

MASTER OF PUBLIC HEALTH

A cooperative Program of

JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH

&

The IIHMR University

Practicum Training

By

AasthaSrivastava

IIHMR/JHSPH MPH

2013-2015

MASTER OF PUBLIC HEALTH

A cooperative Program of

JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH
&
The IIHMR University

Practicum Training

**Psychological well being of students of Medical and Engineering
Coaching Classes of Kota district**

By

Name: AasthaSrivastava

Under the guidance of

J P Singh

Year 2013-2015

TO WHOMSOEVER MAY CONCERN

This is to certify that Aastha Srivastava student of Master of Public Health Program offered by Institute of Health Management Research, Jaipur in cooperation with Johns Hopkins Bloomberg School of Public Health, Baltimore has undergone Practicum Training on the topic Psychological wellbeing students in Kota District from October 2014 to Jan 2015.

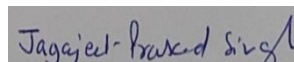
The Candidate has successfully carried out the study designated to him during practicum training and his/her approach to the study has been sincere, scientific and analytical.

The Practicum Training is in fulfillment of the course requirements.

I wish him/her all success in all his/her future endeavors.



Ashok Kaushik
Dean, Academics and Student
Affair
(IIHMR Jaipur)



J P Singh
(IIHMR Jaipur/ JHSPH
Baltimore)

MASTER OF PUBLIC HEALTH

A cooperative Program of

JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH
&
The IIHMR University

CERTIFICATE BY SCHOLAR

This is to certify that the Practicum Project title psychological wellbeing Of Student in Kota district and submitted by Aastha Srivastava under the supervision of J P Singh for award of **Master of Public Health** carried out during the period from 2013 to 2015 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Aastha Srivastava

Signature

ABSTRACT

Psychological health, as measured in the present study, is defined as a state of being in which a student is balanced both emotionally and intellectually. However, as students are at a crucial stage of development, they are more prone to experience mental illnesses in the transition from being an adolescent to an adult. It is also important to know that whether Indian youth is greatly affected by this issue or not.

Objective of the study was to find the extent of psychological morbidity among student living in Kota district of Rajasthan, to find the difference between stress level among Medical and Engineering exams preparing students and to see the association of Psychological wellbeing of students with gender, residence and economic conditions.

A cross-sectional quantitative study is done using the General Health Questionnaire (GHQ), which was originally developed by Goldberg, has been widely used in various cultures as a screening tool to determine whether an individual is at risk of developing a psychiatric disorder. Stratified Random sampling was used for this study collecting sample of 384 students.

After data analysis it was found that Students from both the fields of education (medical (66.7% and engineering (33.3%) are exposed to severely stressed i.e. coming under grade 3 ; however it seems that the students aspiring from engineering entrance examination are less prone to the development of stress compared to students aspiring for medical entrance examination. Students having their permanent place of residence in urban areas were observed to be prone to develop stress (18%) and students residing in rural area are comparatively less in stress (9%) . Also girls were found to be in more stressed (18%) than male students (9%).

Therefore Health is a major concern of students, and therefore the promotion of healthy dietary and lifestyle habits should be encouraged

Acknowledgment

I would like to gratefully and sincerely thank my advisor **J P Singh**, for his guidance, understanding, patience and most importantly, his guardianship during my post graduate studies at IIHMR University, Jaipur. His mentorship was paramount in providing a well-rounded experience consistent my practicum term.

I would like to thank **directors and HR head** of various institutes of Kota, for permitting and assisting me in data collection for the successful completion of my Capstone. I believe that their actions provided me with the unique opportunity to gain a wider breadth.

Finally and most importantly, I would like to thank my mentor **Dr. Suresh Joshi** for providing me the opportunity to be his mentee. I am so deeply grateful for his help, professionalism, valuable guidance and support throughout my Master in Public Health Program at IIHMR.

In the end, I sincerely would like to express my special expression to all the faculties who taught us during the program for enriching us and whose teachings I finally can incorporate in the report. This accomplishment would not have been possible without them. Thank you

Table of Contents

Introduction.....	9
Literature Review	12
METHODOLOGY:	15
Research Questions	15
Study Design.....	15
Study Area.....	15
Study Period.....	15
Study Setting.....	15
Study Population	15
Sampling method.....	15
Sample size.....	15
Study Criteria.....	16
Study Tool:.....	16
Ethical Clearance	16
Data Collection Method:.....	17
Result and Discussions	17
Table No. 1 : students sex and stream cross tabulation table.....	18
Table No. 2: Economic status and frequency table.....	18
Table No.3 Grades and frequency table	19
Table No.4 Cross tabulation table of grade score and sex.....	20
Table No. 5, Age of Student * Grading of Score Crosstabulation	20
Table No. 6 Cross tabulation table of grade score and Place of residence	22
Table No. 7 Grading of Score Cross tabulation with annual family income	22
Table No. 8, Score Grade Cross tabulation with stream of student.....	23
Table No. 9, Score grade Cross tabulation : stream of male students.....	24

Table No. 10, Score grade Cross tabulation: stream of female students	24
Table No. 11, Sex of Medical Student * Grading of Score Crosstabulation.....	25
Table No. 12, Sex of Engineering Student * Grading of Score Crosstabulation	26
Table No. 13, Stream of Student from urban area * Grading of Score Crosstabulation	26
Table No. 14, Stream of Rural Student * Grading of Score Crosstabulation.....	26
Conclusion and Recommendation.....	27
Limitations:.....	28
Annexure 1: Study Tool.....	30
Consent Form.....	30
General Information:	31
General Health Questionnaire	31
Annexure 2: LIST OF COACHING INSTITUTES AT KOTA.....	34
References.....	42

List of Abbreviation

GHQ: General health questionnaire

IIT: Indian Institute Of technology

JEE: Joint Entrance Exam

AIEEE: All India Engineering entrance Exam

PMT: Premedical test

WHO: World Health Organization

IRB: Institutional Review Board

IHMR: Institute Of health management research

Introduction

Health is defined as a state of complete physical, mental and social wellbeing, and not merely absence of disease or deformity. Psychological health, as measured in the present study, is defined as a state of being in which a student is balanced both emotionally and intellectually. A psychologically healthy student is capable of thinking clearly, developing socially and learning new skills with ease. However, as students are at a crucial stage of development, they are more prone to experience mental illnesses in the transition from being an adolescent to an adult (Giugliano, 2004). Reports on cases of young adults suffering from mental illness have made the issue a national concern in India. Many epidemiological studies conducted in India on mental and behavioral disorders report varying prevalence rates, ranging from 9.5 (to 370 per 1000 population. As per National Sample Survey Organization report 2008, for the age group 15 to 19 years, the rural adolescents have prevalence of mental illness as 91 per 100,000 population while the adolescents in urban region, the mental illness was found around 73 per 100,000 population. Therefore, there seems to be a need for research on the psychological health of college students is important if the aim is to identify stress experienced by these students, determine the factors contributing to their stress, and ultimately design a treatment plan that can be used to improve students' quality of life and reduce their risks of experiencing mental illness.

The term stress refers to the psychological state which derives from the person's appraisals of the success with which he or she can adjust to the demand of the society environment.¹ When student start taking education as a challenge, stress bring them the sense of competence and when education is seen as a threat , stress elicit feeling of helplessness and a foreboding sense of loss. It also postulated those students who are under low and high stress learn the least and those under moderate stress learn the most.²

Psychological problems vary from 2 percent to as high as 50 percent in student population. Common reasons for stress among the students includes greater academic demands, changes in social life, change in family relations, being on your own in new environment and exposure to new people ideas and temptations. Some specific problems of students include fear of failure, time pressure, pressure of academic excellence and tough competition and struggle to establish their identity. Emotional problems faced by these students are feeling inferior to others, worrying too much, not able to think properly, feeling anxious without any apparent reasons and sometimes feel that life is not worth living.

With the exception of few researches and surveys, academic stress has not been explored in much detail. It is also important to know that whether Indian youth is greatly affected by this issue or not. In purview of the problem, mental health professionals in India have identified acute pressure as a stress factor which may lead to mental distress and in some extreme cases it may even lead to suicide attempts. Psychologist even says that children are under pressure to appear for competitive exams. During exams times, when the academic pressure is very high, suicide

¹12. IRSSH-485-V5N1 - 12_IRSSH-485-V5N1.161113142.pdf Available at: http://www.irssh.com/yahoo_site_admin/assets/docs/12_IRSSH-485-V5N1.161113142.pdf. Accessed 11/13/2014, 2014

²P.L. Broadhurst, Emotionality and the Yerkes-Dodson Law, Journal of Experimental Psychology, 54(5) (1957), 345-352

hotlines are swamped with calls that time, all calls are pertaining to committing suicide due to not achieving good marks or grades as expected by their parents.

The General Health Questionnaire (GHQ), which was originally developed by Goldberg, has been widely used in various cultures as a screening tool to determine whether an individual is at risk of developing a psychiatric disorder (Goldberg & Williams, 1988). It is worth mentioning that the GHQ is extensively used by researchers and has been found to be reliable and well-validated (Goldberg et al., 1997). The GHQ was originally designed to be used in adult populations. However, it is noted in the GHQ manual that the scale has been used with adolescents (Goldberg & Williams, 1988). The GHQ comes in four versions, and these include GHQ-60, GHQ-30, GHQ-28 and GHQ-12. The original version of the GHQ contains 60 items and is known for its multi-dimensional aspects. The GHQ-12 is the shortest version and commonly used as a screening tool in a public setting. It is usually regarded as testing only a single dimension of psychological health (Gao et al., 2004). However, some previous research have shown that the GHQ-12 has two (e.g. Picardi, Abeni, & Pasquini, 2001; Werneke, Goldberg, Yalcin, & Ustun, 2000) and three (e.g. Cheung, 2002; Picardi et al., 2001; Werneke et al., 2000) meaningful underlying factors.

Situated on the banks of Chambal, Kota is a dusty and non-descript town of Rajasthan India. But over so many years it has emerged as the country's coaching class capital where student from various different states descend to prepare for engineering and medical entrance exams (like IIT-JEE, AIEEE, PMT). Each top coaching institute of Kota like Allen, Resonance, Bansal classes and Career point has more than 15,000 students and over 500 staff. Many outstation students are said to be under stress that are undergoing coaching for engineering and medical entrance exams

in Kota district of Rajasthan India. As a competition to grab seat in best coaching institute Kota is on rise, so is the suicidal tendency.

Literature Review

Various studies and surveys were conducted in India laying emphasis on stress and other psychological morbidity among students appearing for undergraduate level entrance examination. In 2013, Hindustan Times newspaper conducted survey among 5000 students and found 48% students felt that the exams caused pressure while 24% said they felt pressurized to an extent. Survey findings also revealed that student feel in pressure because their identity is linked with their performance in the entrance examination. Most of the students that were part of the survey said that the education system needs a more practical and interactive approach now to overcome these situations.³

As per findings of a study conducted in India in 2006, students find it very difficult to cope with both the board examinations and entrance test at the same time. In 2006 only, 5857 students (16 per day) committed suicide across India due to exam stress, while few students ran away from their home or simply refused to appear for exams. Symptoms of exam stress were reported as sleepless nights, loss of appetite, and trouble thoughts. This study emphasized on how stress causes immense effect on nervous system, immune system and cardiovascular system etc. Social polls conducted under the study have demonstrated that student perceives exams as sever torture and as an intellectual and emotional overload.⁴

Under Stanford University, Students Health Needs Assessment was conducted in 1990. It was found that psychological distress is very common in students. 1 in 5 students described

³48% college students under pressure from entrance exams, reveals survey - Hindustan Times Available at: <http://www.hindustantimes.com/india-news/mumbai/48-college-students-under-pressure-from-entrance-exams-reveals-survey/article1-1123116.aspx>. Accessed 11/13/2014, 2014.

⁴Board and Entrance Exam Stress on Students - Don't Kill yourself Available at: <http://www.succesgcds.net/Articles/Board-Entrance-Exam-Stress.html>. Accessed 11/13/2014, 2014

themselves as tired without any apparent reason. 1 out of 3 students describes themselves as anxious/tense. 43 percent felt so depressed that it became hard for them to get going and 16 percent felt that life is not worth living (Martinez & Fabino, 1992).⁵

Rao P.N. (1978), in his unpublished MD thesis, administered general health questionnaire (GHQ) on 428 students within the age group of 13-16 years. The study showed that about 20 percent of students were under neurotic problem, 47 percent with depression, 21 percent with anxiety, 8 with psychogenic headaches and 7 with inability to concentrate and vague aches and pains.⁶

There is a statistically significant association between field of education and stress. A cross sectional study was conducted in dental, medical and engineering colleges students in 2012 to test the association of stress with academic factors. The study confirmed the association and stress was observed in 27.7% female students and 20.4 % in male students. Higher stress level is observed in medical students in comparison to engineering students.⁷

Thackore et al (1971) conducted a longitudinal study on 58 medical students over a time span of 4 years (1966 to 1970). On the basis of results, he concluded that the prevalence rate of psychological morbidity was 1 percent and most of them suffered from depression and anxiety. Wig et al (1969) found that out of 68 students referred to counseling center, 50 percent reported difficulty in concentration while some had problem of frequent sad moods, getting nervous, headache, inferiority complex and difficulty in memory.⁸

⁵ 12_IRSSH-485-V5N1 - 12_IRSSH-485-V5N1.161113142.pdf Available at: http://www.irssh.com/yahoo_site_admin/assets/docs/12_IRSSH-485-V5N1.161113142.pdf. Accessed 11/13/2014, 2014.

⁶ 12_IRSSH-485-V5N1 - 12_IRSSH-485-V5N1.161113142.pdf Available at: http://www.irssh.com/yahoo_site_admin/assets/docs/12_IRSSH-485-V5N1.161113142.pdf. Accessed 11/13/2014, 2014.

⁷ A Study of Stress among Students of Professional Colleges from an Urban area in India Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3749028/>. Accessed 11/13/2014, 2014

⁸ 12_IRSSH-485-V5N1 - 12_IRSSH-485-V5N1.161113142.pdf Available at: http://www.irssh.com/yahoo_site_admin/assets/docs/12_IRSSH-485-V5N1.161113142.pdf. Accessed 11/13/2014, 2014.

Students are the successors of any country. Countries that want to become great have learned that economic dominance is predicated upon the creation of a system of high quality and stress free education. Education is good not just for the person who becomes educated, but also for everyone around him. Looking into the previous studies and importance of students towards country's economy, there is urgent need to understand the level of stress and its association with other factors among students.

Many studies have examined the relationship between psychological distresses with different factors using GHQ12.

GHQ is used to assess mental health status of the students, which was found to be reliable and valid in many countries. It is a screening test used by world health organization (WHO)⁹ in many of the studies, GHQ 12 has therefore been taken as a tool for finding stress among students. In one of the study “academic achievement and presence of a negative event in last year were the main factor that were taken into consideration for the study and were present in the GHQ12 model¹⁰. GHQ-12 is a valid measure for testing a mental well-being and from a complete perspective (positive and negative). Although that this model shows valid in many countries; it has not yet been studied for physically active youth. Findings of our study indicate that GHQ12 has valid scales measuring stress levels.¹¹

⁹ Goldberg DP, Gater R, Sartorius N, Ustun TB, Piccinelli M, GurejeO et al. The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychol Med* 1997; 27(1):191–7

¹⁰ sag-38-5-10-0709-14:sag-0 - 5000030291 Available at: <http://dergipark.ulakbim.gov.tr/tbtkmedical/article/viewFile/5000030054/5000030291>. Accessed 1/2/2015, 2015

¹¹ Mental Health, Subjective Vitality and Satisfaction with Life for F - 2.pdf Available at: [http://www.idosi.org/wiss/4\(2\)11/2.pdf](http://www.idosi.org/wiss/4(2)11/2.pdf). Accessed 1/2/2015, 2015.

METHODOLOGY:

For the purpose of the present study, the GHQ-12 was chosen as a screening tool for psychological problems faced by secondary school students in Kota, Rajasthan. The accessible population for the present study was the students of class 11/12th studying in Coaching Institutes, Kota.

Research Questions

- 1) What is the extent of Psychological morbidity among students?
- 2) What is the difference between stress level among Medical and Engineering exams preparing students?
- 3) What is the association of Psychological wellbeing of the students with gender and residence and economic condition?

Study Design: A cross-sectional quantitative study (primary data)

Study Area: Kota District (Urban) of Rajasthan

Study Period: November 2014 to January 2015

Study Setting: Coaching institutes in urban region of Kota

Study Population: Students studying in coaching institute of Kota

Sampling method: Stratified Random sampling was used for this study. There are 132 coaching institutes listed in official website of district administration of Kota. These coaching institutes were divided into 2 strata's - Medical and Engineering. Then using simple random sampling, 5 coaching institutes were picked for each stratum. Then by simple random sampling, 40 students were selected from each institute.

Sample size: 384 ($n = z^2 * PQ / d^2$, $Z = 1.96$, $P = .5$, $Q = 1 - P$, $d = .05$)

Study Criteria

Inclusion criteria: Students who willfully filled the questionnaire and filled the consent form.

Exclusion criteria: Students who were not will full to fill the questionnaire.

Study Tool: Self-administered questionnaire is used for data collection. Standardized questionnaire on General Health Questionnaire - 12 (GHQ) (Goldberg, 1978) is used. GHQ 12 is a screening tool which is used to identify the severity of psychological distress which is experienced by an individual. This tool focuses on normal functioning rather on lifelong traits. It only covers patterns or disorders of adjustment that are associated with stress. Each question has four responses from “better than usual” to “much less than usual”. For the purpose of this study scoring method of (0-0-1-1) is chosen. This is a better method to help eliminate biases which might result from the answer marked by the respondent who may tend to choose responses 1 and 4 or 2 and 3, respectively. Then all items are added up ranging from 0 to 12 and summed.

Apart from that, questions on Gender, Residence (Urban or Rural) and Family Income will be asked.

Ethical Clearance:

IRB approval will be taken before conducting study and data collection. In the study, beneficence will be discussed with the students. Their personal dignity, and autonomy pertaining to both informed, voluntary, competent decision making and the privacy of personal information will be maintained. In case of any encounter with unhealthy students during the study, the issue will be discussed with the Authorities of the educational institutions in which the student is studying. In such case, the result will not be directly disclosed to the respective student in order to protect him/her from psychological harm after knowing the result. Since the study deals with

the psychological health of the students, Ethical clearance is needed so that the questionnaire or the objectives of the study should not harm the health status of the students.

Data Collection Method:

Permission from the institute administration was taken for the study. At the beginning of each interview, the researcher introduced herself, the study and the organizations were involved. The purpose and content of the study was then explained. Finally, researcher asked for informed consent to proceed with their participation in the study. The researcher explained participants about the confidentiality and anonymity of the study. The interviewer specified that the data was being collected for research purposes only and that participants were free to stop the interview at any time. The study and the tools used received ethical approval from the IIHMR's Ethical Review Board. Standard procedures were put in place in the unlikely event that a respondent became distressed during the interview.

Self-administered questionnaire were given to the respondents after getting the consent formed filled by them. Then the questionnaire was collected after 15 minutes with the help of institution staff.

Result and Discussions:

Out of a total 400 students, 372 completed and returned the questionnaires, giving an overall response rate of 93%. One hundred eighty nine (50.8%) of the respondents were males, while 183 (49.2%) were females. The mean age of the study subjects was 17.79 years with a standard deviation of 0.71. The mean age of male students was 17.84 years and for female students, it was 17.73 years.

In the sample, 190 (51.1%) students were aspiring for medical entrance examination and 182 (48.9%) students were aspiring for engineering entrance examination. About half of them were from urban area and remaining were from rural area.

Table No. 1 : students sex and stream cross tabulation table

Sex of Student * Stream of Student Cross tabulation			
Sex of Student	Stream of Student		Total
	Medical	Engineering	
Male	93	96	189
Female	97	86	183
Total	190	182	372

On being asked about family income, students responded in integer value but for the ease in analysis, their responses were further classified into different income slabs. The annual family income ranged from Rs.1, 00,000 to Rs.12, 00,000 per year, while mean family income was around Rs. 3.5 lakhs.

Table No. 2: Economic status and frequency table

Category	Frequency	Percent
Upto 2 lakh	108	29.0
2 to 4 lakhs	143	38.4
4 to 6 lakhs	78	21.0
6 to 8 lakhs	26	7.0
Above 8 lakhs	17	4.6
Total	372	100.0

In order to access the mental health status of the study subjects, GHQ12 was used. It has 12 questions in which the students evaluated their occurrence on a 4-point response scale. The scale points were described as follow: “less than usual”, “no more than usual”, “rather more than usual”, “much more than usual”. The standard scoring method recommended by Goldberg for the need of case identification is called “GHQ method”. Scores for the first two types of answers are “0” (positive) and for the two others are “1” (negative).

In GHQ scoring of the answer “as always” depends on the consideration: does the positive answer to a question indicates illness (so called negative items of the questionnaire) or health (positive items). Among negative items, “feeling unhappy and depressed”, a respondent gets 1 point for an answer “no more than usual”. Therefore, the scoring of answers for such questions is: 0, 1, 1, 1.

In positive items, such as “been able to concentrate on whatever you’re doing” the reply “same as usual” has a 0 value. The scoring of positive items is then the same as the standard scoring in the GHQ (0, 0, 1, 1). Thus the result of an individual subject will be in range from 0 to 12 points.

Psychological morbidity is divided into three grades. Grade I denotes no morbidity ranges from 0 to 4 point on GHQ12 scale. Grade II denotes less or moderate morbidity ranging from 5 to 8 points on GHQ12 scale. Grade III denotes severe morbidity ranges from 9 to 12 points.

Table No.3 Grades and frequency table

Grades	Frequency	Percent
--------	-----------	---------

Grade 1 (0 to 4)	183	49.2
Grade 2 (5 to 8)	162	43.5
Grade 3 (9 to 12)	27	7.3
Total	372	100.0

This table shows the frequency and percentage of students under various grades of psychological morbidity. Around 50% students were in grade I. They were not psychological morbid. 7.3% students were in grade III which show that they were severely morbid. Rest of the students were moderate morbid. This might be due to various factors other than academics pressure. But this section of students must be monitored regularly as they can switch to severe morbidity.

Table No.4 Cross tabulation table of grade score and sex

		Grading of Score			Total
		Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	
Sex of Student	Male	97	83	9	189
	Female	86	79	18	183
Total		183	162	27	372

Analysis the scores of GHQ12 as per sex of the students, it was found that in grade III, more than two third of the students were females. Males were more than females in grade I and grade II. Females were more morbid than males.

Table No. 5, Age of Student * Grading of Score Crosstabulation

			Grading of Score			Total
			Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	
Age of student	17	Count	58	58	7	123
		% within Grading of Score	31.7%	35.8%	25.9%	33.1%
	18	Count	107	80	16	203

		% within Grading of Score	58.5%	49.4%	59.3%	54.6%
	19	Count	17	22	3	42
		% within Grading of Score	9.3%	13.6%	11.1%	11.3%
	20+	Count	1	2	1	4
		% within Grading of Score	.5%	1.2%	3.7%	1.1%
Total		Count	183	162	27	372
		% within Grading of Score	100.0%	100.0%	100.0%	100.0%

Age is an important factor associated with stress and related conditions. Sometimes a student with age more than his or her colleagues, feels more pressure of performance and thus at more risk of being psychological morbid in comparison to other students. Similar when a student is too young in the class, he or she feels age inferiority with other older students.

In this study, students with age 20 years or more were approximately 25% in grade III. For other age and age groups, the percent of students falling in grade III was around 6-8% only.

In Indian system of education, it is generally seen that a normal student passes his or her senior secondary school by the age of 17-18 years. When a student with age 20 or more study with students of age group 17-18 years, he or she feels inferiority of being not able to perform well when he or she was of age 17-18 years. Being older than others, their social circle also reduced, thus they were not able to share their thoughts and feelings with others. Apart from the effect of their immediate surroundings, they have high pressure from parents and society to perform better in entrance examination as they have taken drop in the education for preparing for entrance examination. After 2 or 3 failure attempts in entrance examination, they felt more stress and anxiety.

Table No. 6 Cross tabulation table of grade score and Place of residence

			Grading of Score			Total
			Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	
Place of residence	Urban	Count	97	79	18	194
		% within Grading of Score	53.0%	48.8%	66.7%	52.2%
	Rural	Count	86	83	9	178
		% within Grading of Score	47.0%	51.2%	33.3%	47.8%
Total		Count	183	162	27	372
		% within Grading of Score	100.0%	100.0%	100.0%	100.0%

The place of residence was asked from students as urban or rural. It was discussed in various studies that students from rural areas found difficulty in coping with students of urban area. While some studies revealed that students from urban areas were more prone to stress due to their pampered upbringing.

From the table no., in 5grade III, 66.7% were the students from urban areas while only 33.3% students were from rural areas. In grade II, percentages of students from rural and urban areas were similar.

Table No. 7 Grading of Score Cross tabulation with annual family income

Annual Family Income (Rs)		Grading of Score			Total
		Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	
Upto 2 lakh	Count	57	42	9	108
	% within Grading of Score	31.1%	25.9%	33.3%	29.0%
2 to 4 lakhs	Count	69	66	8	143
	% within Grading of Score	37.7%	40.7%	29.6%	38.4%
4 to 6 lakhs	Count	39	32	7	78
	% within Grading of Score	21.3%	19.8%	25.9%	21.0%

Above 6 lakhs	Count	18	22	3	43
	% within Grading of Score	9.8%	13.6%	11.1%	7.0%
	Total	183	162	27	372
	% within Grading of Score	100.0%	100.0%	100.0%	100.0%

In table no. 6, in grade III, one third of the students were having family income less than two lakhs rupees whereas in case of family income more than 6 lakhs, only one tenth students were severely morbid. Although no test of significance was performed between family income and GHQ12 score, still it can be deduced that family income plays an important role in determining the mental health of the students.

Table No. 8, Score Grade Cross tabulation with stream of student

Stream of Student			Grading of Score			Total
			Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	
	Medical	Count	83	89	18	190
		% within Grading of Score	45.4%	54.9%	66.7%	51.1%
	Engineering	Count	100	73	9	182
		% within Grading of Score	54.6%	45.1%	33.3%	48.9%
Total	Count		183	162	27	372
	% within Grading of Score		100.0%	100.0%	100.0%	100.0%

Among 190 medical students, more than 55% students were morbid either moderately or severely. While in case of 182 engineering students, 45% students were morbid. In grade III, about 67% students were from medical stream and only 33.3% students were from engineering

stream. Similar results could be seen in grade II. In the sample covered, medical students were either more morbid or at risk of morbidity in comparison to engineering students.

Table No. 9, Score grade Cross tabulation : stream of male students

Stream of Student			Grading of Score			Total	
			Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)		
	Medical	Count	44	43	6	93	
		% within Grading of Score	45.4%	51.8%	66.7%	49.2%	
	Engineering	Count	53	40	3	96	
		% within Grading of Score	54.6%	48.2%	33.3%	50.8%	
	Total		Count	97	83	9	189
			% within Grading of Score	100.0%	100.0%	100.0%	100.0%

In order to have more sex and stream specific status of mental health, sex wise cross tabulation was performed between grades of GHQ12 score and stream of the students. Among male students, medical stream students were more severe morbid (66.7%) than those who were preparing for engineering entrance examination. Similarly in grade II, medical stream students were more at risk.

Table No. 10, Score grade Cross tabulation: stream of female students

Stream of Student			Grading of Score			Total
			Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	
	Medical	Count	39	46	12	97
		% within Grading of Score	45.3%	58.2%	66.7%	53.0%
	Engineering	Count	47	33	6	86

		% within Grading of Score	54.7%	41.8%	33.3%	47.0%
Total	Count		86	79	18	183
	% within Grading of Score		100.0%	100.0%	100.0%	100.0%

In case of females, students those who were studying in medical stream (66.7%) were severely morbid while only 33.3% students from engineering stream were severely morbid. In grade II, 58.2% moderately morbid students were from medical stream and in grade I, about 55% students who were not psychological morbid were from engineering stream.

Deducing from the above analyses, females were more morbid or at risk than male students. Looking at the figures as per stream, students preparing for medical entrance examination were more morbid than students aspiring for engineering entrance examination.

Table No. 11, Sex of Medical Student * Grading of Score Crosstabulation

Sex of Student			Grading of Score			Total
			Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	
	Male	Count	44	43	6	93
		% within Sex of Student	47.3%	46.2%	6.5%	100.0%
	Female	Count	39	46	12	97
		% within Sex of Student	40.2%	47.4%	12.4%	100.0%
Total		Count	83	89	18	190

Among medical students, the females (12.4%) were more in grade III than males (6.5%). In grade II, the percent of males and females was almost equal showing no difference. While in grade I which represents no stress or morbidity, the number of males (47.3%) was more than females (40%).

Table No. 12, Sex of Engineering Student * Grading of Score Crosstabulation

Sex of Student			Grading of Score			Total
			Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	
	Male	Count	53	40	3	96
		% within Sex of Student	55.2%	41.7%	3.1%	100.0%
	Female	Count	47	33	6	86
		% within Sex of Student	54.7%	38.4%	7.0%	100.0%
Total		Count	100	73	9	182

55.2% males aspiring for engineering examination were in grade I and 54.7% females in grade I.

In grade III, only 3.1% males were present while 7% females were severely morbid.

Table No. 13, Stream of Student from urban area * Grading of Score Crosstabulation

Stream of Student			Grading of Score			Total
			Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	
	Medical	Count	45	42	12	99
		% within Stream of Student	45.5%	42.4%	12.1%	100.0%
	Engineering	Count	52	37	6	95
		% within Stream of Student	54.7%	38.9%	6.3%	100.0%
Total		Count	97	79	18	194

Mentally healthy students in medical stream were 45.5% and in engineering stream were 54.7%.

Taking place of residence as constant (only Urban students), the more students from medical stream (42.4%) were at risk than students from engineering stream (38.9%). In grade III, nearly twice medical students were severely morbid than engineering students.

Table No. 14, Stream of Rural Student * Grading of Score Crosstabulation

Stream of Student			Grading of Score			Total
			Grade 1 (0 to 4)	Grade 2 (5 to 8)	Grade 3 (9 to 12)	

	Medical	Count	38	47	6	91
		% within Stream of Student	41.8%	51.6%	6.6%	100.0%
	Engineering	Count	48	36	3	87
		% within Stream of Student	55.2%	41.4%	3.4%	100.0%
Total		Count	86	83	9	178

In the medical stream, half of the students from rural place of residence (51.6%) were at risk, 41.8% were mentally healthy while 6.6% were psychologically morbid. In the engineering stream, 55% students were healthy, 41% were at risk and remaining students were in grade III.

Conclusion and Recommendation:

Students from both the fields of education (medical and engineering) are exposed to stress; however it seems that the students aspiring from engineering entrance examination are less prone to the development of stress compared to students aspiring for medical entrance examination. Further research needs to be done to study the differences in the academic environments of these fields, the role of number of medical and engineering colleges in India and impact of these factors on the development of stress. Academic, environmental, social and health problems all play an important role in the development of stress.

Development of more student-friendly environments and regular periodic extracurricular activities with universal participation can prove to be useful stress-busters. Similarly, students having their permanent place of residence in urban areas were observed to be prone to develop

stress; thus a periodic review should be conducted with their parents and the issues of the students should be promptly addressed.

Health is a major concern of students, and therefore the promotion of healthy dietary and lifestyle habits should be encouraged. Additionally teachers, parents and even students themselves should be aware that undue expectations about academic achievement can lead to stress.

Institute should post the counselors for the students; do that they can be counseled on regular intervals as per the priority of stress level analyzed and situations. Post counseling of parents should also be done so that they encourage their children and help and motivate them during the stressful conditions and examinations time.

Finally, regular study habits and adequate preparation can help students to avoid stress.

Limitations:

There are some limitations to this study. This study was based on results from a self-administered questionnaire, hence reporting bias cannot be totally eliminated. There was geographical coverage since the study was conducted in a single urban area. Confounding factors such as the participants' current emotional state or personality may be present. Similarly, the difference in stress levels at different times, during pre-examination, examination and post examination periods, was not included in this study.

Annexure 1: Study Tool

IIHMR Jaipur :Psychological wellbeingOf Students in Kota District

Consent Form

I am AasthaSrivastava doing my Masters in Public Health from Indian Institute of Health Management Research, Jaipur in collaboration with John Hopkins University, Baltimore. I am conducting a study on Psychological morbidity of students in Kota district.

Objective of the Study:

The main objective of the study is to determine the level of stress and other Psychological wellbeingamong students preparing for their under-graduate entrance examination.

Method of the Study:

I am conducting a cross-sectional quantitative study in educational institutes in urban region of Kota. I will be visiting both engineering and medical entrance exam aspirants. From each institute, I will be selecting 50 students randomly upon their consent for participation in the study.

Time Taken: You will be given a self-administered questionnaire which will take around 15-20 mins to fill. You need to provide some personal information like your age, gender, residence type, family income, etc.

Confidentiality and Anonymity:

The results will be shared with you. It will also be presented at scientific reports and presentations at IIHMR. However, your identity will not be disclosed, the details and results will be maintained confidential.

Risk and Benefits:

There is no risk associated with your participation in the study. You will not have to pay anything for participation nor will you receive any monetary benefits for the same.

Voluntary Participation and Right to Withdraw in between:

If you have read this form and have decided to participate in the study, please understand your participation is entirely voluntary and you have the right to withdraw your consent or discontinue participation at any point of time without any penalty.

Use of the Study:

The data collected from the study will be used to identify the level of stress among students in general and can be used to plan various methods to reduce the stress and ultimately to reduce the chance of acquiring psychological problems.

Contact Address:

In case of any emergency, you can contact my study advisor at the number provided :
Dr. J. P. Singh, Assistant Professor, IIHMR Jaipur, Mob: 01412791431

Signature of Participant

Date: ____/____/____

General Information:	
Name of Student:	Annual Family Income: Rs _____
Age of Student (in yrs):	Name of Institute/School:
Sex: Male / Female	Class / Batch:
Place of Residence : Urban / Rural	Stream : Medical / Engineering

General Health Questionnaire

We want to know how your health has been in general over the last few weeks.
Please read the questions below and each of the four possible answers. Circle the response that best applies to you. Thank you for answering all the questions.

S.No.	Question	Response	Code
	Have you recently:		
1.	Been able to concentrate on what you're doing?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
2.	Lost much sleep over worry?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
3.	Felt that you are playing a useful part in things?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
4.	Felt capable of making decisions about things?	Not at all	0
		No more than usual	1
		Rather more than usual	2

		Much more than usual	3
5.	Felt constantly under strain?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
6.	Felt you couldn't overcome your difficulties?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
7.	Been able to enjoy your normal day to day activities?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
8.	Been able to face up to your problems?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
9.	Been feeling unhappy or depressed?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
10.	Been losing confidence in yourself?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3

11.	Been thinking of yourself as a worthless person?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
12.	Been feeling reasonably happy, all things considered?	Not at all	0
		No more than usual	1
		Rather more than usual	2
		Much more than usual	3
THANK YOU !!!!			

Annexure 2: LIST OF COACHING INSTITUTES AT KOTA

Sr. No.	Name & Address of the Assessee	Registration No. & Date	Phone No.
1	M/s Aakash Institute, PMC Tower, IndraVihar, Kota, Rajasthan		7821007826/27/28/29/30
2	M/s Anapurna Classes Ladpura ,KOTA	02/KOTA/ST/CTC/04 05.01.04	2332028
3	M/s Bansal Classes,2-K-17, Vigyan Nagar,KOTA	102/KOTA/ST/CTC/2003	2423738
4	M/s Sharma Classes 1e-30,Talwandi KOTA	105/KOTA/ST/CTC/04 21.01.04	2425202
5	M/s FIITJEE Ltd.SP-12A,Indira Vihar,KOTA	106/KOTA/ST/CTC/2003	2421696
6	M/s RESONANCE, J-2,Jawahar Nagar,KOTA	107/KOTA/ST/CTC/2003	2437144
7	ShriMukesh Gupta of M/s Gupta CommerceCoachingClasses,New Post office Road,KOTA Jn.	108/KOTA/ST/CTC/2003	2462041
8	ShriMukulVahal of M/s Bright Physics Classes,2-C-7,Mahavirnagar-III, KOTA	109/KOTA/ST/CTC/2003	
9	Shri Anil Kumar Jain of M/s Advance Classes,1 G-28,RHB Colony,Dadabari,KOTA	118/KOTA/ST/CTC/2003	2503963
10	ShriVirendraPrakash Jain of M/s Jain Classes,E-10,Vallabhbari, KOTA	119/KOTA/ST/CTC/2003	2391494
11	ShriAmitRathore of M/s Rathore Coaching Centre, Shop No.5-6 Near Water Tank TalwandiKOTA	122/KOTA/ST/CTC/2003	
12	Smt. Namrata Agrawal of Prop. M/s SainathCommerce Classes, 2-H-15, Talwandi, KOTA	127/KOTA/ST/CTC/2003	2420156
13	M/s Neochem(Coaching)(Partnership Firm)6-B, Jawahar Nagar, KOTA	129/KOTA/ST/CTC/2003	24333964
14	Vission -2000 Educational Service 360-BTalwandi KOTA	130/KOTA/ST/CTC/2003	2433228
15	M/s Future Z Point 3-F-27,Talwandi KOTA	132/KOTA/ST/CTC/2003	2437578
16	M/s Atul Gaur Mathematics Classess,A-768Indira Vihar KOTA	135/KOTA/ST/CTC/2003	2411242
17	Krishna Carriers Instiutes ,3-E-27 Talwandi KOTA	136/KOTA/ST/CTC/2003	
18	Wisdom ,761 Dadabari ,KOTA	137/KOTA/ST/CTC/2003	2505033
19	PT Education &Traning Service Ltd , Aerodrome Circle, KOTA	138/KOTA/ST/CTC/2003	2500273
20	Shri Ashok Kumar Singh,B-07 Jawahar NagarKOTA	140/KOTA/ST/CTC/2003	2426938

21	M/s Seema Classes ,MPA-16 Mahaveer Nagar KOTA	142/KOTA/ST/CTC/2003	
22	M/s CroseRads Classes, DeepshriParisar1st floor Opp.HDFC Bank Jhalawar Road KOTA	143/KOTA/ST/CTC/2003	2365008
23	Carrear Point.112-B,Shakti Nagar KOTA	144/KOTA/ST/CTC/2003	2500492
24	Carrear Point Infosys 112-B,Shakti Nagar KOTA	145/KOTA/ST/CTC/2003	2505268
25	V.P.M. Classes 1-C-8 SFS Talwaqndi KOTA	146/KOTA/ST/CTC/2003	2429714
26	ShriLokeshRasania of M/s Absolute Classes262-A Talwandi KOTA	147/KOTA/ST/CTC/2003	2429263
27	ShriPramodMangal of M/s V.C.I.322Mahaveer Nagar KOTA	149/KOTA/ST/CTC/2003	2430191
28	ShriParshantMaheshwari of M/s Birla CarrierInstitute 131 Dadabara Ext, KOTA	152/KOTA/ST/CTC/2003	
29	Tutorial H.No.30 Mahaveer Nagar II Opp. Riico CommunityCenter ,Opera Hospital Road	153/KOTA/ST/CTC/2003	2421128
30	MrsUsha Jain of M/s Carrear Vision Sethi Complex IIndFloorDadabari Main Road KOTA	154/KOTA/ST/CTC/2003	2501451
31	M/s New DeamensionDadwara,KOTA	161/KOTA/ST/CTC/04 21.01.04	
32	Shri Sunil Gaur of M/s Apollo Classes, 2-B- 14,Mahaveer Nagar, KOTA	161/KOTA/ST/CTC/2003	2433095
33	Shri Bharat Sharma of M/s KOTA Classes & Carreers (P) Ltd., 6-Jawahar Nagar Main RoadKOTA	162/KOTA/ST/CTC/2003	2434916
34	Dr. K Gopal of M/s Narayan IIT Academy,Sp 12A, IndraVihar,Talwandi, KOTA	164/KOTA/ST/CTC/2003	2422200
35	M/s S.S.Hada English Classes nr.Newpoat office road ,KOTA	170/KOTA/ST/CTC/04	2461752
36	Shri Vijay Varshney of M/s. Prag EducationalInstitutes ,4-B-10 , Talwandi , KOTA-324005	176/KOTA/ST/CTC/2003 18.08.03	2428385
37	Sh.DivakarSaxena of M/s New Oxford EnglishClasses ,H.No. 1107 , Behind Match Factory , Dadwara , KOTA Jn.	181/KOTA/ST/CTC/2003 22.08.03	2461391
38	Sh. Amratanand of M/s Shri ChaitanyaEducational Committee, 1-D-14, SFS, TalwandiKOTA	184/KOTA/ST/CTC/2003 28.08.03	2431241
	MadhuriChaturvedi of M/s.		

39	BhashaCoaching Classes , 380, Shashtri Nagar , Dadabari, KOTA	185/KOTA/ST/CTC/2003 28.08.03	2500934
40	M/s Pravin Chemistry Classes Nr,Natraj cinema ,KOTA	187/KOTA/ST/CTC/04 23.01.04	2463607
41	M/s Research & Evaluation Centre C- 12,Talwandi ,KOTA	190/KOTA/ST/CTC/04 23.01.04	2431566
42	M/s NirajSaxena Classes 5-K- 12,M.N.III,KOTA	191/KOTA/ST/CTC/04 23.01.04	98291-93324
43	Sh. Rajendra Singh Rathore of M/s CCI , NearChaman Hotel , Nayapura , KOTA- 324001	201/KOTA/ST/CTC/2002 03.09.03	2333187
44	Sh. Bharat Aggarwal of M/s Aggarwal Coaching290 , Shopping Centre , KOTA- 324007	205/KOTA/ST/CTC/2003 09.09.03	2360933
45	Smt. MithileshGarg of M/s Sona Classes , H.No.6Basant Vihar Spl. ,Kta-324009	206/KOTA/ST/CTC/2003 09.09.03	2431906
46	M/s GyanVigyanSansthan 5-A-4,Talwandi .KOTA	207/KOTA/ST/CTC/04 03.02.04	
47	Sh. Anil Kumar Dak of M/s Anil DakMaths Classes , Gulab Bari , Ladpura ,KOTA	209/KOTA/ST/CTC/2003 12.09.03	2340065
48	Sh. Rajkumar Mishra of M/s Raj Classes 6- A- 50, Mahaveer Nagar Extn., KOTA	213/KOTA/ST/CTC/2003	2421838
49	Sh. SushilModi of M/s Modi Classes Modi Girls College Campus, DadabariExtn., KOTA	214/KOTA/ST/CTC/2003 15.09.2003	2323108
50	Sh. Ghanshyam Joshi of M/s ACME Classes1, New Jawahar Nagar, KOTA	216/KOTA/ST/CTC/2003 16.09.2003	2420373
51	Sh. Prabhat Kishore Garg of M/s Garg Classes15-A, Talwandi, KOTA-5	227/KOTA/ST/CTC/2003 26.09.2003	2426734
52	Smt. RashmiGarg of M/s Garg Classes15- A, Talwandi, KOTA-5	228/KOTA/ST/CTC/2003 26.09.2003	2426734
53	M/s Concept Classes 174,Dadabari ext. KOTA	231/KOTA /ST/CTC/04 05.02.04	2504430
54	Smt. NeenaGarg, 4-W-2, Talwandi, KOTA(Raj.)	231/KOTA/ST/CTC/2003 29.09.2003	

55	Mrs. Deepa Singh of M/s civil Services Academy Near TT Hospital, KOTA-5	232/KOTA/ST/CTC/2003 29.09.2003	2425456
56	Sh. Ramesh Chand Sharma, 289, Chambal Garden Road, KOTA-9	233/KOTA/ST/CTC/2003 29.09.2003	2438387
57	Sh. Abhay Kr. Singh & Sh. G.a. Babu Raj, Ramesh Chand Sharma of M/s EXCEL IIT-JEE, 7, Jawahar Nagar, Main Road, KOTA-5	235/KOTA/ST/CTC/2003	2438387
58	M/s Agrawal Craeer Classes 60, Pratap nagar, Dadabari, KOTA	236/KOTA/ST/CTC/04 05.02.04	2501604
59	M/s Kumar Classes 7-A-19 M.N.III, KOTA	240/KOTA/ST/CTC/04 05.02.04	2476775
60	M/s Utkarsh Classes 9-f-9M.n.III, KOTA	241/KOTA/ST/CTC/04 05.02.04	98290-06567
61	M/s Indian Couching Classes, Nr, old Mosque, Sakatpura, KOTA	244/KOTA/ST/CTC/04 05.02.4	2370015
62	Sh. Vijay Singh of M/s Physics Tutorials, 1-D-1, SFS Colony, Talwandi, KOTA	245/KOTA/ST/CTC/2003 07.10.2003	
63	M/s Mehra Career Classes thermal Road, KOTA	247/KOTA/ST/CTC/04 05.02.04	2370788
64	Sh. Rajeev Solanki of M/s Rudrash Tutorials C/o. Tak Studio Building, Nayapura, KOTA	248/KOTA/ST/CTC/2003 13.10.2003	
65	Sh. Udhav Lal Soni of M/s Soni Classes 5-L-4, Talwandi, KOTA-05	250/KOTA/ST/CTC/2003 16.10.2003	
66	Smt. Yogita Tiwari of M/s Tiwari Classes 4-C-12, Talwandi, KOTA-05	256/KOTA/ST/CTC/2003 17.10.2003	2405066
67	Sh. Mahesh Kumar M/s Pleasre of Physics 5-b main road jawaharnagar KOTA -324005	260/KOTA/st/ctc/2003	0744-3106750
68	Sh. Vivek Taparia M/s New Tech P-23 Talwandi KOTA -324005	262/KOTA/st/ctc/2003 Dt. 27.10.2003	
69	Sh. Sumit Arora M/s Zenith Point 78 Second Floor Kalawati Paliwal market KOTA -324007	264/KOTA/st/ctc/2003 Dt. 27.10.2003	0744-2333059

70	ShRakesh Mishra M/s saint Classes 1-d-37 Mahaveer Nagar Ext.KOTA	266/KOTA/st/ctc/2003	0744-
71	Sh.Kapil Kumar M/s Maruti Talents Tutorials Opp.Ummed Park ,Nayapura ,KOTA	274/kta/st/ctc/2003	9414189738/2324138
72	Sh.Govind Prasad Sharma Sigma Institute b- 167,Opp.DAV School Talwandi,KOTA	276/KOTA/st/ctc/2003	2426150
73	Sh.BharatBhushanPareek M/s Suganitam 4,Jawahar Nagar Main Road KOTA324005	280/KOTA/st/ctc/2003	0744-2504511
74	Sh.ArunKumawat M/s Dyanamic Couching Center Istitute D-3,UIT Colony, Thermak Main Road ,Sakatpura KOTA-8	282/KOTA/st/ctc/2003	0744-3100232
75	Sh.ParagBhargava M/s Bhargava Classes behind bakewel bakery Gummanpura KOTA- 324007	283/KOTA/st/ctc/2003 Dt.12.11.2003	0744-2390651
76	M/s Arora Classes L-B-209,Indra Vihar KOTA	287/KOTA/ST/CTC/04 11.02.04	3104807
77	Sh.Dheeraj Swami M/s Wisdom 1-kha- 22,Dadabhari ,KOTA -09	310/KOTA/st/ctc/2003 Dt.19.11.2003	0744-2505033
78	Sh.SanjeevRajora 567,Rajora Complex Chawani Main Road ,KOTA	323/KOTA/st/ctc/2003 Dt.25.11.2003	2312145
79	M/s R.A.Sharma Classes Nr.Bhimmandi Police Station ,KOTA Jn.,KOTA	333/KOTA/ST/CTC/04 11.02.04	
80	M/s Suman Sharma 1-J- 21,Teachers Colony Keshovpura ,KOTA	334/KOTA/ST/CTC/04 11.02.04	
81	M/s Creative English 2-R-1,Talwandi KOTA	346/KOTA/ST/CTC/04 11.02.04	
82	M/s Sigma Education & Computer Classes Opp.Gurudwara ,Tipta,KOTA	347/KOTA/ST/CTC/04 11.02.04	
83	M/s Singhal Commerce Classes 1063,M.nll,KOTA	359/KOTA/ST/CTC/04 11.020.4	2431117
84	M/s JemanMaths Classes 229,Shastri Nagar KOTA	365/KOTA/ST/CTC/04 13.02.4	2500710
85	M.s Manish Classes H-400,Nr, Emmanuel School Dadwara, KOTA	369/KOTA/ST/CTC/04 13.02.04	2460357
86	M/s MagamindClasses,Plot No.13 M.N.Ext.,KOTA-05	374/KOTA/st/ctc/2003	3107163

87	Mrs.Abhajain&Vimla Devi M/s The Victor Coaching Classes New post office Road ,KOTA Jn.,KOTA -02	379/KOTA/st/ctc/2003	2460057
88	M/s Chouhan Coaching Centre A-47,Subhash colony ,KherliPhatak ,KOTA	382/KOTA/st/ctc/2003	2321490
89	sh.ParmanandGautam M/s S.S Point 1-k-4,M.N.Ext.KOTA.	386/KOTA/st/ctc/2003	98290-99146
90	Sh.manishkhatri M/s Mohak Classes 1-k-2,Vigyan nagar ,KOTA	387/KOTA/st/ctc/2003	2428861
91	M/s Goyal Classes 566, BasantVihar, KOTA-	413/KOTA/ST/CTC/2004 17/02/04	2424050
92	M/s VipinBuliga Mathematics Classes, 4-a-1, M.N.III,KOTA	440/KOTA/ST/CTC/2004 23/02/04	
93	M/s Lifeline Maths Classes, Plot.No.12, Purana Jhana Road, VigyanNagar,KOTA	441/KOTA/ST/CTC/2004 23/02/04	94142-52219
94	M/s Bhawani Mathematics Classes, Plot.no.15, Police Thana Road, Vigyan Nagar, KOTA-	442/KOTA/ST/CTC/2004 23/02/04	2505784
95	M/s Lakshya Coaching centre, Opp. T.T.Hospital, Keshopura, KOTA	443/KOTA/ST/CTC/2004 23/02/04	3112412
96	M/s Joshico computer Education, 6-a-21, M.N.Ext., KOTA-05	445/KOTA/ST/CTC/2004 23/02/04	2401471
97	M/s universal Classes 4-jh-1, VigyanNgar, KOTA	447/KOTA/ST/CTC/2004 23/02/04	2423954
98	M/s Annu Disc Centre, 1/39, sec.1, Ganesh Talab, KOTA	448/KOTA/ST/CBL/2004 23/02/04	3102535
99	M/s Sukhiya Classes, 657-a, talwandi,KOTA	450/KOTA/ST/CTC/2004 24/02/04	2434943
100	M/s Anil Kumar, 3-M-15, Talwndi, KOTA	474/KOTA/ST/CTC/2004 05/03/04	
101	M/s Bhatnagar Classes, 4-ch-03, VigyanNgar, KOTA-05	520/KOTA/ST/CTC/2004 05/03/04	
102	M/s Kuber Classes , 377-a, Talwandi, KOTA	546/KOTA/ST/CTC/2004 15/03/04	2424308
103	M/s E-Plus Tutorials 108,Dadbari Ext,KOTA	58/KOTA/ST/CTC/04 12.01.04	3106653
104	M/s L Zebra Institute 121,Dadabari Kta	59/KOTA/ST/CTC/04 12.01.04	2500773

105	M/s Vedica Classes 801,Shastri Nagar ,Dadabari ,KOTA	60/KOTA/ST/CTC/04 12.01.04	2501062
106	ArunBazari, Arun's CA & Commerce Studies95-Shopping Centre,KOTA-7	60/KOTA/ST/CTC/20033.07.2 003	2425441
107	K.L.IIT-JEE Academy(a unit of Daswani Classes) 467, Modi College Raod, Dadabari Extn., KOTA-09	615/KOTA/ST/CTC/2004 23/03/04	3091198
108	Smt. Kirti Singh, 5-A-8, Mahaveer Nagar- lind, KOTA-05	627/KOTA/ST/CTC/2004 24/03/04	
109	Cambay Institute, 1, Teachers colony, gumanpura, KOTA-07	641/KOTA/ST/CTC/2004 29/03/04	3100070
110	Career Line Coaching Centre, Opp. Girls School, Gandhi chwok, Sultanpur, Dist. KOTA- 04	658/KOTA/ST/CTC/2004 30/03/04	224423
111	Rahul Acharya of AcharyaClasses,B- 314,Opp.DAV College,Talawandi,KOTA	66/KOTA/ST/CTC/2003 8.07.2003	98292-
112	Rajendra Kumar Jain, 56-A, Model town, Kherli Phatak, Civil Lines, KOTA-02	664/KOTA/ST/CTC/2004 30/03/04	2333697
113	Manoj Kumar Agarwal,B160, Opp.D.A.V.SchoolTalwandi	69/KOTA/ST/CTC/2003	2429578
114	Allen Career Institute,C- 210/2,Talwandi KOTA	70/KOTA/ST/CTC/2003	
115	M/s Nissan Science Classes 2-y- 5,M.N.III,KOTA	75/KOTA/ST/CTC/04 13.01.04	2475025
116	M/s Sharma Cauching Institute 5-A- 15,M.N.III,KOTA	77/KOTA/ST/CTC/04 13.01.04	2430935
117	AnuragSharma ,Prop. of M/s Arya Bhatt Sansthan 1-B-25,Talwandi KOTA	78/KOTA/ST/CTC/2003	2424782
118	Shri Anil Daswani Partner of M/s Daswani Classes467,Dadabari ,KOTA	79/KOTA/ST/CTC/2003	2505467
119	RakeshRathi Partner M/s HOPE 306- B,Talwandi KOTA	80/KOTA/ST/CTC/2003	2424892
120	Samdeep Jain Partner of M/s VISION- 2000Educational Services,306- B,Talwandi,KOTA	81/KOTA/ST/CTC/2003	2424892
121	C.L.Gangan,1-PHA-8,Vigyan Nagar,KOTA	82/KOTA/ST/CTC/2003	2438822
122	ManishaChaturvedi of M/s Unique Tutorials,2- Ka-4,Vigyan Nagar,KOTA	83/KOTA/ST/CTC/2003	2421105

123	RadhaNaklak of M/s Naklak Tutorials,1-N-15,Talwandi,KOTA	84/KOTA/ST/CTC/2003	2437768
124	M/s Mathematics For IIT JEE C-16,Jawahar Nagar ,KOTA	85/KOTA/ST/CTC/04 15.01 04	2424181
125	Raj Kumar Naklak of M/s Naklak Tutorials,125,Shopping Centre,KOTA	85/KOTA/ST/CTC/2003	2364401
126	M/s Tripathi Classes nr.T T Hospital KOTA	86/KOTA/ST/CTC/04 15.01.04	3503268
127	Kishore Bhatia of M/s Bhatia Coaching Inst.SaraykaSthan,Patanpole,KOTA	86/KOTA/ST/CTC/2003	2386108
128	ShriShshirMittle M/s Inshite Coaching Center 141-A,Talwandi KOTA	96/KOTA/ST/CTC/2003	2433425
129	M/s Saransh Tutorial 1Ka-5,Dadabari KOTA	97/KOTA/ST/CTC/04 15.01.04	2438141
130	SmtMinal Jain M/s Study Center of CommerceAducation,Mahaveer Nagar-II, KOTA	97/KOTA/ST/CTC/2003	

References

- 12. IRSSH-485-V5N1 - 12_IRSSH-485-V5N1.161113142.pdf Available at:
http://www.irssh.com/yahoo_site_admin/assets/docs/12_IRSSH-485-V5N1.161113142.pdf. Accessed 11/13/2014, 2014
- P.L. Broadhurst, Emotionality and the Yerkes-Dodson Law, Journal of Experimental Psychology, 54(5) (1957), 345-352
- 48% college students under pressure from entrance exams, reveals survey - Hindustan Times Available at:
<http://www.hindustantimes.com/india-news/mumbai/48-college-students-under-pressure-from-entrance-exams-reveals-survey/article1-1123116.aspx>. Accessed 11/13/2014, 2014.
- Board and Entrance Exam Stress on Students - Don't Kill yourself Available at:
<http://www.successcds.net/Articles/Board-Entrance-Exam-Stress.html>. Accessed 11/13/2014, 2014
- A Study of Stress among Students of Professional Colleges from an Urban area in India Available at:
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3749028/>. Accessed 11/13/2014, 2014
- 12. IRSSH-485-V5N1 - 12_IRSSH-485-V5N1.161113142.pdf Available at:
http://www.irssh.com/yahoo_site_admin/assets/docs/12_IRSSH-485-V5N1.161113142.pdf. Accessed 11/13/2014, 2014.
- Goldberg DP, Gater R, Sartorius N, Ustun TB, Piccinelli M, Gureje O et al. The validity of two versions of the GHQ in the WHO study of mental illness in general health care. Psychol Med 1997; 27(1):191-7
- sag-38-5-10-0709-14:sag-0 - 5000030291 Available at:
<http://dergipark.ulakbim.gov.tr/tbtkmedical/article/viewFile/5000030054/5000030291>. Accessed 1/2/2015, 2015
- Mental Health, Subjective Vitality and Satisfaction with Life for F - 2.pdf Available at:
[http://www.idosi.org/wjss/4\(2\)11/2.pdf](http://www.idosi.org/wjss/4(2)11/2.pdf). Accessed 1/2/2015, 2015.