Effects of Gender, Living Background and Educational Background on Psychological Morbidity in University Students

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Introduction

Morbidity is defined as any departure subjective or objective, from a state of physiological of Psychological wellbeing: in this sense, sickness, illness and morbid condition are similarly defined.

Morbidity itself is measured according the number of people affected, the types of illnesses, and how long the illness lasts. Therefore, the term also refers to the prevalence of psychiatric conditions within a specific social category. For example, students may suffer from acute psychiatric conditions due to burnout, and understanding the rate of which those conditions impact students as a social group would be the psychological morbidity of students.

Students are subjected to different kinds of stressors, such as the pressure of academics with an obligation to succeed, an uncertain future and difficulties of integrating into the system. The students also face social, emotional and physical and family problems which may affect their learning ability and academic performance. Too much stress can cause physical and mental health problems, reduce students' self-esteem and may affect students academic achievement. In recent years there is a growing appreciation of the stresses involved in students in different academic streams. Studies

have classified the sources of stress into three main areas: academic pressures, social issues and financial problems (Sreeramareddy et.al, 2007).

A vast array of literature has been conducted on Psychological morbidity among university students across different countries. Those references range from comparison studies on the students of different colleges (Mahawar&Ghosh, 2011),relationship between different behavioral patterns like internet addiction and psychological morbidity (Alhajjar, 2014) General Psychological health of university student (Zulkefly&Baharudin, 2010), Stress and burnout (Watson et.al, 2008), Prevalence of emotional disorders (Sidik, 2003), Psychological morbidity and coping strategies (Sreeramareddy et.al, 2007) and many other areas.

Chandrasekar, Samasundar, Kapur and Kallaperumae(1980) quoted the findings of McArthur(1961) and reported the factor being responsible for the psychological morbidity as follows: Uncontrollable tension, Restlessness in the background of financial stress, Expectation of emotional rewards in the form of appreciation, Unconscious desire to fail because of unwillingness to be someone who others wants him or her to be, Retaliation against parents.

But it can be seen that the estimates made on the prevalence figures about Psychological morbidity among university students are not uniform findings as well as distorted pictures.

These conclusions have relied on the followings as Kidd (1965) says:

- Some have been concerned to obtain a prevalence figure for psychiatric disorders in relation to the number of students attending university health services during the academic year

- Some university health services have held questionnaire inquiries to assess the incidence of psychological complaints among students

- Some have provided details of psychiatric disorders presenting among students who attend voluntarily for health examinations

- Some have provided details of the extent of usage of their psychiatric services by students

In numerous examples, in this literature, different versions of Goldberg's General Health Questionnaire (GHQ) have been employed as a research tool. Mukherjee and Poddar (2014) in a study which aimed at investigating the level of general well-being of university students and secondly, to specify the level of their well-being in terms of selected life skill attributes- perception of academic stress, degree of suicidal ideation and identity style, employed GHQ-28 along with other inventories and found that The trend of well-being was moderately high among university students.

The problems related to academic activities penetrate many aspects of a student's life and function as predictors to psychological morbidity. Kumaraswami(2013) studied academic stress, anxiety and depression and focused stress among college students, nature of psychiatric morbidity, emotional problems and adjustment, psychological problems of college students. The paper briefly described the research carried out in the last 3 decades especially regarding stress, anxiety & depression and also suggested preventive measures to be taken by colleges.

The prevalence of psychological morbidity among university students is always varies according to the certain independent variables like demographic characteristics etc. to find out the mental morbidity among post graduate and research students and to find out the relationship between mental morbidity and certain demographic social and psychological variables, Chandrasekar, Shamasundar, Kapur&kalliaperumae(1980) administered Questionaire-60, to a group of 1160 students and 179 students with a percentage of 16.68 showed a morbidity rate scoring above 12 in GHQ-60, indicating they are psychiatrically disturbed cases. Also they found that sex, age, language, medium of instruction, marital life, place of birth, rural living, participation in religious activities, type of parents, educational level showed a significant relationship with the morbidity rate.

Sometimes the attempts have been made to compare the rate of psychological morbidity among university students with the same age community samples. Kuruppuarachchi, Kuruppuaracchi, Wijerathne and Williams (2002) aimed to determine the proportion of university students that are psychologically distressed when compared to an age and sex matched population sample and to describe the factors that may contribute to their distress. The general health questionnaire (GHQ 30), previously validated in Sinhala, was administered as a screening test to random samples of

undergraduates in 5 universities in Sri Lanka.. Results showed among the undergraduates, 104 (39.8%) had scores for psychological distress whereas only 67 (25.7%) from the community sample had scores for similar distress. This difference was significant (p=0.0007). A significantly greater proportion (p=0.009) of those entering from rural schools were psychologically distressed than those from suburban and urban schools, and a greater proportion living in rented rooms and hostels were (p=0.001) distressed than those travelling from their homes.

The same kinds of studies have been done even in other locations to understand the prevalence of emotional disorders in university students. Sidik, Rampal&Kaneson, (2003), showed that a total of 41.9% of the medical students were found to have emotional disorders. Factors found to have a significant association with different background effects.

Rationale of the study

In any population Psychological morbidity as well as approaches for interventions to reduce the morbidity levels are context dependent. That means both of them are determined by the interaction between the person and the particular socio-cultural system. The behavior that is associated with psychological morbidity of the student is dependent upon Indian culture, the way of the relationships are maintained, the demanded career and role expectations from the student and the psychosocial stressors as well as the emotional burden that the Indian student is experiencing different from those findings in the western countries.

When this context specificity is related with the particular gender roles' and living background (urban or rural), behavior in that context, their perceptions of why and how they want to live becomes a unique situation. This is more sharpened when these variables functions together with the other individual variables level of education. So this study aims at addressing the Indian context specific psychological morbidity of the university students with reference to their gender and locality as well as level of education. Then the overall development of the Indian student that we address though interventions to reduce morbidity or pathologies can be properly achieved.

Students should be given priority because their qualitative development is a contributor to a nations both quantitative as well as qualitative developmental aspects. As existing researches say students being self conscious and being group conscious makes

them more vulnerable to psychological problems (Chandrasekar, Shamasundar, Kapur&kalliaperumae, 1980). So, the present study allows us to make predictions on which subgroup of the population is more vulnerable to particular stressors.

It has been supported by the literature that familial background (the social relations) is associated with psychological morbidity among students (Sidik, Rampal&kaneson, 2003). Present study employs a variable which allows understanding the effects of living background on psychological morbidity.

The study of the setting (social or physical) is very important because the resulting conditions due to them are not favorable for the students' healthier lifestyle to continue his or her studies. Failure to detect these disorders will unfortunately lead to increase psychological morbidity with unwanted effects throughout their careers and lives.

Generally, the university and college life is said to be stressful than other areas of activities that a same aged person engage in (Kuruppuarachchi, Kuruppuaracchi, Wijerathne& Williams, 2002). So it is necessary to screen the student population time to time and understand the level of their wellbeing and susceptibility to certain kinds of psychological problems. This study aims at using GHQ as a screening tool to understand the psychological morbidity among Indian students.

The student life is getting complex day by day. Guidance and counseling is needed to help the students for optimum achievement and adequate adjustment in the varied life situations. Need analysis of the students in the universities shows the psychological morbidity in the students particular to the problems related to education, profession, social, and health, moral, personal and marital areas. Study on Morbidity itself become a part of needs analysis providing the researcher proper directions.

Methodology

The Research problem of the present study is to study the effects of Gender, Living background and educational level on Psychological morbidity in university students.

Participants

The participants of this study consisted as given in the following table. The Sample was selected using Simple Random Sampling method where every student had the chance to be selected to represent the larger Indian student population.

	Undergraduate	Postgraduate	Total
Male	65	65	130
Female	65	65	130
Total	130	130	**260**

Table-I

Measures

Psychological morbidity is a psychological construct. As this study attempted to identify the Psychological morbidity in university students, the following psychometric tool was used.

- General Health Questionnaire(GHQ-28)(Goldberg and Williams, 1988)

General Health Questionnaire (GHQ) was designed to be a self administered screening test at detecting Psychiatric disorders among respondents in community settings and non-psychiatric clinical settings (Goldberg & Williams, 1988). But this questionnaire doesn't assess the trait like psychiatric conditions rather the presenting complaints in the person at a given period of time. GHQ has several versions. They are GHQ-60, GHQ-30, GHQ-28 and GHQ-12. The "scaled version" or GHQ-28 is used in the present study which assess the probability that a person becoming a psychiatric case. The questionnaire assesses psychiatric "caseness" under four subscales called Somatic Symptoms (Items 1-7), Anxiety/Insomnia(items 8-14), Social Dysfunction(items 15-21) and Severe Depression(items 22-28)(Sterling, 2011). The respondent is provided with four alternative responses.

For the present study, the author adopted the traditional GHQ scoring method where the four alternative responses can be scored as 0, 0, 1, and 1. Although there were number of studies establishing the threshold score in various cultures the commonly accepted Threshold level for GHQ-28 version, is "4". For GHQ-28, higher reliabilities (Split-half and internal consistency) and Validities are reported elsewhere.

Procedure

The questionnaire was administered both in a formal class room situation and outside the class room. The objectives of the study were explained and the average time taken for filling the questionnaire was 15 minutes. The researchers ensured that data collected was

cleaned before carrying out the analysis and the data analysis was done using the SPSS-16. Initially the Normality was checked for the data in each variable using Kolmogorov-Smirnov and Shapiro-Wilk tests of normality. The mean differences in the data of male and female respondents, Urban and Rural respondents as well as Undergraduate and Post-Graduate respondents were compared using Independent samples T-test. The scores of those who scored above the threshold level of GHQ-28 questionnaire were taken as those who are representing Psychological morbidity and the similar procedure was followed while reporting the results.

Results

Out of 420 Undergraduate and Post Graduate Students, only 260 respondents returned the questionnaires (both GHQ-28 and DSQ-40) giving a response rate of 61.90%. Their mean age was 21.05 years (SD=1.73) with 130 (50%) females and 130 (50%) males.

Psychological morbidity level was considered for those who scored on or above 4 in total score in GHQ-28, is named as Variable "above" and this represented the "caseness" of GHQ score. Those who scored less than "4" in GHQ is named as variable" below" and they were considered as not representing "caseness"(above threshold) or vulnerability to any Psychological problem at the given period of time in which data was collected.

Out of 260 Undergraduate and Post graduate students, a total of 129 was represented as having the level of Psychological morbidity (high scorers) with a percentage of 49.6%. The rest (131 students with a percentage of 50.4), fell within the normal range (low scorers).

The effects of Gender, Living background and Level of education were assessed by comparing the mean differences of scores in both those who scored above the threshold level of GHQ scores as well as those who scored below the threshold score.

For the first research question that was asked (Is there a difference in male and female in Psychological morbidity, Table-2 shows the results of those who scored above the threshold (having GHQ "caseness") in GHQ-28. The number of female students who has scored above the GHQ threshold level is 83 compared to 45 male students who have scored above threshold.

The Independent sample t-test analysis was carried out to compare the mean differences between male and female students' (those who scored above threshold/high scorers) GHQ total (psychological Morbidity) score and its subscales. "There was no a significant difference in the scores of Psychological morbidity ("GHQ total" for male (M=8.84 SD=3.33) and female (M=8.22, SD=3.64) participants where; t (126) =0.959, p =0.339", Showing there is no gender difference in Psychological morbidity level of university students in general. A significant difference in the scores of GHQ subscale "Severe Depression" was reported between male and female students as male (M=2.65 SD=1.77) and female (M=1.64, SD=1.29) participants where; t (126) =3.68, p =0.000". A significant difference in the GHQ subscale scores of males and females were not reported in the other three subscales where in "Somatic Symptoms" the score of males (M=1.69 SD=1.31) and female (M=2.17, SD=1.48) participants where; t (126) = -1.821, p =0.071", in Anxiety Insomnia, the score of males (M=2.31 SD=1.38) and female (M=2.57, SD=1.51) participants where; t (126) = -0.942, p =0.348" and in "Social Dysfunction" score of males (M=2.20 SD=1.34) and female (M=1.86, SD=1.18) participants where; t (126) = 1.502, p =0.136". These results show that only in the subscale "Severe Depression" there is a difference with respect to Gender, in the GHQ scores of University Students.

To answer the second research question, which asked "is there a difference between urban and Rural students (living background) in psychological morbidity, a t-test analysis was conducted and the following tables show the results of the urban and rural students those who scored above the threshold score (high Scorers) in GHQ-28. It was shown within the students' sample that scored above the threshold (high in GHQ-28), the rural students are over represented, where the number is 76 from rural living background and 53 from urban areas.

The t-values and their significance levels obtained by GHQ "caseness" which represented both rural and urban students showed that there was no significance difference between urban and rural students in GHQ total scores, in which the score of Urban (M=7.83 SD=3.85) and Rural (M=8.87, SD=3.23) participants where; t (127) = -1.660, p =0.099". In the subscale scores too, there were no differences between urban and rural students in three GHQ subscales: Somatic Symptoms, Social Dysfunction and Severe Depression, as shown in the same table, scores in Somatic symptoms subscale, in which the score of Urban (M=1.77 SD=1.40) and Rural (M=2.14, SD=1.45) participants

where; t (127) =-1.453, p =0.149", Social Dysfunction scale,in which the score of Urban (M=1.79 SD=1.28) and Rural (M=2.09, SD=1.21) participants where; t (127) = -1.351, p =0.179, and in Severe Depression scale, in which the score of Urban (M=2.15 SD=1.66) and Rural (M=1.89, SD=1.47) participants where; t (127) = 0.925, p =0.357. But, there was a significant difference shown between urban and rural students in "Anxiety Insomnia scale in which, the score of Urban (M=2.13 SD=1.51) and Rural (M=2.74, SD=1.39) participants where; t (127) = -2.349, p=0.020.it Could be reported that the Differences were not found in the scores of Rural and Urban University students in the GHQ total score as well as 3 subscales other than Anxiety Insomnia Scale.

It was asked in this study, "Is there a difference between Undergraduate students and Post Graduate students in their Psychological Morbidity?, as the third research question.

The number of Undergraduate students has overtaken the number of Postgraduate students who is showing psychological morbidity (represented GHQ "caseness"), where UG students are 77 while the PG students are 52.

According to the t-test comparison on mean differences of GHQ scores of those who represented "caseness" (High Scorers), a significant difference is reported between Undergraduate and Postgraduate students. It is given in the variable GHQ total, in which the score of Undergraduate (M=8.95 SD=3.26) and Postgraduate (M=7.69, SD=3.79) participants where; t (127) = 2.011, p =0.046". when the subscale scores are considered, a significant difference can be seen between UG and PG students only in "Anxiety Insomnia" subscale, in which the score of Undergraduate (M=2.88 SD=1.27) and Postgraduate (M=1.90, SD=1.55) participants where; t (127) = 3.932, p =0.000".When mean differences are compared, significant differences could not be seen in the other three subscales: Somatic symptoms, Social Dysfunction and Severe Depression. The Subscales: Somatic Symptoms,in which the score of Undergraduate (M=2.08 SD=1.38) and Postgraduate (M=1.87, SD=1.51) participants where; t (127) = 0.825, p =0.411, Social Dysfunction, in which the score of Undergraduate (M=1.84 SD=1.14) and Postgraduate (M=2.15, SD=1.38) participants where; t (127) = -1.393, p =0.166 and Severe Depression, in which the score of Undergraduate (M=2.16 SD=1.47) and Postgraduate (M=1.77, SD=1.64) participants where; t (127) = 1.398, p =0.164 indicating the no difference between UG and PG students in their GHQ subscale scores. These

results indicate that the differencesexist in the GHQ scores between Urban and Rural students' GHQ total score as well as Anxiety Insomnia subscale but not in the other subscales.

Discussion

At the outset of the study, the researcher formulated several hypotheses related to his research question on the influences made by Independent variables. The first Hypothesis (H_0) in this study was "There is no difference between male and female university students in their level of psychological morbidity". As the mean score for male was 8.44 and female was 8.22 and male being slightly higher than females' score doesn't show a much difference. In the participants who scored above threshold the significant difference was not shown between male and female students in GHQ total score (which determined the level of Morbidity). This indicates that the populations, who are vulnerable and can be considered as risky to experience Psychological distress, have common receptivity for the possibility of having a psychological disorder, despite the differences in their gender. This is consistent with the findings of Moffat,Chie, Ross and Morrison(2004) and Papazisis, Tsiga, Papanikolaou, Vlasiadis and Sapountzi-Krepia(2008) which say that there are no significant differences in terms of Gender. But this result of the current study is contradictory with the findings of Yussuf, Kuranga, Balogun, Ajiboye and Buhari(2007),Aarif and Mishra(2009) and Kuruppuarachchi, Kuruppuarachchi, Wijerathne and Williams(2002). The Differences in terms of the Subscales were found only in "Severe Depression" indicating that male and female university students (those who were vulnerable to psychological morbidity) show differences with respect to their Gender only in experiencing Depressive symptoms but not the symptoms related to Somatic, Anxiety Insomnia or Social dysfunction aspects. This indicates a consistent finding with Papazisis ,Tsiga ,Papanikolaou ,Vlasiadis and Sapountzi-Krepia(2008), Ali et.al(2014)(who says that depression is shown in university students with gender differences), Aarif and Mishra(2009) and Srivasthava and Bhandari(2014).

These analyses indicate that there is no significant difference between male and female in the GHQ scores who obtained above the threshold level. The distribution of the level of vulnerability/susceptibility (psychological distress or Morbidity) is common for both Genders. So here the null hypothesis is accepted. The results also indicate that the male and female university students' experience of Depression related psychological

disturbances are at varying levels among those who are having psychological morbidity (high scorers).

Secondly the researcher hypothesized that **"Living background has no effect (H_0)on Psychological morbidity"**. The analysis of the results of the university students those who scored above the threshold score in GHQ-28 showed that there was no significance difference between urban and rural students in GHQ total scores indicating that the psychological morbidity level is equally present in both Urban and Rural level university students. This rate for Urban student was 7.83 while for the Rural students was 8.87. The slight above difference by Rural students over the Urban ones(both those who scored above threshold) in their GHQ score was not significant. Both groups are equally vulnerable to psychological disturbances. This is consistent with the finding of Rashid,Zain and Jan(2000). But this study provided findings contradictory with the findings of Kuruppuarachchi, Kuruppuarachchi, Wijerathne and Williams (2002), Rao and Begum (1994). When the subscale results were compared, only Anxiety insomnia Subscale showed there is a significant difference between Urban and Rural students in their GHQ subscale scores while other three scales showed no difference. These results indicate that the university students who show cut of levels in psychological morbidity experience difficulties related to Somatic symptoms, Social Dysfunctions and Severe Depression Despite their Living background. But the Disturbances related to Anxiety and Insomnia among university students' group who are at the level of psychological morbidity differ in terms of their living background and the researcher had to accept null hypothesis .

It was hypothesized (H_0)in this study that there is no difference between Undergraduate and Postgraduate university students' psychological morbidity. The results of those who were showing levels of Psychological morbidity (those who scored above GHQ threshold) showed that "there is a significant difference between Undergraduate and Postgraduate students. The score for UG students was 8.95 and for PG students was 7.95 which was a significant difference. Undergraduate students have scored higher compared to postgraduate students. This is consistent with the findings of Moffat, McConnachie Ross and Morrison(2004) who say that the morbidity level increase with the year in the college, Sidik, Rampal and Kaneson(2003) who say that the UG and PG student differ from each other groups in their GHQ scores, Aarif and Mishra(2009) who say morbidity is high among students during early years in college. This was not according to the

finding of Chandrashekhar et.al (2007) and Goldberg, Gater,Sartorius, Ustun, Piccinelli,Gureje andRutter(1997). When the subscale scores are considered it could be seen that the Undergraduate students and Postgraduate students significantly differed only in the scores of Anxiety Insomnia subscale.

These results of the group who scored above the threshold in GHQ indicate that the educational level plays a role in their experience of psychological morbidity. Undergraduate students experience, or are in a state of developing a psychological disorder at a different level than postgraduate students. The comparison of the subscale scores of both UG and PG students show that among those who experience high level of morbidity, the UG and PG students' experience Anxiety Insomnia related disturbances at different levels

Summary and Conclusions

The research findings of the present study showed that the percentage of the university and college students who is vulnerable to developing a psychological disturbance approximates to the median. Psychological morbidity was considered as those who scored on or above the threshold score of General Health Questionnaire and it showed that The Male students didn't differ significantly from the female students in their Psychological Morbidity level. Further the results indicated that Urban and Rural students didn't differ in their Psychological morbidity level in terms of the living background. However, the results indicated that Undergraduate and Postgraduate Students significantly differed in the level of psychological morbidity when the educational level is compared. Further the results of the group who scored above the threshold in GHQ, showed no correlation between GHQ total score and a particular defense style as well as any of the GHQ subscale and a defense style.

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