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## A Study on Prevalence of Psychiatric symptoms among Post graduate Female students of Bangalore University

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### Abstract

**Aim:** This study aims to assess the prevalence of Psychiatric symptoms of female students studying in various P.G. Departments of Bangalore University using the Symptom Check list 90 revised version. **Method:** The self-report version of the SCL 90r. 90 item, single page, self-administered questionnaire was used as a Measure to assess the Quantification of current psychopathology along nine symptom constructs was administered to the P.G. students with their due consent. And these P.G Students were from various departments of Bangalore University at Jnanabharathi campus, Bangalore. The age of the subjects ranged from 24-26years.

**Results:** out of the total samples used for the study, In Somatization symptom construct 56% were above the mean value and 44% were recorded below the mean value (SD=3.54). In Obsessive-Compulsive symptom construct 34% were above the mean Value and 66% were below average with a SD=4.95. In Depression symptom construct 44% were above average and 56% were below average with a SD=59.5. In anxiety symptom construct it was shown 38% above average and 62% below average with a SD=4.95. In Hostility symptom construct 68% were above average and 32% were below average with a SD=0. In Phobic Anxiety symptom construct 62% were above average and 38% were below average with a SD=5.66. In Paranoid ideation symptom construct 48% were above average and 52% were below average with a SD=2.83. And finally in Psychotism symptom construct 32% were above average and 68% were below average with SD=8.49. The most sensitive single Quantitative indicator (GSI-Global severity Index) concerning respondent's psychological distress status, the mean value was 61.5 and SD=5.66. Measure to provide information about respondent's distress style (PSDI-Positive symptom distress Index) was having a mean value of 53.5 with a SD=9.44. Array of symptoms the individuals were currently experiencing (PST-positive symptom total) was having a mean value of 62.5 and SD=2.12.

**Conclusion:** From the above results it can be concluded that the distress levels were moderate to high-moderate for the respondents, Overall intensity of distress was somewhat elevated and they had endorsed a marked number of symptoms. The respondents had positively endorsed a number of first rank symptoms of thought disorder. Although this pattern sometimes occurs as a result of histrionic over-dramatization or other personality-based response set distortions, the possibility of a true thought disorder should be evaluated.

**Keywords:** Somatization, Obsessive-Compulsive, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, psychotism.

### Introduction

Youth - the critical phase of life is a period of major physical, physiological, psychological, and behavioral changes with changing patterns of social interactions and relationships. Youth is the window of opportunity that sets the stage for a healthy and productive adulthood and to reduce the likelihood of health problems in later years <sup>[1]</sup>.

Due to advancement in life-style and rapid urbanization, the mental health is disturbed by various reasons and mental disorders account for nearly 12% of the global burden of disease. By 2020, it is likely to account for 15% loss from 6.1% in 1993 and expected to become second most important cause of disability in the world <sup>[2]</sup>. A study conducted for National Council for Mental Health (NCMH) in India which stated that at least 6.5% of Indian population had some form of serious mental disorder, with no discernible urban-rural differences <sup>[3]</sup>. Different epidemiological studies on the prevalence of psychiatric morbidity among school-going children and adolescents have reported a wide variation from 20% to 40% <sup>[4]</sup>. Stress that begins in the student period may continue to future life and if adjustments

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are not made, then inevitably a "correction" will occur, which may take the form of "burnout" or physical and/or mental impairment<sup>[5]</sup>.

Psychiatric epidemiology is the study of the distribution and determinants of occurrence of mental illness in human beings. In India many investigators have studied the prevalence of various psychiatric disorders over period of time. In a country like India where people are less aware about mental health problems, only patients with major mental illness access care and those with minor mental disorders remain in the community without identification and management<sup>[6]</sup>. In India, the adolescent population constitutes a quarter of the country's population which is approximately 243 million which in turn constituted 20% of the world's 12 billion adolescents<sup>[7]</sup>. In India though many investigators have studied the prevalence of psychiatric disorders in children, and there is a wide variation in prevalence rate from 0.48%<sup>[8]</sup> to 29.40%<sup>[9]</sup>.

Although adolescence and young adulthood are generally considered healthy times of life, several important public health and social behaviors and problems either start or peak during these years. Most of these problems are linked with social determinants and lifestyles operating and interacting in complex environments that precipitate or trigger these conditions or behaviors<sup>[10]</sup>. With the advancement in modern technology and the competitive world, most students especially adolescents who are concerned about their future and career are stressed out and prone for behavioral and mental hardships<sup>[11]</sup>.

**Materials and Methods**

For the study Researcher employed 100 Female Post Graduate students from the various departments of Bangalore University. Symptom check list 90 revised version (SCL-90r) was used which measures Somatization, Obsessive-compulsive disorder, Inter-personal sensitivity, Depression, Anxiety, Hostility, Phobic anxiety, Paranoid Ideation, Psychotism. Normative mean levels are assessed to predict the percentage of prevalence of symptoms above and below mean level.

**The Study Population**

The study was carried out with the various departments P.G. Students of Bangalore University, Jnanabharathi campus, urban district of Bangalore. The study population Consisted of 50 Post graduate female students, aged between 24 to 26 years.

**The SCL-90r Symptom check list 90 revised version Questionnaire**

The 90-item self-report symptom inventory (SCL90r) designed primarily to reflect the psychological symptom patterns of an individual was used to assess the current, point-in-time psychological symptom status. Each item of the questionnaire was rated by the patient on a five-point scale of distress from 0 (none) to 4 (extreme).

**The SCL-90r consists of the following nine primary symptom dimensions**

- Somatization
- Obsessive-compulsive
- Interpersonal sensitivity
- Depression
- Anxiety
- Hostility
- Phobic anxiety
- Paranoid ideation
- Psychoticism

**The instrument's three global indices of distress were**

- Global Severity Index (GSI)
- Positive Symptom Distress Index (PSDI)
- Positive Symptom Total (PST)

**Administration time**

The SCL-90 required between 12 and 20 minutes completing. The typical time for administrative instruction was 1-2 minutes (Derogatis 2000)

**The Screening Procedure**

An information sheet and consent form was given to each respondent. The consent form was to be signed by the respondent and returned to the interviewer. The questionnaires were distributed to the respondents as a group in their classrooms during a pre-arranged time. Each respondent who had returned a consent form was given a copy of the questionnaire for completion. The pupils were asked to read the questionnaire and answer it to the best of their ability. Every effort was made to ensure that the pupils had privacy when completing the questionnaire. Interviewer Was available to answer any of the pupils' questions or to clarify instructions. The Respondents were also asked to include their email- id, phone number and age which was kept confidential.

Scores for each of the nine factors are the average rating given to the symptoms of that factor. The remaining seven items do not measure any particular factor, but were evaluated qualitatively. Three "global" scores are also obtained. The GSI was the average rating given to all 90 items. The PST was the number of symptoms complained of (i.e., the number of items rated higher than zero). The PSDI was the average rating, from 1 to 4, given to those symptoms which were complained of (i.e., not rated "0"). Raw scores for each of the primary symptoms were converted into standardized scores. Mean and standard deviation were calculated for three global indices to reflect psychological symptom patterns; the Global Severity Index (GSI), The Positive Symptom Distress Index, (PSDI), and the Positive Symptom Total (PST).

**Table 1:** Table showing the variables and their mean and standard deviation value

Sl. no.	Item name	Mean value	Percentage	
			Above average	Below average
1	Somatization SOM	61.2	56%	44%
2	Obsessive-Compulsive (OC)	59.5	34%	66%
3	Inter personal sensitivity (IS)	52	78%	22%
4	Depression (DEP)	59.5	44%	56%
5	Anxiety (ANX)	64.5	38%	62%
6	Hostility (HOS)	57	68%	32%
7	Phobic Anxiety (PHOB)	63	62%	38%
8	Paranoid Ideation (PAR)	60	48%	52%
9	Psychotism (PSY)	65.5	32%	68%
10	GSI	61.5	44%	56%
11	PST	62.5	44%	56%
12	PSDI	53.5	68%	32%

out of the total samples used for the study, In Somatization symptom construct 56% were above the mean value and 44% were recorded below the mean value (SD=3.54). In Obsessive-Compulsive symptom construct 34% were above the mean Value and 66% were below average with a SD=4.95. In

Depression symptom construct 44% were above average and 56% were below average with a SD=59.5. In anxiety symptom construct it was shown 38% above average and 62% below average with a SD=4.95. In Hostility symptom construct 68% were above average and 32% were below average with a SD=0. In Phobic Anxiety symptom construct 62% were above average and 38% were below average with a SD=5.66. In Paranoid ideation symptom construct 48% were above average and 52% were below average with a SD=2.83. And finally in Psychotism symptom construct 32% were above average and 68% were below average with SD=8.49. The most sensitive single Quantitative indicator (GSI-Global severity Index) concerning respondent's psychological distress status, the mean value was 61.5 and SD=5.66. Measure to provide information about respondent's distress style (PSDI-Positive symptom distress Index) was having a mean value of 53.5 with a SD=9.44. Array of symptoms the individuals were currently experiencing (PST-positive symptom total) was having a mean value of 62.5 and SD=2.12.

### Discussion

The respondents' somatization levels were obviously above average, and were clearly indicative of a clinical picture involving enhanced distress associated with somatic complaints. Levels of obsessive-compulsive symptoms in this respondent's profile are at normative mean levels, and were essentially unremarkable. Zhang *et al* [12]. In a sample of Chinese college students found that the depression, somatization, obsessive-compulsive and phobic anxiety subscales of SCL-90 affect the university students and focused on the sport competition.

There is some evidence to suggest that the respondents were experiencing difficulties with feelings of personal inadequacy and considerations about devalued self-worth; however, distress was not of a clinical magnitude. The respondents' level of depression was manifestly elevated and clinical in nature. There was evidence suggesting a true depressive disorder may be present. It was also worth noting that the respondents reports suicidal ideation. Jackson *et al.* [13] exploring the associations between psychological symptoms assessed by the Symptom Check List-90 and loneliness in college students, found a significant association between loneliness and interpersonal sensitivity and depression. Students who have health problems are twice as likely to have depression as the students who do not have health problems. Students who have experienced a traumatic death in their families have higher odds of having depression than those who do not have such experience while the entire remaining variables are the same.

The respondents' level of anxiety was significantly elevated, and clinical in nature. Evidence suggests that the respondent may be suffering from a clinical anxiety state, or may be experiencing anxiety secondary to the emergence of another psychological disorder. In an another study Sing *et al.* [14] aiming to clarify that insomnia exerts a mediating or moderating effect on the optimism-depression association in 529 Chinese college students who completed the Beck Depression Inventory (BDI), found that insomnia qualifies as a mediator, suggesting considerable variance in anxiety and depressive symptoms of college students could be due to change in their sleep pattern.

The respondents' record reveals levels of phobic anxiety above the normative mean, but not of a nature to be truly remarkable. There was slight evidence of some suspiciousness in the respondents' responses, but not at all outside the ordinary. The

respondents' psychoticism score was in the clinical range. However, it was more likely that this reflects an intense experience with social alienation, rather than a thought disorder. Paul Pearson and Tony Clayden [15] referred a group of graphic design male students, were found to have higher psychoticism and neuroticism scores than normal on the Eysenck Personality Questionnaire. Extraversion and lie scores were not significantly different from normal. Females did not differ significantly from the normative data on psychoticism, extraversion, neuroticism or lie scores. A further group of new 1st year students showed raised psychoticism scores for females but not for males. The meaning of psychoticism in relation to the personality of artists is questioned by way of two paradoxes [16].

The respondent manifests a symptom pattern highly consistent with a condition of Panic Disorder. Further evaluation is recommended since such a constellation of symptoms may also be associated with a variety of medical conditions, side effects of a therapeutic drug, or withdrawal from an addictive substance. Telch, Michael J.; Lucas, John A.; Nelson, Patrick Aug 1989 [17]. Presented data on the prevalence and Symptomatology of panic attacks and panic disorder (PD) in a large nonclinical sample ( $n = 2,375$ ) of college students. Results showed that approximately 12% of the sample had experienced at least one unexpected panic attack and that 2.36% met Diagnostic and Statistical Manual of Mental Disorders-III—Revised (DSM-III—R) criteria for panic disorder. The infrequent panickers were much less likely to report fears of dying, going insane, and derealization during a panic attack. The findings provide preliminary support for the role of anxious apprehension as a psychological vulnerability factor in the pathogenesis of panic disorder.

### Conclusions

The respondents had positively endorsed a number of first rank symptoms of thought disorder. Although this pattern sometimes occurs as a result of histrionic over-dramatization or other personality-based response set distortions, the possibility of a true thought disorder should be evaluated. The respondent indicates substantial distress associated with Sleep Disturbance. The nature and duration of this problem should be further explored.

The respondents of SCL-90r symptom profiles reveal a pattern and magnitude to be considered in the clinical range, and qualify them as a positive clinical case. Symptomatic distress levels were moderate to high-moderate for the respondents. Scores in certain areas were approaching, or have already penetrated the clinical range. Overall intensity of distress was somewhat elevated and they had endorsed a marked number of symptoms.

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