

A Study On Perceived Stress And Mental Well-Being Among Medical College Students

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Abstract

The aim of the research was to study the relationship between perceived stress and mental well-being among medical students. However, the students face perceived stress in various aspects of their life and the effect will always reflect on individual's mental well-being. This paper investigates the perceived stress and the mental well-being among medical college students. For this purpose, a sample of 151 medical college students was selected by random sampling technique with exploratory questionnaires. The Perceived Stress Scale by Sheldon Cohen in 1983 and Warwick-Edinburgh Mental Well-Being Scale by researchers at the Universities of Warwick and Edinburgh in 2006 were used to collect the data. The data analysis done with IBM SPSS in that Pearson correlation and t test used to analyze the data. The findings revealed a significant relationship between perceived stress and mental well-being. This study suggests that there is a significant relationship between perceived stress and mental well-being.

Keywords: perceived Stress, mental well-being, medical college students, exploratory questionnaires

Introduction

In this modern world, a variety of situations that provides an overload, allostatic load and overall stress daily. Where, the stress can be related with different factors and predictors, which adds many biological, psychological, social and economic variables. There might be various stress causing events happens over a period of time which directly affect the mental well-being. With increasing awareness on mental health, this study related the relationship between perceived stress and mental well-being.

Perceived stress

Perceived Stress is that the feeling or thoughts that a person has regarding what proportion stress they're beneath at a given purpose in time or over a given fundamental measure. Perceived stress incorporates feeling about the incapable of being controlled and changeable of one's life. According to the authors Lazarus and Folkman, perceived stress was defined as this primary appraisal (i.e., perceived stress) determines the degree of confidence people possessed relating to their

ability to address nerve-wracking things (i.e., secondary appraisal) additionally, to perceived stress, self-efficacy influence on in individuals well-being. Perceived stress has lots of components that may be a lot of stressful events and stressors, they are (Objective stress and Subjective stress).

Mental well-being

Mental well-being is described as an individual's own thoughts and feelings, it's also states how the person cope with the ups and downs of everyday living if there is a lack of mental well-being that may leads to diagnosable conditions such as anxiety and depression. Mental well-being can increase, decrease or destroyed. Ryff's proposal that measuring psychological well-being can be measure by questionnaires this has been in the year of (1995). According to American psychology Association stated that mental well-being as a state of happiness and contentment. A person who has low level of distress, good physical and mental health will denote a good quality of life. World Health Organization was described that mental well-

being is denote by good mental health and as important as physical health it also about the state of mind what we feel, what we think, how we response, how we handle situation and proper positive aspects.

Objectives:

1. To identify the level of perceived stress among medical college students
2. To identify the level of mental well-being among medical college students.
3. To analyze the level of perceived stress and mental well-being among medical college students with respect to the demographic variables.
4. To find out the relationship between perceived stress and mental well-being among medical college students.

Materials and Methods

In the present study samples from medical college students, the students are asked to answer the questions appropriately.

Participants, Procedures and Data collection

This is a study done with one hundred and fifty-one medical college students. The purpose of the study is to find the significant difference between perceived stress and mental well-being among medical college students. The response for the study was collected from various medical college students, Tamil Nadu.

Demographics and Measures

In the present study, the participants are asked to provide their socio-demographic information through self-reporting and followed with different questionnaires.

The tool used to measure the perceived stress of college students was Perceived Stress

Scale (PSS - 10) by Sheldon Cohen with 10 items in it, with 4 items that has reverse scored. The scores range from 0-13 represents low perceived stress, 14-26 represents moderate perceived stress, 27-40 represents high perceived stress. An overall reliability coefficient of the perceived stress scale ranges from 0.84 to 0.86.

The tool used to measure the mental well-being of college students was Warwick – Edinburgh Mental Well-Being Scale (WEMWBS) developed by researchers at the universities of Warwick and Edinburgh. The scale has 14 items. Each of the 14 items are scored from 1 (none of the time) to 5 (all of the time). The total score is calculated by summing the 14 individual item scores. The minimum score is 14 and the maximum score is 70.

Result findings and Discussions:

Socio-demographic characteristics of study participants

The independent sample t-test analysis between perceived stress and gender: There is no significant difference between perceived stress and gender shown in table 1. Independent sample t test indicated that there is no significant difference in the respondent's level of perceived stress on the basis of gender ($t=-1.843$, $p>0.05$). The mean score of the females is higher (Mean=21.41, SD=5.594) when compared to males (Mean=19.73, SD=5.371). The result indicates that "There will be no significant difference in perceived stress on the basis of gender among medical college students".

Table 1

Difference in perceived stress with respect to gender

Variable	Sub	N	Mean	SD	df	t	Sig. (2-tailed)
Gender	Male	60	19.73	5.371	149	-1.843	.068
	female	91	21.41	5.594			

P>0.05 (Not significant)

The independent sample t-test analysis between perceived stress and age: There is no significant difference between perceived stress

and age shown in table 2. Independent sample t test indicated that there is no significant difference in the respondent's level of

perceived stress on the basis of age limit ($t=0.722$, $P>0.05$). The mean score of the age limit 18-20 is higher (Mean=20.99, SD=5.648) when compared to the age limit of 21-23

(Mean=20.32, SD=5.401). The result indicates that "There will be no significant difference in perceived stress on the basis of age limit among medical college students".

Table 2

Difference in perceived stress with respect to age

P>0.05 (Not significant)

Variables	Sub	N	Mean	SD	df	t	Sig. (2-tailed)
Age	18-20	95	20.99	5.648	149	0.722	.472
	21-23	56	20.32	5.401			

The independent sample t-test analysis between perceived stress and place of living: There is no significant difference between perceived stress and place of living shown in table 3. Independent sample t test indicated that there is no significant difference in the respondent's level of perceived stress on the

basis of locality ($t=-0.450$, $P>0.05$). The mean score of the rural is higher (Mean=21.00, SD=4.183) when compared to urban (Mean=20.62, SD=6.113). The result indicates that "There will be no significant difference in perceived stress on the basis of place of living among medical college students".

Table 3

Difference in perceived stress with respect to place of living

that there is no significant difference in the respondent's level of perceived stress on the basis of family type ($t=0.480$, $P>0.05$). The mean score of the joint family is higher

Variables	Sub	N	Mean	SD	df	t	Sig. (2-tailed)
Place of living	Urban	102	20.62	6.113	149	-.450	.654
	Rural	49	21.00	4.183			

P>0.05 (Not significant)

The independent sample t-test analysis between perceived stress and family type: There is no significant difference between perceived stress and family type shown in table 4. Independent sample t test indicated

(Mean=21.04, SD=6.256) when compared to the nuclear family (Mean=20.56, SD=5.100). The result indicates that "There will be no significant difference in perceived stress on the basis of a family type among medical college students".

Table 4

Difference in perceived stress with respect to family type

P>0.05 (Not significant)

variables	Sub	N	Mean	SD	df	t	Sig. (2-tailed)
Family type	Joint family	57	21.04	6.256	149	.480	.632
	Nuclear family	94	20.56	5.100			

The independent sample t-test analysis between mental well-being and gender: There is significant difference between mental well-being and gender shown in table 5. Independent sample t test indicated that there is a significant difference in the respondent's level of mental well-being on the basis of

gender ($t=2.291$, $p<0.05$). The mean score of the males is higher (Mean=48.27, SD=9.094) when compared to females (Mean=44.93, SD=8.196). The result indicates that "There will be a significant difference in mental well-being on the basis of gender among medical college students".

Table 5

Difference in mental well-being with respect to gender

Variable	Sub	N	Mean	SD	df	t	Sig. (2-tailed)
Gender	male	60	48.27	9.094	149	2.291	.024
	female	91	44.93	8.196			

P<0.05 (significant)

The independent sample t-test analysis between mental well-being and age: There is no significant difference between mental well-being and age shown in table 6. Independent sample t test indicated that there is no significant difference in the Respondent's level of mental wellbeing on the basis of age

($t=-.129$, $p>0.05$). The Mean score of the age group 21-23 is higher (Mean=46.38, SD=8.261) when compared to the age group 18-20 (Mean=46.19, SD=8.975). The result indicates that "There will be no significant difference in mental well-being on the basis of Age among medical college students".

Table 6

Difference in mental well-being with respect to age

Variable	Sub	N	Mean	SD	df	t	Sig. (2-tailed)
Age	18-20	95	46.19	8.975	149	-.129	.898
	21-23	56	46.38	8.261			

P>0.05 (Not significant)

The independent sample t-test analysis between mental well-being and place of living: There is no significant difference between mental well-being and place of living shown in table 7. Independent sample t test indicated that there is no significant difference in the respondent's level of mental wellbeing on the

basis of locality ($t=-.440$, $p>0.05$). The Mean score of the rural is higher (Mean=46.69, SD=8.173) when compared to urban (Mean=46.05, SD=8.959). The result indicates that "There will be no significant difference in mental well-being on the basis of place of living among medical college students".

Table 7

Difference in mental well-being with respect to place of living

Variable	Sub	N	Mean	SD	df	t	Sig. (2-tailed)
Place of living	Urban	102	46.05	8.959	149	-.440	.661
	Rural	49	46.69	8.173			

P>0.05 (Not significant)

The independent sample t-test analysis between mental well-being and family type: There is significant difference between mental well-being and family type shown in table 8. Independent sample t test indicated that there is a significant difference in the respondent's level of mental wellbeing on the basis of family type ($t=2.425$, $p>0.05$). The mean score

of the joint family response is higher (Mean=48.40, SD=8.326) when compared to nuclear family response (Mean=44.96, SD=8.691). The result indicates that "There will be a significant difference in mental well-being on the basis of family type among medical college students".

Table 8

Difference in mental well-being with respect to family type

Variable	Sub	N	Mean	SD	df	t	Sig. (2-tailed)
Family Type	Joint family	57	48.40	8.326	149	2.425	.017
	Nuclear family	94	44.96	8.691			

P<0.05 (significant)**Correlation statistics of Perceived Stress and Mental Well-Being**

Table 9 shows the correlation statistics indicated a significant negative correlation between perceived stress and mental well-

being ($r=-0.633$, $P<0.01$), which says the perceived stress and mental well-being are negatively correlated to each other. The result indicates that "There will be a significant relationship between the perceived stress and mental well-being".

Table 9

Variables	Mental well-being
Perceived Stress	-0.633**

**Correlation is significant at the 0.01 level (2-tailed).

Conclusion

The present study has been distinguished the perceived stress and mental well-being of medical college students. As the variables are

negatively correlated, the individual having high perceived stress, will have poor mental well-being and also found that there is no significant difference among age and place of

living between perceived stress and mental well-being, no significant difference in gender and family type with respect to perceived stress and a significant difference in gender and family type with respect to mental well-being. This research revealed that college students undergo stress and the perception of stress has an effect on their mental well-being. Therefore, the present study proposes understanding of psychological requirements of students and also revealed the need of psychological care for the students.

Limitations

The present research paper has shown that there is a significant negative relationship between perceived stress and mental well-being i.e., perceived stress result in poor mental well-being. But there are some limitations in the research paper that they need to be considered in future studies. The sample size taken in the research is very small. The responses are collected in a large population. The responses from a closed population will result in more significant findings. The sample can be taken from different regions of India to get more variety of responses.

References

1. Lee JS, Joo EJ, Choi KS. Perceived stress and self-esteem mediate the effects of work-related stress on depression. *Stress Health*. 2013 Feb;29(1):75-81. doi: 10.1002/smi.2428.Epub 2012 May 18. PMID: 22610597. <https://doi.org/10.1002/smi.2428>
2. Lee, Jieun et al. "The effect of perceived stress on life satisfaction: The mediating effect of self-efficacy." *Ch'ongsonyonhak yongu* vol. 23,10 (2016): 29-47
doi:10.21509/KJYS.2016.10.23.10.29
<https://pubmed.ncbi.nlm.nih.gov/27996059/>
3. Phillips A.C. (2013) Perceived Stress. In: Gellman M.D., Turner J.R. (eds) *Encyclopedia of Behavioral Medicine*. Springer, New York, NY. https://doi.org/10.1007/978-1-4419-1005-9_479
4. Strizhitskaya, Olga 2019/02/28, 155, 162 Perceived Stress And Psychological Well-Being: The Role Of The Emotional Stability 10.15405/epsbs.2019.02.02.18
5. Carmelo vazquez¹, Gonzalo Hervás², Juan Jose Rahona³, Diego Gomez³, December (2009), Psychological well-being and health. Contribution of positive psychology, 15-27 <https://www.researchgate.net/publication/228460254>
6. Waqas, Ahmed & Ahmad, Waqas & Haddad, Mark & Taggart, Frances & Muhammad, Zerwah & Bukhari, Muhammad & Sami, Shahzad & Batool, Sayyeda & Najeeb, Fiza & Hanif, Ayesha & Zehra, Ali & Rizvi, & Ejaz, Sumbul. (2015). Measuring the well-being of health care professionals in the Punjab: A psychometric evaluation of the Warwick-Edinburgh Mental Well-being Scale in a Pakistani population. *PeerJ*. 3.e1264.10.7717/peerj.1264. <https://www.researchgate.net/publication/282348660>
7. Ingersoll-Dayton, Berit & Saengtienchai, Chanpen & Kespichayawattana, Jiraporn & Aungsuroch, Yupin. (2001). Psychological well-being Asian style: The perspective of Thai elders. *Journal of Cross-Cultural Gerontology*. 16. 10.1023/A:1011984017317. <https://www.researchgate.net/publication/30843754>
8. Teh HC, Archer JA, Chang W, Chen SH. Mental well-being mediates the relationship between perceived stress and perceived health. *Stress Health*. 2015 Feb;31(1):71-7. doi: 10.1002/smi.2510.Epub 2013 Jul 30. PMID: 23897829.
9. Shishu kesh kumar, satchit prasun Mandal, das ambika Bharti (2020) the relationship between perceived stress in psychological well-being on Indian emerging adults in journal of the Indian academy of applied psychology vol. 46, No. 2, 200-209 <https://www.researchgate.net/publication/349290490>
10. K Anand, Y Nagle (2016), Perceived Stress as Predictor of Psychological Well-being among Indian Youth, *International Journal of Indian Psychology*, Volume 3 (4), DIP:

18.01.213/20160304, DOI:
10.25215/0304.213.

11. Golovey, L., Murtazina, I., Savenysheva, S., Petrash, M., & Strizhitskaya*, O. (2019). Perceived Stress and Psychological Well-Being: The Role of The Emotional Stability. In S. Ivanova, & I. Elkina (Eds.), Cognitive - Social, and Behavioural Sciences - icCSBs 2018, vol 56. European Proceedings of Social and Behavioural Sciences (pp. 155-162). Future Academy.
<https://doi.org/10.15405/epsbs.2019.02.02.18>
12. Schiffrin, H.H., Nelson, S.K. Stressed and Happy? Investigating the Relationship Between Happiness and Perceived Stress. *J Happiness Stud* 11, 33–39 (2010).
<https://doi.org/10.1007/s10902-008-9104-7>
13. Khan, Safina. (2019). Stress and Its Association with Positive Mental Health Pak ArmedForces Med. 70. 1391-95.
<https://www.researchgate.net/publication/345433360>