

***“An exploratory study of effect of psychological factors on  
total stress among female Weight Lifters.”***

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**INTRODUCTION**

Stress within the context of sports and athletics may be seen from multiple perspectives. It may be seen as a process in which environmental demands are perceived to impact the adjustment of the athlete, or it may be seen as a state of emotional anxiety and heightened physiological arousal. Within this context, sports psychologists and behavioral scientists have addressed the issue mainly from an emotional reaction perspective, and view stress within that context- as an elevated anxiety from the perceived demands of a specific athletic event, expectation or performance. Within this context, sport-specific competitive anxiety arises within the continuum of a sporting event, and may be influenced by personality, biochemistry, or sport-specific trait anxiety.

Stress is defined as an organism's total response to environmental demands or pressures. When stress was first studied in the 1950s, the term was used to denote both the causes and the experienced effects of these pressures. Stress in humans results from interactions between persons and their environment that are perceived as straining or

exceeding their adaptive capacities and threatening their well being. The element of perception indicates that human stress responses reflect differences in personality, as well as differences in physical strength or general.<sup>2</sup>The causes of stress can include any event or occurrence that a person considers a threat to his or her coping strategies or resources. Researchers generally agree that a certain degree of stress is a normal part of a living organism's response to the inevitable changes in its physical or social environment, and that positive, as well as negative, events can generate stress as well as negative occurrences.

Stress is commonly viewed as a frustrated 'fight or flight' response. Basic human survival mechanism left over from our primordial 'roots' when we could best respond to perceived dangers by either fighting or fleeing; seen in this way, stress behavior and emotions are sometimes regarded as problematic inappropriate responses to threatening situations in modern civilized society, however, stress is a) a powerful internal communication to raise awareness, and b) a source of energy, although the raw emotional and physical energies may have to be transformed to a more useful form before they are directly useful.

Stress is characterized by the body's non-specific response varying demands that are placed upon it. Many times it is referred to in a negative light; however stress can help a person to be alert and motivated allowing a person to accept more than they would otherwise. Lack of stress can be much of a problem as too much stress. The goal in treating stress is not to eliminate it but to manage it and use it to our advantage. As we strive for an optimal level of stress in our lives we should see the amount of stress motivate us in our performance.

Stress is an integral part of the natural fabric of life. Some of it occurs because we try to do too much in the time available and some of difficulties with interpersonal relationship either at home or at work. Coping with stress and anxiety is needed for normal growth and development with any situation in which a persons behavior is evaluated by other can be stressful, even the act of getting in morning generates enough stress.

Several studies (DeMeuse, 1985; Hardy and Riehl, 19880) of anxiety and sports performance have produced inconsistent results. One-dimensional anxiety and athletic performance have more frequently been related to a variety of casual events. Cognitive motor demands of various sports also present unique aspects and results in various forms of stress. Individual differences and expectations of self-efficacy and self-confidence may affect athletic performance and show a casual relationship between stress of sport and resulting performance in the athlete. What is clear is that most athlete encounter the range of psychological stressors that other experiences, therefore, it is likely to expect that athletic performance is sensitive to the effects of general life stressful events as in somatic and psychological well being.

What a lot of people don't know is that athletes have another life outside of their sport. This is what makes it harder for athletes to stay focused. When they're outside life is not going well and they have to perform for their school that is a tough situation. All of this can lead to some emotional problems as well. Emotional stress can be induced by the stimulus of any of the human emotional pressure or response The emotional pattern of anger can be stimulated by such factors as the warring of one's

wishes, or cumulative effects of a number of other disappointments and irritations concerning athletes and their grade point average (Humphrey 2000:72).

Since stress is mentally and emotionally disruptive, it can cause some upsetting conditions that start occurring in response to adverse external influences. “This is capable of affecting physical health, which is usually characterized by increased heart rate, rise in blood pressure, muscular tension, irritability, and depression (Haworth 1998:6).” These are some issues that affect both the non-student athletes and the student athletes when stress takes place. The surveys show that a student athlete feels additional stress from fans, media, and friends. After all of this stress is built up in a student athlete, there is yet another factor that comes up in depression. Non-athletes experience these feelings as well, but most of the time, it affects the athletes. College athletes must learn how to balance the competing demands of the academics, developing new social contacts, and being responsible for their own daily lifestyle.

Coping with stressful episode during competitive event is a common occurrence in sport. Surprisingly, attempts to understand the coping process in sport has received only scant attention in the sport psychology literature and are absent with respect to Asian culture. While coping process may be similar between cultures, the cultural differences are more apparent in the preferred selected coping strategies. At an optimum level of stress you will get the benefits of alertness and activation that a good level of stress brings. Excessive levels of stress damage performance and damage your enjoyment of your sport. These excessive levels occur in the following circumstances:

- When you think that what is being asked of you is beyond your perceived abilities

- When too much is asked of you in too short a space of time
- When unnecessary obstacles are put in the way of achieving goals

The negative effects of stress are:

- That it gets in the way of judgment and fine motor control
- It causes when competition is seen as a threat, not a challenge

It damages the positive frame of mind that you need for high quality competition

by:

- Promoting negative thinking
- Damaging self-confidence
- Narrowing attention
- And disrupting flow

It consumes mental energy in, for example, worry. This is energy that you could devote to keeping technique good.

Sources of frustration may be *internal* or *external*. Internal sources of frustration involve personal deficiencies such as a lack of confidence or fear of social situations that prevent one from reaching a goal.

Conflict can also be an internal source of frustration when one has competing goals that interfere with one another.

### **Frustration**

Frustration is an emotion that occurs in situations where one is blocked from reaching a personal goal. The more important the goal, the greater the frustration. It is comparable to anger.

**Distress** is a bad type of stress that arises when you must adapt to too many negative

demands. **Eustress** is the good type of stress that stems from the challenge of taking part in something that you enjoy but have to work hard for. Eustress pumps you up, providing a healthy spark for any task you undertaken.

### Anxiety

Anxiety is different from stress. Anxiety comes from a concern over lack of control over circumstances. Anxiety and fear are ubiquitous emotions.

### CONFLICT

The officiating environment can be challenging and potentially hostile. Dealing with conflict can be tough for a confident official, let alone an inexperienced one. Good officiating relies on dealing with conflict professionally and positively.

### Pressure

Most people play a sport for the thrill of having fun with others who share the same interest, right? But it's not always fun and games. Most student athletes who play competitive sports have had thoughts that go like this at one time or another: "Man, I can't believe I let the ball in the goal, and I know from the look in coach's eyes he wasn't happy."

## **STATEMENT OF THE PROBLEM**

The present study entitled “*An exploratory study of effect of psychological factors on total stress among female Weight Lifters.*” (Psychological variables viz. frustration, conflict anxiety, pressure)

### DELIMITATION

1. The study was delimited to female weight lifters.

2. The study was further delimited to the following Psychological variables  
frustration, conflict, pressure, anxiety,
3. The test was administered a night before the competition.

### **LIMITATION**

1. Lack of limited subjects.
2. Lack of motivational devices, training programs, control of food habits  
etc.

### **PROCEDURE**

**SAMPLE SIZE** 300 female weight lifters of age group 18-25 participated in All India inter-varsity of weight lifting, during 2007-2008 were selected as subjects for this study at random.

### **SELECTION OF TOOLS AND TECHNIQUES**

#### ***BIST BATTERY OF STRESS SCALES by Abha Rani***

**PURPOSE---**It assessed the psychological variables viz frustration, conflict, pressure and anxiety through SCALE OF ACHIEVEMENT STRESS (SachS). It carries 52 items in total covering all required aspects related to competitive situation.

Table 1

Percentiles on the Scale of Stress Battery

S. No.	Scales	P <sub>10</sub>	P <sub>20</sub>	P <sub>30</sub>	P <sub>40</sub>	P <sub>50</sub>	P <sub>60</sub>	P <sub>70</sub>	P <sub>80</sub>	P <sub>90</sub>
1	SAchS	80.06	99.58	101.24	126.30	130.90	134.40	140.00	148.01	161.62

- High stress- PH70 or above., Average stress-P69 to P31, Low stress-P30 or below

**SCORING**

TABLE 2

The scoring is as follows for the positive statements-

Always	Often	Sometimes	Rarely	Never	Total	Grand Total
Too much	Much	Average	Less	Not at all		
4	3	2	1	0		
4	3	2	1	0		

For negative statements it is just vice versa the total will be separate foe frequency and quantity. The grand will be the sum of frequency scores and quantity scores. Thus the scale has-Frequency of stress, Quantity of stress, Total stress score Component wise stress

TABLE 3

For interpretation the scores are arranged in following manner

Frustration		Conflict		Pressure		Anxiety		Total		Grand Total
Frequency	Quantity	Frequency	Quantity	Frequency	Quantity	Frequency	Quantity	Frequency	Quantity	

The total will show the sum of frustration, conflict, pressure, and anxiety scores frequency and quantity wise. The grand totals will be sum of both frequency and quantity scores and will show the total amount of stress.



### ADMINISTRATION OF TEST

The test was administered during the inter-varsity competitions held by University Sports Board. The subjects were made aware about the study and its significance prior to the administration of test. The Confidentiality of test taken was maintained. The other members involved in administration of test were given a brief training before the test. The test was administered one night prior to competition

### STATISTICAL TECHNIQUE

**Multiple Regressions** is used to find

- The effect of Frustration, conflict, pressure and anxiety on total stress with respect to quantity, frequency and in total.

#### **Percentile**

**To find the scores of high and low stress P30 and P70 was computed**

### Table 4

Showing Stress among female players of Weight Lifting

Percentile norms were established for scale of the battery .the corresponding grouping of high average and low stress in term of percentile is-

Stress	Percentile	Score
High Stress	P70 and Above	236
Average Stress	P69-P31	202-236
Low Stress	P 30 and Below	202

**TABLE 5**

Showing the effect of four factors i.e. frustration, conflict, pressure and anxiety on total stress among weight lifters

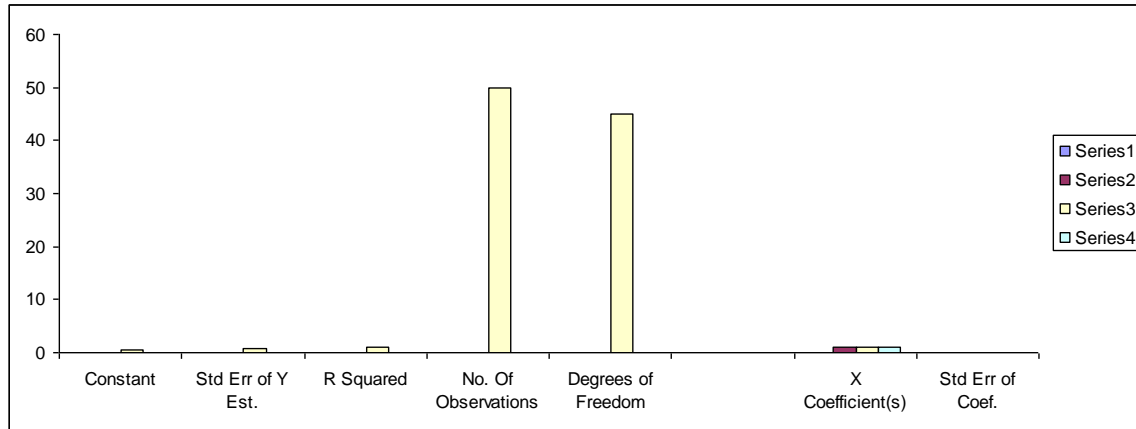
Regression Output:

Constant		0.502272			
Std Err of Y Est.		0.678194			
R Squared		0.99937			
No. Of Observations		50			
Degrees of Freedom		45			
X Coefficient(s)	0.997682	1.012392	0.988951	1.002238	
Std Err of Coef.	0.006217	0.017106	0.007707	0.010052	

This shows that four factors of stress i.e. frustration has an effect of 0.997682 on stress with STD Error of 0.006217. Where conflict has 1.012392 effects with std.error 0.017106, pressure has effect of 0.988951 with an std error of 0.007707 and anxiety has effect of 1.002238 with std. Error of 0.010052. All the four factors in together have 0.965116 (96.5116%) effect on stress (co-efficient of determination). All other factors other then these four factors (which are not taken into consideration in this study) have 0.502272 with an std.error of 0.678194.

**GRAPH**

Showing the effect of four factors i.e. frustration, conflict, pressure and anxiety on total stress among weight lifters



### **DISCUSSION OF FINDINGS ON BIST BATTERY OF SCALE FOR STRESS**

- In Weight lifting Conflict has maximum effect on stress followed by Anxiety than Frustration and at last pressure was found to have least effect on stress. It was found that many other factors other than these three factors, which are not taken into consideration in this study, have much more effect on stress.

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