

Perceived Stress and Psychological Well-Being among health care professionals of Quetta, Pakistan

Psychology

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Abstract

The present study aimed to examine perceived stress and psychological well-being among health care professionals. The sample included 60 participants (30 male and 30 female). The data was collected from Bolan Medical College and Civil Hospital Quetta. Participants' age ranged from 23 to 50 years. Two different scales were used to collect the data. The first was perceived stress scale by © Cohen et al., 1983, and the second was psychological well-being scale by Ryff © (1989). Reliability and validity were measured on both the scales. Findings of the study suggested the psychological well-being is dependent on perceived stress that is significant at 5% level of significance. It is noted that psychological well-being was positively affected by perceived stress. The value of correlation coefficient is 0.437 shows positive relationship. So, our hypothesis is rejected and we conclude that Perceived stress and psychological well-being are not adversely (negatively) correlated. The average of male doctors is 20.27 and average of female doctors is 21.43 that show greater level of stress in male health care professionals, therefore, the female perceives more stress as compared to male.

Keywords: *Perceived Stress, Psychological Well-being, Health Care Professional.*

Introduction

Stress is often used to describe a process through which individuals experience, respond to, and are affected by objective conditions in the social (Lazarus & Folkman, 1984) or physical environment (Heaney & Ran, 1990). Stress is the state manifested by the specific syndrome which consists of all the non-specifically induced changes within a biologic system (Selye, 1936; & Hindle, 1973). These conditions are referred to as stressors if they are likely to be perceived as harmful or threatening (Lazarus & Folkman, 1984) or if they place a demand on an individual that results in a physiological adaptation response (Selye, 1973). According to Brown (1978) an expert on biofeedback stress is conscious and unconscious worry. Basowitz (1955) concluded after their elaborate study on anxiety, and stress, that stress would be defined as the organism response to internal and external process which reach those threshold levels that strain its physiological and psychological integrative capacities close to or beyond their limits. These unpleasant reactions of stress can be upsetting feelings (Selye, 1973; Hinsic & Campbell, 1970) or bodily discomforts (Weiss & English, 1975).

Cohen, Kamarck, & Mermelstein (1983) are of the view that it is important to emphasize that stress appraisals are determined not solely by the stimulus condition or the response variables, but rather, by the person's interpretations of their relationships to their environments. Lazarus and Folkman (1984) pointed out that psychological stress involves a particular relationship between the person and the environment that is appraised by endangering his or her well-being.

Bolger and Zukerman (1995) identified two fundamental stages of stress process stress exposure and stress reactivity. Stress exposure represents the degree to which a person is likely to experience a stressful event; stress reactivity is the degree to which a person is likely to manifest emotional or physical symptoms in response to a stressor.

In a research Aziz (2004) explored the origin of perceived stress in American medical doctors considering six factors in this research (e.g. workload, work environment, hospital, and nature of work, external environment and role conflict). Workload explained the maximum amount of variance followed by work environment and the highest source of stress and experience was negatively related to stress. The findings suggest that better management of time may help reduce stress among them.

Bradburn (1969) explained the origin of effect of different types of music on perceived and physiological measures of stress. Participants rated their relaxation and anxiety level after listening to music or silence and completed the Mental Rotations Task Test. The results of the research suggest that music may have effect on the cognitive component of the stress response.

Psychological well-being refers to how individuals self-evaluate and their ability to fulfill certain aspects of their lives (Amato, 1994), such as relationships (Flouri & Buchanan, 2003), support (Knoester, 2003), and work (Roberts & Bengtson, 1993; Wilkinson, 2004). Psychological well-being such as self-acceptance, personal growth including openness to new experiences, optimism, hopefulness, purpose in life, control of one's environment, spirituality, self-direction and positive relationship (Ryff & Keyes, 1995; Keyes, 1998). Shek (1992) defines psychological well-being as that "state of a mentally healthy person who possesses a number of positive mental health qualities such as active adjustment to the environment, and unity of personality. According to Ryff and Singer (1996) psychological well-being is an indicator of functioning based in the eudemonic tradition. Aspects of psychological well-being include: (a) autonomy, (b) environmental mastery, (c) personal growth, (d) positive relationships with others, (e) purpose in life, (f) and self-acceptance. Although psychological well-being has been extensively evaluate (Diener, 1984) when it comes to articulating the basic structure of psychological well-being (Bradburn, 1969), the researchers always center the discussions around the distinction between positive and negative affect and life satisfaction (Andrews & Withey, 1976; Bryant & Veroff, 1982; Liang, 1984, 1985).

According to Diener (1984) there is a growing number of instruments to measure aspects related to well-being, such as satisfaction with life, emotional well-being, psychological strengths, positive emotion. The finding suggests that the ranges of positive mental health effects associated with transformational leadership and are suggestive of interventions that organizations can make to improve well-being of workers (Amato, 1994).

Objectives of the Study

Objectives of study

- To find the relationship among the health care professionals in case of perceived stress and psychological well-being.
- To study the difference in male and female health care professionals on perceived stress and psychological well-being.
- To find the relationship between stress and psychological well-being among health care professionals.

Hypotheses

- Perceived stress will predict psychological well-being of health care professionals.
- Perceived stress and psychological well-being will be adversely correlated to each other.
- Perceived stress will be greater in female than male health care professionals.

Method

Research Design

The present research is quantitative in which survey method has been used adopting different standardized self-report.

Participants

Using random sampling technique, sample was obtained from BMC and Civil Hospital Quetta from 60 (30 male and 30 female) medical professionals with an age range 23 to 50 years.

Inclusion & Exclusion Criteria

Those professionals included were having basic degree in medicine along with at least 6 month of work experience; while divorced/separated, having chronic physical illness as well as diagnosed psychological illness have been excluded.

Measures

i. Demographic information Sheet

Demographic Sheet held details of age, gender, education, occupation, work experience, monthly income, socioeconomic status, marital status and hobbies.

ii. Perceived Stress Scale

A self-reported scale consisting of 10 items (© Cohen et al., 1983). Perceived Stress Scale (PSS) scores are obtained by reversing responses (e.g.) 0=4, 1=3, 2=2, 3=1, 4=0) to the four positively stated items (items 4,5,7,8) and then summing across all scale items. Reliability of the scale was 0.813.

iii. Psychological Well-being Scale

The Ryff (1989) Scale focuses on measuring multiple facets of psychological well-being. Ryff scale of psychological well-being found to be valid and reliable measure of psychological well-being. Reliability was found to be 0.779.

Procedure

The total time required for the administration of demographic information and the questionnaires approximately 35-40 minutes. In hospital,

the researcher had individual meetings with doctors and the data was collected in small group. It was difficult to motivate professionals for testing due to their fear about the impacts of their result on perceived stress and psychological well-being scales on their jobs. So, they had to be assured time and again about confidentiality of participant's personal information, test responses and result. At the end of the complication of the questionnaires the researcher thanked participants for their cooperation and time.

Statistical analysis

Descriptive statistics, correlation and t-test were adopted for analysis of the results. It was also calculated on frequency percentage, mean, medium and mode minimum and maximum scores.

Ethical consideration

The research has been conducted in manners that respect the dignity, human rights and welfare of the participants of the research.

Results

Table 1
Reliability of the Perceived Stress scale

| Reliability Coefficient (Alpha) | No. of Items |
|---------------------------------|--------------|
| 0.813 | 10 |

The reliability of the perceived stress scale is 0.813 shows that the scale is appropriate and reliable.

Table 2
Reliability of the Psychological Well-Being scale

| Reliability Coefficient (Alpha) | No. of Items |
|---------------------------------|--------------|
| 0.779 | 84 |

The reliability of the well-being scale is 0.779 shows that the scale is reliable.

Table 3
Psychological Well-being of the respondents

| Well-being | Frequency | Percent |
|---------------------|-----------|---------|
| Low Well-being | 0 | 0.0 |
| Moderate Well-being | 56 | 93.3 |
| High Well-being | 4 | 6.7 |
| Total | 60 | 100.0 |

Table 3 shows that most of the respondents (56 from 60 which are 93.3%) are at moderate level of well-being. There is no one at low well-being and 6.7%

people are at high level of well-being. Hence we can conclude that our target population is moderately on better well-being.

Table 4
Descriptive Statistics of the concerned variables like Stress and Well-being

| Variables | N | Minimum | Maximum | Mean | Std. Deviation |
|-----------|----|---------|---------|--------|----------------|
| Stress | 60 | 9 | 31 | 20.85 | 4.333 |
| Wellbeing | 60 | 245 | 415 | 315.50 | 38.356 |

Table 4 shows descriptive statistics of the concerned variables. There are two main variables in our study. One is perceiving stress and the other is psychological well-being. The average score of perceiving stress is 20.85 with std. deviation 4.333. The average score of psychological well-being is 315.50 shows the moderate level of well-being of the respondents.

Table 5
Effect of Perceived Stress on Psychological Well-Being

| R Square | Regression Coefficient | Std. Error of estimate | T-Test | P-value |
|----------|------------------------|------------------------|--------|---------|
| 0.191 | 0.437 | 34.787 | 3.705 | 0.000 |

The value of R-square is 0.191 indicates that 19.1% variation in psychological well-being is due to the perceived stress. The value of regression coefficient is 0.437 which shows the effect of perceived stress is 43.7% on psychological well-being; P-value is 0.000 means the dependence of psychological well-being on perceived stress is significant at 5% level of significance.

Table 6
Correlation between Perceived Stress and Psychological-Wellbeing

| Variables | | Stress | Wellbeing |
|-----------|---------------------|---------|-----------|
| Stress | Pearson Correlation | 1 | 0.437** |
| | P-value | | 0.000 |
| | N | 60 | 60 |
| Wellbeing | Pearson Correlation | 0.437** | 1 |
| | P-value | 0.000 | |
| | N | 60 | 60 |

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

The value of correlation coefficient is 0.437 shows the positive relationship between the both variables. P-value is 0.000 shows the significant relation between both variables. So, hypothesis stands rejected and it may be conclude that Perceived stress and psychological well-being are not adversely (negatively) correlated.

Table 7
Comparison between male and female in case of Perceiving Stress

| Gender | N | Mean | Std. Deviation | Std. Error | Differences | | Comparison | | |
|--------|----|-------|----------------|------------|-------------|------------|------------|-----|---------|
| Male | 30 | 20.27 | 4.792 | 0.875 | Mean | Std. Error | t | d.f | P-value |
| Female | 30 | 21.43 | 3.812 | 0.696 | 1.167 | 1.118 | 1.044 | 58 | 0.301 |

P < 0.05

The average of male health care professionals is 20.27 with std. deviation 4.792 and the average stress of female health professionals is 21.43 with std. deviation 3.812. Since the average score of female is greater than male health care professionals therefore the female perceived more stress as compared to male. The P-value is 0.301 therefore the difference is not significant at 5% level of significance.

Table 8
Comparison between Male and Female in case of Psychological Well-being

| Gender | N | Mean | Std. Deviation | Std. Error | Differences | | Comparison | | |
|--------|----|--------|----------------|------------|-------------|------------|------------|-----|---------|
| Male | 30 | 297.50 | 30.061 | 5.488 | Mean | Std. Error | t | d.f | P-value |
| Female | 30 | 333.50 | 37.671 | 6.878 | 36.00 | 8.799 | 4.091 | 58 | 0.000 |

P < 0.05

The average score of male is 297.50 with std. deviation 30.061 and the average score of female health professionals is 333.50 with std. deviation 37.671. Since the average score of female is greater than male health care professionals therefore the female have more psychological well-being as compared to male. The P-value is 0.000 therefore the difference is significant at 5% level of significance.

Discussion

The first hypothesis that perceived stress is a predictor of psychological well-being. The results reveal that the R-square score 0.191(19.1%) variation in psychological well-being is due to perceived stress

and the regression coefficient is 0.437 (43.7%) at that level P-value is 0.000 means dependence of psychological well-being on perceived stress is significant at 5% level of significance. Results remained persistent with Lazarus and Folkman (1984); & Liang (1985) research.

The other hypothesis perceived stress and psychological well-being are adversely correlated. The results show a positive correlation of the two variables perceived stress and psychological well-being. A value of correlation coefficient 0.437 shows positive relationship. The significant relationship between both variables shows P-value is 0.000. Therefore, the hypothesis stands rejected. Finding of Ryff & Keyes, 1995 were in line with correlated perceived stress and psychological well-being among health care professionals.

In the comparison between male and female in case of perceiving stress shows that the average of male doctors is 20.27 with 4.792 and average of female is 21.43 with a 3.812 standard deviation. It proves the average of stress in male is less than female, because the P-value is 0.301 so the difference is not significant at 5% level of significance. The results of the studies, Selye, 1993; Hinsic & Campbell, 1970, are in line with these results. The average score of male is 297.50 with std. deviation 30.061 and in female is 333.50 with std. deviation 37.671. Since the average score of male is less than female. Therefore the male have less psychological well-being as compare to female as the P-value is 0.000, therefore the difference is significant at 5% level of significance.

Conclusion

Among health care professionals, perceived level of stress, in male professionals is lesser than female; however, they are low in psychological well-being. On the other hand, female professionals' perceived stress is higher in female as compared to male but they have better psychological well-being.

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