IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

ASSESSMENT OF STRESS AND CHANGE IN DIETARY HABITS DURING EXAMINATION AMONG COLLEGE STUDENTS (10+2) ALONG WITH NUTRITIONAL INTERVENTION

DR SUGREEV DWIVEDI ANUJ[1] SHAFQUAT* DR. NEELAM KUMARI[2] SNIGDHA THAKUR[3]

1. CLINICAL PHARMACOLOGIST, DEPARTMENT OF CLINICAL PHARMACOLOGY, RANCHI CANCER HOSPITAL AND RESEARCH CENTRE, RANCHI, 834006 , INDIA

1.DEPATMENT OF NUTRITION, ISABELLA THOBURN COLLEGE, LUCKNOW,226007, INDIA

2. DEPATMENT OF NUTRITION, ISABELLA THOBURN COLLEGE, LUCKNOW,226007, INDIA

3. DEPATMENT OF NUTRITION, ISABELLA THOBURN COLLEGE, LUCKNOW,226007, INDIA

ABSTRACT

Examination stress among college students (10+2) has been a topic of interest for many years. Students experience high level of stress for many reasons such as lack of interest, lack of preparation, lack of information and pressure from their elders, seniors and teachers. When stress is perceived negatively or becomes excessive, it leads to anxiety before and during examination and ultimately affects their academic achievements. The present study was conducted to know the changes in dietary habits during examination stress among intermediate students. Further comparison was done to find out the level of stress felt by intermediate and seen changes in their eating habits during examination programme. The sample consisted of 72 students drawn using random sampling method from same schools girls and boys. A self-made questionnaire was developed to access examination stress and change in their dietary habits among college students (10+2). The result shows correlation between examination stress and anxiety of students. On comparing the stress and change in dietary habits among girls and boys it was found that students feel average high stress. There was no significant difference found in the stress and anxiety level of boys and girls.

KEYWORDS :- Stress, Dietary habits, Examination , Nutritional Intervention.

INTRODUCTION

The concept of stress was first introduced in the life science by Hans Selye, a pioneer in stress Research. Derived from the Latin word stringere, stress was probably used in the seventeenth Century to mean hardship, strain, adversity or affliction. Each person sees the situation through His/her own eyes. The stress increases closer to the day of the examination and probably at the Peak when the students enter the examination centre. Demand to score good marks in the examination. There were many constraints, extensive syllabus, anticipated difficult questions, The pressure to get selected against limited seats in the school, time limit to complete the Examination. Some would be quite stressed while others may not be stressed at all. The non- Specific response of the body to any demand made upon it, any external event or an internal Drive which threatens to upset the individual's balance was stress (Selye, 1974).

Academic stress can be conceptualized as a student's interactions between environmental Stressors, the student's cognitive appraisal of and coping with the academic-related stressors, And psychological or physiological response to the stressors (Lee & Larson, 2000; Lou & Chi, 2000). One of the major problems of today's world is stress. Every person has a unique nature

As regard to capabilities, attitudes, personality characteristics and interest (Banerjee & Chatterjee, 2016).

Stress and anxiety force and pushes them to focus on their studies and score good marks.

The level of stress and anxiety start at the time of the entrance exam. If a student does not cover The whole syllabus at a given time, in the end, they start panicking. The most important thing To avoid stress and anxiety before the examination to keep few necessary information like Examination date, venue, and admit card. Previous studies have found a strong relationship Between stress and unhealthy eating in both children and adults. However, few studies have Focused especially on college students. Because the relationship between stress and unhealthy Eating has been well established in other populations, it is likely it also exists for college Students. During the last 50 years the prevalence of disordered eating behaviour and disordered Eating had increased in the world (Meyer, T.A, Gist, J, 2008).

Stress as the situation by which the individual suffers from physical and psychological hyper

Tension resulted from factors that can't be handled and exceeds human ability to cope with (Hussein and Hussein, 2006).

College students' (10+2) stress levels are important as students use different strategies to cope with stress (e.g., alcohol, smoking, illicit drug/s use) that might include unhealthy eating. For many people, eating in response to negative emotions or stress is quite common, and may be Considered as an emotional relief and a form of maladaptive coping (Manzoni, G.M.; Paganini, F.; Goring, A, 2009).Studies of stress and food choice found that individuals experiencing periods Of stress overate food items they would customarily avoid (Seller, D.A.; Saito, S, 2007). Academic stress is a pervasive problem across the countries, culture, and ethnic groups and Must be viewed in its context (Wong, Wong, & Scott, 2006).

Every student aspires to pursue academic success to achieve respect, family pride, and social Mobility (Gown, Bella, Kimber, & Hua, 1996). This result in extremely high academic demands And extraordinary pressure on students and specially adolescents (Bossy, 2000).

PURPOSE OF STUDY

The purpose of study to assess the stress level experienced by college students (10+2) in Lucknow. The study aimed to answer these questions:-

1) What is the stress level college students (10+2) have?
2) What are the factors associated with this stress?
3) What are the changes occur in diet due to stress?

OBJECTIVE

1) To assess changes in dietary pattern during examination among college students (10+2).
2) To study the stress and pressure during examination among intermediate college students.
3) To evaluate between stress, food behaviour and food intake in intermediate college students.
4) To develop nutritional education or nutritional intervention

SIGNIFICANCE

Transition of students from school environment to university environment could cause a Psychological, academic and social shock to them, since this educational system has huge Differences: the student will face new methods of teaching, new academic requirements, new Type of relations between students and faculties and even new relations among students Themselves. Due to these changes students experience different types of stress that

Mental health, social health and academic achievement, this age called age of stress (Thawabieh, A.M, 2012). This research shows the effect of stress on eating pattern and it will guide to avoid eating Disorder which cause serious health issues and diseases.

METHODOLOGY

Population selected: - It was important step in any research work, the sample size what I

Had selected for my dissertation work was the group of school students who were preparing for

Their board's examination. All the students under the age of 16-18 years residing in Luck now City were considered.

Area of study: - Area of study chosen of Luck now city, Online mode

Period of Study: - The period of was 3 months of days which utilizes for the collection of Review of literature, survey, collection or analysis of data and completion or printing of reports.

Selection of Sampling: - On the basis of representation and element selection and in order To give every item an equal chance of inclusion in the sample. Sample random sampling was Used. The online mode were selected for data collection.

Sample Size: - The random selection of target was done. The sample size was 73 Intermediate college students.

SELECTION OF CASE

Inclusion Criteria: - Students who preparing for board examination.

Exclusion Criteria: -

1) Students below the 10^{th} or 12^{th} class.
2) Pre-school children.

TOOLS AND MATERIALS: -

Tool: - A self-constructed tool was use for data collection. The questionnaire divided into 3 Section and contain total 20 questions. The questionnaire was designed to elicit the information On examination and rest of the questions related to diet during examination. After selecting Sample there was the need to collect the information according to the selected topic of our Study. In my study I had used questionnaire as a tool to collect information. A questionnaire Set of questions used to collect or gathered the information about the topic.

Collection of Data: - The questionnaire was set to keep in mind to get all required Information to assess the examination stress and their dietary habits during examination. The data will be collected by the subject itself.

The self-developed questionnaire divided into three sections in different forms of questions regarding the study topic.

General Information: - The background information include age, gender, income group and education.

Examination Stress: - This include information about stress face by students during their examination time.

Dietary Habits: - This include students eating habits, patterns and food preference during stress.

RESULT

In the study to assess the stress and change in dietary habits among intermediate students in Lucknow city. A total number of 72 respondents were selected through random sampling as the unit of investigation.

The collected data from selected was tabulated, computed and presented in chapter and under following heading according to the study.

Mean Formula: -

Mean $(\underline{x})=\frac{1}{n}\sum_{i=1}^{n} x_a$

Where n=sample size

x_i=number of observations

Standard deviation formula: -

Standard deviation $(\sigma)=\sqrt{\frac{1}{n}\sum (x - \underline{x}}$

Where n=size of the sample

x_i =Number of observations

$\underline{x}$=mean value

σ=standard deviation

T-Test Formula: -

Given two groups (1, 2), this test is only applicable when:

- the two sample sizes (that is, the number *n* of participants of each group) are equal;
- it can be assumed that the two distributions have the same variance; Violations of

these assumptions are discussed below.

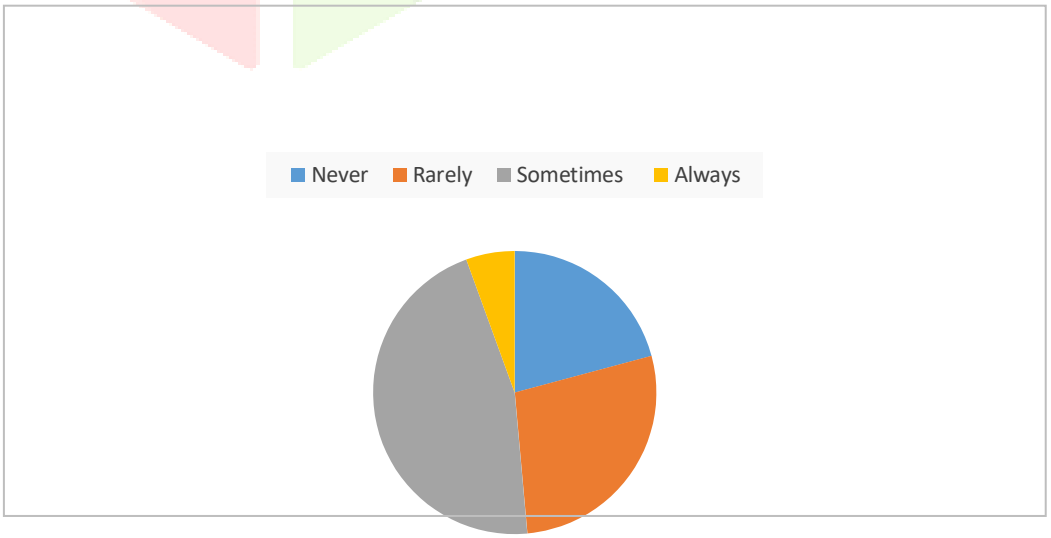
The *t* statistic to test whether the means are different can be calculated as follows: $t=\frac{mA-Mb}{\sqrt{s2/nA+S2/nB}}$

RESULT & DISCUSSION

1) Do you read thoroughly the test paper and feel that you do not know any of the answer?

(TABLE 1.1)

S.No	Options	Frequency	Percentage (%)
a)	Never	15	20.8
b)	Rarely	20	27.7
c)	Sometimes	33	45.8
d)	Always	4	5.55



Discussion: - The above graph shows 20.8% students doesn't feel that they don't know the answer and 27.7% students rarely feel that they don't know the answer when they read question paper thoroughly and 45.8% students sometimes feel like that and 5.55% students always feel they don't know the answer when they read question paper thoroughly.

2) Do you get panic before and during examination?

(TABLE 1.2)

S.No	Options	Frequency	Percentage (%)
a)	Yes	42	58.3
b)	No	30	41.6

Discussion: - The above graph shows 58.3% students get panic before and during examination and 41.6% students don't get panic before and during examination, students get panic because they feel pressure, tension and highly stressed about their examinations.

3) Do you feel visible sign of nervousness such as shaky hands, sweaty palm and many more before examination?

(TABLE 1.3)

S.No	Options	Frequency	Percentage (%)
a)	Never	22	30.5
b)	Rarely	13	18.05
c)	Sometimes	28	38.8
d)	Always	9	12.5

Discussion: - The above graph shows 30.5% students see visible sign of nervousness before examination and 18.05% students rarely see sign of nervousness and 38.8% students sometimes see visible sign of

nervousness and 12.5% students always see visible sign of nervousness such as sweaty palm, shaky hands before examination.

4) Do you try to make healthy food choices?

(TABLE 1.4)

S.No	Options	Frequency	Percentage (%)
a)	Y	46	63.8
b)	e	16	22.2
c)	s	10	13.8
	N		
	o		
	Sometimes		

Discussion: - The above graph shows 63.8% students try to make healthy choice during examinations period and 22.2% students never do that and 13.8% students sometimes try to make healthy choice during examination period.

5) Do your stress level usually change your eating habits?

(TABLE 1.5)

S.No	Options	Frequency	Percentage (%)
a)	Never	37	51.3
b)	Sometimes	35	48.6

Discussion: - The above graph shows 51.3% students stress level never change their eating habits and 48.6% students sometimes their stress level change their eating habits.

6) What do you do when you are stressed? (TABLE 1.6)

S.No	Options	Frequency	Percentage (%)
a)	Eat more	13	18.05
b)	Eat less	18	25
c)	Skip meals	21	29.1
d)	Eat same amount as you normally do	20	27.7

Discussion: - The above graph shows 18.05% students eat more when they stressed and 25% students eat less when they are stressed and 29.1% students skip their meal when they stressed and 27.7% students eat same amount as they normally do when they stressed.

7) Have you ever noticed any connection between your stress and eating habits? (TABLE 1.7)

S.No	Options	Frequency	Percentage (%)
a)	Yes	30	41.6
b)	No	19	26.3
c)	Sometimes	15	20.8
d)	Rarely	8	11.1

Discussion: - The above graph shows 41.6% students notice their connection between stress and eating habits and 26.3% students did not notice any connection between stress and eating habits and 20.8% students sometimes notice connection between stress and eating habits in their health and 11.1% students rarely notice any connection between stress and eating habits in their health.

8) Any changes in meal frequency because of stress?

(TABLE 1.7)

S.No	Options	Frequency	Percentage (%)
a)	Yes	26	36.1
b)	No	19	26.3
c)	Sometimes	21	29.1
d)	Rarely	6	8.3

Discussion: - The above graph shows 36.1 % student's meal frequency change because of stress and 26.3% student's meal frequency not change because of stress and 29.1% students sometime change their meal frequency because of stress and 8.3% students rarely change their meal frequency because of stress.

9) Do you avoid eating before examination?

(TABLE 1.8)

S.No	Options	Frequency	Percentage (%)
a)	Never	22	30.5
b)	Sometime	19	26.3
c)	s Rarely	11	15.2
d)	Always	20	27.7

Discussion: - The above graph shows that 30.5% students never avoid their eating before examination and 19% students avoid sometimes their eating or food and 15.2% students rarely avoid their food and 27.7% students always avoid their food before examination. Students avoid their food before examinations because of nervousness and stress of examinations.

Table 2: Showing mean and standard deviation of sample on stress

N	Mean	Std. deviation
72	53.46	25.70

The total number of participants who were subjected to the analysis procedures were 72. The mean of the sample on the total stress score was 53.46(SD=25.70) as reflected in table 1. Using the mean as cut-off for preliminary analysis and interpretation, it was found that 48.80% of students fall under the category of having average to high stress levels

Table 3: Showing results of independent samples t test of the two groups, males and females

Gender	N	Mean	Std.Deviation	Sig
Males	36	53.01	26.75	.317
Females	36	53.87	24.75	

The second major objective was to find if there are any significant gender differences in the total stress score obtained by the participants. The total number of male and females were 36 and 36 with a mean score of 53.01(SD=26.75) and 53.87(SD=24.75) respectively. According to the independent samples t- test results indicated in table 2, there exists no significant difference in total stress experienced by males and females

CONCLUSION

The present study as "Assessment of stress and change in dietary habits during examination among intermediate students". The students were different ages most of between (15 to 19). Too much stress can interfere their academics. It was found in the study that stress and eating habits were related to each other. The least amount of stress was found among students.

When the level of stress and dietary habits before and during examination was compared between boys and girls it was found that boys and girls feel same level of stress and least level of stress.

Some students feel sleepless night before examination and some of them don't study regularly to avoid stress and in some students seen their change in eating habits because of stress More emphasis is needed on understanding the impact of examinations on students, on identifying vulnerable individuals, and on the appropriateness of the current examination process (Fisher, 1994).

REFERENCE

1. Yahya Saleh Ibrahim, Shahimi bin Mohtar, Muhammad Abdullahi Sabo, Mohd Kamarul Irwan Abdul Rahim, Ahmad Shabudin Ariffin. Stress and Academic Programme Type: Perspective on Polytechnic Students in Nigeria. *American Journal of Public Health Research*. 2015; 3(6):214-220. doi: 10.12691/ajphr-3-6-3.

2. Hudd, S., Dumlao, J., Erdmann-Sager, D., Murray, D., Phan, E., Soukas, N., & Yokozuka, N. (2000). Stress at college: Effects on health habits, health status and self-esteem. College Student Journal, 34, 217- 227.

3. Tomiyama AJ, Dallman MF, Epel ES. Comfort food is comforting to those most stressed: evidence of the chronic stress response network in high stress women. Psychoneuroendocrinology. 2011 Nov;36(10):1513-9. doi: 10.1016/j.psyneuen.2011.04.005. Epub 2011 Sep 8. PMID: 21906885; PMCID: PMC3425607.

4. Mikolajczyk RT, El Ansari W, Maxwell AE. Food consumption frequency and perceived stress and depressive symptoms among students in three European countries. Nutr J. 2009 Jul 15;8:31. doi: 10.1186/1475-2891-8-31. PMID: 19604384; PMCID: PMC2716364.

5. Kumar KS, Akoijam BS. Depression, Anxiety and Stress Among Higher Secondary School Students of Imphal, Manipur. Indian J Community Med. 2017 Apr-Jun;42(2):94-96. doi: 10.4103/ijcm.IJCM_266_15. PMID: 28553025; PMCID: PMC5427869.

6. Choi J. Impact of Stress Levels on Eating Behaviors among College Students. Nutrients. 2020 Apr 27;12(5):1241. doi: 10.3390/nu12051241. PMID: 32349338; PMCID: PMC7284653.

7. Dixon, Wayne & Heppner, Puncky & Anderson, Wayne. (1991). Problem-Solving Appraisal, Stress, Hopelessness, and Suicide Ideation in a College Population. Journal of Counseling Psychology. 38. 51-56. 10.1037/0022-0167.38.1.51.

8. Akgün, Serap & Ciarrochi, Joseph. (2003). Learned Resourcefulness Moderates the Relationship Between Academic Stress and Academic Performance. Educational Psychology. 23. 287-294. 10.1080/0144341032000060129.