Comparison of Academic Stress between Basic Sciences and Social Sciences Students

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Abstract

The current study explored academic stress among basic and social sciences students. Students of basic and social sciences University of Gujrat were selected as the population. Students of the 2nd and 8th semesters from both faculties were chosen randomly, so the study sample consisted of (225) students, which forms (11%) of the population. A questionnaire comprised of 30 statements was developed to explore students' academic stress levels. The tool consisted of four factors of academic stress, and it was finalized after discussion with experts to ensure objectivity, and changes were made accordingly. The reliability of the instrument was .760. Data revealed no significant difference in the level of academic stress regarding gender, locality, and faculty.

Keywords: Academic stress, Academic achievement, Basic and Social Sciences

Introduction

Universities are expected to nurture those qualities of a student's character, which help him to be successful in life, and he may aspire to improve his education through these qualities. Many factors affect the learning process, but stress is considered a serious impediment to this practice, leading to poor academic performance (Abid, 2006). A person can do nothing to thwart its inevitable attack. Stress may be defined as a state of mental tension resulting from unfavorable conditions, making it difficult for someone to perform in an eye-catching way. Appalling conditions can cause people to panic or be shocked. But daring disposition can make the difference. Daredevils manifest their determination when confronted with horrific circumstances, and their self-motivation gives them the strength to complete their task. But people who despise lack courage may fall victim to melancholy, angst, and seclusion. Such desperate people can also kill themselves deliberately (Burge,2009). The role of stress as a stimulus cannot be denied, but elevated stress may cause heart disease, obesity, asthma, diabetes, and poor performance.

The present study was conducted to discern the relationship between university students' academic achievement and stress types. According to the researchers, factors like striving to establish superiority in class, overwork, disappointment and financial problems are the reasons behind stress (Fair-brother & Warn,2003). Congested lecture halls can also cause stress (Ongori, 2007; Awino & Agola, 2008). Moreover, factors like the activity to gain unsurpassable victory over other students, common issues among the students how to make friends; conflicting expectations regarding relationships with other students and classmates' behaviour all are considered interpersonal stressors. At the same time, the things like sluggishness, pessimism, chaotic approach, and frail health are intrapersonal stressors (Burge, 2009). Students often fail to deal with different things cautiously and are found utterly incompetent to influence the course of events. It shows their inability to manage their time efficiently, which causes elevated stress (Bennet, 2003). Due to the drastic impact of financial challenges, a student cannot keep the stress under control. The poor financial status of a family

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increases the cost of required academic material, and wealthy friends can be taken as financial stressors (Bennet, 2003).

Stress can ruin the academic career of a student. So, it is necessary to recognize the reasons behind this phenomenon for better results. Nobody can avoid the ubiquitous influence of stress that can disorder the function of the human body by its adverse effects. It evokes desperate and disgusting emotions in an individual; in this regard, different reactions have been noticed in different people (Bennet, 2003). Mental or emotional strain caused by a specific reason is called stress. When something happens in contrast with expectations, the state of mind at that point can be called stress. There are three types: acute stress, chronic stress, and episodic Stress (Greenberg, 2005).

Acute stress is caused by impermanent and temporary stressors and is the most frequent among students. A student faces acute stress when he has to complete his task in the stipulated time or prepare for the examination. Comparatively, acute stress is not considered as harmful as the other forms of stress because of its momentary impact. It is easy to overcome acute stress (Greenberg, 2005).

When someone fails to deal with a problem for a long time, he thinks he cannot manage his affairs and feels a surge of anxiety for a prolonged period. The stress under such circumstances is called chronic stress, which may destroy health and affect economic conditions. It is hard to control chronic stress (Greenberg, 2005).

Students who cannot escape the acute stress attack can easily become infected with episodic stress. Such students regularly tend to not complete the task in time due to mismanagement and mishandling. Failure of such students leads them towards episodic stress by making them unenthusiastic (Greenberg, 2005). Academic stress results from pressing requirements beyond the strategy adopted by a person in adverse circumstances (Greenberg, 2005). Many things can curb the academic performance of college students. They not only have to vie with class fellows for desired results but also have to fight against other factors.

It is tough to achieve a successful university career. There are various factors of academic stress, including management, financial, insomnia and social issues. Students are effective positively if academic stress does not persist to an optimal level and has negative consequences if prolonged (Harper & Stevenson, 2006). Academic institutions vary in working and environment; hence symptoms, causes, and consequences of academic stress did not get comprehensive attention from different institutions (Jogaratnam & Buchanan,2004). Due to individual differences, different students have different targets in life, and to meet all these aims, these should be well aligned with organizational goals and objectives (Carveth et al.,1996). Greenberg (2008) notifies that serious psycho-social-emotional health consequences may result if a student cannot manage academic stress effectively.

There are many studies on academic stress, and most research has focused on identifying the factors of academic stress. Tough competition and massive content coverage in a short period are causes of academic stress. Stress factors in academic institutions are overcrowded classrooms, inadequate physical resources, and a semester system (Awino & Agolla, 2008).

The present study assessed the impact of gender and academic discipline on the level of stress experienced by students of Social sciences and basic sciences.

The results would be equally useful to students, parents/guardians, university administrators, and academic policymakers.

Extensive literature revealed that the university environment effect students mentally, socially, and morally. Academic stress influences students in every program (Eisenberg et al., 2007; Verger et al., 2010). Prime causes of academic stress include heavy workload, time constraints, lingual difficulties, complex teaching methods, the expectation of social sciences, basic sciences, irrespective of gender parents and teachers, comparisons of performance among peer groups, relationship problems, and fewer job opportunities (Deb et al., 2014; Deb et al., 2015).

Due to natural differences, females face more stress as compared to males. Students from Social Sciences are more vulnerable to academic stress than that Basic Sciences students. Students of the semester system feel higher academic stress because of overburden, lack of time management, personal failures to cope with the environment and lack of collaboration with others. Academic stress affects students' academic achievement, but stress levels vary among faculties. Hence, the current study was intended to explore the stress level among students of basic and social sciences. They were moreover discovering the level of stress among students in the initial and final semesters to probe whether during stay develops compatibility of students to cope with stress or not (Gyawali, 2013).

Literature Review

A person experiences ferocious mental strain on account of stress and eventually succumbs to pessimism. The level of pessimism cannot be predicted because it varies from time to time. Under the influence of stress, an individual abandons hope and the feelings of wanting to know or learn about something being taken away from him. He is deprived of delight and determination. As Greenberg (2005) stated, the specific functional reaction evoked by an outer agent that exerts an effect on behavior is called stress. The psychological reaction which results from a demanding environment has an undesirable impact and shatters someone's hopes, feelings, and beliefs (Antoniou & Cooper, 2005). One gets perturbed due to the tension resulting from adverse circumstances because he has to confront emotional, social, and mental problems. An individual is besieged by stress when he fails to deal with responsibilities and problems, particularly in the desired way. Stress is an uninvited and unpleasant reaction to modern life, and some people also promulgate this view that stress ensued from the present era. Students get agitated due to the educational tasks or pieces of work allocated to them as part of the course of study. Imminent threats in games keep the players under hellish pressure. A mild personality disorder can be noticed in most mothers because they remain anxious about their children's studies. An employee's mind is affected by stress while completing a task satisfactorily, which has a consequent penalty for failure (Hussien, 2015). Movement stirs up emotional turmoil. This stance can be vindicated by giving examples of a student, player, and people. A student is always vulnerable to stress when he moves from home to university or university to home because environmental change causing the feeling of dismay does not allow him to subjugate the surge of anxiety. Even a player cannot defeat the stress while going to the playground from home. A pithy observation shows that people find it hard to influence the feelings of worry, nervousness, or unease when moving from one place to another. Deteriorating effects of situational change on a person's mental characteristics or attitude are irrefutable, and this change gives rise to unbearable tension. When a player participates in a competitive situation, he strives to meet the people's expectations. To bask in the glow of unprecedented triumph, he feels defeated in the face of overwhelming strain. Stress has been discussed formally, and innumerable studies have been conducted to understand this intricate phenomenon. It is an emotional strain resulting from intimidating, depressing and demanding circumstances (Greenberg, 2005).

The causes of stress have been divided into three types. i.e. a) Bewildering impact of change, b) Reaction against the menacing environment, and c) Apprehension about losing grip. There are certain symptoms of stress, for example, i) Continuous pain in the head, ii) Extreme tiredness, iii) Pain or discomfort in the stomach, iv) Abnormally high blood pressure, v) Noticeably irregular heartbeat, vi) Distraction of attention, vii) Sleep disorder, viii) The condition of having excessively sweaty palms, and ix) Feeling of unease and nervousness.

University students face many psychosocial, academic, and financial challenges in the university environment, as viewed by several studies. Academic stress affects many students and their academic performance (Eisenberg et al., 2007). Prime causes of academic stress

include over-competition, regular homework, long class hours, periodic examinations, language difficulties, complex teaching methods, over-expectation performance among peer groups, relationship problems, and fewer job opportunities (Deb et al., 2014; Deb et al., 2015). Vermunt and Steensman, 2005; Malach-Pines and Keinan, 2007 identified stress as incompatibility between hostile external conditions and one's competence. Many researchers believe that stress is an unbidden reaction against severe or excessive demand. Tempting but uncontrollable circumstances can also lead to stress.

As Awino and Agola(2008) reported, students may take pressure or tension in universities due to demanding circumstances (Ongori, 2007). Malach-Pines and Keinan (2007); Ongori, (2007); Agolla & Ongori, (2009); Agolla, (2009) acknowledge the existence of lethargy, and high blood pressure, melancholy, lack of concentration, frustration, and agitation as stress. Person-Environment Model plays a significant role in perceiving the stress at the university level (Misra & McKean, 2000). According to this model environmental stimulus that causes stress is no less than a nightmare.

Stress is inevitable in bringing about an intended result. In some cases, stress bestows the gift of competence, leading to higher academic achievement. On the other hand, a student may be demoralized due to mental or emotional strain, which causes poor academic performance. Nobody can refuse to admit the existence of stress in a student's life. Its ineludible impact cannot be denied because one has to face demanding conditions to give results in his academic life (Agolla & Ongori, 2009). Students have to be subjected to academic stress to give better performance in the stipulated period (Agolla & Ongori, 2009)

A devastating impact of academic stress is noticed on the academic performance and health of a student at the college level (Misra & McKean, 2000). For undergraduate students, academic stress ruins their academic careers but also becomes the cause of poor health and psychological problems (Dwyer & Cummings, 2001).

Misra and McKean(2000) arrived at a judgment that tension resulting from adverse or demanding circumstances during the first year of college results in lower CGPA in the final year because a person's mental state is seriously affected by stress. The majority of students have arrived at judgment that numerous unwelcomed and harmful matters relating to a person's mental and emotional state act as serious impediments to academic achievement. For example, the evident influence of depression, anxiety, and stress on a student's academic career is unquestionable. Agolla and Ongori (2009) investigated that in a state of unhappiness and despair, the incidents causing mental and emotional stress can disturb the student's process of performing.

Research Objectives

1. To explore the level of academic stress among students of basic sciences.
2. To explore the level of academic stress among social sciences students.
3. To compare the level of stress among the students of basic sciences and social sciences.

Research Questions

1. Does the Academic stress mean score of UOG students significantly differ from the scale mean score, i.e.3?
2. Is there any significant difference in overall academic stress mean score between basic sciences and social sciences students?
3. Is there any significant difference in academic stress mean score difference between males and
   female students of basic sciences?
4. Is there any significant difference in academic stress mean scores of male and female

students of social sciences students?

Methodology

Participants were selected from a population of 2nd,4th,6th & 8th-semester basic sciences and social sciences students at the University of Gujrat. They were chosen randomly, so the study sample consisted of (225) students, which forms (11%) of the study population. The study used (30) an items questionnaire (Appendix1) to gather information on basic sciences students' and social sciences' stress levels. These items assess (4) main domains; the first is the academic factor (11) items, the second is the relations with others (7) items, the third is the personal factor (8) items, and the fourth is the environmental factor (4) items.

Experts previously reviewed the questionnaire to check its validity and suggested revisions in the questionnaire. The suggested changes were incorporated accordingly. The questionnaire also included these demographic factors: gender, locality, and department. Data were collected by personal visits to the sampled departments of the University of Gujrat by the researcher herself.

Data Analysis

Q.1. Does the Academic stress mean score of UOG students significantly differ from the scale mean score, i.e.3?

Table:1

Academic Stress mean score comparison with mean scale score i-e 3.

Variables	N	Mean	S. D.	Mean Difference	t-value	Sig.(2-tailed)
Academic factor	225	2.82	.73	-.18	-3.69	.000
Relation factor		2.57	.79	-.42	-8.07	.000
Personal factor		2.53	.93	-.46	-7.43	.000
Environmental factor		2.78	1.16	-.21	-2.70	.007

The table 1 showed that the total number of students is 225. There was a significant difference among students level of Academic Stress from the scale mean score i-e 3.Under all the four factors, academic factor (t=3.69,p=.000<.05), Relations factor(t=.807,p=.000<.05), Personal factors(t=-7.43, p=.000<.05), environmental factors(t=-2.70, p=.000<.05).

Students had average level of stress in all of the stress factors, academic factor (Mean 2.82,S.D .73), relation factor (Mean 2.57,S.D .79), personal factor (Mean 2.53,S.D .93)

Environmental factor (Mean 2.78,S.D 1.16).

Q.2. Is there any significant difference in academic stress mean score difference between males and female students of basic sciences?

Q.3. Is there any significant difference in academic stress mean scores of male and female students of social sciences students?

Table: 2

Gender Based Comparison of Academic Stress

Factors	Groups	Mean	S. D.	Mean Difference	t-Value	Sig.(2tailed)
Academic Factor	Male	2.78	.95	-.04	-.265	.107
	Female	2.82	.67			
Relations with other	Male	2.48	.72	-.11	-.88	.417
	Female	2.59	.81			
Personal Factor	Male	2.67	1.45	.17	1.05	.012
	Female	2.50	.78			
Environmental Factor	Male	2.56	.88	-.27	-1.35	.833

	Female	2.83	1.21

In Table 2, the value of t-test =-265 and p-value=.107>0.05 showed no significant difference in the level of academic stress between males and females in academic stress at a 95% level of significance. The mean value (M=2.78) showed that the majority of male students at the university level had average stress. Similarly, the Mean value (M=2.82) showed that the majority of female students at the university level also had an average level of stress in the academic factor. So no gender-based significance difference was found in the Academic stress factor.

The value of t-test=-.88 and p-value=.417>0.05 showed no significant difference in the level of academic stress between males and females in the relation factor at 95% significance. The Mean value (M=2.48) showed that most male students had slight stress in the relation factor; similarly, the Mean value (M=2.59) showed that most female students had average stress levels in the relation factor. So no gender-based significant difference was found in the relations factor.

The value of t-test=1.05 and p-value=.012>0.05 showed no significant difference in the level of academic stress between male and female students in the personal factor at 95% significance. The mean value (M=2.67) showed that most male students had an average level of academic stress in personal factors. Similarly, the Mean value (M=2.50) shows that most female students had an average level of academic stress in a personal factor. So no gender-based significant difference was found in a personal factor.

The value of t-test=-1.35 and p-value=.833>0.05 showed no significant difference in the level of academic stress between males and females in the environmental factor at 95% significance. The Mean value (M=2.56) showed that most male students had an average level of academic stress in the environmental factor. Similarly, the Mean value (M=2.83) showed that most female students also had average academic stress levels in an environmental factor. So no gender-based significant difference was found in an environmental factor.

Q.4. Is there any significant overall academic stress mean score difference between basic sciences and social sciences students?

Table: 4: *Faculty-Based Comparison of Academic Stress*

Factors	**Groups**	**Mean**	**S.D**	**Mean difference**	**t-Value**	**Sig.(2tailed)**
Academic factor	Social sciences	2.80	.64	-.02	-.253	.260
	Basic sciences	2.82	.80			
Relation factor	Social sciences	2.67	.77	.19	1.80	.541
	Basic sciences	2.48	.80			
Personal factor	Social sciences	2.54	.65	.01	.084	.002
	Basic sciences	2.52	1.11			
Environmental	Social sciences	2.81	.79	.04	.315	.213
Factor	Basic sciences	2.76	1.39			

The value of t-test=-.253 and p-value=.260>0.05 showed no significant difference in the level of academic stress between Social Sciences and basic sciences in the academic factor at a 95% significance. The Mean value (M=2.80) showed that the majority of social science students had an average level of academic stress in the academic factor. Similarly, the Mean value (M=2.82) showed that the majority of Basic Science students also had average academic stress levels in an academic factor. So no faculty-based significant difference was found in academic factors.

The value of t-test=1.80 and p-value=.541>0.05 showed no significant difference in the level of academic stress between Social Sciences and basic sciences in the relation factor at a 95% significance. The Mean value (M=2.67) showed that the majority of social science students had an average level of academic stress in the academic factor. Similarly, the Mean value (M=2.48)

shows that majority of Basic Science students had a slight academic stress level in an academic factor. So no faculty-based significant difference was found in academic factors.
The value of t-test=.084 and p-value=.002<0.05 showed a significant difference in the level of academic stress between Social Sciences and basic sciences in the academic factor at 95% significance. The Mean value (M=2.54) showed that the majority of social science students had an average level of academic stress in the academic factor. Similarly, the Mean value (M=2.52) shows that majority of Basic Science students also had average academic stress levels in an academic factor. So no faculty-based significant difference was found in an academic factor.
The value of t-test=.315 and p-value=.213>0.05 showed no significant difference in the level of academic stress between Social Sciences and basic sciences in the academic factor at 95% significance. The Mean value (M=2.81) showed that the majority of social science students had an average level of academic stress in the academic factor. Similarly, the Mean value (M=2.7.6) showed that most Basic Science students also had average academic stress levels in an academic factor. So no faculty-based significant difference was found in an academic factor.

Conclusion and Discussion

The present study compared the stress level of Social science and basic science students. Results for academic stress revealed that male and female students experienced the average level of academic stress, which contradicts the findings presented by (Misra & Castillo, 2004); Gentry. et al. 2007 & Gyawali (2013). These studies found that female students have a higher level of academic stress than male students.
There are different gender roles prescribed for male and female youths. Men are supposed to be harder, enduring, forceful, and steady, whereas females are supposed to be reserved, kind, and passionately susceptible. Some researchers suggested females less than males (F<M) pattern for the experience of stress; for example, Hyde and Plant (1995); Milkie and Thoits (1993) claimed that female students more often report letting out their feelings, whereas males more often report controlling their emotions, accepting the problem, not thinking about the situation, and engaging in Problem-solving efforts. Similarly, coping styles to stressors can also differ by gender.
Students of Urban areas have relatively good facilities and opportunities to secure good marks. So it was assumed there would be significant difference in the locality. But the independent sample t-test showed that the students of urban and rural areas experienced average academic stress. Despite different academic facilities and possibilities of securing marks, there was no significant difference in the level of academic stress experienced by urban and rural students.
On the contrary, students of basic sciences have a relatively higher possibility of securing good marks via internal evaluations and practical examinations. So it was assumed there would be a significant difference in an academic discipline. Still, the independent sample t-test showed that the students of basic sciences and social sciences experienced the average level of academic stress. There was no significant difference in the level of academic stress experienced by students of social sciences students and basic sciences students.

Recommendations

Academic stress can influence the mental health and academic achievement of the students. Reducing stress effects should be directed to optimizing the examination procedure and developing communication skills.
The university may provide a conducive environment for the students to minimize their stress due to environmental factors. Teachers should instantly engage their students in such activities, which may improve their creativity. Effects of academic stress on other aspects of academic

life, such as academic achievement, adjustment, exam anxiety etc., can also be explored and examined in further research.

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