

Perceived Distress in College: Problem in Adjustment in a Social and Cultural Context

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Abstract

This study examines the psychological distress associated with socio-cultural/economical influences among first-year students of the University of Colombo during the 2009/2010 academic year. A self-administered questionnaire was adopted with two distinctive sections: 1) the General Health Questionnaire version 30 (GHQ - 30) for determination of distress levels and 2) pilot and validated questionnaire for gathering socio-economic, education pressures, and physical stress. Information was gathered from 156 university students (68% male and 32% female) of four faculties. Of the students, 49% had distress. Students in the Law faculty showed the highest distress (53%) followed by Medical (48%) and Arts and Science (47%) faculties. Male students had a higher level of distress than female students. The most influential factors for psychological distress among first-year students were permanent residence, mode of residence during university education, and family income. Students who were having more interactions with their peers had lower distress levels. Furthermore, our results suggested that the first-year students of the University of Colombo were mainly suffering from adjustment problems to the new environment. Pre-orientation, guidance and counseling programs could be utilized as preventive measures to reduce the upsurge of psychological distress. Expansion of hostel facilities and financial assistance for needy students would be better rehabilitative measures to improve the psychological environment in universities.

Key words: GHQ – 30, Psychological distress, Undergraduates, University of Colombo

Introduction

Any individuals with a normal life may be intermittently exposed to negative environmental factors, leading their life toward a feeling of unhappiness. The coping ability, depending on intensity of external factors and tolerability, makes them adapt to such situations. If the tolerability of individuals has been undermined, they become distressed. In such events, they need professional help including medical management with necessary psychological measures such as counseling (Hoff, 1984).

When the global context of psychological background is considered, there has been a widespread increase in stress-related mental disorders as a result of a more competitive social structure that accompanied the increasing industrialization and globalization. It is estimated that by the year 2020, anxiety and depression will be the second most common cause of disability worldwide (Lopez and Murray, 1998). Changing environmental and social circumstances play a major role in the onset of stress-related diseases. Thus, developing countries share the heavy burden of social and economic challenges (WHO, 2008).

In the context of such a stressful global background, university students as a special group of members in the society encounter a great deal of academic, personal and social stress during terms of educational endeavor. The students of secondary education, where they are bound to the schools with rules and regulations and direct parental supervision, transfer to university environments that provide more freedom, democracy and self-decision-making opportunities. In such situations, adjustment problems to new environments could lead to psychological distress (Kuruppuarachchi *et al.*, 2002).

The population of first-year university students has historically faced a wide range of stressors and challenges while embarking on a new direction of life. The complexity of these stressors, however, appears to be based on psychological determinants (Gaab *et al.*, 2005). While academic performance is highlighted during this transitional period, Li *et al.* (2010) suggested that many students in Hong Kong are also folding under the pressure and expectations and it may lead to poorer academic attainment and quality of life. Cooke *et al.* (2006) identified financial and academic pressure as the basis for increased levels of anxiety in first-year university students, worse than the general population.

Since the first year is the transitional stage from secondary education to tertiary education, first-year students may have comparatively more adjustment and other individual problems (Kuruppuarachchi *et al.*, 1999). While they adjust to university education, they have to face social issues such as hazing, external political influences, etc. More often first-year students are not provided accommodation facilities. Their deprived economic state compels them to live in small rooms and to have low cost unhygienic foods. Such unmanageable situations may lead to psychological distress, which may eventually lead to university dropouts, physical harm, clinical problems such as symptoms in gastrointestinal tract and, in the long term, it may lead to suicidal tendency (LeBovidge *et al.*, 2009).

Kurupparachchi *et al.* (1999, 2002 and 2012) revealed that university students were more distressed compared to general population. Perera (2011) has recognized that first-year medical students possessed more distress than students of other grades. Recognition of distress levels and related factors may pave the way for formation of important guidance to formulate required strategies for policy makers and university authorities. This study evaluates distress level and related factors of first-year students in University of Colombo, Sri Lanka, which is located at the highly urbanized capital of Sri Lanka.

Materials and Methods

Having received approval from the Ethical Review Committee (ERC-Colombo-SOP Version 2.2, November 2009) of the University of Colombo, necessary permissions were obtained from the Deans of selected faculties of University of Colombo through the Course Director of Post-graduate Diploma in Health Development, before starting the study.

A surveying method was used to determine the psychological distress levels as well as the socio-economic factors in this study with the help of an internationally accepted self-administered general health questionnaire (GHQ-30) (Questionnaire I) and a prepared and validated questionnaire (Questionnaire II) to evaluate socio-economic factors, respectively. At the commencement, all participants were educated about the study and written consent was voluntarily obtained from the willing participants. Subsequently, both questionnaires were randomly distributed among first-year students of the University of Colombo covering all four selected faculties.

The sample was composed of 225 randomly selected first-year students, of these 156 participants returned the questionnaires from the four faculties, namely 43 from Arts, 38 from Law, 36 from Science, and 39 from Medical in the University. 1857 students have been recruited for the particular period (year 2009) into those faculties (UGC, 2009). As such the randomly selected sample represented 12% of the total student population. The similar type of research designed by Goldberg and Hiller (1979), Guthrie *et al.* (1995), Benjapontittak, (1996), Beck *et al.* (1997), and Kurupparachchi *et al.* (1999, 2002, and 2012) was used for this study. Structured questionnaires were formulated to gather data on psychological distress among first-year students.

The names of the participants were not mentioned in the questionnaires to keep confidentiality of the participants. While maintaining anonymity, collected data

were scrutinized by using a numbering and code system to avoid mixing and double counting.

Questionnaire I (General Health Questionnaire 30 (GHQ 30))

The General Health Questionnaire is a self-administered screening instrument to quantify the risk of developing psychiatric disorders such as anxiety, feelings of incompetence, depression, difficulty in coping, and social dysfunction (Huppert *et al.*, 1989). It targets two areas: inability to carry out normal functions and the appearance of distress. This questionnaire can be used for measuring the well-being of a person. GHQ comprises of different versions, namely GHQ-12, GHQ-28, GHQ-60 and GHQ-30 (Golderberg and Williams, 1988; Jackson, 2007). The GHQ item 30 version was widely used (Mostafa *et al.*, 2006; Yusuf *et al.*, 2011) and already adapted and validated for Sri Lankan populations (Rodrigo, 1988; Kurupparachchi *et al.*, 1999, 2002 and 2012). In addition, Abesena *et al.*, 2012(a) concluded that the GHQ-30 displayed adequate reliability for assessment of psychological disorders among primary care attendees of Sri Lanka.

Scoring system of GHQ-30

Respondents who marked column one or two scored zero (0) and column three or four scored one (1) (0-0-1-1). The participants were supposed to respond once for each item. The total of all (01 or 00) in thirty items would be given as a single numerical value. In other words the maximum numerical value for GHQ-30, would be a score of 30 and the minimum value would be zero (Jackson, 2007). According to Goldberg and Hillier (1979) and Guthrie *et al.* (1995) a GHQ score of four or more was considered as the cutoff point of GHQ-30 for the European population. In contrast, Sri Lanka, the cutoff point for GHQ-30 for the Sinhala speaking population has been increased up to six or more (de Silva and de Zoysa, 2011; Kathriarachchi *et al.*, 2001; Kurupparachchi *et al.*, 1999, 2002 and 2012; Rodrigo, 1988). Peiris *et al.* (2011) found that cutoff point for psychological distress for patients attending Colombo North Teaching Hospital in Sri Lanka within the age range of 18–75 years is seven or more. In this study, GHQ score \geq six (06) was considered as a cutoff point and respondents who scored six or above were recognized as distressed personalities (Jayawardene *et al.*, 2011; Kathriarachchi *et al.*, 2001; Kurupparachchi *et al.*, 1999, 2002 and 2012).

Questionnaire II (Prepared and validated questionnaire)

The Questionnaire II has been designed by the author to gather information mainly on socio-economic status of participants. There are a few open-ended questions (comments of problems and resolution suggested) to discuss individual opinions of problems encountered. The information received through Questionnaire II has been used to determine socio-economic factors, which were correlated with levels of psychological distress.

The questionnaire II is divided into two parts. Part I consists of 13 items to determine the socio-economic background, as well as the place of residence, distance from university, and consulting a doctor, among other problems related to distress.

Data Analysis

At first, as explained above, sub items in each GHQ-30 questionnaire were counted as a single numerical value. Participants with a GHQ-30 score of six or more were considered distressed individuals. Qualitative values in author-prepared questionnaires were converted into quantitative values. Subsequently simple statistical analyses, frequency tabulation, as well as a Chi-Square test for independence were adopted in a computer-based statistical package (Minitab[®] 14 statistical software package) to find out the relationships between GHQ scores and socio-economic status with the data gathered from the author prepared questionnaire.

Results

The percentage of distress among first-year students of the University of Colombo, who were between the ages of 18-24, was 49%. The College of Law recorded 53% (20 students), followed by the College of Arts and Science 47% (20 and 17 students respectively), and the College of Medicine 48% (16 students). The student category of age 18-21 years exhibits a higher percentage of distress (54%) than the category of age 22-24 years (23%). Under the gender variable, male students (51%) were more distressed than female students (46%).

The distress levels were analyzed according to secondary school education and permanent residence. The results showed that students from rural areas were more distressed (51%) than suburban areas (49%) ($P=0.13$), which was somewhat equal to urban areas (46%). The hostels of the university were recognized as the least distressed place (48%), as compared to the other residence types. The students who traveled from their own houses recorded a

49% distress level, while students of outside boarding places recorded a 51% distress level. On the other hand, those who proceeded from relatives or friends' houses suffered much higher distress (56%) ($P=0.07$). Correlation between distress level versus distance between permanent residence and the university showed that students who lived within 50 km of the university were more distressed (54%).

The students that belonged to the lowest monthly family income (<Rs10,000) and students that belonged to the highest monthly family income (>Rs.30,000) have each recorded 45% low distress levels. Students that belonged to moderate monthly family income ranges (Rs.10,001 - 20,000 and 20,001 - 30,000) have recorded comparatively high distress levels (54% and 52% respectively) (Table. 1).

Table 1. The levels of distress in relation to family income

Monthly family income	No. of students distressed	Level of distress (%) (X^2)	P-value
<Rs. 10,000	17	44.74%	0.05
Rs. 10,001 to Rs. 20,000	13	54.17%	
Rs.20,000 to Rs.30,000	13	52.00%	
> Rs.30,000	28	45.16%	

The students who were mainly dependent on university bursary system and the students who were getting encouragement from peer groups both showed 60% distress. The self-motivated group of students was found to be less distressed (41%) than students who were influenced by parents and friends. Students who were engaged in extracurricular activities showed less distress (43%) than the other students (55%). Students who were getting the second level frequency in medical consultations (once in a month) showed more distress (73%) than other student categories who consult medical officers at longer intervals (once in six months). In relation to clinical evaluation, the students who were suffering physical illnesses of the respiratory system and the gastrointestinal system were found to be the highest distress level (100%) reported in the study.

Discussion

This analysis of the GHQ 30 results indicates that 49% of first-year students of the University of Colombo reported psychological distress. This is a high prevalence of reported psychological distress among first-year university

students in comparison to similar studies done in other Sri Lankan universities. Kurupparachchi *et al.* (1999 and 2002) examined university students and found only 40% from five universities of Sri Lanka were emotionally distressed. In a similar study, Chatterjee (2012) showed that 15% of undergraduate students of a Medical College in Kolkata in India were mentally distressed. Mostafa *et al.* (2006) reported that 85% of medical students of Alexandria school in Egypt had emotional distress. Since a decade has changed the expectations, curricular contents, and life styles along with changing globalization effects, the distress level of university students would have been increased in comparison to previous studies. The GHQ cutoff point also should change with changes in the socio-economic status of a population with time i.e. Abeyseena *et al.*, 2012(b) recommended that GHQ-30 score seven or above was more suitable for Sri Lankan, Sinhala speaking population.

Figure 1 illustrates that 51% of undergraduates had a GHQ-score of five and below and therefore count as non-distressed. The study sample of students is not in normal distribution and skews left. Therefore, it is reasonable to conclude that the distribution of distress levels in the study sample is highly specific.

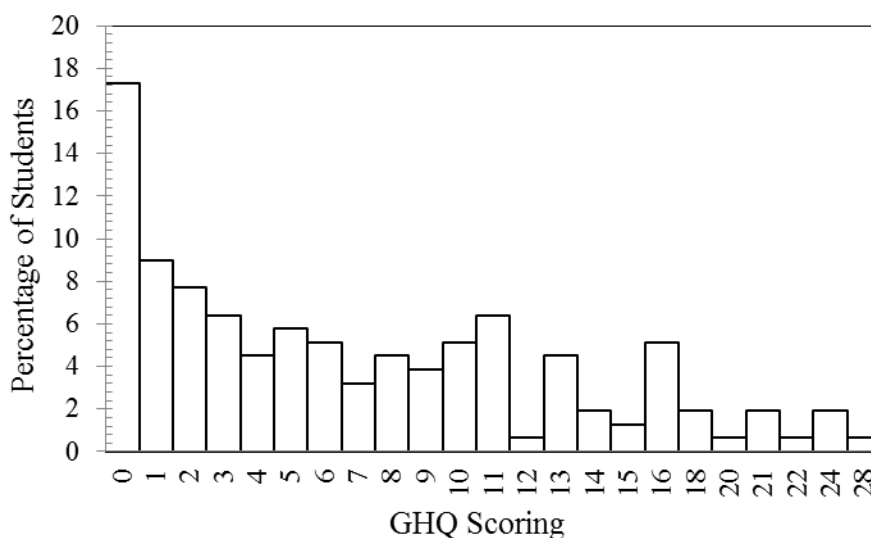


Figure 1: Percentages of students in relation to GHQ scoring

Cultural and linguistic stress

Prevalence of high levels of psychological distress among first-year university students might be due to adjustment problems erupted with the exposure to an unfamiliar social environment. Perhaps the students might have waited

enthusiastically to enjoy a new academic environment with a freshly gathered peer group; however, they had to leave close family, a familiar social and natural environment, behind to enter into a complex macro-institutional environment filled with students in different disciplines. For a matter of fact, each individual first-year student has to undergo a period of hazing. In some courses conducted in the university, first-year students have to change the medium of language from either Sinhala or Tamil into English. Since students enrolled from rural areas are still poor in using English, they are deprived of their prominence in the society of the university. It may further lead to formation of class-based sub cultures or peer groups or isolation of certain students. Such a language-based hostile environment nourishes certain political agendas inside the university. Environmental factors have caused physical illness and distress for first-year students. The campus climate affects all forms of student adjustment, as do transitional experiences that are common for most students in the first undergraduate year (Hurtado *et al.*, 1996).

Students who were between the ages of 18-21 years were more distressed (54%) than their elder peers. Generally, the category of students who get through A/L at the first attempt comes under this particular age group. They have just completed their adolescence age, living with very close parental supervision and bonds, until admission into university. Perhaps they might have remnants of previous distress in relation to hardships undergone in studying and getting through A/Ls. It is obvious that, for the younger students, the concerns of transition are coupled with additional psychological concerns with academic and social adjustment, development of autonomy, and identity development (Wintre and Yaffe, 2000).

Physical stresses

In some boarding houses, meals are not provided or are at a substandard level; however, students have to depend on food sold at outlets. Since that food is prepared with added artificial substances and most often in poor cleanliness, students suffer from illnesses of the gastrointestinal tract. The present study has revealed that students who suffered physical illnesses of the gastrointestinal tract have reported the highest proportion of distress (100%). Meanwhile, the student category that had less than a 50km distance between their permanent residence and the university suffered a 54% distress level, which was the highest reported under the categories of variable distances between permanent residence and the university. They are the students who proceed daily from home to the university through busy traffic. Daily moving through busy traffic in a highly urbanized road system exposed to highly polluted air may eventually

lead to physical illnesses of the respiratory system. Since busy traffic and congested population in the city of Colombo led to air pollution (Ileperuma, 2000), students who are boarded in city limits usually live in smaller rooms with poor ventilation, so they are also vulnerable of having physical illnesses of the respiratory tract. Hence, the category of students who suffered physical illnesses of the respiratory system is divided into two categories: students who lived less than 50 km from the university and students who were staying in boarding places. The students in these categories have reported the highest level of distress (100%).

Relationship among age category

In this study, male students have shown more distress (51%) than female students (46%). Seeman (1997) found that female undergraduates had more mental tolerability than males. A similar study conducted by Mostapha *et al.* (2006) found high prevalence of female distress. The reported low distress among Sri Lankan female first-year students would have happened with the competitive development in literacy levels and remaining social values in the country. Even though hazing is prevalent as a social malfunction in Sri Lankan universities, bodily harm done to female students was rarely reported.

Rural students distress, development, drive, and future research

Prevalence of comparatively high proportions of distress has been reported more in rural set up than suburban and urban set up (51%) in this study. Most relevant factors for such distress arose due to failures in infrastructure development and provision of human resources (especially teachers) in the rural sector. Kurupparachchi *et al.* (1999, 2001 and 2012) reported that rural students have more adjustment problems, and they recommended more orientation programs for undergraduates. In addition, Kathriarachchi *et al.* (2001) suggested that students who were from under-privileged districts were more distressed. The government has already realized this background and started its developmental drive focusing on rural sector uplifting (Central Bank of Sri Lanka, 2009).

There was approximately a 5% drop of distress observed in the permanent residence factor of rural areas in relation to school education in rural areas (56% - 51%). Perhaps the reason for this improvement may be due to the supportive environment created for education with student migration towards urbanized areas. As such, it would be one of the best attempts of doing fresh research in

contrast between rural and urban educational set up to support developmental endeavors in Sri Lanka.

Residency during university education and associated distress

Since the low distress level (48%) reported among first-year university hostellers, the most preferable place to stay would be university housing for university students. Facts like high levels of peer group support, economical compatibility, safety measures and time management would have been supported in such a situation. Most often, first-year university students are deprived of university housing facilities. In these situations, they are forced to select comparatively distressed places like outside boarding houses (51%) or a relative/friends' house (56%). In the case of students who have their own places very far away (> 150km) from where they can't travel daily have to select one of above mentioned comparatively distressed places, in which the distress would be higher (51%) than the students who have their own houses and are exposed to known environments from which they can travel (49%).

Level of distress in relation to family income

Students who belong to the lowest income (< Rs. 10,000) families exhibited the lowest distress (45%). The students of the highest range of income (> Rs. 30,000) were found to have the second lowest distress level (45%). Comparatively high distress was recorded among the middle-income group of students. This type of outcome might have resulted due to an ongoing financial support system from which middle-income students are not supported. Perhaps, the low level of psychological distress among the low-income group might have resulted due to coping abilities already developed among low-income students against poverty, in their socio-economic environment. Conversely, the low level of psychological distress in the high-income group of students might have resulted because they were capable of spending more than the other income groups. Previous studies (Kathriarachchi *et al.*, 2001; Kuruppuarachchi *et al.*, 1999, 2002 and 2012) recognized that economic difficulties of university students are one of the major key factors, which govern psychological distress among undergraduates.

Conclusions

In conclusion, it was observed that 3 out of 15 distinctive parameters indicated that the study identified relative determinant factors for psychological distress among first-year university students. Those relative determinant factors were permanent residence, family income of the student and mode of residence

during university education. It was highlighted that first-year students who are from the lower income group and rural areas to the university mainly suffered with adjustment problems against the new environment, as mentioned by earlier studies on the same matter. From the results of this study, we recommend that there should be an efficient and effective counseling service for students and training of academics on stress management. In addition, implementation of installment basis payments for tuition, similar bursary systems, and expansion of accommodation facilities are suggested.

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