



Original Research Article

A Study to Assess the Effectiveness of Stress Management Protocol on the Perceived Level of Stress among the Professional and Non-Professional Students in Selected Colleges of Rajasthan

Mahipal Singh

Principal, Akhil Bhartai Vidyapeeth College of Nursing, Sikar (Rajasthan).

Received: 18/01/2014

Revised: 11/02/2014

Accepted: 18/02/2014

ABSTRACT

Introduction: Now a day's Student life is becoming more and more stressful largely due to an ever-increasing debt and hardship that students face. Therefore, this study was conducted on effectiveness of stress management protocol on perceived level of stress among the professional and non-professional students.

Materials & Methods: A quasi-experimental, one group pre-test, post-test design was adopted to measure the effectiveness of Stress management protocol among Professional and Non-Professional students in selected colleges of Rajasthan. The study was covering the 600 students, out of them 300 were professional and 300 were non-professional students. Data was collected from May 2011 to July 2011. A self-structured stress assessment questionnaire was used to collect demographic data and perceived level of stress of study subject and stress management protocol to check its effectiveness on perceived level of stress.

Results: The data revealed that, there is significant difference in mean perceived level of stress score (165.55) of professional students and mean perceived level of stress score (139) of non-professional students. Major findings of study revealed that stress management protocol is effective in decreasing the stress level of professional and non-professional students. Perceived level of stress was a significantly associated with fathers' education, family income of professional students and father education of non-professional students

Conclusion: After the detailed analysis of this study shows that professional students may have more Perceived level of stress compared to non-professional and it could be also undoubtedly concluded that stress management protocol make aware the college students regarding the impact of stress on their life and to manage their own affairs.

Key words: Perceived level of stress, stress management protocol, Professional and Non-professional Students.

INTRODUCTION

Students are the cream of young population and their life is becoming more and more stressful because of the nature of their work. Professional students have stress,

which is the part of their college life, including greater academic demands, new financial responsibilities, changes in social life, exposure to new people, role conflict, and lack of support and adjustment to the

rigorous program of theory and clinical practice.(Chandrashekar CR., et al.,1980).^[1]

Beck DL, Hackett MB, et. al. (1997)^[2] conducted a study on Perceived level and sources of stress in university professional schools of Canada. The results revealed that nursing students experienced higher levels of stress and higher levels of physiological and psychological symptoms than students in other health-related disciplines. (Robert G. 1998)^[3] Studies have shown that due to academic difficulties among undergraduate students, almost 6% of students dropped out before graduating and a further 8% required substantial extra time to complete their course of study. Findings are almost identical for both sexes. Psychiatric disorders were diagnosed in 42% of male students with academic problems, neurosis accounting for nearly half of the cases and psychotic for a quarter. (A. Okasha, 1985)^[4] Various Studies conducted on college students in India, highlight the level of adjustment problems in different areas which are: getting tired easily (81.30%), worrying about examinations (68.9%), unable to concentrate on studies (79.3%), having no one to share problems (80.20%), having too many personal problems (70%), worried about finances (19.7%), being made fun of (82.17%), difficulty in communication (67.82%), and 7% difficulty in making friends etc.

Researches show that stress to a certain extent helps the individual to increase his productivity and creativity. Stress in moderate or severe levels can lead to physical and psychological disorders. It is important for every student to realize the impact of poor mental health on their mental well-being and also can prevent the long-term debilitating effects of unmanaged stress. To manage stress among students, there must be baseline data regarding the perceived level of stress among professional and non-professional students. **Objectives of**

study (1) assess the perceived levels of stress experienced by Professional and non-professional students,(2)Evaluate the impact of Stress Management Protocol by comparing the perceived level of stress experienced by professional and Non-Professional students before and after administration of Stress Management Protocol (3) Compare the perceived level of stress experienced by Professional and Non-professional students (4) association of the perceived level of stress experienced by Professional and Non- professional students with different selected demographic variables.

MATERIALS & METHODS

A quasi-experimental study was carried out on 300 professional (B.Sc. Nursing Students) and 300 non-professional (General B.Sc. Degree students) to assess the effectiveness of stress management protocol on the perceived level of stress among the professional and non-professional students in M.G. university college of Nursing Jaipur, Udaipur college of nursing, National Institute of Medical sciences university college of nursing and Upchar college of nursing, Rajasthan for professional (B.Sc.Nursing Students) and for non-professional (General B.Sc. Degree) students was in Bharatiya general Degree college, Shekhawati degree college and Keswanand general degree college Rajasthan. The sample for the study comprised of 300 professional students who are studying in B.Sc. Nursing course and 300 non-professional students, who are studying in general B.Sc degree course.

The sample who met sampling criteria and available during the month of May 2011 to July 2011 were selected as the subject for the study. They were selected by non-probability convenient sampling technique in equal number of professional and non-professional students.

In Phase I of the study, a descriptive survey approach was adopted to assess the perceived levels of stress. In Phase II of the study an evaluative approach was used to measure the effectiveness of Stress management protocol. The research design used was Quasi-experimental, one group pre-test, post-test design to measure the effectiveness of Stress management protocol among Professional and Non-Professional students.

A self-structured stress assessment questionnaire was developed which consists of 60 items with 3-point likert scale. A structured questionnaire was confined to the areas of the cognitive, emotion, social relationship, curriculum, social support, time physical, spiritual and financial aspect of students.

Stress management protocol confined the meaning of stress, common stressors in college life, how body will respond to stress, recognize the common source of stress and use the stress management strategies to relieve the stress.

The content validity of stress assessment questionnaire and Stress Management Protocol was established by experts. The experts were selected on the basis of their clinical expertise, experience and interest in the problem being studied. They were from different specialties i.e. Psychiatry, Psychology, Education, Research, Statistics and Mental Health Nursing. They were requested to give their opinions on the appropriateness and relevance of the items in the tool. Necessary modifications were made as per the expert's advice. The reliability of the questionnaire was established by Split Half method and was found to be r-1.

A final study was carried out on 300 professional and 300 non-professional students of selected colleges of Rajasthan. Data were collected from 10th May 2011 to 30th July 2011. The sample for the study

comprised of the students, who met the designated criteria were selected through convenient sampling technique. Objectives of study was discussed and obtained consent for participation in study. Existing perceived level of stress was assessed by administering a structured stress assessment questionnaire, followed by stress management protocol. Post test was taken after 8-9 days. Based on the objective and the hypothesis the data was analyzed by using various statistical tests i.e. percentage, mean, and standard deviation. Statistical methods The significance was calculated by using mean, Standard deviation, unpaired t statistics, paired t statistics for comparison and the Chi-square statistics was used to find the independence of difference. Significance was accepted at 0.05 level of probability.

RESULTS

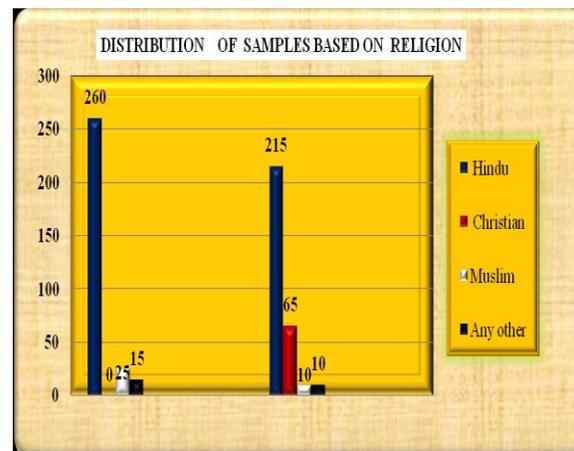


Figure: 1 Multiple bar diagrams showing the frequency distribution of professional and Non-professional students based on religion.

Section I: Description of Socio demographic data of professional and non professional students

The Demographic data showed that, most of (87%) of students were Hindu in professional group and (72%) of the students were Hindu in non-professional. In professional students (62%) of students' present residence was rented rooms whereas

in non-professional students' present residences was with family (52%). In professional students 50% of students were from nuclear families and 38% of students' fathers were graduates. 58 % of students' fathers were in service. 47% of had 20001 & above, rupees per month family income. Whereas in non-professional 87% of students were from nuclear families, 36% of students' fathers were graduates. 44% of students' fathers were in service. 42% of students had family income of rupees 10001- 20000 per month.

Section II: Assess the mean score of pre-test perceived levels of stress experienced by Professional and non-professional students.

Table:1-Comparative mean scores of pre-test Perceived level of stress among professional and non-professional students (N=600).

Sr. No.	Pre-test mean score of Perceived level of stress				Cal. 't' Value	Level of Significance
	Students	N	Mean	SD		
1.	Professional	300	165.55	5.69	48.26 **	P < 0.01 Shows highly significance **
2.	Non-Professional	300	139	7.39		

Table 1 shows that Professional students have higher mean perceived level of stress score (165.55) than the non-professional students mean perceived level of stress score (139).

Section III: Evaluate the impact of Stress Management Protocol by comparing the mean of pre-test & post-test perceived level of stress scores in professional and non-professional group.

Table- 2 Comparative mean of pre-test & post-test perceived level of stress scores in professional and non-professional group (N=600).

S. No	Group	Mean score of perceived level of stress		Cal. 't' Value	Level of Significance
		Pre-test	Post-test		
1	Professional	165.55	121.80	75.27	P < 0.01 shows highly significance **
2	Non-professional	139	97.26	85.84	

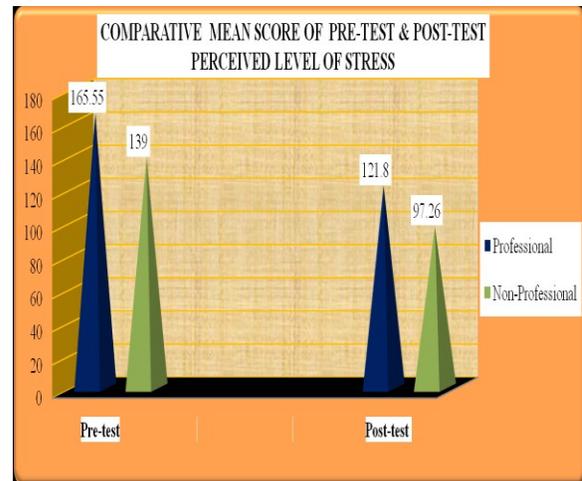


Figure : 2- Column diagram showing the comparative mean score of pre-test & post-test perceived level of stress in professional and non- professional group.

The data in table 2 depicts, that in pre-test, Professional students have mean perceived level of stress score (165.55) in severe stress range than non-professional students mean perceived level of stress score (139) in moderate stress range . After administration of stress management protocol mean perceived level of stress scores of professional is (121.80) and non-professional is (97.26). This table also shows that Professional students in pre-test having mean perceived level of stress score (165.55) and in post test (121.80). Since the calculated value of 't' (75.27) is greater than tabulated value of 't' (2.32) at 1% level of significance, there for the null hypothesis is rejected and research hypothesis is accepted. Non professional also shows that in pre-test mean perceived level of stress score is (139) and in post test (97.26). Hence it is concluded that Post-test mean perceived level of stress scores of professional and non-professional students shows a marked decrease in perceived level of stress score. This indicates that stress management

protocol is effective in decreasing the perceived level of stress.

Section IV: Comparison of the perceived level of stress experienced by Professional and Non-professional students.

Table-3: Comparison of mean score according to areas of perceived level of stress between professional and non-professional Students.

Sr. No.	Students	Areas of perceived Level of stress	Mean	SD	Cal. 't' Value	P Value	Level of Significance
1.	Professional	Cognitive	2.57	0.51	4.40 **	2.9E	P < 0.01 Shows highly Significance **
	Non-Professional		2.15	0.53			
2.	Professional	Emotional	2.60	0.49	2.36 NS	0.01	
	Non-Professional		2.38	0.54			
3.	Professional	Social Relationship	2.64	0.47	4.52 **	0.01	
	Non-Professional		2.24	0.49			
4.	Professional	Physical	2.64	0.47	4.52 **	0.01	
	Non-Professional		2.24	0.49			
5.	Professional	Curriculum	2.54	0.50	5.35 **	0.01	
	Non-Professional		2.01	0.56			

Findings reveals that professional students have higher mean score (2.64, 2.64) in social relationship & physical areas of perceived level of stress. This indicates that perceived level of stress have more effect on social relationship as well as physically health of professional students. But still they have shown higher perceived level of stress score in Cognition (2.57), Emotional (2.60), and curriculum (2.54) as compared to non-professional students mean perceived level of stress score in the areas of Cognition (2.15), Emotional (2.38), social relation

(2.24), Physical (2.24) and curriculum (2.01). Since calculated value of 't' in all areas of perceived level of stress is greater than table value of at 1% level of significance, null hypothesis is rejected. Whereas in emotional calculated value of 't' (2.36) is less than table value of (2.08) at 5% level of significance, hence null hypothesis is accepted. Perceived level of stress has more effect on social relationship, physical activity, emotional stability and curriculum of professional students.

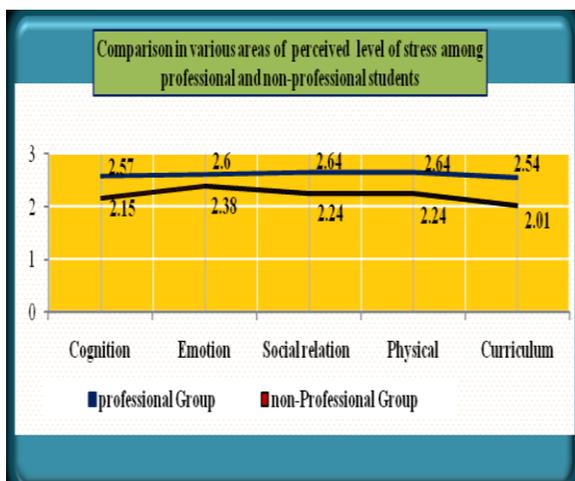


Figure-3 Multiple line diagrams shows comparison of Perceived level of stress score between professional and non-professional students according to areas of Perceived level of stress.

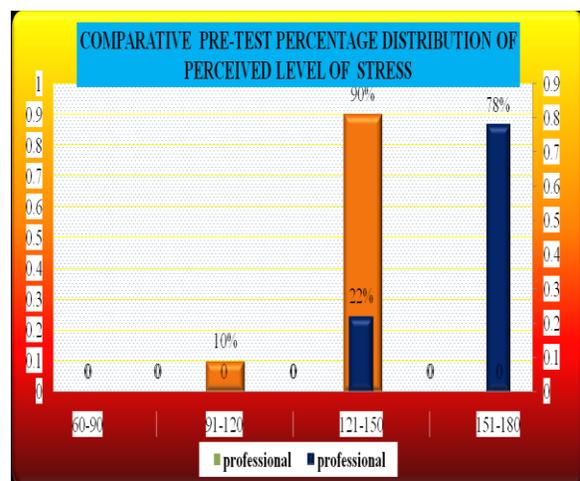


Figure-4 Bar diagram showing comparative pre-test frequency distribution according to range of perceived level of stress score between Professional and Non-professional Students.

Table-3:- Comparative percentage distribution according to range of Perceived level stress between Professional and Non-professional Students.

S.No	Range of perceived level of stress score	Comparative percentage distribution of Perceived level of stress			
		Professional		Non-professional	
		Pre-test	Post-test	Pre-test	Post-test
1	60-90 (Border line stress)	00	20%	00	55%
2	91-120 (Mild stress)	00	71.66%	10%	45%
3	121-150 (Moderate stress)	22%	8.33%	90%	00
4	151-180 (Severe stress)	78%	00	00	00

Findings in table no.3 according to range of perceived level of stress show in pre-test, that 22% of professional students have moderate stress and 78% have severe stress Whereas 10% of the non-professional students have mild level of stress and 90% of has moderate level of stress but no one has severe stress. After administration of stress management protocol findings shows that 20% of professional students have borderline stress, 71.66% have mild and 8.33% only have the moderate level of stress but no one have severe stress whereas 55% of the non-professional students have borderline level of stress and 45% of has mild level of stress but no one have moderate and severe level of stress. This result shows the effectiveness of stress management protocol in decreasing the perceived level of stress.

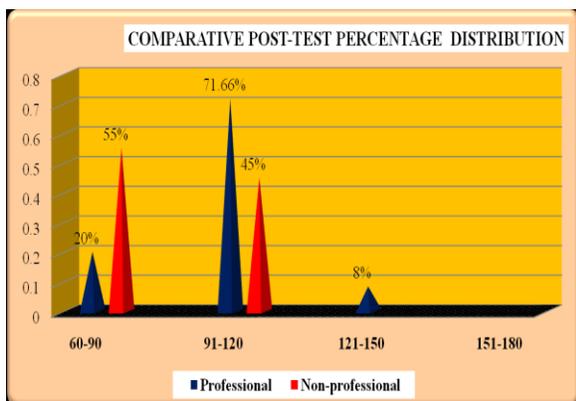


Figure- 5 Column diagram showing the comparative post-test percentage distribution according to range of Perceived level of stress between Professional and Non-professional Students.

Section V: association of the perceived level of stress experienced by Professional and Non- professional students with different selected demographic variables.

Finding showed that there was a significant relationship of perceived level of stress with fathers' education (5.34), family income (4.97) of professional students and father education (9.42) in non-professional students is greater than table value (3.84). This was found statistically significant as $P < 0.05$. It is also showed that there is no significant relationship between perceived level of stress and Sex, Religion, Present residence, type of family and Fathers occupation of students.

DISCUSSION

The present study revealed that Professional students having higher mean perceived level of stress score (165.55) than the non-professional students mean perceived level of stress score (139). The findings of this study was supported by Trygstag L.N. (1996) ^[5] who conducted study on "Stress and coping in psychiatric nursing" found that Students are suffering with severe level of stress from recognizable disorders like anxiety, depression, personality disorder with poor academic performance, irregular to the classes, dropping out of the course, unusual and unwanted behavior aggression Major findings of study revealed that, in pre-test mean perceived level of stress score in professional (165.55) and (139) in Non-professional, whereas in post-test mean perceived level of stress score in professional (121.80) and (97.26) in Non-professional.it showed that stress management protocol is effective in decreasing the stress level of professional and non-professional students. The findings of this study was supported by a report to the Review Committee of the University of Cambridge Counseling Service (2000) ^[6]

that coping strategies was shown to be beneficial with 75% reporting that the help and advice given by the service had helped to resolve their present problems and level of stress.

Results also showed that there was no significant relationship between perceived level of stress and Sex, Religion, Present residence, type of family and Fathers occupation of students. The findings are supported by Sen C, (1995) ^[7] which reported that family size & family type do not have a significant relationship with the level of stress of adults. The findings are also supported by the University of Cambridge (2000) ^[6] which provide us with a valuable insight into the extent of mental health difficulties amongst students within one UK higher education institution. Psychological distress amongst Cambridge students was apparent, with one fifth of the students reporting at least one problem which caused them substantial worry. Academic problems caused students greatest concern, closely followed by financial concerns and social/personal relationship problems. Roberts G.(2001) ^[8] conducted a study on "Student finance and mental health" and reported their findings that poorer mental health was significantly related to difficulty in paying bills as well as to longer working hours outside university. In addition, found that people who had considered abandoning their course of study for financial reasons had significantly perceived stress poorer perceived general health, lower vitality and poorer social functioning; these findings suggest that large numbers of students may be at risk. Hence the perceived levels of stress of students have great concerns with family income.

CONCLUSIONS

The present study explore that there is significant difference between the perceived level of stress of professional and

non-professional students. Further it is concluded that Post-test mean perceived level of stress scores of professional and non-professional students shows a marked decrease in perceived level of stress score. Thus it indicates that stress management protocol is effective in decreasing the stress level of professional and non-professional students. Hence on the basis of above cited findings, it could be undoubtedly concluded that stress management protocol developed by the investigator, make aware the college students regarding the impact of stress on their life and to manage their own affairs and become adjusted in new conditions through the practice of various stress management strategies to achieve a positive mental health and stress free life.

Implication & recommendation

The findings of study have implication at various level of nursing like nursing practice, nursing education, nursing administration and nursing research in following ways:-

- ❖ Formulation and development of curriculum emphasis on importance of mental health and prevention of mental health problems.
- ❖ Develop and implement policies to promote mental well-being for students. This not only assessing the perceived level of stress but also in the relieving the level of stress and contributes to a healthy working environment for students.
- ❖ Encourage to increasing the awareness among academics and support staff regarding the broad issues in dealing with students (and colleagues) with perceived level of stress and mental health problems
- ❖ A survey of academics' experiences in supervising students with mental health difficulties. The survey examined the difficulties academic

supervisors encounter in responding to students' mental health needs.

- ❖ Establish and support counseling services in developing and maintaining compatible safe and ethical practices in regard to mental health issues.
- ❖ Establish counseling services to build on existing good practice to make the following contributions:
 - Supporting students who are distressed or disturbed.
 - Supporting those who are concerned about students with experiencing psychological difficulties
 - The provision of assessments and support for students with mental health difficulties, including facilitating student groups for issues such as stress management strategies.
- ❖ A study can be done on students from urban and rural areas to assess perceived level of stress and impact of stress management strategies to relieve the stress.
- ❖ Similar study can be done to assess the perceived level of stress of various age groups and supporting services available for them to relieve stress.

ACKNOWLEDGEMENTS

I express my deep sense of gratitude to all the students who gave their consent to participate in the study. I appreciate their co-operation, willingness and patience in study. My Grateful acknowledgements are extended to

(Dr.) S.C. Sharma. And my wholehearted appreciation and gratitude to Dr. Jagdish P., HOD, Department of Statistics, University of Rajasthan for his valuable help and guidance in all statistical analysis involved in the study.

REFERENCES

1. Chandrasekhar CR., et al., Mental morbidity among postgraduate and research students – an epidemiological study. *Indian Journal of Psychiatry*, 1980: 89-93.
2. Beck DL, Perceived level and sources of stress in university professional schools”, *Journal of Nursing Education*, April 1997, Vol.36, pp.180-206.
3. Roberts G., et al., The effects of students' economic circumstances on mental and physical health. *Psychosomatic Medicine*, 1998 Vol.35, pp.129-135.
4. A.Okasha et al., Academic difficulty among male Egyptian university student. *British Journal of Psychiatric*. 1985;146-150.
5. N.Trygstay, Stress and coping in Psychiatric Nursing. *Journal of Psychological Nursing*. October. 1996, P.P. 23-27.
6. University of Cambridge counseling service -Student mental health, use of services and academic attainment. <http://www.pubmed.com/student mental health/reviewed on 6/7/2011>
7. Sen C., Relationship of background information with stress, *Journal of nursing education*, September, Vol.35, 1995,pp.245-251.
8. Roberts G., et al., Student finance and mental health. *Psychosomatic Medicine*, 1998 Vol.28, pp.117-121.

How to cite this article: Singh M. A study to assess the effectiveness of stress management protocol on the perceived level of stress among the professional and non-professional students in selected colleges of Rajasthan. *Int J Health Sci Res*. 2014;4(3):174-181.
