Impact of Academic Qualification, Gender and Educational Stream on Stress among Graduate and Post Graduate Students

Kantariya Ashokbhai Shefabhai
Ph.D. Student, Saurashtra University, Rajkot- 360005

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ABSTRACT: *The aim of the present study was to investigate the impact of academic qualification, gender and educational stream on stress among graduate and post graduate students.The random sampling method was used in this study. The total sample consisted of 480 subjects out of which 240 were graduate students and 240 were postgraduate students. Students were from the various collegesand departments of M.K. Bhavnagar University. Gujarati version (**Desai, M. D. &Parmar, J. M., 2014**) of Students Stress Scale developed by **Da CosteLeite and Israel (2011)**was used to measure stress. The data were analyzed using F-test. The result showed that there are significant main and interaction impact of Academic Qualification,Educational Stream,Academic Qualification x Gender,Academic Qualification x Educational Stream and Genderx Educational Stream on stress between graduate and post graduate students.Post graduate students scored higher on stress than graduate students and science stream students scored higher on stress than arts and commerce stream students.*

Key Words: *Stress, Academic Qualification,Gender, Educational Stream, Graduate and Post Graduate Students*

Introduction

The term "stress" was first used by the endocrinologist ***Hans Selye*** in ***1936*** to identify physiological responses in laboratory animals. The origin of the word 'stress' originates from the Latin word "Stringere". Stress is a physical expression of our "Fight or Flight" survival mechanism.***Hans Selye(1956)***have defined stress as, "The nonspecific response of the body to any demand."According to ***Richard S. Lazarus (1966)***, "Stress occurs when an individual perceives that the demands of an external situation are beyond his or her perceived ability to cope with them".According to***Baum A. (1990)***,"Stress is any uncomfortable emotional experience accompanied by predictable biochemical, physiological and behavioral changes."According to***Bernstein, D.A., Penner, L.A., Stewart, A.C., Roy, E.J. (2008)***, "Stress is viewed as a negative emotional, cognitive, behavioral and physiological process that occurs as a person tries to adjust to or deal with stressors".Thus, stress is a situation of frustration, conflict and pressure that can harm a person's physical and mental health.Stress is a condition of tension (mental or physical or both) which results in emotional loss and pain according to dictionary of psychology***(Lai, Chao, Chanf, & Chang, 1996)***.

Hans Selye (1976)explained stress model based on physiology and psychobiology as General Adaptation Syndrome (GAS). His model states that an event that threatens an organism's well-being (a stressor) leads to a three-stage bodily response: alarm stage, resistance stage and exhaustion stage. There are different type of stress- acute stress, chronic stress, eustress and distress. Three types axial of stress are frustration, conflict and pressure. Sources of stress are including psychological stress sources, social stress sources and chronic stress sources. The effect of stress are psychological, physical, behavioral and social. ***Lazarus and Folkman (1984)***suggested two types of coping responses of stress are emotion focused and problem focused.

Research indicates that the increasing amount of stress poses a serious problem for many postgraduate students at the university level ***(Rana & Mahmood, 2010)***.Studies show that postgraduate students most often require counseling as compared to students of the same age who are employed ***(Stallman, 2010)***. ***Anjali N., Shete, and Garkal, K. D. (2015)*** Studied stress, anxiety and depression among post graduate medical students. Result revealed that a high level of stress is seen in post graduate medical students. Stress is an unavoidable phenomenon in every aspects of human life. It is generally an emotional imbalance which may be due to several reasons such as tests, papers and projects, competitive nature within your chosen field, financial worries about school and future job prospects ***(Rose, S.E., Neibling, Bradley C. and Heckart, Teresa M., 1999)***.According to ***Cheng (2009)***remarks that stress mainly comes from academic tests, interpersonal relations, relationship problems, life changes and career exploration in

college students.***Petroff (2008)***stress had a negative impact on academic success among college students. Higher levels of stress among college students have been associated with a number of adverse effects such as increased risk of illness, poor sleep, disordered eating, increased utilization of health services and depression **(*Brooks, Girgenti& Mills, 2009; Matheny, Ashby &Cupp, 2005; Osberg& Eggert, 2012; Roddenberry &Renk, 2010; Sawatzky, Ratner, Richardson, Washburn, Sudmant&Mirwaldt, 2012*)**.Stress associated with academic activities has been linked to various negative outcomes, such as poor health **(*Greenberg, 1981*),** depression **(*Aldwin& Greenberger, 1987*),** and poor academic performance **(*Clark &Rieker, 1986; Linn &Zeppa, 1984*)**.

Objective

The objective of present research was to study theimpact of academic qualification, gender and educational stream on stress among graduate and post graduate students.

Hypotheses

1. There will be no significant difference in mean scores of the stress among students with reference to academic qualification (graduate/post graduate).
2. There will be no significant difference in mean scores of the stress among students with reference to gender (boys/girls).
3. There will be no significant difference in mean scores of the stress among students with reference to educational stream (arts/commerce/science).
4. There will be no significant interaction effect of academic qualification, gender and educational stream on stress among students.

Method

Sample:

A total of **480** students were selected as sample on the basis of the randomized sampling methodology from different colleges and departments based on the University of Bhavnagar district for the whole study.In **480** samples, **240** graduate students and **240** post-graduate students were included.In **240** graduate students, **120** boy's students and **120** girl's students were selected.Among the above students **40** having arts, **40** having commerce and **40** having science stream of the study were selected. As above **240** post graduate students, **120** boy's students and **120** girl's students were selected. Among the above students **40** having arts, **40** having commerce and **40** having science stream of the study were selected.

Instruments:

1. Personal Data Sheet:

A personal data sheet developed by the investigator was used to collect information about academic qualification, gender and educational stream as well as to collect some other demographic information.

2. Students Stress Scale:

Gujarati version (***Desai, M. D. &Parmar, J. M., 2014***) of Students Stress Scale developed by ***Da CosteLeite and Israel (2011)***was used to measure stress.The modified version of the Student Stress Scale is a 32 item scale and is made up of three subscales, namely: Academic demands (9 items), non-academic demands (10 items), and environmental demands (13 items).The scale has a five point frequency rating scale ranging from 1 (not at all) to 5 (very much). The higher the score, the more obstacles students perceive. The Cronbach alpha coefficients for the subscales of academic demands, non-academic demands, and environmental demands were .87, .88, and .89 respectively (***Da CosteLeite& Israel, 2011***). In the current study, the Cronbach alpha coefficient for the Student Stress Scale was .88 while the Cronbach alpha coefficients for the subscales of the Student Stress Scale (academic demands, non-academic demands, and environmental demands) were .84, .79, and .88 respectively. According to***George and Mallery(2003)*** an alpha value greater than .90 is excellent; an alpha greater than .80 is good; an alpha greater than .70 is acceptable; an alpha greater than .60 is questionable; an alpha greater than .50 is poor and finally, any value less than .50 is unacceptable. In the current study, the alpha values for the subscales of the Student Stress Scale as well as the scale as a whole ranged from acceptable to good.

Procedure:

The testing was done on a group ofacademic qualification, gender and educational stream. The whole procedure was explained to them clearly. Obtained data were analyzing using (Three Way Anova) F-test for knowingimpact of academic qualification, gender and educational stream on stress among graduate and post graduate students.

Result and Discussion

The main objective of present study was to know theimpact of academic qualification, gender and educational stream on stress among graduate and post graduate students. The F-test was used to find out whether academic qualification, gender and educational streamhas an impact on stress.

Table-1.1

Summary of ANOVA on Stress with Reference to Academic Qualification (Ass), Gender (Bss) and Educational Stream (Css) (N=480)

Sources of Variance	Sum of Squares	df	Mean of squares	F
Ass	3466.88	1	3466.88	10.58**
Bss	1184.41	1	1184.41	03.62NS
Css	2032.29	2	1016.14	03.10*
ABss	3000.00	1	3000.00	09.16**
ACss	8383.84	2	4191.92	12.80**
BCss	3700.75	2	1850.38	05.65**
ABCss	0640.29	2	0320.14	00.98NS
Wss	153308.35	468	327.58	-
Tss	175716.80	479	-	-

*** P < 0.05, ** P < 0.01, NS = Not Significant**

In the table 1.1 shows the 'F-ratio' of academic qualification, gender and educational stream variables of stress. The 'F-ratio' of A (Academic Qualification) variable is found 0.01 level significant. The 'F-ratio' of C (Educational Stream) variable is found 0.05 levels significant.The 'F-ratio' of A x B (Academic Qualification x Gender),A x C (Academic Qualification x Educational Stream) and B x C (Genderx Educational Stream) variables are found 0.01 levels significant. The 'F-ratio' of B (Gender) and A x B x C (Academic Qualification x Gender x Educational Stream) variables are not found significant.

Research indicates that the increasing amount of stress poses a serious problem for many postgraduate students at the university level ***(Rana & Mahmood, 2010)***.Studies show that postgraduate students most often require counseling as compared to students of the same age who are employed ***(Stallman, 2010)***. ***Garkal, K. D. (2015)*** Studied stress, anxiety and depression among post graduate medical students. Result revealed that a high level of stress is seen in post graduate medical students. Stress is an unavoidable phenomenon in every aspects of human life. It is generally an emotional imbalance which may be due to several reasons such as tests, papers and projects, competitive nature within your chosen field, financial worries about school and future job prospects***(Rose, S.E., Neibling, Bradley C. and Heckart, Teresa M., 1999)***.According to ***Cheng (2009)***remarks that stress mainly comes from academic tests, interpersonal relations, relationship problems, life changes and career exploration in college students. Such stress may usually cause psychological, physical and behavioral problems.

Mohammad A. W., et al. (2016) studied stress, anxiety and depression among science and arts students. The result showed that science students have high level of stress, anxiety and depression. ***Solanky et al. (2012)***found that medical college students reported 25.9% to 96.8% stress level. Results also revealed that 96.8% stress is because of vast syllabus, time shortage for preparation, examination and also not getting expected marks.Stress associated with academic activities has been linked to various negative outcomes, such as poor health ***(Greenberg, 1981)***, depression ***(Aldwin& Greenberger, 1987)***, and poor academic performance ***(Clark &Rieker, 1986; Linn &Zeppa, 1984)***.When stress is perceived negatively or becomes excessive, students experience physical and psychological impairment. Methods to reduce stress by students often include effective time management, social support, positive reappraisal, and engagement in leisure pursuits ***(Murphy & Archer, 1996)***.The result is same as above researcher. So null hypotheses no. 1 and 3 are rejected and hypotheses no. 2 and 4 are accepted.

Conclusion

There are significant main and interaction impact of Academic Qualification,Educational Stream,Academic Qualification x Gender,Academic Qualification x Educational Stream and Genderx Educational Streamon stress between graduate and post graduate students.Post graduate students scored higher on stress than graduate students andscience stream students scored higher on stress than arts and commerce stream students.

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