economic class and education are more likely to present with gastrointestinal problems, while those of higher socio-economic class present with headaches and forgetfulness (Puri et al., 1995; Raguram et al., 1996; Raguram et al., 2001).

In the current study, although few students reported aches, many students reported lack of sleep and weight loss. For most students, however, these problems appeared to be less an expression of distress than an outcome of the high pressure environment they operated in – they simply lacked the time to sleep or eat. For some students, however, the 12th standard was clearly a source of distress that manifested in somatic symptoms. Several students identified school-related stress as the source of their disturbed sleep, disorientation, forgetfulness, and headaches. Although most students wished that they did indeed have enough time to eat and sleep, few students appeared particularly worried about these symptoms. They appeared to view it as an unavoidable part of the 12th standard. In fact, one student, a female commerce student at an SB school, looked forward to potentially losing weight. These symptoms are consistent with somatic presentations of middle-class Indians, which is the same as the population that made up the sample in the current study.

Although one can assume that parents (especially mothers) generally kept an eye on their children's somatic symptoms, and it is likely that they made adjustments to their eating schedules to accommodate their children, few students reported that their parents overtly monitored their eating and sleeping habits. Perhaps parents expected these changes as an inevitable result of the requirements of 12th standard, and understood that there was simply not enough time for their children to eat and sleep. Only one student indicated that his mother kept an eye on his sleep habits and ensured that he received sufficient rest. He said,

> When I study through the night, like, 10:30 she comes turns off the light and says, 'Don't waste midnight oil' and she'll tell me to go to sleep. 'Whatever you've

studied is enough, you don't need to strain your health to get a [good] mark.'

… She wants me to have a systematic study pattern, study properly, and at the

same time, take good care of my health… Health, she says, is wealth.

Male, Computer Science, CB

Students expressed a range of beliefs and attitudes about the 12th standard.

Surprisingly, none of the students reported feeling bored by the constant study; they all

appeared to view it as necessary for the 12th standard. Some students felt confident that

they would perform well in the following year. Rangaswamy (1982) found that high-

achieving students, or those who typically performed well in school, were more likely to

experience problems with adjustment. In the current study, however, students who said

that they performed well in school appeared to be well-adjusted and confident about the

12th standard.

There were several differences between SB and CB students in their experience of

the 12th standard. More CB students expressed worry about the 12th standard than SB

students, but SB students more often believed, rightly or wrongly, that their performance

in 12th standard would set the path for the remainder of their lives. These findings

appeared to be contradictory, because it seems likely that believing that the 12th standard

is a 'do-or-die' year is associated with worry about the 12th standard. There are several

possible reasons for this: CB students appeared to lack confidence and be more worried

about the 12th standard than SB students, possibly because they believed that their board

and entrance exams are more challenging than SB students. Their lack of confidence did

not extend to the long term, however, because they appeared to expect that things would

work out for them in the end. For instance, a female computer science student in a CB

school was not sure what she wanted to study after college, but felt certain that she would

"figure it out" and "end up somewhere." Similarly, her male classmate, although uncertain about the coming year, felt that "it would all work out." The CB students were also more interested in pursuing non-traditional careers, such as journalism, art, and psychology than SB students. CB students may have been more worried about the 12th standard than their SB peers because admission to these programs is mostly based on board exam performance rather than entrance exam performance. Finally, although none of the students mentioned this, it is also possible that CB students, who were more likely to come from upper-middle class families, could depend on their parents to pay for a 'payment' or 'management quota' college seat. Although this did not relieve them of their responsibility or their desire to perform well on the board or entrance exams and earn admission on their own merits, it may have made them less likely to view the 12th standard to be a watershed year as some SB students.

There has been little previous research on the perceived role of God in academic success. The researcher's personal experience, however, suggested that belief in God was an important factor to explore in the Indian setting. Few students expressed a belief in superstition or fate, and none of the students expressed a belief in astrology, but consistent with expectations, most of the students believed that God played some role in their academic success. Many of them prayed for good performances on the board and entrance exams, and some of them made 'deals' with God to ensure academic success. Most students expected to become more pious as exam time approached. These findings suggested that belief in God was indeed was an important and relevant factor to explore in the experiences of 12th standard students. It was not clear, however, whether faith in God or prayer was associated with academic stress and adolescent distress.

SB students were more likely to visit temples regularly and pray for specific outcomes, such as a seat in medical college or a certain question on an exam, compared to their CB peers. This is possibly because the CB students appeared to be more likely to come from secular upper middle-class families who took a casual approach to religion. Many reported that they visited temples only infrequently, and they were also more likely to deny the existence of God. Irrespective of the degree to which they believed in God, most students were strongly motivated by the belief that hard work was the key to academic success. Although this belief has not been previously described in the literature pertaining to Indian youth, it is consistent with research conducted with Chinese children (Chen & Lan, 1998) and with children of East Asian immigrants in the United States (Kim, 1993; Steinberg et al., 1992), which reflects the strong conviction in East Asian cultures that hard work will lead to academic and professional success. It is possible that this belief in a meritocracy is a new one in India, a result of the recent changes in Indian society.

The open-ended question at the end of the interview revealed, in some students, a deep sense of disappointment with the current educational system. These students, all of them from CB schools, felt that the 12th standard curriculum was irrelevant and uninteresting, and that the testing was unfair and unnecessarily stressful. A few students felt that the curriculum should emphasize practical knowledge rather than theoretical knowledge, and one student thought that the curriculum should also include the development of life skills. Students also felt that testing should occur throughout the year (monthly tests, writing assignments), and in different conditions (laboratory, group work).

It is likely that CB students were more likely to complain about the current education system than SB students because they were more aware of alternative systems of education; their upper middle class status likely exposed them to the many international schools that have opened in Chennai in the last few years. The international schools use Western pedagogical methods, curricula, and examination systems to accommodate the children of employees of foreign companies. These students felt that the Indian educational system should adapt some of the features of these schools.

Although students described rich and varied perceptions and understandings of the 12th standard, few indicated that they discussed their experiences with their peers. With friends, discussions about school tended to center around complaining about teachers and tests; students were only vaguely aware of what their friends intended to pursue after college. Only a few students reported that they worried about their peers or discussed academic stress with friends. One student argued that students avoided talking about school with their friends at all, because their friendships provided a refuge from days that were filled with worry. Although they discussed educational and professional plans with their parents, few students reported sharing details about their thoughts, concerns, or worries with their parents either. In general, it appeared, students' experience of the 12th standard was deeply private one that was not shared with many people.

Parental Involvement

An analysis of student interviews revealed that parents were involved in their child's education in five ways – by having high expectations, placing pressure, comparing, controlling the study environment, and providing support. While most of

these types of involvement were not associated with stress for the students, parental pressure and comparison did appear to be a source of adolescent distress. These categories, and their effects on student experiences of academic stress and distress, will be discussed with respect to the relevant literature in the following section.

Parents expressed their expectations to their children by urging their children to pursue professions that, in India, were financially rewarding and prestigious, such as engineering or medicine (Asher, 2002). The students were not overtly guided towards certain careers; instead, their parents indirectly conveyed their expectations and aspirations. Research suggests that indirect influences such as expectancy socializing have, in fact, a greater impact on educational experiences than direct influences (Eccles et al., 1982; Eccles et al., 1990). While students did not always agree with their parents about academic and career choices, they appeared to accept their guidance without argument. This is likely because Indian students are socialized to accept and respect parental advice (Larson et al., 2000). This kind of guidance was common and did not appear to be a source of stress for the students, although it is possible that the true effects of parental guidance were not captured in the student interviews. Indeed, in longer interviews that were conducted with Indian-American high school students, parental guidance about academic and professional choices did appear to be related to perceptions of stress (Asher, 2002).

It is perhaps surprising that students who wished to pursue non-traditional fields did not argue further with their parents when urged to pursue more traditional fields instead. It is possible that some of these students had no clear idea of how to follow their interests; for instance, the student who wished to become an artist or a musician was

vague about the training and experience necessary to succeed in such a field. Similarly, the student who was interested in the social sciences did not know the differences between the various social sciences and was unaware of what career options were open to someone following such an education. Lacking clear information about their own interests, these students accepted, willingly or unwillingly, the advice given by their parents. (It is notable that those who had obtained information on their interests, such as the student described on p. 110 who wished to become a film director, were more likely to rebel against the safe choices their parents urged them toward).

Parental pressure, on the other hand, clearly appeared to be the source of stress for some students. Parents exerted pressure by expressing disappointment or shame and by preventing their children from 'wasting time.' Several students reported that their parents would be disappointed if they did not perform well in their exams or be accepted to a prestigious institution. Consistent with other studies conducted in India, the students felt that they would be letting down their parents if they did not succeed in their exams or college admission (Pasmantier, 2005). It was noted previously that most students were motivated to work hard by the promise of future success; it appears, however, that some students were also motivated by a desire to not disappoint their parents. Some students even felt that their success or failure would be more than a matter of disappointment; it was a matter of pride or shame for their parents. This kind of pressure has been documented in Korean immigrant families in the United States (Kim, 1993).

Some students reported that whenever they took a break from study to engage in leisure activity, their parents urged them to return to their work. Studies conducted with Indian populations and East Asian immigrant populations have also found this to be true

(Liu, 1998; Ramalingam, 2005). Parents often rationalized the pressure they were exerting by reminding their children that their behavior was 'for their own good,' i.e., they suggested that their insistence on constant study would pay off in terms of exam performance, college admission, and eventual professional success. While the students who were exposed to this pressure acknowledged that their parents were looking out for their best interests, most of them did not agree with their parents. They felt they could not possibly be studying any more than they already were, and resented their parents for implying that they needed to be studying more. At some level, however, this parental rationalization was largely accepted by the students, even when they resented or felt stressed by parental pressure, because they perceived that their parents' behavior arose solely out of concern for their future well-being.

As described in Chapter 2, social comparison is often a powerful tool that parents use as a way of encouraging their child and indicating to them that a certain level of performance is expected of them. Several students in the current study indicated that their parents compared them, usually to a close family member who had recently completed school. Students responded differently to the comparison – some of them did not recognize that they were being compared, and only a few of those who recognized the comparison were distressed by it. Indirect social comparison likely happens in societies where the academic successes and failures of individuals are publicly known, such as Japan (Kiefer, 1970) or among Korean immigrants in the United States (Kim, 1993). In the current study, however, a more direct kind of social comparison that has not been previously found with respect to the experience of academic stress is observed.

Perhaps the most powerful way that parents were involved in their child's education was by structuring the study environment to encourage academic achievement. Parents restricted social engagements and arranged transportation to school and tutorial classes. They also reduced professional obligations and made lifestyle changes to be more available to their children and to create a distraction free study environment. These findings are similar to what has been found in several studies involving Indian parents (Larson et al., 2000; Ramalingam, 2005; Verma & Gupta, 1990) and East Asian immigrant parents (Kim, 1993; Liu, 1998; Steinberg et al., 1992). It was expected that parents would also take steps to reduce distractions by limiting access to mobile telephones, cable television or the internet. Some parents did, in fact, limit access to the phone and the television, but surprisingly, few limited access to the internet. In spite of the fact that several students reported that they spent much of their free time on the computer, chatting with friends or playing online games, it is possible that parents viewed the internet as a source of information and were therefore reluctant to limit access to it.

Studies conducted with the children of Korean immigrants found that the children felt constantly monitored and pressured by the personal and professional sacrifices made by the parents (Kim, 1993; Liu, 1998). In the current study, only a few students reported feeling bothered by the constant monitoring by their parents (specifically, they wanted to be able to watch more television). Most students did not report that they felt monitored or pressured by their parents. In general, the students were keenly aware and appreciative of the changes their parents had made, and while they wished that their parents would let them occasionally relax, they did not feel too pressured by the monitoring or the sacrifices.

Another way in which parents were involved in their child's education was by being supportive of their child's educational and professional choices. Most of the students who reported parental support wished to pursue financially and professionally stable and traditional careers (such as engineering or accountancy), but they felt certain that their parents would have been equally supportive even if they had decided to pursue non-traditional careers. This was the only kind of parental involvement in which there was a significant group difference, with CB students more often mentioning parental support than SB students. This is possibly because CB students were more likely to come from cosmopolitan, upper middle class families who were more willing to consider non-traditional careers, and who could also provide financial support even if they chose to pursue such a career. SB students, on the other hand, were more likely come from more middle class families, where a traditional career meant financial independence and stability.

The results on parental involvement support the three empirically tested models of academic achievement and/or its outcomes on students that were explored in Chapter 4: Eccles' Value-Expectancy Model (Figure 2), Schneider and Lee's model to explain the success of East Asian students (Figure 3), and Thompson and Bhugra's model to understand the interrelation of school and parental pressures (Figure 4). The two common features to all three of these models – individual expectations and parent expectations – have been explored in analysis and discussion.

Both Eccles et al. (1982) and Schneider and Lee (1990) suggest that student expectations affect academic persistence and achievement. Although these models do not explore academic stress, the current study suggests that student expectations for success

are indeed an important factor to consider in the exploration of academic stress. The Thompson and Bhugra model (2000) suggests that anxiety about school performance can lead to academic stress, which was a theme that arose frequently in analysis. The study also provides evidence for the existence of additional factors that appear to have a significant role in student experiences – attitudes and beliefs about the 12th standard, and beliefs about the role of God and hard work.

According the Eccles et al. (1982), the expectations, attitudes and behaviors of important socializers such as parents influence the expectations, attitudes and behaviors of their children, and their eventual academic and professional goals. The Schneider and Lee (1990) model finds that the expectations of parents and their control of out-of-school time has an effect on the child's effort and persistence, and on their eventual academic and professional aspirations and achievement. Finally, Thompson and Bhugra (2000) find that high parental expectations and parental restrictions, among other factors, contribute to the experience of stress by students. Consistent with these models, the current study provides strong evidence about the important role of parents in their child's educational experience. Parents influenced their children indirectly by being expectancy socializers and directly by controlling their study environment.

Effect of Gender

A number of research studies conducted in the United States suggest that girls have lower expectancies for academic success than boys, especially in math-related fields (Eccles et al., 1990; Frome & Eccles, 1998). This finding is echoed in parental beliefs as well, with parents having lower expectations for the academic success of their daughters in math-related fields than their sons (Eccles et al., 1990). These perceptions, held by

daughters and parents, persist even when there are no gender differences in actual performance.

A study conducted with college students in India similarly suggests that girls have lower generalized expectancies for success than boys (Murphy-Berman & Sharma, 1986), and Indian parents appear to have higher academic and professional expectancies for their sons than their daughters (Verma & Gupta, 1990), although these expectancies do not appear to be related specifically to achievement in math-related fields. Parents in Japan (Kiefer, 1970; Schoolland, 1990) and in the Korean immigrant community in the United States (Kim, 1993) urged their daughters to pursue less demanding careers so that they could find a way to balance home and work when they became wives and parents.

These studies suggest that there are significant gender differences in educational and professional expectations, by students and by their parents. It is important to note that, in the current study, however, there did not appear to be any significant gender differences in terms of the educational and professional expectations of the students and their parents. Many of the students, both male and female, in alignment with their parents' wishes, were interested in pursuing typically masculine-typed fields such as engineering and law; fewer students, either male or female, were interested in typically feminine-typed fields such as the social sciences.

Student reports suggested that there were few differences between the parents of these students as well. Most parents urged their children, whether male or female, to pursue masculine-typed careers that would provide financial independence. The very absence of a gender differences is to be noted – in a society, where, until recently, men were breadwinners and women were homemakers, the relative absence of gender

differences in educational and professional aspirations is striking. The great increase in the number of dual income couples in urban India is one of the results of economic liberalization.

All the female participants in the study intended to work upon completing their education and continue working after marriage, and many of them wished to do so in traditionally male-dominated fields. Their parents, furthermore, encouraged them to do so in order to be financially independent. Their desire is consistent with the reality in urban parts of India today, where young women routinely work for a few years after graduation and continue to do so after marriage (Sengupta, 2007). Although none of the students mentioned this as a possible reason, (on behalf of their parents or themselves), it is highly likely that their desire is also because women's education and employment have become highly desirable qualities in the marital marketplace.

But the results were not as straightforward as they appeared. Girls, especially from CB schools, were far more likely to consider pursuing non-traditional careers than their male students or their female SB peers, and there was greater variety in their career plans. The six CB female students who were interviewed were interested in pursuing music, art, law, journalism, architecture, and business. The six SB female students intended, and were encouraged by their parents, to pursue more traditional careers in medicine, engineering or law. These findings represent the influence of the intersection of gender and class on educational and professional plans. Female CB students, who were more likely to come from upper-middle class families, were more likely to mention that they wanted a job that fulfilled their creativity and met their interests; for the female SB

students and their parents, who were more likely to be from middle class families, employment was seen as a source of financial security rather than personal satisfaction.

Contributions to Theory

When Grounded Theory is used carefully as the basis for analysis in a study, it is expected that the findings will lead to the generation of new theories, or that existing theories will be strengthened or modified by the findings (Strauss & Corbin, 1990). The findings in the current study were consistent with, and elaborated upon, the theoretical perspectives that guided the study design and research questions. Three major theoretical perspectives were used to develop an understanding of the issue of academic stress and adolescent distress: human development, education, and social change. As discussed in Chapter 3, the human development perspective that is most relevant to the current study is Bronfenbrenner's Ecological Systems Theory, which suggests that individuals develop in a series of nested environments; the education perspective is best framed by Bourdieu's views on the subject, which suggest that education functions as a form of cultural capital; and the social change perspective is based on recent research about the effects of social change.

Human Development

According to Ecological Systems Theory, individuals are most strongly influenced by proximal environments with which they have frequent and critical contact, or microsystems. These proximal environments vary with age - individuals interact most with the parents in childhood, peer groups in adolescence, and romantic partners in adulthood. At the center of all these environments is the individual itself, who, in turn, influences his or her environments.

Students had strong personal experiences of, and opinions about, their final year in school. They were stressed by the expectations of 12th standard, board exams, and college entrance examinations. While some of this stress is created by the expectations of their environments, it is clear that some of the stress is created by the students themselves, in a variety of ways. For instance, they set high goals for themselves, and worry that they might not be able to achieve it, or they worry about the fact that they are not studying as hard as they believe they should be. In some cases, these worries affected the ability of the student. Certain beliefs could also be a source of stress; for instance, believing that 12th standard is a 'do-or-die' year could contribute to the pressure to do well. These stresses often manifested in somatic symptoms. But students also held a number of adaptive beliefs, such as believing that hard work could guarantee a good performance. While the environments of these individuals may have contributed to or shaped these beliefs, they were deeply internalized by the students.

Parents are a significant influence on the experience of academic stress as well. While parents are only one of many microsystems that Indian youth operate in, studies have found that Indian youth spend most of their time with their parents, even in adolescence. They remain close to their parents throughout their school years, and lean on their parents for advice, encouragement and support (Larson et al., 2000). These findings suggest that the parental system is the most influential microsystem with which Indian adolescents interact.

The parental influence is evident in the current study, which reveals that parental involvement in their child's education is proximal, frequent, and intense. Their involvement is both direct (overtly pressuring the child) and indirect (changing lifestyle

to accommodate the child), and it has negative (expression of disappointment or shame) and positive (support, encouragement) overtones. In the experience of the students, the parents do indeed appear to be the most influential environment with which they interact.

Ecological Systems Theory further suggests that the individual is also affected by indirect environments, such as mesosystems, which are interactions between microsystems, and exosystems, which are environments which do not include the individual. The influence of these systems is also evident in the current study. Parents used examples of high-performing or high-achieving peers (often relatives) as examples to motivate and encourage their own child. This involved an interaction between two microsystems: parents, and peers or extended family. The parental workplace, an important exosystem, also played a role in the current study. In the case of some students, the profession of the parent influenced the student to pursue the same academic path (like the student who wished to become a chartered accountant like his father), and in the case of others, the limitations of the parental profession encouraged the student to pursue a different path (for instance, the father who had not finished his college was urging his daughter to pursue a college degree). Many fathers made adjustments to their work schedule in order to accommodate their children, and the extent to which they could do this appeared to be influenced by their profession.

The most distal system, called the macrosystem, includes contextual environments such as cultural values or social conditions. In Chapter 2, the cultural emphasis on academic achievement and particularly, on achievement in certain careers, was described. All the students described the emphasis on academic achievement at home; parents constantly urged their children to spend more time studying and to perform

better at school. Most of the students who were interviewed wished to pursue traditionally rewarding careers in engineering, medicine, commerce, and law. Of the few students who were interested in non-traditional careers, many of their parents were actively involved in trying to nudge their children towards more traditional careers.

Culturally widespread social comparison played an important role in the 12th standard experience, because many parents compared their children to their peers or relatives, in terms of both performance on the board exams and admission to college. As described in Chapter 2, academic achievement by the student reflected upon the entire family, by demonstrating the importance of academic achievement in the family, and by making clear the necessary adjustments and sacrifices that the family had made to ensure success.

There were also other socio-political factors at play. Students, for instance, were aware of the difficulty of earning admission to prestigious institutions due to the intense competition and politics involved. Nevertheless, several students indicated their desire to earn admission to college on the basis of their 'merit,' so that they would not have to depend on family or political connections (should they have any), or pay an admission fee. This desire, for obvious reasons, was encouraged by parents.

The findings of the current study are consistent with the expectations of Ecological Systems Theory, which suggest the strong influence of macrosystems such as cultural expectations, social customs, and educational and political conditions, on professional choices of students and parents, social comparison by parents, and the desire to earn admission to college on the basis of one's own abilities. Overall, the current study

provides evidence that supports the tenets of Ecological Systems Theory, which suggests that individuals develop in a series of nested environments of varying influence.

Education

Bourdieu proposed that education was a form of capital, because it was a source of power in social relations. Education provided economic capital in the form of income, social capital in the form of membership in social networks, and cultural capital in the form of knowledge that could provide status (1973). In the current study, it is clear that most students pursued careers that they perceived would bring them all three kinds of capital, although their emphasis was mainly on economic capital. The career that most students were interested in – engineering – was selected on the basis of the high income associated with such a qualification in India's current economy. The students also understood that pursuing such a career would also earn them social status, especially in the eyes of their immediate and extended family. Fewer students discussed how their education would bring them cultural capital, but it was noted that certain careers (medicine, engineering) were associated with high status, while others (plumbing, mechanic) were not.

While students may not have fully recognized the processes by which they pursued certain careers, Bourdieu suggested that parents play a significant role in the career choices of their children, primarily by creating or socializing cultural capital. They could create it by having high expectations of their children, and providing an environment in which academic achievement is encouraged and supported. It could also be socialized, by promoting certain forms of speech or activities (Bourdieu, 1986). By these criteria, in the current study, parents were indeed responsible for the creation and

socializing of cultural capital. They had high expectations of their children and created environments that allow their children to focus on study, and they encouraged their children to pursue certain careers and fields of study which they believed would be most beneficial. Bourdieu (1990) suggested that there were gender differences in academic socialization: while boys were guided into the study of sciences, girls were expected to study the humanities. This expected difference did not materialize in the current study, because girls and boys had similar academic and professional goals, and parents appeared to socialize their sons and daughters similarly.

In his study of French society, Bourdieu (1986) found that the socialization of cultural capital was more likely to occur in the upper classes, where it was embodied in the culture, and also that children tended to follow in the footsteps of their parents. The socialization, it appeared, allowed for the maintenance of class distinctions. This class divide was not apparent in the current study, where few differences were found between the parents of students attending SB and CB schools. The parents had similar expectations of their children, enrolled them in tutorials, engaged in similar behaviors, and made similar adjustments to their lifestyles to accommodate their children. In most cases, in fact, SB parents urged their children to earn higher and better qualifications than they themselves did. Although a few students from both types of schools wished to follow in the footsteps of their parents, SB and CB students were quite similar in their academic and professional goals.

Nevertheless, class differences remain significant. As discussed previously, the CB board exams are considered more challenging than the SB board exams. While upper middle class CB students were preparing for the entrance exams to highly competitive

national-level institutions, SB students were preparing for the entrance exams to less competitive state-level institutions. In other words, although a CB and SB student may have pursued a degree in the same field, their qualifications would not be valued equally in the marketplace. The CB student's degree confers not just cultural capital (the academic qualification), but also social capital (by membership in social networks), and economic capital (higher income).

It is also necessary to consider the influence of financial support. Although all the interviewed students indicated their desire to be admitted to college 'on merit,' it is possible that the CB students, who were more likely to come from upper middle class families and have access to economic capital, could depend on their parents to pay for a 'payment' or 'management quota' seat in college, or to go abroad for college.

There were significant differences between SB and CB students in their reporting of parental support, with CB students mentioning more often that their parents were strongly supportive of their goals. Even though most of these students were pursuing traditionally rewarding careers in fields like engineering, they felt that their parents would be supportive even if they were interested in non-traditional fields such as the social sciences. The CB students also spoke with more confidence about the future, and were more likely than their SB peers to believe that things would work out for them. Because the CB students were more likely to come from more educated, upper-caste families, it is likely that, consistent with Bourdieu's description of cultural capital (1986), they were socialized into having high expectations for success, no matter their career path. All of these differences in economic, cultural, and social capital allow for the maintenance and perpetuation of class differences, as described by Bourideu (1973).

Bourdieu (1990) did not think that examinations taken in late adolescence should have such a significant influence on the remainder of a student's professional life. His concern was echoed by several students, mostly from SB schools, who were stressed by their belief that the 12th standard was a 'do-or-die' year on which the rest of their lives hinged. He also rejected the notion that exams were democratic measures of ability and merit, because he felt that academic experiences, and therefore, exam performances, could be affected by the gender or class of the student. While gender did not appear to be a significant factor, class differences may be factor in the current study.

As described in Chapter 2, it was generally considered easier to 'score high marks' in the SB board exams than the CB board exams, and in entrance exams based on SB curricula than those based on CB curricula. This leads to a two-tier system in which CB students are prepared for admission into more competitive institutions and careers than SB students. Because lower-caste students were more likely to attend SB schools, and upper-caste students more likely to attend CB schools, this may have led to a perpetuation of caste differences.

Bourdieu (1990) was critical of educational systems that emphasized examinations. It was, in fact, this emphasis that contributed to the experience of academic stress by such a large proportion of 12th standard students. A few students commented negatively on the examination system itself, which they felt unfairly tested them at only one time, and in only one way. They suggested examination reforms, such as testing throughout the year, and including different modes of testing, which, they believed, would relieve some of the academic stress.

Bourdieu's ideas about education appeared to be relevant in the current study. For instance, students decided, and parents urged them, to pursue careers which they felt would earn them capital, and parents created and socialized cultural capital in ways that Bourdieu had described. His beliefs that educational systems perpetuated gender and class differences were partially supported, and his criticisms of exams were echoed by many students. Although his ideas about education and educational systems were developed with respect to French society, they clearly informed many of the findings in the modern Indian setting.

Social Change

In the 1990s, India's economy moved from a socialist system to a capitalist one as a result of economic liberalization policies. Globalization and privatization have created a competitive marketplace in which qualifications and ability are valued over caste and connections. The traditional social order has been disrupted, allowing women and other minorities to participate more fully in the new, merit based economy. These social changes have been discussed in much greater detail in Chapter 3.

The effects of economic liberalization were evident during the research phase of the current study. Several students were met in western-style cafes, where they confidently ordered lattes and smoothies, and many were reminded of their appointments using text messages on mobile telephones[6]. A global outlook was clear in their professional goals as well. Students were considering, for instance, jobs in fields that did not exist to a great degree prior to the liberalization, such as graphic design, journalism, film direction, and biomedicine. Several contemplated studying abroad for their

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[6] Other students were also met in more conventional settings, where they consumed traditional south Indian coffee or tea, and were reminded of their appointments over the telephone.

undergraduate degrees, a change from previous generations, who generally went abroad for a graduate education. Some students said that their parents were not aware of these new career possibilities, which suggested a knowledge gap between the pre- and post-liberalization generations. These students educated their parents about the new careers that were available to them.

Although the above experiences generally appeared to be true for male and female students, science and commerce students, and for CB and SB students, CB students were more likely to own mobile telephones, to be met in cafes, and consider studying abroad. These findings are consistent with the generally upper-middle class status of the CB students. Overall, however, excitement about new possibilities was apparent in most interviews; while the students expressed worry and anxiety about being in the 12th standard, they rarely expressed despair about the future. Just like the absence of gender differences, the absence of significant class differences between the upper- and lower-caste students in terms of educational and professional goals is also noteworthy. These changes provide evidence for the breaking down of traditional boundaries.

Some of these changes, however, did not occur without a reaction from students. While students did not comment on the breaking down of gender boundaries, the breaking down of class boundaries was not viewed positively. One of the ways in which class boundaries are being broken down is by the practice of reserving seats for members of lower-caste communities in public and private education institutions (since 1990 and 2006, respectively). It was noted in Chapter 2 that the passage of these laws was followed by protests by upper-caste students all over India. While anti-reservation protests were not widespread in Tamilnadu, several students registered their discontent with the

reservation system. One student from a CB school wrote "Down with Arjun Singh" on his survey, referring to the public official who was responsible for the 2006 legislation. Another student, a female commerce student from a CB school, attempted to organize a protest against the 2006 legislation. One student explained his discontent in detail:

> And then there's the quota. That is one of the main things [that is bad]. I come from upper class, I'm a brahmin, and giving a backward class fellow [a seat] is really pathetic, because they just don't study. My opinion is, they don't study, and they don't really deserve it. I don't want to hurt anyone, but I'm just telling what I think.
>
> **So reserving a place for them is not necessary.**
>
> No. It's based on caste. The constitution tells, like, you should not have caste system, and these guys split us based on caste. And then after which... where is the thing of economic status? They should give quota based on economic status, and if you're performing [well], that is. If you don't perform, why even... they don't study, they don't do anything. Just because you're born to a backward class, they're automatically given…
>
> Male, Computer Science, CB

This student found the government view on caste hypocritical[7]. His stereotyped view of lower-caste students led him to strongly believe that the current reservation system was hurting hard-working, upper-caste students like him, so he felt that reservations should instead be on the basis of performance and economic status. Not all students, however, were outraged – the anti-reservation protest that the student above attempted to organize

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[7] The constitution does not state that the caste system is illegal; it only states that discrimination on the basis of caste is illegal. The former view, while incorrect, is commonly held by many upper-caste students.

failed when she found that most students were simply resigned to the new reservations.

For instance, a male commerce student from a SB school seemed disappointed rather that

distressed that he had only a 10% chance of getting into the college of his choice because

he was a member of an upper-caste community. Other CB students who mentioned the

reservations also appeared to be resigned to the system; they simply viewed reservations

as one of many barriers to college admission. This suggests that most students found

reservations to be a source of anxiety rather than outrage. These comments and beliefs

represent the backlash against the breakdown of caste barriers that Oza (2006) described,

and the anxieties provoked by the recent changes in India.

These findings illustrate the remarkable social changes that have occurred in India

since the 1990s. Although it is not possible to do a comparison (because there are few

studies that examine the lives of students prior to economic liberalization), there seems

little doubt that that the post-liberalization generation has grown up in a more

economically competitive country, where status is earned rather than ascribed, in a more

altered society, in which traditionally underrepresented communities have greater

professional opportunities, and a more globalized country, where individuals have

exposure and access to cultures from around the world.

Limitations and Future Directions

By assessing the prevalence of the experience of academic stress and adolescent

distress in 12th standard students, exploring student descriptions of the 12th standard, and

attempting to develop an understanding of parent involvement in the issue, the current

study makes a substantial contribution towards the literature on this topic. The study,

however, is not without limitations. Furthermore, due to the dearth of empirical research on the topic of academic stress, several research issues remain to be explored.

A major limitation of the study was that it was conducted at the beginning of the school year. This was done mainly for reasons of convenience – for the researcher, school administrators, and students. Although the current study revealed very high rates of academic stress, depression and anxiety, it also appears that at least some of the perception of stress was due to the anticipation, rather than the reality, of academic pressure. Had the students been surveyed and interviewed later in the school year, it is likely that rates of depression and anxiety would have been higher than they were at the beginning of the school year, and it would also have captured the true experience of academic stress. It is also possible that students (and their parents) would have had more complex attitudes, beliefs, and expectations about exams and college admission. Nevertheless, the results of a study conducted at the beginning of the school year also allows interventions to be developed that will address student concerns before the 'real' stress of the 12th standard sets in.

The topic under investigation is extensive, and includes, as Bronfenbrenner's Ecological Systems Theory (1979) suggests, other environments which are known to be influential. In the current study, the emphasis was on students and parents, but it is necessary to explore the influence of microsystems such as peers, schools, and tuitions, and macrosystems such as culture, social customs, and laws. In order to explore other environments, it is also necessary to include the voices of the other important players, such as parents, teachers, and counselors. It is also necessary to use a variety of methods to explore such a complex issue. For instance, in the current study, scores on the BDI

revealed that the average experience of a 12th standard student was one of 'mild mood disturbance,' but little is known about the lived experience of such a 'diagnosis.' While this topic was further explored in interviews with students, observing students during school hours, in classrooms and tutorials, and interacting with their families would have led to a better and fuller understanding of their lives.

It would have been helpful to collect information about the parents, such as education, employment, and career path, since these characteristics influence their children's perceptions and expectations. For instance, Larson et al. (2000) found that daughters of educated mothers were more likely to report enjoying a more enjoyable family climate than sons, indicating that maternal education and employment has a significant impact on daughters; this impact remains to be explored. Additionally, parents of 12th standard students appear to experience their own form of academic stress – they worry about whether they are doing enough to help their child do well in the 12th standard, and wonder whether they could do more. Their experience of academic stress and adolescent distress is worthy of further exploration.

It is important to note that the study sample was unrepresentative of the larger school population in Chennai. The study was conducted only in middle-class, private, co-educational, English-medium schools, which represent only a small percentage of secondary schools in the country. The experiences of students who attend such schools are likely different from the experiences of students who attend public schools, single-sex schools, or schools were the medium of instruction is the local language. Furthermore, the students in the sample appeared to be generally well-adjusted and high-achieving. Most studies in this area, including the current study, have focused upon high-achieving

middle class youth as victims of academic stress, since they most face the weight of expectation. But little is known about the experiences of lower class youth, who face the weight of hope, if not expectation, that they will succeed in the new economy. Although these students perceive that a professional degree and proficiency in English are necessary qualifications, they are frustrated by the lack access to the right education and training facilities (Puri, 2008). In fact, in recent years, the suicides that are reported in the media have increasingly come to concern lower class students.

In the current study, all the students expected to pass their board and entrance exams and many expected to earn admission to the college of their choice. Because academic failure is a matter of shame for many families, little is known about students who do not succeed in the board and entrance exams. Some students wait a year to prepare for and take their entrance exams again, and those who can afford it may try to attend college on a 'management quota' seat or apply for colleges abroad. As noted previously, only about half of all high school graduates are admitted to college; some are likely to be lower class youth who chose not to attend college, or were unable to earn admission to college on merit and were also unable to afford a seat. Their experiences of academic stress and their future educational and professional paths have not been described.

My mother is a regular educational social worker in two low-income schools (both public Tamil-medium schools; one is girls-only, the other is co-educational). Most of the students in these schools were first-generation school attendees; few of these students completed high school, and fewer still earned a college education. When she explained my research to administrators and teachers of these schools, they were

extremely interested in having me conduct research about academic stress in their schools as well. It was not possible to do so in the current study, but the exploration of academic stress in different settings and with a more diverse sample is important to developing a complete understanding of the topic.

The sample for the qualitative part of the study was quite small. Attempts were made to include as many student voices as possible, and to ensure that students from different backgrounds (gender, academic track, school type) were represented, but it is not clear that these goals were achieved. Tables 1 and 4 reveal that female students in general, and SB girls, in particular, were underrepresented in the survey part of the study. As discussed previously, co-educational schools (especially SB schools) in Chennai tend to have highly imbalanced gender ratios because many girls attend more conservative single-sex schools which follow an SB curriculum. Girls who do attend co-educational schools are likely to be from more progressive families. Indeed, in the current study, the female students are quite comparable to their male peers in terms of their experience of 12th standard and their educational and professional goals. Their experiences are probably not comparable with the majority of female students in Chennai. Table 4 also suggests that the perspectives of male commerce students were highly underrepresented in the interviews. While they are moderately underrepresented in the commerce track, it is not clear why they were reluctant to participate in the interviews.

Although several students reported high levels of academic stress and parental influence, it is also possible that students who were experiencing the most academic stress or the most parental pressure were less likely to volunteer to participate in the study. Conducting research guided by grounded theory requires that participant sampling

must be continue until no new themes or concepts are uncovered (Strauss & Corbin, 1990). In the current study, due to time limitations, it was not possible to continue participant sampling and interviewing until theoretical saturation was reached. This suggests that information relevant to the issue may not have been uncovered. Any future studies in the area need to allow for sufficient time to interview enough participants in order to reach theoretical saturation (Strauss & Corbin, 1990).

It was noted in the methods section that teachers in three schools recruited students to be interviewed. This process ensured that male and female students, studying science and commerce, from CB and SB schools were all represented. The researcher requested that recruited students be selected as randomly as possible, and to include those who were low- and high-achieving, articulate and inarticulate, and outgoing and shy. Although the teachers attempted to recruit as random as a sample as possible, this process may have influenced the quality of the data. In one school, for instance, most of the recruited students were outgoing, and in another, most were high-achieving. Some of the students who were interviewed were, in fact, inarticulate or shy, but it is possible that the experiences of students who were less articulate or less outgoing may have been overlooked.

The study focuses on measurable outcomes such as depression, anxiety, and somatic symptoms. Research suggests, however, that students who experience academic stress also express themselves in terms of other milder outcomes, such as emotional problems, difficulties in adjustment, and negative affect, and in terms of more severe outcomes, such as suicide attempts and suicide. In order to explore a broad understanding of the issue, it is necessary to explore these other outcomes as well. Researchers also

worry about the long-term consequences of academic stress, which remain unexplored, of the long periods of time spent in a state of distress, and its' impact on academic enjoyment, competence and performance (Larson & Verma, 1999); these questions can only be answered through longitudinal studies.

Due to the dearth of empirical research on the topic of academic stress, several research issues remain to be explored. It is necessary to address some of the limitations, such as exploring other outcomes of academic stress, and to conduct longitudinal studies that explore the possible long-term effects of academic stress and adolescent distress. It is also necessary, as mentioned above, to include the voices of parents, peers, teachers, tuition teachers, and counselors to investigate their role in the phenomenon. Additionally, parents of 12th standard students appear to experience their own form of academic stress, and their experience of the phenomenon needs further exploration.

Interventions

The eventual goal of the exploration of a topic such as academic stress and adolescent distress is to develop effective interventions that address, at the most basic level, student and parent concerns. As described in the current study, the problem of academic stress exists at a number of levels. Some interventions are clearly required at the macro-level; for instance, structural changes that lead to a greater number of high quality institutes of higher education, or a change in social attitudes that values success in non-traditional fields, can reduce the intense competition for admission, especially in certain fields. Educational reforms that lead to changes in the methods of testing and reduce the emphasis on exams can lower academic stress. These interventions, in the long-term, are necessary, and have been recommended by educational reformers in India

(Chitnis, 1993; Zachariah, 1993), but they require significant resources and time. Other interventions can be implemented immediately at the micro-level, and require fewer resources. These interventions can be targeted at students, parents, and teachers.

In developing interventions, it is necessary to keep in mind that the problem of academic stress and adolescent distress does not appear to be psychologized. Although almost all of the students experienced academic stress, none of the interviewed students viewed their experiences as being unique from other students, or as requiring treatment or medical attention. Some students hoped for educational reforms that would mitigate the pressures of 12th standard, but generally, students appeared to view the problem as a temporary one that would end they started college.

Several students reported that they put pressure on themselves by having extremely high self-expectations for goals that they could not realistically achieve. While students must certainly be encouraged to have high expectations, helping them to identify and work towards realistic and achievable goals may reduce self-pressure. Although the study was conducted early in the academic year, students suggested that they lacked the time to sleep and eat enough, leading to tiredness and weight loss. Ensuring that students receive sufficient sleep and food may also lead to lower stress. Several students believed that the 12th standard was a 'do-or-die' year, and felt that their performance in the board and entrance exams would shape the rest of the lives. Students must be discouraged from holding such beliefs, which are associated with a greater perception of stress, and learn to have a more balanced view of the 12th standard. Finally, students who wished to pursue non-traditional fields lacked information about educational and professional choices, and therefore felt pressured to pursue more traditionally rewarding fields; it is necessary to

provide information to students that will allow them to make more careful academic decisions.

Several students reported that their parents engaged in several behaviors that contributed to their academic stress. Although parental expectations were not generally associated with stress, some students felt pressured by their parents' wishes for them to pursue a certain field. Parents also rebuked their children for not spending enough time in study, engaged in a form of emotional blackmail by letting the children know how disappointed they would be in a poor performance, and compared the performance of their child to his or her peers. Even though most students recognized why their parents engaged in these behaviors, these parental behaviors were, nevertheless, viewed negatively by students.

Interventions that address these issues can be implemented with the help of counselors. Two of the schools (1 SB and 1 CB) in the current study already employed full-time counselors. The counselors discussed a variety of approaches to reduce academic stress, ranging from those that calmed the students (such as meditation and breathing exercises) to strategies that helped them become better test-takers. The counselors introduced students to new fields of study by inviting professionals from relatively non-traditional fields to address the students. (At one of the schools, students had met a marine biologist, graphic designer, and agricultural researcher since the beginning of the school year, although they had not met any professionals from more non-traditional fields such as art, humanities, or social sciences). When they felt it was necessary, they also met with students individually in order to discuss personal issues. The students who attended these schools referred to the counselor in positive terms,

although it is not known whether their presence actually improved the students'

experience of 12th standard. Nevertheless, it is an intervention that can be easily

implemented, although it does require the school to possess certain financial resources.

Several students reported that their parents engaged in several behaviors that

contributed to their academic stress. Although parental expectations were not generally

associated with stress, some students felt pressured by their parents' wishes for them to

pursue a certain field. Parents also rebuked their children for not spending enough time in

study, engaged in a form of emotional blackmail by letting the children know how

disappointed they would be by a poor performance, and compared the performance of

their child to his or her peers. Even though most students recognized why their parents

engaged in these behaviors, these parental behaviors were, nevertheless, viewed as a

source of stress by some students. This problem can be partially addressed by counselors;

at the two schools discussed above, the counselors met with parents when necessary and

encouraged them to pursue strategies that would reduce the academic stress experienced

by their children. [8] Even at schools that do not employ a dedicated counselor, parents can

be reminded during parent-teacher meetings that they need to refrain from urging their

child to pursue a certain career path, engaging in social comparison, and emotionally

blackmailing their child. Most importantly, parents should encourage their children to

relax and to get enough uninterrupted sleep.

Schools and teachers can play a significant role in reducing academic stress. In

some schools, administrators did not uniformly expect their students to earn high marks

in the exams; instead, students were told that they were expected to 'meet their potential,'

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[8] The effectiveness of these meetings is not known, since it depends on how parents viewed these meetings, whether they accepted the counselor's recommendations, and whether this led to reduction in academic stress experienced by the children.

or perform to the best of their ability. Although even this expectation was associated with a certain degree of stress (since few students were willing to admit that they lacked the potential to earn high marks in the exams), students at these schools generally did not feel as though they were being held accountable for the academic success or the reputation of the school.

The media, which contributes to the problem of academic stress, can also make a contribution towards helping students navigate the 12th standard successfully. Coverage of the topic in the media should be limited to the announcement of exam dates and results. The implicit bias towards traditional fields such as engineering or medicine (evident in language that describes those students who did not succeed in these entrance exams as 'failures') should be corrected. Discussing study strategies, publishing exams from previous years, conducting interviews with exam 'toppers' and printing congratulatory school advertisements must be avoided, since these lead to the expectation that students will utilize the study strategies, complete the practice exams, follow the advice given by the exam 'toppers' in order to make their school proud; such expectations are unrealistic and a source of stress. By avoiding coverage of such topics, the media can also subdue the belief that the 12th standard is a 'do-or-die' year.

The focus of media coverage needs to shift towards providing information that allows individuals to make informed decisions. The media can play a role in encouraging parents and teachers to 'back off' from creating conditions of academic stress for students. Students, for instance, need to be encouraged to engage in outdoor play rather than spending time in front of the computer, since research suggests that engagement in active leisure (exercise, sports) is associated with better adjustment and fewer symptoms

of depression than passive leisure (watching TV) (Larson & Kleiber, 1993; Strasburger, 1995). Similarly, they could also present research which shows that lack of sleep or interrupted rest can lead to poorer exam performance. Since students appear to lack information about non-traditional fields, the media can also address this problem by describing various non-traditional fields, locating institutions that offer degrees or qualifications in them, and identifying the career possibilities that follow such an education. They could interview or highlight individuals who have pursued and succeeded in non-traditional fields.

In addition to the interventions described above, it is also necessary to develop interventions that address the serious mental health consequences that some students may experience as a result of academic stress, such as anxiety, depression, or even suicide. Although there are suicide prevention hotlines and mental health professionals who specialize in academic stress, the onus is currently placed upon students to self-identify their need for help. To address the issue at an earlier stage (i.e., before the need for suicide prevention specialists), students, parents, and teachers must be taught to recognize common symptoms of distress in their peers, children, and students. The media can play an important role in this effort, by educating consumers to identify these symptoms and by directing them to the right resources.

The interventions described above are only quick fixes for the larger causes of academic stress. They are, nevertheless, easy to implement, require few resources, and are likely to have an immediate and mitigating effect on the experience of academic stress by 12th standard students.

APPENDIX A

TABLES

Table 1.
Demographic characteristics of survey participants

	State Board		Central Board	
	Female	Male	Female	Male
Science	26	153	76	142
Commerce	25	67	32	38

Table 2.
Descriptive characteristics of survey participants

Characteristic	Percentage	*M (SD)*
Age		16.34 (.62)
Grades compared to classmates		
Better than classmates	39	
Same level as classmates	38	
Worse than classmates	23	
Changed school for 11th and 12th standards	35.5	
Attend tuitions	84.8	
Hours per week spent at tuitions		9 (6.7)
Attend coaching classes	22.8	
Hours per week spent at coaching classes		8 (8)
After school plans		
Go to college	92.2	
Future expectations		
Engineering	24.1	
Computer sciences	12.4	
Commerce	16.2	
Parental expectations		
Engineering	26.7	
Computer science	9.9	
Commerce	17	

Table 3.

Means and standard deviations for Depression, State anxiety and Trait anxiety across Gender, School Type, and Academic Track

| | State Board | | Central Board | | Significant Differences |
	Female	Male	Female	Male	(*p*<.05)
Depression					
Science	11.42 (6.59)	13.04 (11.50)	14.55 (11.99)	11.12 (7.91)	CB♀Sc > CB♀Com CB♀Sc > CB♂Sc
Commerce	13.32 (7.81)	12.18 (9.14)	9.75 (5.96)	12.34 (10.17)	
State Anxiety					
Science	51.19 (3.66)	49.96 (3.89)	41.86 (3.81)	51.35 (3.76)	CB♀Sc < CB♀Com CB♀Sc < CB♂Sc
Commerce	50.40 (4.87)	51.77 (3.59)	52.21 (3.27)	51.66 (4.37)	SB♂Sc < SB♂Com SB♂Sc < CB♂Sc
Trait Anxiety					
Science	50.62 (3.22)	50.26 (3.74)	50.73 (3.09)	51.14 (3.03)	SB♂Sc < CB♂Sc
Commerce	51.18 (4.39)	50.49 (4.02)	52.07 (3.11)	50.37 (3.25)	

SB: State Board   ♀: Female   Sc: Science
CB: Central Board   ♂: Male   Com: Commerce

Table 4.
Demographic characteristics of interview participants

	State Board		Central Board	
	Female	Male	Female	Male
Science	5	4	3	6
Commerce	2	1	3	0

APPENDIX B
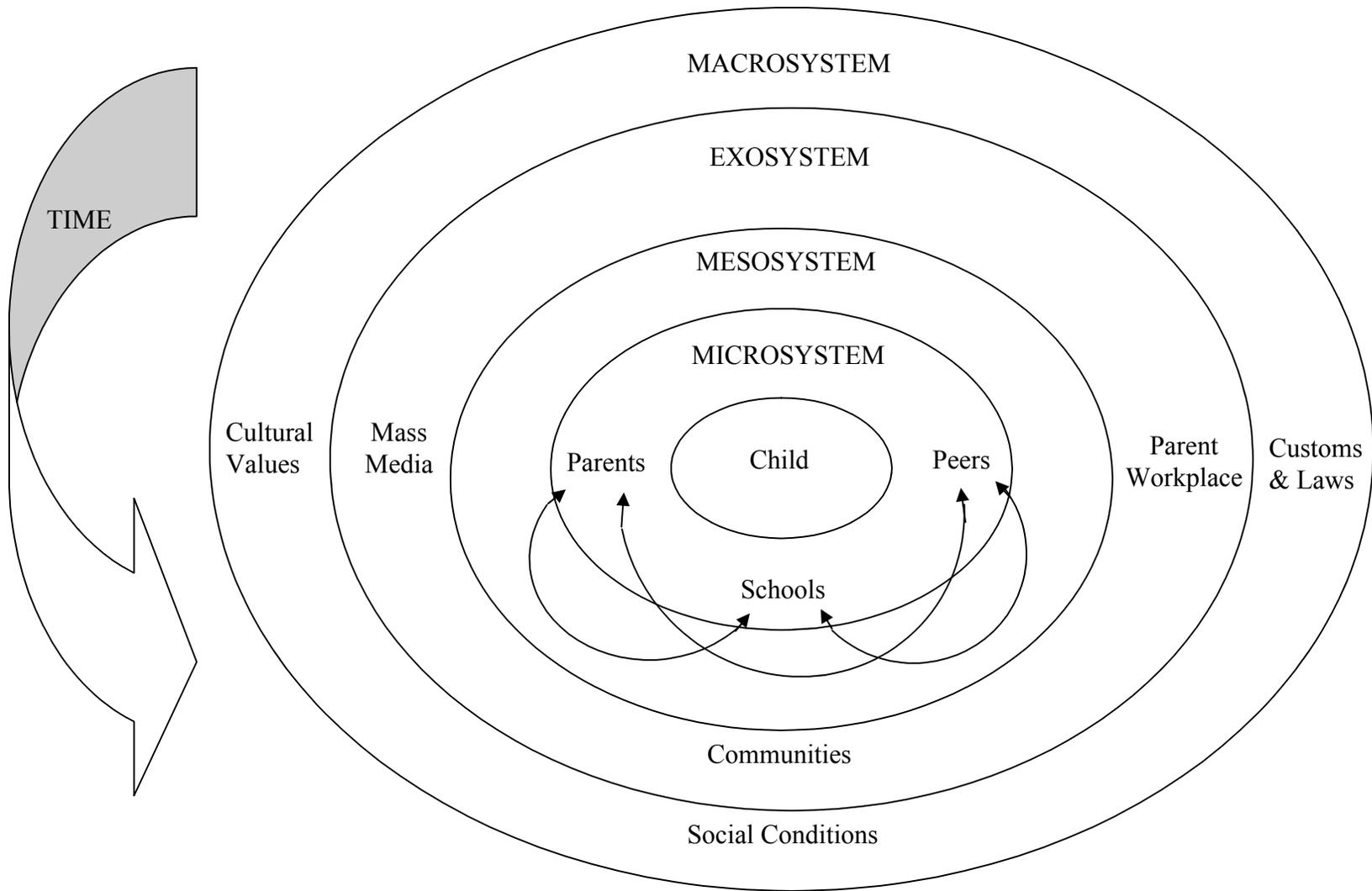
FIGURES

Figure 1.
Ecological Systems Theory (Bronfenbrenner, 1979)

Figure 2.
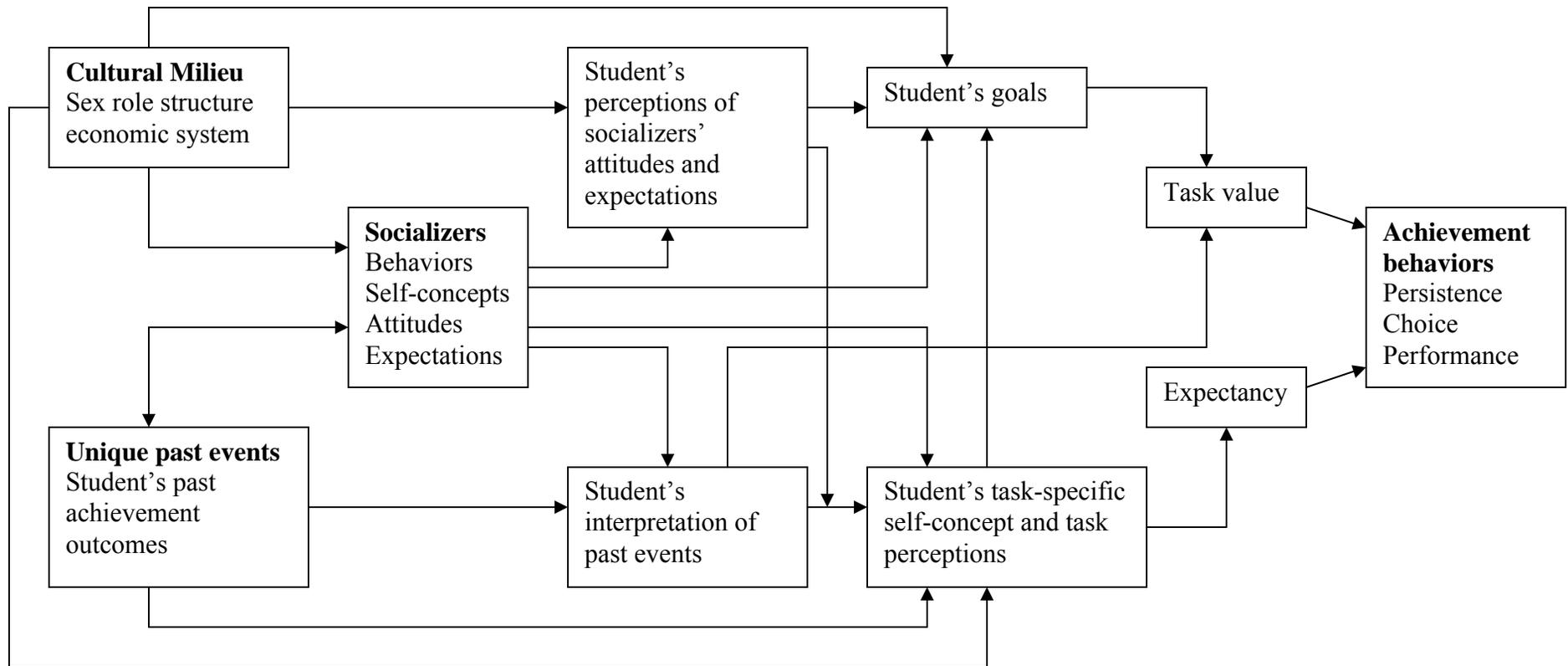Value Expectancy Model (Eccles et al., 1982)

Figure 3.
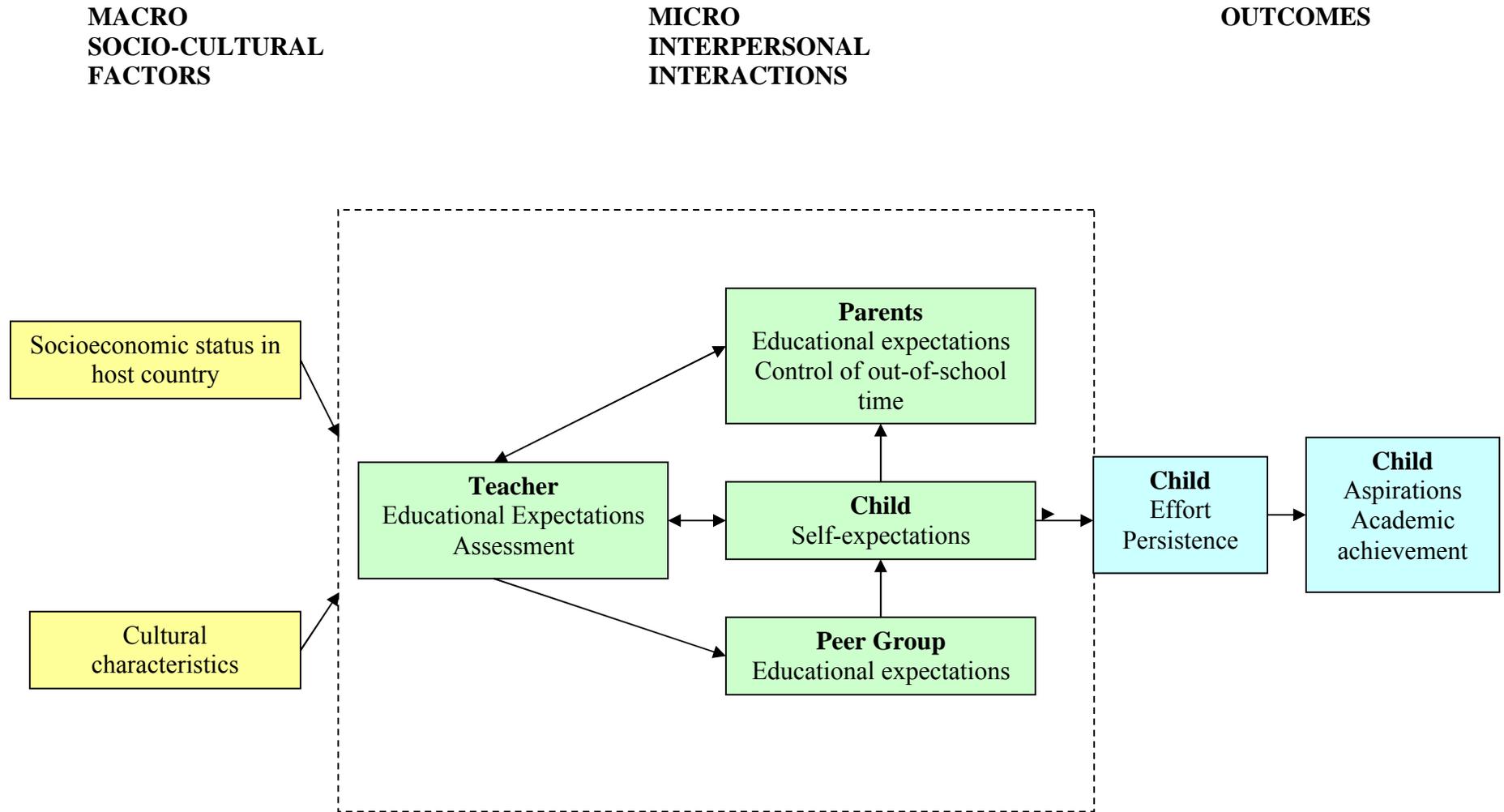Model to explain East Asian Academic Success (Schneider & Lee, 1990)

MACRO   **MICRO**   **OUTCOMES**
SOCIO-CULTURAL   **INTERPERSONAL**
FACTORS   **INTERACTIONS**

Figure 4.
Interrelation of school and parental pressures (Thompson & Bhugra, 2000)
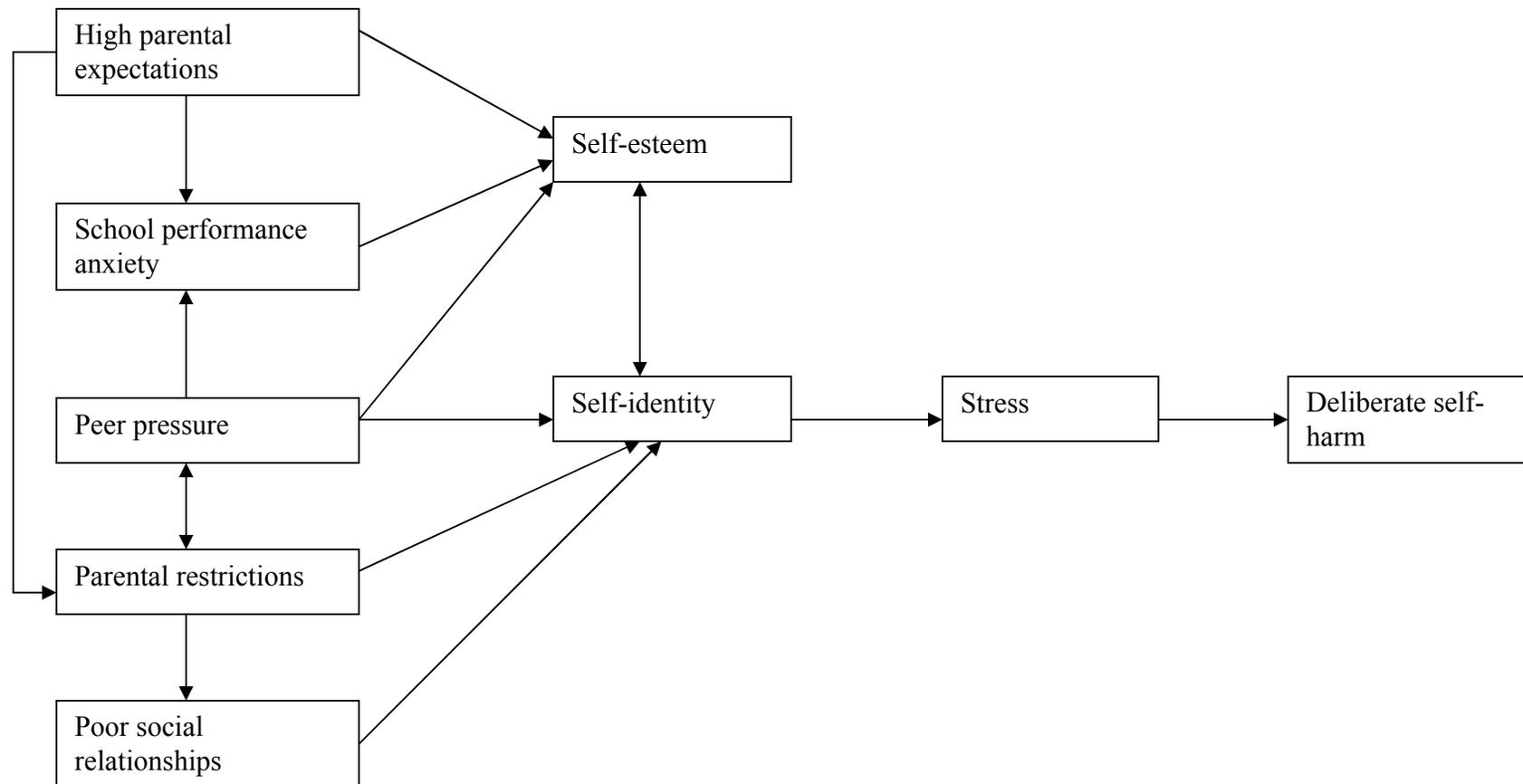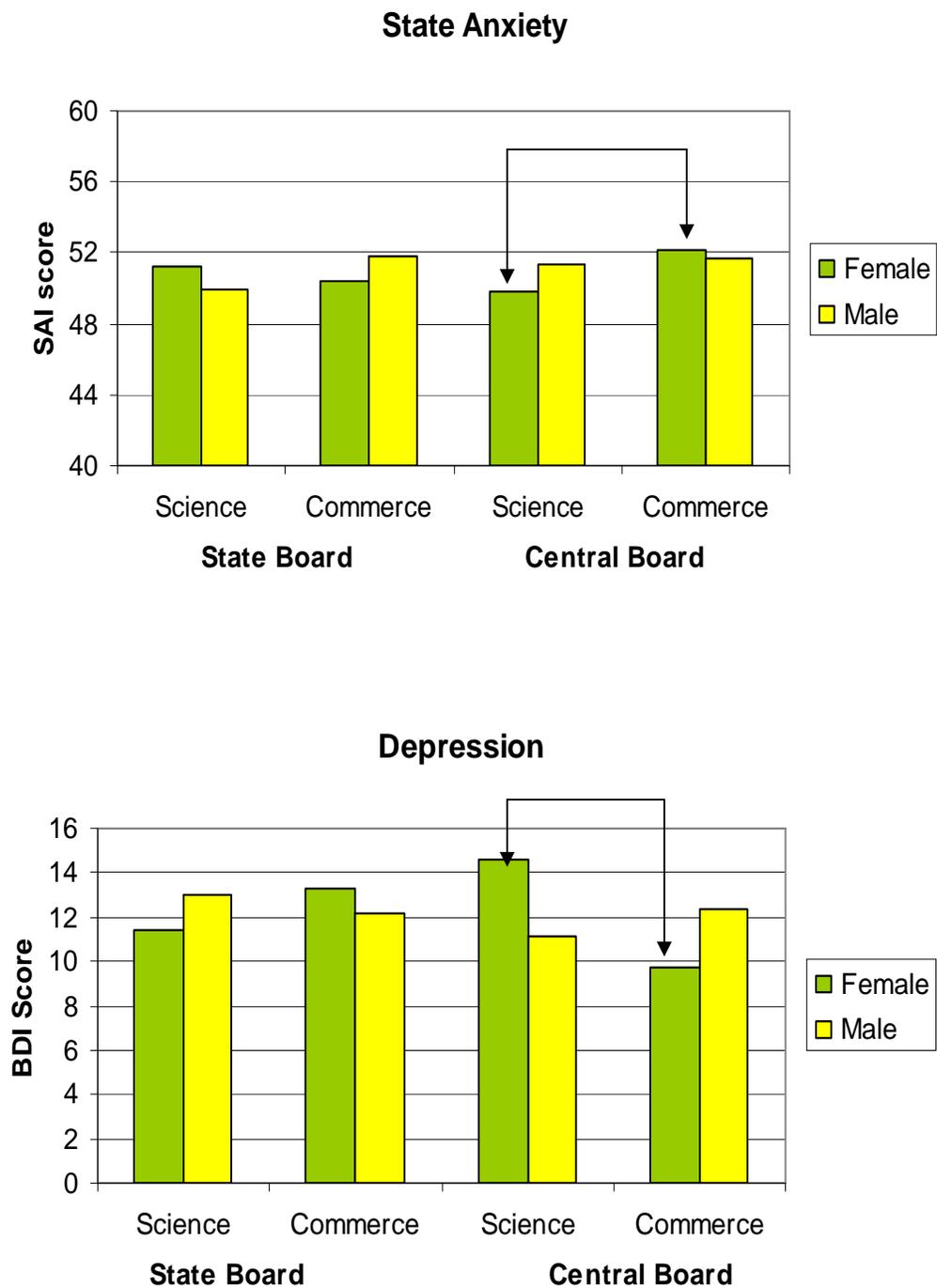
Figure 5.
Three-way interaction for female CB students

State Anxiety

Depression

Figure 6.
Three-way interaction for science CB students

State Anxiety

Depression
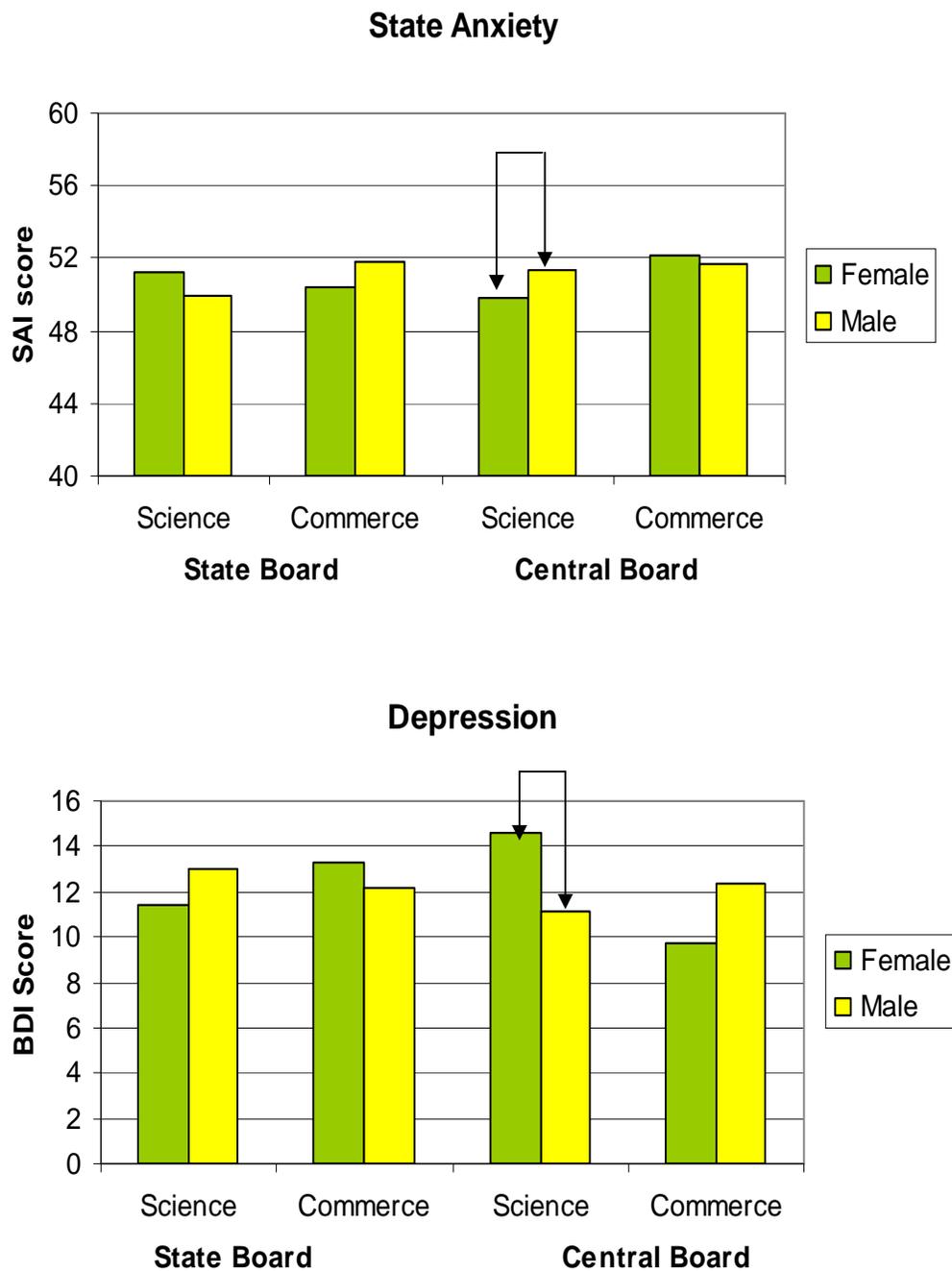
Figure 7.
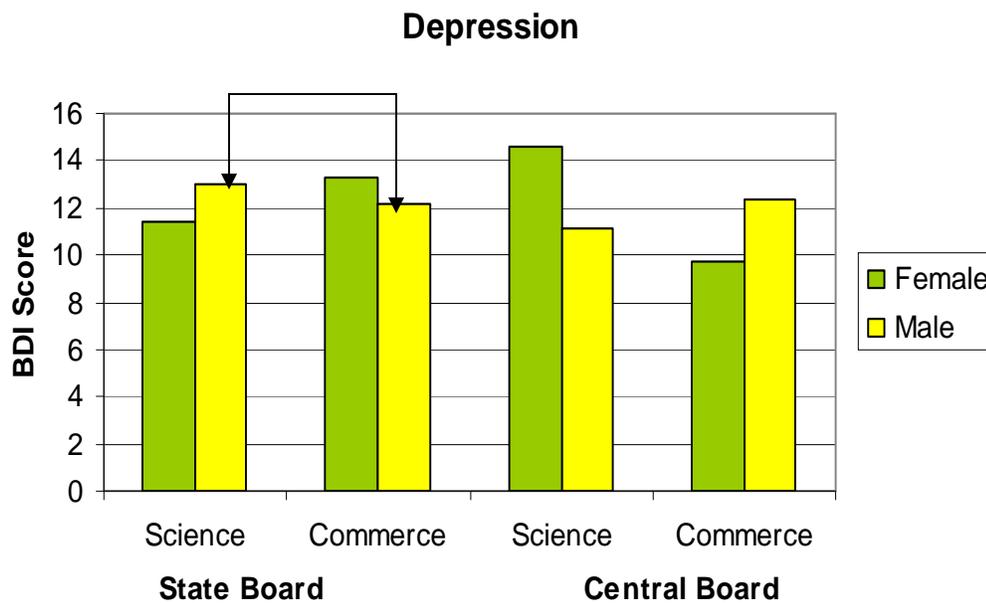Three-way interaction for male SB students

State Anxiety

Depression
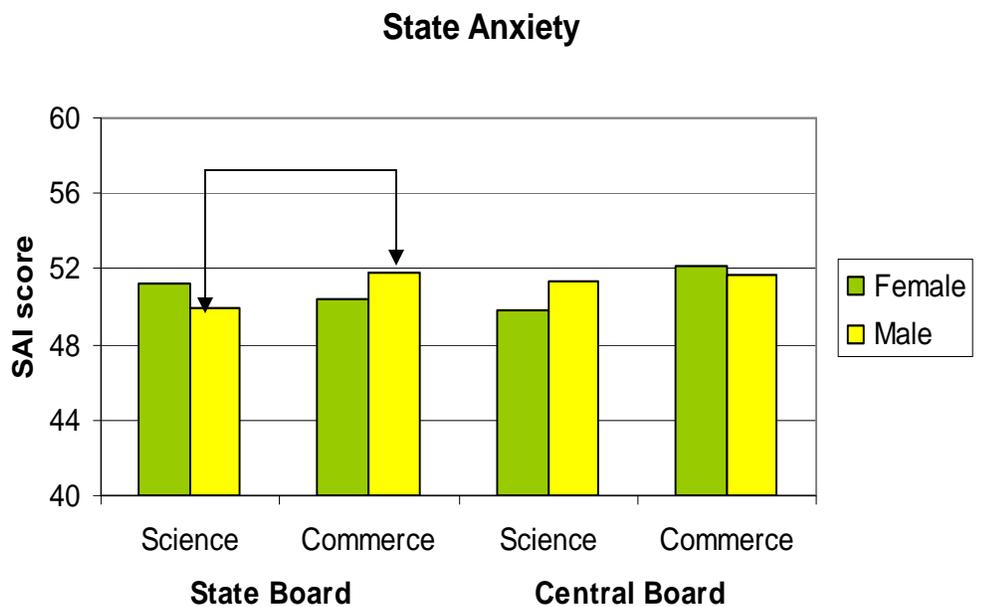
Figure 8.
Three-way interaction for male science students

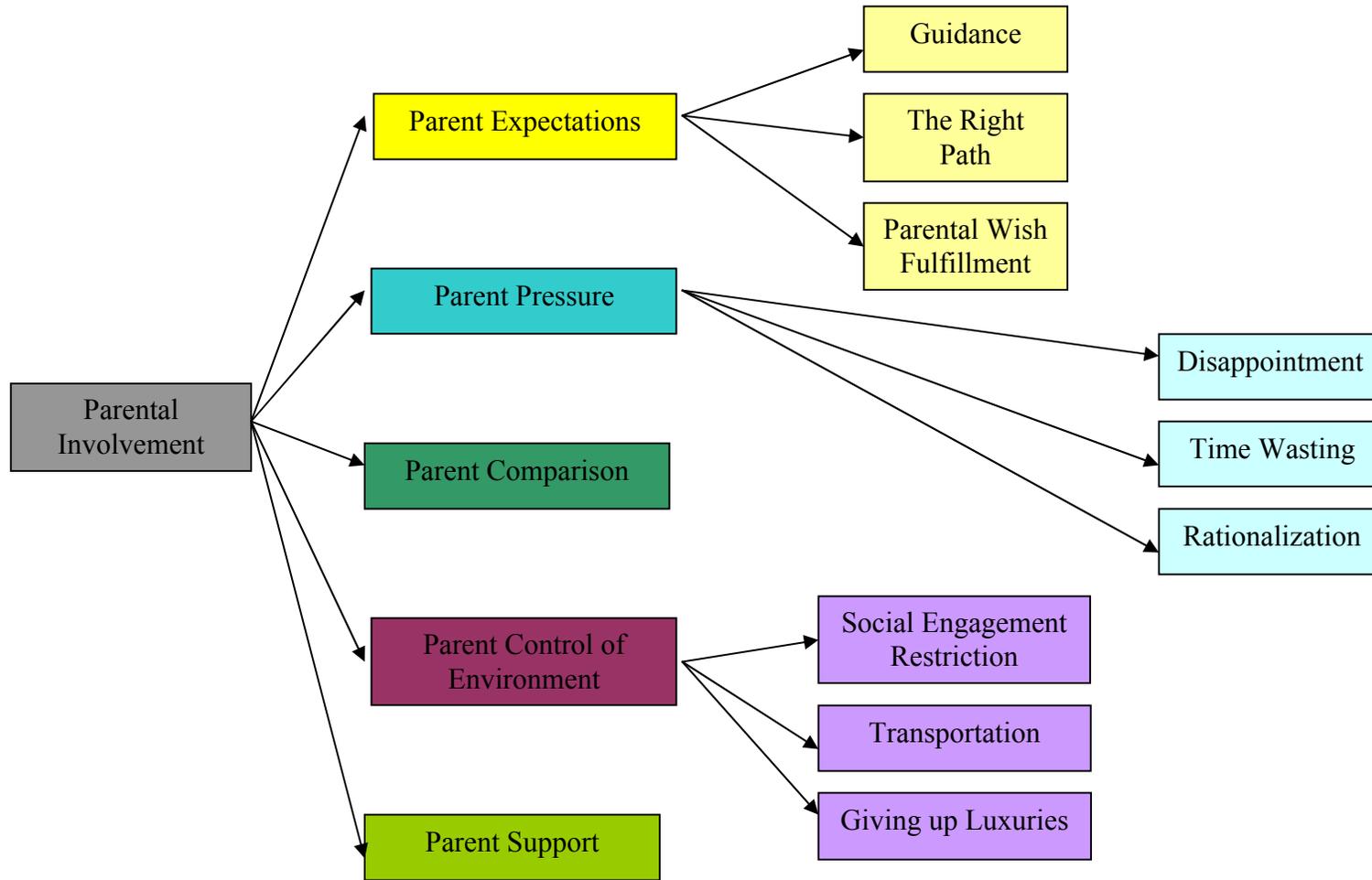## State Anxiety

Depression
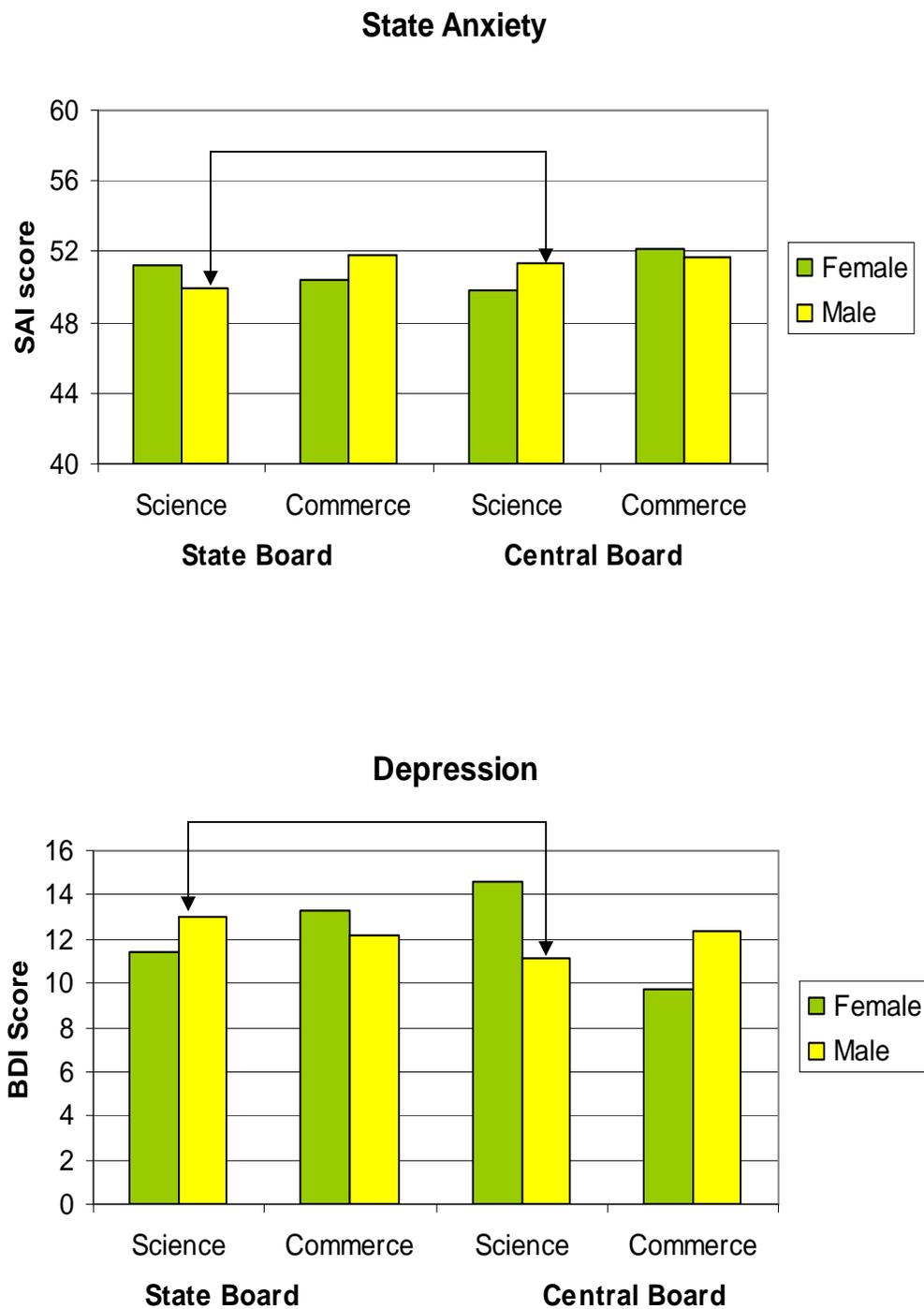
Figure 9.
Parental Involvement Themes

APPENDIX C

MEDIA REPORTS

THE ✵✵ HINDU

The toppers' formula for success

VANI DORAISAMY & MEERA SRINIVASAN

Five students, who emerged toppers in the Plus-Two and entrance examinations this year, explain their winning methods. Vani Doraisamy &

WINNERS ALL: Plus-Two students (from left) Shreya Mehta, Sandhya Suresh, V. Vinod Kumar, T. C. Vivek Sandeep and Arun KumarL . Photo: R. Ragu

Is academic excellence the only hallmark of a good student? In a world where career goals and aspirations are getting increasingly competitive, do students look beyond their curriculum? Do school and examination toppers even realise the need to develop `soft skills', the one area which educationists say is still a grey area even for the best performing students?

The Hindu Education Plus spoke to five students who have topped their class XII and entrance examinations held this year to ascertain the importance of non-academic skills to a student's overall development.

The five students are L. Arun Kumar and T.C. Vivek Sandeep, who topped the State in the Plus-Two examinations; V. Vinodh Kumar, State topper in AIEEE; Sandhya Suresh, who topped the medical stream of the TNPCEE, and Shreya Mehta, who topped her school

(CBSE) in Commerce stream. While Arun, Vivek and Sandhya were from D.A.V. Gopalapuram, Vinodh and Shreya were students of Padma Seshadri Bala Bhavan, K.K.Nagar and Nungambakkam, respectively.

For all five, preparation for the examinations began well ahead of the actual schedule.

Vinodh who was attending coaching classes for IIT-JEE says that those classes helped him in his board examination and other entrance tests as well. He has obtained a good rank in IIT-JEE and hopes to study Mechanical Engineering.

For Sandhya, who had shifted to State Board after class X, preparation began right from day one. She is most likely to pursue medicine in one of the leading institutions in Chennai.

Arun and Vivek felt there was no need for one to get worked up with examinations. Planning schedules effectively, concentrating and relaxing when necessary were their keys to success. Stress would not help and on the other hand, if one enjoyed the process of studying, it was actually a lot of fun, they admit.

Shreya, too, was consistent with her efforts, as she knew there was no entrance examination for students of the Commerce stream. Interestingly, she has taken up a bachelor's degree in Fine Arts. She confidently lists the several career options that she could take up without having to give up her passion for the arts. "I can become a textile designer, graphics expert, art critic or can take up freelancing assignments or even look up to MNCs for a good career choice. I had always wanted to do fine arts," she asserts.

The stream one studied in also made a lot of difference to the mode of study. "Under CBSE, you don't need to do too much of memorising, unlike State Board where preparations have to start at least a year in advance," says Sandhya.

And, not all toppers believed that an engineering or medical degree was the logical next step. What mattered was the degree of one's interest and the aptitude. "Parents and teachers can only help you make up your mind. The ultimate choice has to be yours. You have to choose the course that you think would suit your career aspirations the best," chorus Vivek and Vinodh.

The toppers concede that the new syllabus for Plus-Two examinations this year and the TNPCEE brought in its share of problems. "All teachers may not have been fully prepared to tackle the new syllabus. Also, there was not enough time to get acclimatised," says Vivek. "Despite the scores of revision tests, there still was a problem with time management," Arun adds.

THE 🔳🔳 HINDU

Back

Opinion - News Analysis

Social malaise that needs sensitive coverage

K. Narayanan

It was a reader who alerted me to a significant news report buried in one of the inside pages ("Agrarian crisis, wheat import discussed", May 19, 2006): over one lakh farmers committed suicide in the six years from 1998. The second paragraph of the story said that of the over one lakh suicides reported, 15 to 16 per cent were by farmers. The reader's doubt was — is it gross total of one lakh suicides over six years, or by farmers alone?

Enquiries with the Special Correspondent in Delhi, Sandeep Dikshit, who filed the report, made the picture clear. According to figures read out by Union Agriculture, Consumer Affairs and Food and Public Distribution Minister Sharad Pawar in the Rajya Sabha, suicides reported from 1998 to 2003 (the year which figures are available) ranged from 1.04 lakh to 1.10 lakh every year; farmers' suicides in these years numbered 16,015 to 17,471 a year, totalling over one lakh in six years.

For the national population of one billion the proportion of suicides may appear minuscule, but in absolute terms one lakh is no small number. And behind each one of these tragedies is a complex web of factors.

A day or two after this report appeared came the news of a student's death by suicide following the publication of examination results. Another such incident came two days later. Last week there were more, when some examination results were announced.

For journalists, covering suicides raises many questions. In the first place, should an individual suicide be reported at all? If it is done in private, how does it affect others outside the family and how is it newsworthy or in public interest? If it is a phenomenon, as among farmers, weavers, or goldsmiths, it becomes an issue to be discussed (as is being done by P. Sainath incisively in *The Hindu*, or was done by *Frontline* some time ago). So also in the case of celebrities.

Even when writing about a large number of suicides in one group, where does one draw the line? Will repeated coverage promote "suicide contagion" or the "Werther effect" as

psychologists call it? (Goethe's story of a young dreamer, Werther, who killed himself for lost love led to a spate of suicides by youth.)

The Hindu used to have a policy of not reporting suicides by students after examination results were announced; it was feared that such reporting could be a trigger for more. Such non-reporting is no longer feasible. But the paper's coverage of the tragedies has always been sober and subdued, factual, even when celebrities like TV stars are the victims. In contrast to television coverage of the same events, it does not intrude into the family's privacy.

Total blackout is not desirable, says Dr. Lakshmi Vijayakumar, founder Trustee of Sneha, the suicide helpline in Chennai. Responsible reporting of this "multidimensional malaise with social, religious and cultural reasons" is needed, she says. Her advice is: don't sensationalise, don't describe the method of suicide (such as the chemical used) and don't glorify it.

Behind every suicide is a complex interaction of many factors — mental, physical, family circumstances, substance abuse, other stresses. There is no simple explanation of the causes, Dr. Lakshmi Vijayakumar notes. In reporting students' suicides, underplay the examination failure aspect, and never feature it — "don't make it a seed in vulnerable people," she stresses.

Journalism education has no regular courses on covering suicide. The codes of the Press Complaints Commission (PCC-U.K.) and the Press Council of India are silent on this. A few newspapers mention it in their in-house guidelines. *The Guardian*, for instance, asks its journalists to exercise restraint on reporting suicide or issues involving suicide, bearing in mind the risk of encouraging others.

Differing attitudes to this issue were evident some time ago when three London newspapers published pictures of a woman leaping to her death from a building. The others, including *The Guardian*, did not. A public debate raged over the ethics of such publication and it was taken to the Press Complaints Commission, which did not find substance in the protest. The PCC's decision was widely criticised.

The World Health Organisation (WHO), through its Suicide Project (SUPRE), and the U.K.-based media ethics charity, Presswise Trust, have comprehensive guidelines for journalists on this subject. The American Society of Suicidology and the U.S. Department of Health's Center for Disease Control have also jointly evolved a set of rules.

Some basic conclusions and suggestions emerge:

There are three ways of covering suicide: in graphic detail (as many newspapers in the U.S. still do); not reporting at all; reporting only cases that are genuinely newsworthy (which requires editorial discernment).

Reporting in "an appropriate, accurate and potentially helpful manner by enlightened media can prevent tragic loss of lives by suicides" (Presswise Trust, 2001). It is not coverage per se, but certain types of news coverage that increase suicidal behaviour, WHO points out.

Looking at life beyond grades

ANUKRITI PANDEY

NOW THAT the dust of excitement generated by the CBSE results has settled down and `normal' life has resumed, let us all take a moment to reflect upon a very serious problem. A problem that literally is a matter of life and death.

The class XII results which apparently are the `single' source of determining the future of 17 year olds across the country seem to be significant enough to drive those very 17 year olds to another phenomenon, that of suicide.

The act of suicide and its causes do not remain a case for the discipline of psychology anymore. Each year class XII students killing themselves a day or two after the results are announced is an unhealthy social phenomenon and not just a stray case of individual deviant behaviour. This is a serious situation that calls for sincere attention.

These suicide cases cannot be treated as aberrations where each successive year on an average 10 students take their own lives because of `depression' due to results. That is a naïve and to a certain extent insensitive approach to the problem. The causes are much more deep rooted than just the young person's frame of mind on the day of the results. Suicide in this case is not an act of impulse.

Pressures

We have to pay attention to the framework within which the development both academic and personal of the young people (who have the fortune of attending high school) is taking place in our society. What are the kind of pressures that we are imposing both on our young and ourselves? As parents, is it our own sense of lack of accomplishment in certain cases or the desire to see our success level being taken forward by the offspring?

As educators, at what cost do we want to see our institution top the `merit-list'? We have to realise that schools merely do not possess marks fetching machines but potential painters, artists, actors, doctors, engineers, entrepreneurs, development workers and most important normal human beings who require careful grooming. Their potential in no way can be judged by one final examination that is taken at the end of the school career.

Free career counselling offered for failed students

It was organised by the NSS wing and Psychology Department of Madras University

Meera Srinivasan

CHENNAI: "Failure in examinations should by no means shatter a student's confidence level" — this was the basic message conveyed to students at the free career counselling programme organised by the NSS wing and Psychology Department of the University of Madras.

The programme, conducted for candidates who failed in their Class Ten or Class Twelve examinations, was aimed at boosting their confidence ahead of the upcoming supplementary examinations and guiding them regarding various career prospects.

Despite the significant number of failures in different streams, only about 100 students came for the sessions. In Chennai itself, 6,513 students failed in the HSC (Class Twelve) examinations this year. Nearly 42,500 candidates appeared.

Conducted for the fifth consecutive year, the programme featured sessions designed to address different academic and emotional challenges faced by students.

Inaugurating the session here on Tuesday, S.P. Thyagarajan, Vice-Chancellor, University of Madras, said all students had equal capacity but certain constraints prevented some of them from clearing examinations. He told them not to give up.

M. Ramesh Prabha, Managing Director of Galaxy Communications, said students who had gathered courage to attend such a programme had won half the battle. "Academic excellence is merely incidental in one's success. Several people who did not obtain high scores have made it big in life," he added.

Principal of New College A. Khader Basha

S.P. Thyagarajan, Vice-Chancellor, University of Madras, interacts with students at a free career counselling programme in Chennai on Tuesday.
— PHOTO: R.RAGU

said though he didn't clear his Pre University Course in the first attempt, he went on to become the head of an institution and therefore, students should not feel dejected.

"So what if my daughter did not pass in one subject. She will try again and perform well. There is no use scolding children for their [poor] marks," said a parent.

Said a student with eyes downcast, "I want to do a course in Finance. Such sessions will help me gain confidence." Several students said conduct of the supplementary examinations in June and July was helpful as they could join college along with the others.

Students from Chennai and the outskirts attended the programme. Organisers said they planned to extend the programme to rural areas.

THE HINDU

Karnataka - Bangalore

Teenager ends life after failing in CBSE exam

Staff Reporter

BANGALORE: A 19-year-old who failed his Class 12 examination of the Central Board of Secondary Education (CBSE), allegedly committed suicide by hanging himself in Mahalakshmi Layout police station limits on Tuesday night.

The CBSE results were announced on Tuesday.

The police gave his name as M.N. Shivaraj Kumar, a native of Madapura in Channapatna taluk of Bangalore Rural district.

He was a student of Navodaya School in Doddaballapur. He had failed in the Economics paper.

After completing his examination, Kumar was working as a clerk in a private company situated near Mahalakshmi Layout bus stand.

He and his colleague were living in a room in the same building.

On Wednesday morning, passers-by noticed Kumar's body hanging from a steel ladder on the terrace of his office building and alerted the police.

Kumar had left a note saying that he was taking the extreme step as he had failed his examination, the police said.

THE HINDU

Karnataka - Bangalore

Failed PU student ends life

Staff Reporter

FOR JUSTICE: NSUI members staging a dharna in front of the Mahatma Gandhi statue in Bangalore on Thursday demanding steps to prevent suicides among students. — Photo: K. Gopinathan

BANGALORE: Yet another student, who failed in her second year PU examination, committed suicide at her house in Byatarayanapura police station limits on Wednesday.

The police gave her name as Rajeshwari (18), a resident of Pantharpalya on Mysore Road. Rajeshwari hanged herself with a sari from a ceiling fan. Rajeshwari's mother Kamalamma, a widow, returned home from work around 7 p.m. and found her daughter dead. While Kamalamma is a construction worker, her two sons were autorickshaw drivers, police said.

THE HINDU

Karnataka - Bangalore

Student ends life hours after II PU examination

Staff Reporter

CRIMENOTES

BANGALORE: Madhu, 18-year-old II PU student, committed suicide on Thursday in Madivala police station limits, following a dismal performance in her Chemistry examination earlier in the day.

Madhu, daughter of head constable at Karnataka State Reserve Police (KSRP), Venkatesh, was found hanging from the ceiling at 4 p.m.

She reportedly took this extreme step immediately after she returned home from the examination. Her parents were not present at that time.

THE ❧❦❧ HINDU

Back

New Delhi

Student kills self

NEW DELHI: A Class VII student of Sarvodaya Vidyalaya at Sector 6 in Rohini allegedly committed suicide by hanging himself at his residence in Meer Singh Colony on Monday evening. According to the police, Vivek got his report card in the morning and found that he had failed in the examinations. The boy had an argument with his parents after which he reportedly hanged himself.

10-yr-old kills himself, cops blame stress
[20 Mar, 2007 2337hrs IST TIMES NEWS NETWORK]

LUDHIANA: Education stress may have just claimed its youngest victim. Ten-year-old Trilok, a student of Class III in Ludhiana's Janata Model School, was found hanging from the ceiling of his house on Monday evening. Police, after preliminary investigations, said classroom pressure most likely drove him to death.

Dhuni Ram, the boy's father who worked as a daily wager, said Trilok had been resisting going to school for sometime, saying he was unable to cope. Ram, a migrant labourer from Bihar, said he believed pressure in class may have led to his son's death.

APPENDIX D

INTERNAL REVIEW BOARD MATERIALS

THE UNIVERSITY OF
ARIZONA.
TUCSON ARIZONA

Human Subjects Protection Program
http://www.irb.arizona.edu

1350 N. Vine Avenue
P.O. Box 245137
Tucson, AZ 85724-5137
(520) 626-6721

31 May 2006

Abha Rao, M.S.
Advisor: Mimi Nichter, Ph.D.
Department of Family and Consumer Sciences
Family and Consumer Sciences, 210
P.O. Box 210033

RE: BSC B06.159 BEING A HIGH SCHOOL STUDENT IN CHENNAI, INDIA: ACADEMIC
EXPECTATIONS AND MENTAL HEALTH

Dear Ms. Rao:

We received your research proposal as cited above. The procedures to be followed in this study
pose no more than minimal risk to participating subjects and have been reviewed by the
Institutional Review Board (IRB) through an Expedited Review procedure as cited in the
regulations issued by the U.S. Department of Health and Human Services [45 CFR Part
46.110(b)(1)] based on their inclusion under research category 6 and 7. As this is not a treatment
intervention study, the IRB has waived the statement of Alternative Treatments in the consent
form as allowed by 45 CFR 46.116(d) and the need for signed informed consent has been waived for
part of the study, as the research involves no risks or procedures for which consent is normally
required outside of the research context as stated in 45 CFR 46.117(c)(2). Although full Committee
review is not required, a brief summary of the project procedures is submitted to the Committee
for their endorsement and/or comment, if any, after administrative approval is granted. This
project is approved with an **expiration date of 31 May 2007.**   Please make copies of the attached
IRB stamped consent documents to consent your subjects.

The Human Subjects Committee (Institutional Review Board) of the University of Arizona has a
current Federal Wide Assurance of compliance, number FWA00004218, which is on file with the
Department of Health and Human Services and covers this activity.

Approval is granted with the understanding that no further changes or additions will be made
either to the procedures followed or to the consent form(s) used (copies of which we have on file)
without the knowledge and approval of the Human Subjects Committee and your College or
Departmental Review Committee. Any research related physical or psychological harm to any
subject must also be reported to each committee.

A university policy requires that all signed subject consent forms be kept in a permanent file in an
area designated for that purpose by the Department Head or comparable authority. This will
assure their accessibility in the event that university officials require the information and the
principal investigator is unavailable for some reason.

Sincerely yours,

Theodore J Glattke, Ph.D.
Chair, Social and Behavioral Sciences Human Subjects Committee

TJG:pm
cc: Departmental/College Review Committee

VIDYA MANDIR
Senior Secondary School
M.L.C. School Society (Regd.)
(Affiliated to Central Board of
Secondary Education, New Delhi)

VIDYA MANDIR
Years of Excellence
in Education

Ref. : ....

Date : ....

VM / 06

15.06.2006

To :

The Human Subjects Protection Prograame
University of Arizona
Tucson
AZ 85711
U S A

Dear Sir / Madam,

I have been approached by Ms. Abha Rao to permit her to conduct research for her dissertation in Vidya Mandir. Her project is titled 'Being a high school student in India : Academic Expectations and Mental Health Outcomes'. She has requested permission to administer short surveys to all 12th Standard students to interview.

I hereby grant permission for Miss. Abha Rao to conduct research for her dissertation in our school.

Yours sincerely

B. Raghunandan
Principal

124, Royapettah High Road, Mylapore, Chennai - 600 004. Phone : 2498 078, 2498 0834, Email : vmmyl@vsnl.com

Sishya

New No. 2, (Old No. 15), PADMANABHA NAGAR, 2ND STREET, ADYAR, CHENNAI - 600 020
PHONE : 24912652   FAX : 044 24919544   E-mail : sishya@md3.vsnl.net.in

19.06.2006

To

The Human Subjects Protection Programme
University of Arizona
Tucson
AZ 85711
USA

Dear Sir / Madam,

Ms.Abha Rao has been given permission to conduct research for her project titled `Being a High School Student in India:Academic Expectations and Mental Health Outcomes` in our school.

She also got permission to administer short surveys to XII students and to have an interview with them.

Thanking you,

Yours faithfully,

Mrs Omana Thomas
Principal

SIR SIVASWAMI KALALAYA

Senior Secondary School

Affiliated to the Central Board of Secondary Education, New Delhi (No.19454)
"SUDHARMA" NO. 5, Sundareswarar Street, Mylapore,
Chennai - 600 004. Phone : 24641257   19.6.2006.

To

The Human Subjects Protection Programme
University of Arizona
Tucson
AZ 85711
USA

Dear Sir / Madam,

Ms. Abha Rao has been given permission to conduct research for her project titled `Being a High School Student in India:Academic Expectations and Mental Health Outcomes' in our school.

She also got permission to administer short surveys to XII students and to have an interview with them.

Thanking you,

Yours faithfully,

(R. ARUNA)
VICE-PRINCIPAL.

☎ : 2847 4808
2847 1300

PUNJAB ASSOCIATION'S

GILL ADARSH MAT. HR. SEC. SCHOOL

46, V.M. STREET, ROYAPETTAH, CHENNAI - 600 014.

Ref. No.........................   Date **21.06.06**...............

The Human Subjects Protection Programme
University of Arizona
Tucson
AZ 85711
USA

Dear Sir/Madam,

      Ms. Abha Rao has been given permission to conduct research for her project titled 'Being a High School Student in India: Academic Expectations and Mental Health Outcomes' in our school.

      She also got permission to administer short surveys to XII students and to have an interview with them.

      Thanking you,

Yours faithfully,

PRINCIPAL 21/6/06
GILL ADARSH SCHOOL

St. Michael's Academy

Matriculation Higher Secondary School
Adyar, Chennai - 600 020. Tamil Nadu
Tel. No. 24915331 / 24402181 Fax : 24452909
E-Mail : principal@stmichaelsacademy.com

Date : ....

To
The Human Subjects
    Protection Programme
University of Arizona
Tucson
AZ 85711
USA

Dear Sir/Madam

    Ms.Abha Rao has been given permission to conduct research for her project titled 'Being a High School Student in India: Academic Expectations and Mental Health Outcomes' in our school.

    She also got permission to administer short surveys to XII students.

Thank you

Yours sincerely

Bro.Dennis Joseph
Principal

PRINCIPAL
NEW No. 2 (OLD No
Sa/- ST MICHAEL'S ACADEMY
CANAL CROSS R
4th N ROAD, GANDHI R
ADYAR CHENNAI 600 020
(O : 249 533

SRI SANKARA SENIOR SECONDARY SCHOOL

(Affiliated to the Central Board of Secondary Education, New Delhi)

21, Vasantha Press Road, Chennai - 600 020.

SUBALA ANANTHANARAYANAN, M.Sc., M.Phil., B.Ed.,
Principal

Date : 30. 06. 06.

The Human Subjects Protection Programme
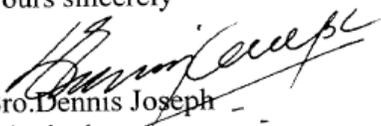University of Arizona
Tucson
AZ 85711
USA

Dear Sir/Madam

Ms. Abha ao has been given permission to conduct research for her project titled 'Being a High School Student in India. Academic Expectations and Mental Health Outcomes' in our school.

She also got permission to administer short surveys to XII students and to have an interview with them.

Thanking you

Yours faithfully

Subala Ananthanarayanan

PRINCIPAL

APPENDIX E

SURVEY MATERIALS

PARTICIPANT DISCLAIMER FORM

Title of project: Exploration of academic expectations for 12th standard students

Dear participant,

You are being invited to voluntarily participate in the above-titled research study. The purpose of the study is to explore the academic expectations of 12th standard students in Chennai. You are eligible to participate because you are a 12th standard student in Chennai.

If you agree to participate, your participation will involve the completion of the questionnaire that will take approximately 30 minutes to complete. In order to protect your confidentiality, the researcher will not collect your name and other personal identifying information. Only the researcher will have access to the information that you provide. Information that you provide will be locked in a cabinet in a secure place.

Any questions you have will be answered and you may withdraw from the study at any time. There are no known risks from your participation and no direct benefit from your participation is expected. There is no cost to you except for your time, and you will not be compensated for your participation. If, upon the completion of this survey you would like to talk to someone about your feelings, contact information for local counselors is provided on the back of this sheet.

You can obtain further information from the researcher, Abha Rao, at asrao@email.arizona.edu. If you have questions concerning your rights as a research subject, you may contact the University of Arizona Human Subjects Protection Program at driggers@email.arizona.edu or peteman@email.arizona.edu.

By participating in this study, you are giving permission for the researcher to use your information for research purposes. You may tear-off this sheet for your records.

Thank you.

Abha S. Rao

Abha Rao

APPROVED BY UNIVERSITY OF AZ IRB
THIS STAMP MUST APPEAR ON ALL
DOCUMENTS USED TO CONSENT SUBJECTS.
DATE: 5/31/06 EXPIRATION: 5/31/07

Counseling information

Sneha

Free 24-hour helpline: 2835-2345

Address: New No. 7 Besant Road
         Royapettah
         Chennai 600014

Email: help@snehaindia.org

Dr. T. R. Suresh

On call at Vijaya Hospital and Sooriya Hospital (call the hospital for an appointment)

Emergency: 2485-0634
              2485-2965

Survey of 12th standard students

What is your age? _____

What is your gender?   MALE   FEMALE

What would you say your grades in all your classes are? (Mark the best answer)
___ Mostly As
___ Some As and Bs
___ Mostly Bs
___ Some Bs and Cs
___ Mostly Cs
___ Some Cs and Ds
___ Mostly Ds
___ Some Ds and Fs
___ Mostly Fs

Compared to your classmates, how well do you think you are performing in classes?

1	2	3	4	5
Much worse	Little worse	About the same	Little better	Much better

Did you change school for 11th and 12th standards?   YES   NO
        If NO, please skip the next three questions
        If Yes, please answer the next three questions
What kind of school were you in? (State Board, CBSE, ICSE) _____
What kind of school are you in now? (State Board, CBSE, ICSE) _____
Why did you decide to change schools?

Do you attend tuitions? YES   NO
When did you first start attending tuitions? (Month/Year) _____ /_____
What subjects do you attend tuitions for?

Do you attend coaching classes?   YES   NO
When did you first start attending coaching classes? (Month/Year) _____/_____
What exams do you attend coaching classes for?

How many hours a week do you spend in (approx.):
Coaching classes?   _____   Tuitions?   _____   Leisure?   _____

What do you do in your free time?

What do you do want to do after finishing school?
_____ Go to vocational school   _____ Get a job
_____ Go to college   _____ Not sure

Do you think that the coming year (12th standard) will be stressful?   YES   NO

If yes, what is the most stressful part of this year?

What subject would you like to study in college?
_____ Law
_____ Medicine
_____ Engineering (Civil, Mechanical, Chemical, etc.)
_____ Computer Sciences
_____ Natural Sciences (Physics, Chemistry, Biology, etc.)
_____ Biotechnology (Microbiology, Genetics, Bioinformatics, etc.)
_____ Commerce (Economics, Marketing, Accounting, etc.)
_____ Social Sciences (Sociology, Psychology, History, etc.)
_____ Design (Architecture, Interior Design, Fashion Design, etc.)
_____ Communication (Mass or Visual, Journalism, etc.)
_____ Other (Please specify) _____

How likely is it that you will get into a program of your choice?

1	2	3	4	5
Not at all likely		Somewhat likely		Extremely likely

What subject would your parents like you to study in college?
_____ Law
_____ Medicine
_____ Engineering (Civil, Mechanical, Chemical, etc.)
_____ Computer Sciences
_____ Natural Sciences (Physics, Chemistry, Biology, etc.)
_____ Biotechnology (Microbiology, Genetics, Bioinformatics, etc.)
_____ Commerce (Economics, Marketing, Accounting, etc.)
_____ Social Sciences (Sociology, Psychology, History, etc.)
_____ Design (Architecture, Interior Design, Fashion Design, etc.)
_____ Communication (Mass or Visual, Journalism, etc.)
_____ Other (Please specify) _____

How likely is it that you will get into a program of their choice?

1	2	3	4	5
Not at all likely		Somewhat likely		Extremely likely

If you and your parents want different things for you after school, how do you handle the situation?

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement which best describes the way you have been feeling in the *last week, including today.* Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. *Be sure to read all the statements in each group before making your choice.*

0   I do not feel sad
1   I feel sad
2   I am sad all the time and can't snap out of it
3   I am so sad and unhappy that I can't stand

0   I am not particularly discouraged about the future
1   I feel discouraged about the future
2   I feel I have nothing to look forward to
3   I feel that the future is hopeless and that things cannot improve

0   I do not feel like a failure
1   I feel like I have failed more than the average person
2   As I look back on my life, all I can see is a lot of failures
3   I feel I am a complete failure as a person

0   I get as much satisfaction out of things as I used to
1   I don't enjoy things the way I used to
2   I don't get real satisfaction out of anything anymore
3   I am dissatisfied or bored with everything

0   I don't feel particularly guilty
1   I feel guilty a good part of the time
2   I feel quite guilty most of the time
3   I feel guilty all of the time

0   I don't feel I am being punished
1   I feel I may be punished
2   I expect to be punished
3   I feel I am being punished

0   I don't feel disappointed in myself
1   I am disappointed in myself
2   I am disgusted with myself
3   I hate myself

0   I don't feel I am worse than anybody else
1   I am critical of myself for my weakness or mistakes
2   I blame myself all the time for my faults
3   I blame myself for everything bad that happens

0   I don't cry more than usual
1   I cry more than I used to
2   I cry all the time now
3   I used to be able to cry, but now I can't cry even though I want to

0   I am no more irritated now than I ever am
1   I get annoyed or irritated more easily than I used to
2   I feel irritated all the time now
3   I don't get irritated at all the things that used to irritate me

0   I have not lost interest in other people
1   I am less interested in other people than I used to be
2   I have lost most of my interest in other people
3   I have lost all of my interest in other people

0   I make decisions about as well as I used to
1   I put off making decisions more than I used to
2   I have greater difficulty in making decisions than before
3   I can't make decisions at all anymore

0   I don't feel I look any worse than I used to
1   I am worried that I am looking old or unattractive
2   I feel that there are permanent changes in my appearance that make me look unattractive
3   I believe that I look ugly

0   I can work about as well as before
1   It takes an extra effort to get started to do something
2   I have to push myself very hard to do anything
3   I can't do any work at all

0   I can sleep as well as usual
1   I don't sleep as well as I used to
2   I wake up 1-2 hours earlier than usual and find it hard to go back to sleep
3   I wake up several hours earlier than I used to and cannot get back to sleep

0   I don't get more tired than usual
1   I get tired more easily than I used to
2   I get tired from almost anything
3   I am too tired to do anything

0   My appetite is no worse than usual
1   My appetite is not as good as it used to be
2   My appetite is much worse now
3   I have no appetite at all anymore

0   I haven't lost much weight, if any, lately   I am purposely trying to lose
1   I have lost more than 2 kgs   weight by eating less
2   I have lost more than 4 kgs   YES   NO
3   I have lost more than 7 kgs

0   I am no more worried about my health than usual
1   I am worried about physical problems such as aches and pains, or upset stomach, or
    constipation
2   I am very worried about physical problems and it's hard to think of much else
3   I am so worried about my physical problems that I cannot think of anything else

Directions: A number of statements which people have used to describe themselves are given below. Read each statement and then circle the correct number to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	Not at all	Somewhat	Moderately so	Very much so
1. I feel pleasant	1	2	3	4
2. I feel nervous and restless	1	2	3	4
3. I feel satisfied with myself	1	2	3	4
4. I wish I could be as happy as others seem to be	1	2	3	4
5. I feel like a failure	1	2	3	4
6. I feel rested	1	2	3	4
7. I am "calm, cool and collected"	1	2	3	4
8. I feel that difficulties are piling up so that I cannot overcome them	1	2	3	4
9. I worry too much over something that really doesn't matter	1	2	3	4
10. I am happy	1	2	3	4
11. I have disturbing thoughts	1	2	3	4
12. I lack self-confidence	1	2	3	4
13. I feel secure	1	2	3	4
14. I make decisions easily	1	2	3	4
15. I feel inadequate	1	2	3	4
16. I am content	1	2	3	4
17. Some unimportant thought runs through my mind and bothers me	1	2	3	4
18. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4
19. I am a steady person	1	2	3	4
20. I get in a state of tension or turmoil as I think over recent concerns and interests	1	2	3	4

Directions: A number of statements which people have used to describe themselves are given below. Read each statement and then circle the correct number to the right of the statement to indicate how you feel *right now*, at this moment. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

	Not at all	Somewhat	Moderately so	Very much so
21. I feel calm	1	2	3	4
22. I feel secure	1	2	3	4
23. I am tense	1	2	3	4
24. I feel strained	1	2	3	4
25. I feel at ease	1	2	3	4
26. I feel upset	1	2	3	4
27. I am presently worrying over possible misfortunes	1	2	3	4
28. I feel satisfied	1	2	3	4
29. I feel frightened	1	2	3	4
30. I feel comfortable	1	2	3	4
31. I feel self-confident	1	2	3	4
32. I feel nervous	1	2	3	4
33. I am jittery	1	2	3	4
34. I feel indecisive	1	2	3	4
35. I am relaxed	1	2	3	4
36. I feel content	1	2	3	4
37. I am worried	1	2	3	4
38. I feel confused	1	2	3	4
39. I feel steady	1	2	3	4
40. I feel pleasant	1	2	3	4

Is there anything else you would like to add that has not already been asked?

Thank you for your participation!

APPENDIX F

INTERVIEW MATERIALS

Student Interview Questions

Everyday life
What is a typical weekday like for you?
What is a weekend day like?
Is this similar to or different from your classmates?
What do you do in your free time?

Family
What future expectations does your family have of you?
How much does the status of the family depend on your performance?
Do you have a brother or sister who has completed school recently?
[If yes]
>   Can you tell me a little more about their experience?

Future
What do you want to do after school?
[If college]
>   What college do you want to go to?
>   And after college what do you want to do?
[If not college]
>   Where would you like to go after school?
If you could study any subject, what would you want to study?
Do you think it is likely that you will achieve these goals? Why or why not?

Have you performed any pujas or taken any vows at the temple?

How confident do you feel about the coming school year?

Parents
Are your parents involved in your schoolwork?
>   In what ways are they involved?
>   [Is their involvement sometimes just too much?]
[Do your parents already have a career in mind for you, or are they open-minded?]
What do your parents want you to do after school?
What do you want to do after school?
[If parent goals are different from student goals]
>   Since you and your parents want different things for you, how do you handle this
>   situation?
[Who do your parents compare you to?]
Does your mother or father schedule their time differently because you are in 12th
standard?
Are you excused from household chores this year?

Peers
Compared to your classmates and/or friends, how good a student do you think you are?

Do your friends come to tuition too?
Do you talk to your friends about plans for college?
Are you worried about any of your friends?
Do you talk to your friends about this?

School
Did you change schools for 11th and 12th standard?
[If yes]
        Why did you leave your old school?
        Why did you choose your current school?
[If no]
        Did you consider leaving your school?
        [If yes]
        Why did you remain in the same school?

Tuitions
Do you go to tuitions?
What subjects do you go to tuition for?
Do you find it necessary to go to tuition?
Do you feel that tuition is helpful?
        How is it helpful?

Somatic symptoms
How well do you sleep these days?
Has your diet changed this year?
Are you taking any medications for stress?

Parent Interview Questions

I hear that a lot of parents whose children are in the 12th standard are anxious or nervous about this year – how do you feel about the coming year?

School
Did your child change schools for 11th and 12th standard?
      How was this decision made?

Involvement
Are you involved in your child's schoolwork?
      In what ways are you involved?
Have you made changes in your life to accommodate your child's schoolwork or school day?
      Can you please describe these changes? [Try to get at gender differences]

Peers
Compared to other students, how well does your child perform?
[If comparatively low]
      Does this concern you?

Future
What do you want your child to do after school?
What does your child want to do after school?
[If parents and children have different goals]
      How do you handle this situation?
How likely is it that your child will achieve these goals?

Tuition
How was the decision to send your child to tuitions made?
Do you think tuitions are necessary for your child?
Does your child benefit from tuitions?
      In what ways are tuitions beneficial?

Is there anything else you would like to add with respect to your child's education?

Teacher/School Administrator Interview Questions

Do you think having high marks are necessary to succeed in life?

Expectations
Does your school have high expectations for students in your school?
Do you think the students in your school have high expectations for themselves?
Newspapers and magazines regularly report that students taking exams are 'depressed' and 'stressed out.' Do you think this is the case at your school?
　　　How does the school administration respond to this situation?
　　　How do teachers respond to this situation?

Tuition
Do you find that students in your school take tuitions?
　　　Why do you think so?
Do you think tuitions are beneficial?
　　　How are tuitions beneficial?

School
Did a lot of students leave or join your school for 11th and 12th standards?
　　　Why do you think students made this decision to stay or leave?
How much schoolwork do the students do outside of school hours?
Do you think that the education that students are getting at your school will help them achieve their goals?

Overall, do you think things have changed since you started teaching? Please describe.

Tuition Instructor Interview Questions

What subjects do you teach tuitions in?
How many students do you have?

Popularity of tuitions
Why do you think students take tuitions?
Has the number of students in your tuition increased or decreased in the last 10 years?
　　　Why do you think so?
What do you offer to your students that other tuitions do not?

School vs. Tuition
Do you have a regular teaching position at a school?
　　　Do some of the students from your school classes also attend your tuitions?
　　　Why do they take tuitions in addition to your school classes?
What can you offer in tuitions that students cannot have at school?

Where do you think tuitions fit in the overall educational system?
Overall, do you think things have changed since you started teaching? Please describe.

APPENDIX G

CONSENT FORMS

STUDENT CONSENT FORM

Project Title: **Being a high school student in Chennai, India**

You are being asked to read the following material to ensure that you are informed of the nature of this research study and of how you will participate in it, if you consent to do so. Signing this form will indicate that you have been so informed and that you give your consent to participate in the interview and be audio taped. Federal regulations in the US require written informed consent prior to participation in this research study so that you can know the nature and risks of your participation and can decide to participate or not participate in a free and informed manner.

PURPOSE
You are being invited to participate voluntarily in the above-titled research project. The purpose of this project is to explore the academic expectations and mental health outcomes for high school students in Chennai, India.

SELECTION CRITERIA
The Principal Investigator will discuss the requirements for participation in this study with you. To be eligible to participate, you must be a 12th standard student between the ages of 16 and 18. A total of 36 students will be enrolled in this study.

PROCEDURE
The following information describes your participation in this study. You complete a short form providing demographic information. You will then be interviewed for 45-60 minutes, and the interview will be audio taped. The researcher will also take notes during the interview. At the end of the interview the participant will be thanked. The data that is collected will have no link to your identity, other than your voice on the tape, so your responses will remain confidential.

RISKS
There are no risks to you from your participation.

BENEFITS
There is no direct benefit to you from your participation. The proposed study, however, will broaden our knowledge and understanding of the pressures affecting Indian high school students. This information can be used in developing effective academic and personal counseling programs for high school students.

CONFIDENTIALITY
Any information that you share with the researcher will be coded, and not be associated with personally identifying information other than your voice on the recording. The information that you provide will be accessible only to the researcher.

PARTICIPATION COSTS AND SUBJECT COMPENSATION

There is no cost to you for participating except your time. You will be given Rs. 100 gift certificates for your participation.

CONTACTS

You can obtain further information from the principal investigator Abha Rao, Ph.D. Candidate, at abharao@gmail.com. If you have questions concerning your rights as a research subject, you may email the University of Arizona Human Subjects Protection Program office at driggers@email.arizona.edu or peteman@email.arizona.edu.

AUTHORIZATION

Before giving my consent by signing this form, the methods, inconveniences, risks, and benefits have been explained to me and my questions have been answered. I may ask questions at any time and I am free to withdraw from the project at any time without causing bad feelings. My participation in this project may be ended by the investigator for reasons that would be explained. This consent form will be filed in an area designated by the Human Subjects Committee with access restricted by the principal investigator, Abha Rao, Ph.D. Candidate, of the Family and Consumer Sciences Department. I do not give up any of my legal rights by signing this form. A copy of this signed consent form will be given to me.

_____   _____
Subject's Signature   Date

_____   _____
Parent's Signature   Date

Dear Parent,

I am interested in talking to parents of 12th standard students, such as yourself, about your experiences regarding your child's education. I would like to ask you about your thoughts on homework, schools, tuitions, and college. These interviews will take between 30 and 45 minutes. If you are interested in participating, please check the box below. Any help that you can give me will be appreciated.

Sincerely,
Abha Rao
Ph.D. Candidate
Division of Family Studies and Human Development
University of Arizona

☐   Yes, I am interested in participating. Contact me at _____.

☐   No, I am not interested in participating. Please do not contact me.

INVESTIGATOR'S AFFIDAVIT:
Either I have or my agent has carefully explained to the subject the nature of the above project. I hereby certify that to the best of my knowledge the person who signed this consent form was informed of the nature, demands, benefits, and risks involved in his/her participation.

_____
Signature of Investigator

_____
Date

PARENT CONSENT FORM

Project Title: **Being a high school student in Chennai, India**

You are being asked to read the following material to ensure that you are informed of the nature of this research study and of how you will participate in it, if you consent to do so. Signing this form will indicate that you have been so informed and that you give your consent to participate in the interview and be audio taped. Federal regulations in the US require written informed consent prior to participation in this research study so that you can know the nature and risks of your participation and can decide to participate or not participate in a free and informed manner.

PURPOSE

You are being invited to participate voluntarily in the above-titled research project. The purpose of this project is to explore the academic expectations and mental health outcomes for high school students in Chennai, India.

SELECTION CRITERIA

The Principal Investigator of this study will discuss the requirements for participation in this study with you. To be eligible to participate, you must be the parent of a 12th standard student. A total of 12 parents will be enrolled in this study.

PROCEDURE

The following information describes your participation in this study. You complete a short form providing demographic information. You will then be interviewed for 30-45 minutes, and the interview will be audio taped. The researcher will also take notes during the interview. At the end of the interview the participant will be thanked. The data that is collected will have no link to your identity, other than your voice on the tape, so your responses will remain confidential.

RISKS

There are no risks from your participation.

BENEFITS

There are no direct benefits from your participation. The proposed study, however, will broaden our knowledge and understanding of the pressures affecting Indian high school students. This information can be used in developing effective academic and personal counseling programs for high school students.

CONFIDENTIALITY

Any information that you share with the researcher will be coded, and not be associated with personally identifying information other than your voice on the recording. The information that you provide will be accessible only to the researcher.

PARTICIPATION COSTS AND SUBJECT COMPENSATION

There is no cost to you for participating except for the time. You will not receive compensation for your participation.

CONTACTS

You can obtain further information from the principal investigator Abha Rao, Ph.D. Candidate, at abharao@gmail.com. If you have questions concerning your rights as a research subject, you may email the University of Arizona Human Subjects Protection Program office at driggers@email.arizona.edu or peteman@email.arizona.edu.

AUTHORIZATION

Before giving my consent by signing this form, the methods, inconveniences, risks, and benefits have been explained to me and my questions have been answered. I may ask questions at any time and I am free to withdraw from the project at any time without causing bad feelings. My participation in this project may be ended by the investigator for reasons that would be explained. This consent form will be filed in an area designated by the Human Subjects Committee with access restricted by the principal investigator, Abha Rao, Ph.D. Candidate, of the Family and Consumer Sciences Department. I do not give up any of my legal rights by signing this form. A copy of this signed consent form will be given to me.

_____   _____
Parent/Legal Guardian Signature   Date

_____
Child's name

INVESTIGATOR'S AFFIDAVIT:

I have carefully explained to the participant of the nature of the above project. I hereby certify that to the best of my knowledge the person who signed this consent form was informed of the nature, demands, benefits, and risks involved in his/her participation.

_____   _____
Signature of Investigator   Date

TEACHER/SCHOOL ADMINISTRATOR CONSENT FORM

Project Title: **Being a high school student in Chennai, India**

You are being asked to read the following material to ensure that you are informed of the nature of this research study and of how you will participate in it, if you consent to do so. Signing this form will indicate that you have been so informed and that you give your consent to participate in the interview and be audio taped. Federal regulations in the US require written informed consent prior to participation in this research study so that you can know the nature and risks of your participation and can decide to participate or not participate in a free and informed manner.

PURPOSE

You are being invited to participate voluntarily in the above-titled research project. The purpose of this project is to explore the academic expectations and mental health outcomes for high school students in Chennai, India.

SELECTION CRITERIA

The Principal Investigator of this study will discuss the requirements for participation in this study with you. To be eligible to participate, you must be a teacher or school administrator to 12th standard students. A total of 9 teachers/school administrators will be enrolled in this study.

PROCEDURE

The following information describes your participation in this study. You complete a short form providing demographic information. You will then be interviewed for 30-45 minutes, and the interview will be audio taped. The researcher will also take notes during the interview. At the end of the interview the participant will be thanked. The data that is collected will have no link to your identity, other than your voice on the tape, so your responses will remain confidential.

RISKS

There are no risks from your participation.

BENEFITS

There is no direct benefit to you from your participation. The proposed study, however, will broaden our knowledge and understanding of the pressures affecting Indian high school students. This information can be used in developing effective academic and personal counseling programs for high school students.

CONFIDENTIALITY

Any information that you share with the researcher will be coded, and not be associated with personally identifying information other than your voice on the recording. The information that you provide will be accessible only to the researcher.

PARTICIPATION COSTS AND SUBJECT COMPENSATION

There is no cost to you for participating except for the time. You will be given Rs. 100 gift certificates for your participation.

CONTACTS

You can obtain further information from the principal investigator Abha Rao, Ph.D. Candidate, at abharao@gmail.com. If you have questions concerning your rights as a research subject, you may email the University of Arizona Human Subjects Protection Program office at driggers@email.arizona.edu or peteman@email.arizona.edu.

AUTHORIZATION

Before giving my consent by signing this form, the methods, inconveniences, risks, and benefits have been explained to me and my questions have been answered. I may ask questions at any time and I am free to withdraw from the project at any time without causing bad feelings. My participation in this project may be ended by the investigator for reasons that would be explained. This consent form will be filed in an area designated by the Human Subjects Committee with access restricted by the principal investigator, Abha Rao, Ph.D. Candidate, of the Family and Consumer Sciences Department. I do not give up any of my legal rights by signing this form. A copy of this signed consent form will be given to me.

_____   _____
Teacher/School Administrator Signature   Date

INVESTIGATOR'S AFFIDAVIT:

I have carefully explained to the participant of the nature of the above project. I hereby certify that to the best of my knowledge the person who signed this consent form was informed of the nature, demands, benefits, and risks involved in his/her participation.

_____   _____
Signature of Investigator   Date

TUITION INSTRUCTOR CONSENT FORM

Project Title: **Being a high school student in Chennai, India**

You are being asked to read the following material to ensure that you are informed of the nature of this research study and of how you will participate in it, if you consent to do so. Signing this form will indicate that you have been so informed and that you give your consent to participate in the interview and be audio taped. Federal regulations in the US require written informed consent prior to participation in this research study so that you can know the nature and risks of your participation and can decide to participate or not participate in a free and informed manner.

PURPOSE

You are being invited to participate voluntarily in the above-titled research project. The purpose of this project is to explore the academic expectations and mental health outcomes for high school students in Chennai, India.

SELECTION CRITERIA

The Principal Investigator of this study will discuss the requirements for participation in this study with you. The data that is collected will have no link to your identity, other than your voice on the tape, so your responses will remain confidential.

PROCEDURE

The following information describes your participation in this study. You complete a short form providing demographic information. You will then be interviewed for 30-45 minutes, and the interview will be audio taped. The researcher will also take notes during the interview. At the end of the interview the participant will be thanked. The data that is collected will have no link to your identity, so your responses will be completely anonymous.

RISKS

There are no risks from your participation.

BENEFITS

There is no direct benefit to you from your participation. The proposed study, however, will broaden our knowledge and understanding of the pressures affecting Indian high school students. This information can be used in developing effective academic and personal counseling programs for high school students.

CONFIDENTIALITY

Any information that you share with the researcher will be coded, and not be associated with personally identifying information other than your voice on the recording. The information that you provide will be accessible only to the researcher.

PARTICIPATION COSTS AND SUBJECT COMPENSATION

There is no cost to you for participating except for the time. You will not receive compensation for your participation.

CONTACTS

You can obtain further information from the principal investigator Abha Rao, Ph.D. Candidate, at abharao@gmail.com. If you have questions concerning your rights as a research subject, you may email the University of Arizona Human Subjects Protection Program office at driggers@email.arizona.edu or peteman@email.arizona.edu.

AUTHORIZATION

Before giving my consent by signing this form, the methods, inconveniences, risks, and benefits have been explained to me and my questions have been answered. I may ask questions at any time and I am free to withdraw from the project at any time without causing bad feelings. My participation in this project may be ended by the investigator for reasons that would be explained. This consent form will be filed in an area designated by the Human Subjects Committee with access restricted by the principal investigator, Abha Rao, Ph.D. Candidate, of the Family and Consumer Sciences Department. I do not give up any of my legal rights by signing this form. A copy of this signed consent form will be given to me.

_____   _____
Tuition Instructor Signature   Date

INVESTIGATOR'S AFFIDAVIT:

I have carefully explained to the participant of the nature of the above project. I hereby certify that to the best of my knowledge the person who signed this consent form was informed of the nature, demands, benefits, and risks involved in his/her participation.

_____   _____
Signature of Investigator   Date

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