A STUDY OF PERSONALITY CHARACTERISTICS
AND PSYCHOLOGICAL DISTRESS AMONG
NURSING STUDENTS

Divya Merciline* and O.S. Ravindran**

ABSTRACT

The purpose of the study was to find out the personality characteristics
and to identify the presence of depression, anxiety and stress among
undergraduate nursing students of both first and final year. The sample
for the present study consisted of 100 subjects (16 males and 84 females).
They were assessed by the following tools: General Health Questionnaire
(GHQ-12), NEO Five Factor Inventory (NEO-FFI), and Depression Anxiety
and Stress Questionnaire (DASS). Results were discussed using percentages
and t-test. Results indicated that the first year students have experienced
higher level of distress than the final year students.

Key Words: Students, Personality and Stress.

Personality is that which makes us what we are and it makes us different
from others. It is seen as a complex pattern of deeply embedded psychological
characteristics that are expressed automatically in almost every area of
psychological functioning. In the words of Ryckman (2004), personality is
defined as a dynamic and organised set of characteristics possessed by a person
that uniquely influences his or her cognitions, motivations and behaviours in
various situations.

There are various models of personality such as biological, psycho-dynamic,
interpersonal, cognitive, trait and factorial perspectives. Among which, the five
factor model is the most prominent current model of personality which was

* Clinical Psychologist, Sri Ramachandra University

** Associate Professor of Clinical Psychology, Sri Ramachandra University;
Address for correspondence: Second Author: No. 30 (new 17), 23rd Cross Street,
Besant Nagar, Chennai-600090, Tamilnadu E mail: nirmalaravinran20@gmail.com
derived from the analyses of various personality inventories, not words from the dictionary (Costa and McCrae, 1992). It postulates five largely independent and relatively broadly designed personality dimensions such as, neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. Among the different models of personality, the Big Five Model is extensively researched with students (Rubinstein, 2005; Bidjerano et al., 2007 & White et al., 2009).

Personality traits such as neurotic and extrovert can put students at risk of developing stress and other related psycho-pathology (Abbaszadeh et al., 2010). There is a growing concern regarding the mental health of college students among mental health professionals (Council Report, Royal College of Psychiatrists London, 2003). It was found that depression and anxiety are the two most widespread mental health problems seen in college students (Oliver et al., 1999). The stress experienced by students can lead to poor academic performance, depression and serious health problems (Dyrbye et al., 2006). Andrews et al., (2004) studied the relation of depression and anxiety to life stress and achievement in students. The results showed that 9% of previously symptom-free students became depressed, and 20% became anxious at a clinically significant level. Stress is another distressing symptom among students. Stress is a universal phenomenon and the student nurses are also not spared. They experience significant stress during their training period and this may contribute to sickness, absence and attrition (Galbraith & Brown, 2011). Keeping in view of the above, the present study was carried out to find out the personality characteristics and the presence of distressing symptoms (depression, anxiety and stress) among undergraduate nursing students of both first and final year. The specific objectives were: (1) to find out the personality characteristics of the first and final year nursing students. (2) to compare the personality characteristics and the levels of depression, anxiety and stress between the first and final year students.

METHOD

Sample

The sample for the present study comprised of 100 subjects (16 males and 84 females) who were all students of first and final year undergraduate nursing programme in a private nursing college at Porur, Chennai, in the age range of 18-24 years. By using the General Health Questionnaire (GHQ-12) as a screening device, 100 students were identified. Purposive sampling technique was used. Fifty per cent of the students were in the age group of below 19 years and the remaining 50% belonged to 20 years and above. The inclusion criteria were: a) first and final year undergraduate nursing students of both gender. b) Individuals who obtain a score of 5 and above on the GHQ. The exclusion criteria were: a) students who are unwilling to participate in the study. b) Students with chronic medical problems/physical handicaps.
Tools

1. *Socio-demographic Data Sheet:* A socio-demographic data sheet was developed to collect the socio-demographic details of the participants.

2. *General Health Questionnaire (GHQ):* The GHQ-12 (Goldberg, 1972) was designed to assess for the presence of psychiatric distress related to general medical illness. There are four versions of GHQ and in the present study, GHQ-12 was used to screen the students. The GHQ has been widely used in the Indian setting and its reliability and validity have been established.

3. *NEO-Five Factor Inventory (NEO-FFI):* The NEO-FFI is a 60 item version of Form S of the Revised NEO-Personality Inventory that provides a brief, comprehensive measure of the five domains of personality (Costa and McCrae, 1992). It consists of five 12 item scales which assess the five major domains of personality (neuroticism, extraversion, openness, agreeableness and conscientiousness). Each item is rated on a 5-point scale and higher scores indicate higher incidence of the personality trait. Regarding reliability, the internal consistency coefficient for the NEO-FFI was ranging from 0.68 to 0.86; short term test-retest reliability was ranging from 0.75 to 0.83.

4. *Depression Anxiety and Stress Scale (DASS):* The DASS, developed by Lovibond and Lovibond (1995), is a 21-item instrument measuring current symptoms of depression, anxiety, and stress over the past week. Each of the three scales consists of 7 items in which the respondents are expected to rate each of the statement on a four point scale ranging from 0-3. The range of possible scores for each scale is 0-21. The scores for depression, anxiety and stress are calculated by summing the scores for the relevant items. Internal consistency of the DASS subscales was high with Cronbach’s alphas of 0.94, 0.88, and 0.93 for depression, anxiety, and stress respectively.

Procedure

After obtaining prior permission from the Institutional Ethics Committee, the students were contacted. They were explained about the nature of the study and then written informed consent was obtained from them. The General Health Questionnaire (GHQ-12) was administered to find out the psychological distress. Those who obtained a score of 5 and above were included in the present study. Thus 100 students were selected from the first and final year. The tools were administered in a group of 10 students each and a total of 10 sessions were conducted. The time taken for each session was approximately 45 minutes. Instructions were read out and explained and queries about how to answer the items were addressed.
RESULT AND DISCUSSION

The data was coded for computer analysis. Obtained data was analysed using percentages and t-test. Majority of the sample were from nuclear family (78%) and another 22% were from joint family. Regarding gender, only 16% were males and the majority (84%) of them were females. Most of the students were from sub-urban background (53%), 36% from urban area and the rest (11%) belonged to rural background.

Table 1: Significance of Difference between Mean Scores of the two groups on Personality Characteristics (N=50 in each group)

<table>
<thead>
<tr>
<th>Factors</th>
<th>I year</th>
<th></th>
<th>IV year</th>
<th></th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>57.06</td>
<td>5.83</td>
<td></td>
<td>55.84</td>
<td>4.85</td>
<td>1.60</td>
</tr>
<tr>
<td>Extraversion</td>
<td>51.14</td>
<td>6.73</td>
<td></td>
<td>53.08</td>
<td>8.24</td>
<td>1.29</td>
</tr>
<tr>
<td>Openness</td>
<td>45.10</td>
<td>6.14</td>
<td></td>
<td>42.70</td>
<td>5.74</td>
<td>2.02</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>35.64</td>
<td>8.77</td>
<td></td>
<td>37.42</td>
<td>8.80</td>
<td>1.01</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>36.66</td>
<td>7.53</td>
<td></td>
<td>41.22</td>
<td>7.39</td>
<td>3.06</td>
</tr>
</tbody>
</table>

NS= Not Significant

The above table shows the mean scores and standard deviations of the two groups on the personality characteristics as assessed by NEO-FFI. On neuroticism, both the groups were found to be sensitive, emotional and prone to experience feelings that are upsetting. With regard to extraversion, both the groups were found to be moderate in activity and enthusiasm. They used to enjoy the company of others but they also value privacy. On the openness factor, the first year students were found to be practical, but willing to consider new ways of doing things while the final year students were found to be down-to-earth and traditional. Both the groups were found to be hardheaded, skeptical, proud and competitive on the factor of agreeableness. On conscientiousness, both the groups were found to be easy going, not well organised and careless at times.

Table 2: Percentage Distribution of Levels of Depression, Anxiety and Stress among First year and Final Year Students

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Normal (%)</th>
<th>Mild (%)</th>
<th>Moderate (%)</th>
<th>Severe (%)</th>
<th>Extremely Severe (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First Year</td>
<td>Final Year</td>
<td>First Year</td>
<td>Final Year</td>
<td>First Year</td>
</tr>
<tr>
<td>Depression</td>
<td>28</td>
<td>48</td>
<td>10</td>
<td>14</td>
<td>34</td>
</tr>
<tr>
<td>Anxiety</td>
<td>14</td>
<td>34</td>
<td>2</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>Stress</td>
<td>32</td>
<td>70</td>
<td>32</td>
<td>22</td>
<td>28</td>
</tr>
</tbody>
</table>

Vol. 8, No. 1, September, 2013
The percentage distribution of the levels of depression, anxiety and stress on DASS are shown in Table 2. With regard to first year students, 10%, 2% and 32% had mild levels of depression, anxiety and stress respectively. Moderate level of depression, anxiety and stress were seen in 34%, 26% and 28% respectively. Twenty-six per cent reported both depression and anxiety in the severe level. Extremely severe level of anxiety was seen in 32% of the students. Regarding final year students, 14%, 8% and 22% had mild levels of depression, anxiety and stress respectively. Moderate level of depression, anxiety and stress was seen in 20%, 26% and 6% respectively. Severe level of depression, anxiety and stress was seen in 12%, 14% and 2% respectively. The percentage of students showing severe level of stress was comparatively less.

Table 3: Significance of Difference between Mean Scores of the two groups on DASS (N=50 in each group)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>I year</th>
<th>IV year</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>M 18.02 SD 8.44</td>
<td>M 10.84 SD 8.60</td>
<td>4.21</td>
<td>0.01**</td>
</tr>
<tr>
<td>Anxiety</td>
<td>M 17.10 SD 8.94</td>
<td>M 12.66 SD 9.04</td>
<td>2.45</td>
<td>0.01**</td>
</tr>
<tr>
<td>Stress</td>
<td>M 16.74 SD 5.87</td>
<td>M 11.64 SD 6.46</td>
<td>4.13</td>
<td>0.01**</td>
</tr>
</tbody>
</table>

**Significant at 0.01 level

The above table shows the mean scores and standard deviations of the two groups on depression, anxiety and stress as measured by DASS. The first year students have significantly higher level of depression, anxiety and stress than the final year students.

Personality is determined by the interaction of both genetic and environmental factors. Eysenck & Eysenck (1975) conceptualised that personality dimensions as ‘constitutional’ (genetic, neurological and biochemical) which are the basis for the measurement of different dimensions of personality and the personality develops from childhood through adolescence.

Adolescence is the period between childhood and adulthood characterised by biological and psychological changes. The students also pass through this crucial period which is considered as a period of strom and stress.

The present study was carried out to find out the personality characteristics and the presence of depression, anxiety and stress among nursing students.

There are different models of personality among which the Big Five model proposed by Costa and McCrae (1992) is extensively researched among college students (Rubinstein 2005; Bidjerano et al 2007; White et al 2009). There are five factors of personality namely neuroticism, extraversion, openness, agreeableness and conscientiousness. For the present study, the first and final year students of nursing were studied to find out their personality characteristics.
They were found to be high in neuroticism, average in extraversion and openness but low on the factors of agreeableness and conscientiousness. Similar findings were reported by Kikuchi et al. (1999); Belsi et al. (2011); Singh & Duggal (2009); Lievens et al. (2002) and Chibnall et al. (2009).

It is observed that students undergo tremendous stress during various stages of their course. Studies among students reported that psychological distress and personality influence academic performance and adjustment (Aktekin et al., 2001; Warbah et al., 2007). Moreover, the presence of depressive and anxiety symptoms also pose a significant challenge for student adjustments on college campuses. Depression and anxiety are the most widespread mental health problems seen in college students (Oliver et al., 1999). In the present study, first year students experienced significant amount of anxiety and depressive symptoms followed by stress than the final year students. Similar findings were reported by (Jones & Johnston, 1997).

Stress is a psychological and physical strain or tension generated by physical, emotional, social, economic or occupational circumstances, events or experiences that are difficult to manage. The stress experienced by students can lead to poor academic performance, depression and serious health problems (Dyrbye et al., 2006). In the present study, first year students experienced high level of stress than the final year students and the academic factors were cited most high in stress intensity. Similar findings were reported by Bush et al. (1985) and Jimenez et al. (2010).

It is concluded that psychological distress is seen more among the first year students than the final year students.

REFERENCES


White, S., et al. (2009). Examination of previously Homeschooled College students with the big five model of personality. The National Home Education Research Institute, 25(1), 1-7.