# An Analysis of the Stress Experienced By College Students throughout the Academic Year

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#### Abstract

This study aimed to investigate the impact of various stress reduction interventions on male and female college students' stress levels throughout a semester. It was anticipated that a comprehensive stress management (SM) program would lead to the most significant reductions in perceived stress, test anxiety, and burnout. The results also demonstrated that the cardiovascular fitness (CF) produced mixed findings, with a significant reduction in perceived stress but no changes in test anxiety. The study acknowledges some limitations, such as the variability in instructors and the single-institution sample. In conclusion, this study suggests that a multifaceted approach to stress management, encompassing various stress reduction techniques, may be the most effective way to reduce stress among college students. While this research did not investigate long-term effects, it lays the groundwork for further exploration in this area, emphasizing the potential benefits of comprehensive stress management programs.

# Keywords: Stress management, mental health, physical activity, fitness, anxiety. Introduction

This is in part due to the fact that society has a propensity to see entering college as the demarcation to the beginning of adulthood. A college student's life includes an unavoidable component known as stress, the causes of which may be various and varied Brown (1992). It is considered that a rapid rise in one's degree of maturity has taken place, allowing students to easily make the transition to college life (Ferrante, Etzel, & Lantz, 2002).

The age range of 18 to 24 to be "late adolescence, "a time period that is laden with concerns such as autonomy from parents, leaving home, self-sufficiency, gender identity, internalized moral reasoning, and job choice Newman and Newman (2003). Students may get the impression that they do not have sufficient time or energy to deal with the obligations that come along with the college experience as a result of any one of these variables or all of them combined. Therefore, as they deal with increased academic, personal, social, and moral pressures in their lives, these stressors may lead to increased anxiety, loneliness, depression, hopelessness, headaches, sleep disturbances, colds, and sometimes suicidal intentions (Kelley, 1993; O'Donovan & Hughes, 2008). In addition, these stressors may cause physical symptoms such as headaches, sleep disturbances, and colds. There is evidence to suggest that some college students are able to acclimatize to the overwhelming obstacles that come about as a result of this new life experience, whilst other students have difficulty in coping with the increasing stress. This study will assess the stress experienced by college students throughout the academic year.

# **Review of Literature**

College students are not exempted from the effects of stress in any of its many manifestations. It is a process in which a stressor generates a demand, and a person is required to respond or react to the demands generated by the stressor. It is a transaction between the environment or situation and the person, which leads in the perception or cognitive appraisal that the demands of the situation exceed the individual's resources available to satisfy or deal with those demands (Kelley, 1994; Lazarus, 1990). This perception or cognitive appraisal is what is known as environmental or situational stress. The sources of stress in one's life might be fleeting, such as vexing problems that arise in regular life, or they can be more persistent and possibly severe.

The method in which such stresses are perceived and an individual's effective response capability are two factors that determine a person's reaction to the stress they cause. People who believe they have the capacity and the resources to deal with adversity are more likely to have a positive attitude in the face of adversity and to take constructive action. On the other hand, Kelley (2007) and Pretzer, Beck, and Newman (2002) found that prolonged exposure to stressful events result in a various health issues pertaining both physical and mental.

International Advance Journal of Engineering, Science and Management (IAJESM) ISSN -2393-8048, July-December 2022, Submitted in August 2022, jajesm2014@gmail.com College students frequently report feeling stressed out, which can have a negative impact on their overall health and well-being in a variety of ways. The cognitive interpretation or experience of stress in a person's life, in most cases, will have impacts on both the person's body and their mind. Hypertension, high levels of muscular tension, and a reduction of immune system defenses are some of the negative physiological repercussions of persistent stress (e.g., Friedman & Berger, 1991; Kelley, 1994; Methany, Aycock, Pugh, Curlette, & Silva Cannella, 1986). These negative physiological implications may be traced back to prolonged exposure to stress. Psychological impacts such as anxiety, sadness, interpersonal issues, and ineffective cognitive processes may also be shown (for example, Kelley & Gill, 1993; Berger, Friedman, & Eaton, 1988).

The effectiveness of stress prevention and skill development training has been examined and the researchers concluded that meditation and relaxation can be as effective in reducing stress as exercise. Therefore, any skill development training could moderate, buffer, and reduce levels of stress.

Physical exercise is another method helpful in relieving stress. For instance, Brown (1992) found that physical activity and fitness helped mediate the effects of negative stress in a sample of college students. It is noteworthy that knowledge of the advantages of exercises, which include stress reduction (Katz, Davis, and Findlay, 2002; Makrides, Veinot, Richard, McKee, and Gallivan, 1998), may have a favourable impact. This shows that enlightening college students about the relationship between physical exercise and stress relief would be beneficial, and that education and distribution of this relation should take place.

Cardiovascular exercises can be more effective in reducing the effects of physiological and psychological stress than regular physical activity (Berger & Owen, 1988; Crews & Landers, 1987; Long & Haney, 1988; Norris, Carroll, & Cochrane, 1990; Schwartz et al., 1978). According to the findings of a meta-analysis (Crews and Landers, 1987) people who had a high aerobic fitness level were more resistant to the psychosocial stress. Therefore, exercise may work as a coping technique that lowers the physiological reaction to stress, and it may also function as a protector by helping to generate more effective responses to psychosocial and emotional stress. VanKim and Nelson (2013) discovered, using a large sample size of almost 15,000 students, that those who met the guidelines for vigorous physical activity had lower levels of perceived stress and were less likely to report poor mental health than those students who were not meeting the guidelines for vigorous physical activity.

Silvestri (1987) found that an experimental intervention consisting of both exercise and relaxation was more successful in lowering stress than exercise on its own. This finding contradicts the hypothesis that exercise alone would reduce stress. Long (1988) found that stress inoculation training coupled with exercise was the best combination for reducing the effects of stress than either intervention alone. Stress inoculation training is a psychological intervention and exercise is a physiological intervention.

Regehr, Glancy, and Pitts (2013) revealed in meta-analysis of treatments used to decrease stress among university students that a wide variety of interventions might be beneficial in lowering anxiety, depression, and cortisol production. These findings were based on the previous study that examined interventions used to reduce stress among adults.

#### **Objectives of the Study**

To study the perceived stress among college students

To assess level of anxiety among college students during tests

To study the personal burnout

#### Hypothesis

It was hypothesized that stress levels would show the greatest reduction during the end of the semester compared to the beginning.

# **Research Methodology**

This study is a descriptive cum exploratory in nature. The colleges of districts Charkhi Dadri and Bhiwani in Haryana (India) were taken as universe for data collection taking 300 samples; male (n = 150) and female (n = 150) on the basis of convenience sampling. These students represented all the three years of college graduate programmes.

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ISSN -2393-8048, July-December 2022, Submitted in August 2022, <u>iajesm2014@gmail.com</u> The participants were drawn from the colleges that covered the topics including stress management (SM), physical activity (PA), and cardiovascular fitness (CV), respectively. An extra control group, denoted by the letter C, was assembled from students who had taken a variety of academic classes (including history, sociology, and geography) that did not place a focus on stress management, physical fitness, or physical exercise. The members of the Control group did not have any of their self-selected activities over the course of the research counted toward their totals for evaluation.

#### Determines the level of perceived stress

The felt Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) was used in order to determine the overall levels of felt stress. The Perceived Stress Scale (PSS) is a measure of perceived stress that includes questions that evaluate control and overload, in addition to thoughts and emotions about stressful events and experiences. The answers on the items on the scale were graded according to how respondents "usually felt over the past three weeks" or what they thought about each issue. The students estimated "how often" they thought or felt a specific way for each of the 14 topics by using a scale similar to the Likert scale, with 1 representing never and 5 representing very often. A total score was then calculated based on the answers the students provided. The Perceived Stress Scale (PSS) is a quick evaluation of how you feel about your level of stress (for example, "In general, how often have you felt that you were unable to control important things in your life?"). Previous study (Kelley, 1994) indicated that the PSS had a good reliability of 72, and validity was confirmed by a substantial correlation between the PSS (r =.79) and the trait section of the State-Trait Anxiety Inventory Form Y (Spielberger, 1983). Both of these findings were published in the journal Psychological Science. The current research found that the alpha coefficients at the beginning and end of the semester were significantly over the.70 threshold proposed by Nunnally (1978). The starting alpha coefficient was. 81, and the end alpha coefficient.

#### Anxiety about the test

The 15-item Sport Competitive Anxiety Test that was used as the basis for the Test Anxiety Survey (TAS) (Martens, Vealey, & Burton, 1990) was modified to create the Test Anxiety Survey (TAS), which was then used to measure the level of anxiety that students feel when they are required to perform in a test-taking or exam-taking setting in the classroom. In order to boost the "face validity" of the experiment for the participants, the words compete and competition was changed to "test." (Kelley, 1996). In addition, students were asked to reply to items using a 5-point Likert-type scale, ranging from almost ever to frequently, instead of the more traditional 3-point scale. This was done so that the score could be comparable to that of other scales. This helps to prevent selection mistakes made by the participants, which are often produced by making the cognitive shift back and forth between multiple Likert-type–formatted questionnaires (Kelley, Hoffman, Gill, and Kang, 1988).

The primary question that was asked in the poll was, "How often do you feel this way when you take a test?" One of the statements was something along the lines of "Before I take a test, I feel uneasy." In the same way as the measurements for felt stress, the various items were added together to produce a total. The purpose of the study was to detect personal trait anxiety in association with the role of a student in a performance and competitive task of test taking. The design of the study was inspired by the work that Martens et al. (1990) had done in this area. At the beginning of the semester, the TAS had an alpha coefficient of.57, and at the conclusion of the semester, it had an alpha value of.72.

Burnout on a personal level. The Personal Burnout Scale (PBS; Kelley, 2007) is a 10-item scale that was created as an applied assessment of a broad sensation of burnout. The scale was developed by Kelley. Items that primarily focused on "work" or "work-related" aspects were reworded to stress a "class-" or "coursework-" related emphasis (for example, "I am becoming increasingly frustrated with class-related responsibilities") in order to improve the instrument's perceived validity for use with college students. On a five-point scale similar to the Likert scale, the participants were asked to evaluate how typical each statement was in expressing how they were feeling right now or how they had felt in recent times. The scale ranged from not very characteristic at all to highly characteristic. The PBS has been shown to

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ISSN -2393-8048, July-December 2022, Submitted in August 2022, <u>iajesm2014@gmail.com</u> have strong dependability (Kelley, 2007), and the alpha coefficients for the two different data collecting times were 0.72 and 0.74 respectively.

# **The Various Treatment Groups**

There were certain preset things that all of the groups had in common with one another. Participants who agreed to take part in the study were enrolled in courses for a total of three credits each, which may be used to satisfy the general education requirements of the institution. Every class got together for an hour and a half three times a week, on Monday, Wednesday, and Friday of each week. All of the professors came to the consensus that they would provide the incentive of additional credit to the students who were willing to take part in the research. Each teacher offered another option for students to gain the same amount of extra credit, so that students would not feel pressured in any way. Randomization was used to decide which therapy each group would get.

#### **Taking Control of Your Stress**

The SM groups split their time evenly between lectures (20%), cognitive-behavioral exercises, ideas, and hands-on involvement (20%), mental and physical relaxation methods, techniques instruction, and practice (20%), and exercise and wellness participation (20%), As the course textbook, a workbook with 170 pages titled "Exploring Your Stress: An Introductory Program" was given to each student. This workbook was produced specifically for the research project, and it was given to each student. It was broken up into 13 chapters and included 164 different activities and exercises. (1) An Introduction to Stress, (2) Stress and Burnout Assessment, (3) Health and Well-Being, (4) Thought Management, (5) Coping, (6) Communication, (7) Psychological Needs and Social Support, (8) Values and Time Management, (9) Goal Setting, (10) Lifestyle Balance, (11) Stress Ideas and Suggestions, (12) Fifteen Ways to Relax and Control Emotions, and (13) Reassessment and Future Planning were the chapters that were included in the workbook.

In addition to that, they were provided with a professionally planned and produced narrated guide set to music that was used for autogenic relaxation and progressive muscle relaxation. As additional material, various leaflets, flyers, and cartoons pertaining to the subject matter of the class were distributed to the students. Additionally, students were invited to bring in items that they had discovered in periodicals, newsletters, or other material that was not covered in the class.

Perform some kind of exercise. Approximately 20% of the PA groups' time was spent listening to lectures, while the remaining 80% was spent participating in activities. The lectures included informative aspects that comprised an introduction, history, biomechanics, technique, strategy, and safety related to the activity that was being discussed. People signed up for classes for a huge variety of sports and games, and some of the activities that were represented were basketball, volleyball, badminton, table tennis, martial arts, tennis, racquetball, softball, bowling, soccer, and touch football. Other activities that were covered included touch football, bowling, and table tennis. Students were given the option in the physical activity sessions to learn a new sport or activity that they could be interested in continuing to participate in for the rest of their lives. This was the primary goal of the programs. In spite of the fact that there was a built-in component for physical training, the major focus was on skill development.

Fitness of the Heart and Blood Vessels. Additionally, around 25% of the CF groups' time was spent listening to lectures, while the remaining 75% was spent participating in activities. Exercise physiology, biomechanics, exercise psychology, personal program planning, and safety were some of the topics that were covered in the lectures. The difference between this group and the PA Group is that this group placed a greater emphasis on developing their aerobic and anaerobic fitness, as well as their overall physical fitness, rather than on engaging in a sport.

#### The steps to take

After receiving clearance from the institutional review board, participants for the research were recruited from university classes that matched the intervention conditions required for the investigation. Every class was slated to run for the whole 16-week duration of the

International Advance Journal of Engineering, Science and Management (IAJESM) ISSN -2393-8048, July-December 2022, Submitted in August 2022, <u>iajesm2014@gmail.com</u> semester. In every single one of the subgroups, the course teachers were called and asked for their permission to visit their classes in order to find new participants. An investigator was present for the first week of the session, and at the beginning of each class period, they gave a presentation to the members of the class. The participants were given an explanation of the overall goal of the research, the prerequisites for participation, and an opportunity to provide their informed permission. The following items were included in the survey packets: (1) a cover letter, (2) a demographic survey, (3) a PSS, (4) a TAS, (5) a PBS, and (6) an informed consent form. The participants filled out the survey during that particular class, and the same process was carried out again at the conclusion of the semester, during the class week immediately before final exams.

As a part of the cognitive-behavioural workbook curriculum that was established for the SM courses, participants were required to complete the specified surveys at the beginning and end of the semester as part of their workbook assignments for the course. These surveys were given to them as part of the workbook curriculum. At the conclusion of the semester, an investigator went around to the different courses and collected the pre-post questionnaires that were completed from the students' workbooks.

An instructor visited each of the chosen classrooms during the second week of the semester, with the exception of the SM class, and delivered a lecture on stress management and test anxiety reduction that lasted for thirty minutes. At the conclusion of the presentation, attendees were given a package of materials that included information from the presentation as well as supplemental material and activities.

#### Analyses of the Results, Descriptive Results

A preliminary check was performed on the data to look for any missing values or violations of the assumptions that were made. There were no data that were missing. All of the assumptions that are made by regression models, such as linearity, normality, and homogeneity of variance, were investigated for these sets of data. At the beginning, students were divided into groups that were comparable to one another in terms of gender, race, and age.

25% of the students that took part in the study were first-years, 16% were sophomores, 21% were juniors, and 39% were seniors, with a mean age of 2.3 years for both male and female participants (n = 173 and n = 127). By ethnicity, the participants were composed of a majority of Male (82%) and Female (54%). The majority (89%) said that they were not in a relationship. A regular schedule of exercise was participated in by almost half (43%) of the respondents, and 51% of respondents reported utilizing exercise as a method of lowering their levels of stress.

#### Variables Relating to Demography

It was determined through the use of correlation analyses whether or not there was a connection between the demographic variables of race, age, class in school, living arrangement (such as a dorm or apartment), number of roommates, participation in a regular exercise program, whether or not they exercised to reduce stress, and the intensity of religious beliefs and the three stress indices (perceived stress, personal burnout, and test anxiety). Those who participated in a regular exercise program had lower levels of perceived stress and burnout at the beginning of the study as compared to those who did not exercise (r =.11, p .21; r =.11, p .01) than they did at the end (r =.11, p .01; r =.07, p .04). Those individuals who exercised for the sole purpose of alleviating stress had a significantly greater level of test anxiety (r =.10, p .01; r =.10, p .01) in comparison to those individuals who exercised not for the purpose of alleviating stress but rather for fitness and pleasure. The demographic variables, most notably gender and participation in an exercise program, accounted for only minimal variance in perceived stress, F(8, 300) = 3.71, p .01, R2 =.06, and test anxiety, F(8, 300) = 3.62, p .01, R2 =.06, at the beginning of the semester, and similarly small amounts in perceived stress, F(8, 300) = 2.89, p .01, R2 =.

# Sort according to the Various Times during the Semester

A repeated-measures multivariate analysis with four groups (SM, PA, CF, and C) and two time points (beginning and ending of the semester)

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#### Table -1

The overall means and standard deviations for stress, management, physical activity, cardiovascular fitness, and control groups on stress variables are shown in the following table:

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Stress Condition	Stress Management	Physical Activity	Cardiovascular Fitness	Control				
Perceived Stress	35.9 (3.9)	35.0 (5.7)	35.3 (6.6)	38.6 (6.3)*				
Test Anxiety	33.9 (5.2)	25.9 (5.8)*	28.2 (6.9)*	31.6 (7.2)				
Personal Burnout	30.4 (6.0)*	28.8 (4.3)*	33.9 (7.2)	32.0 (6.7)				

The levels of perceived stress, exam anxiety, and personal burnout were used as the dependent variables in an analysis of variance. Results showed (see Table 1) that there were significant main effects for Group, with Wilks's =.94, F(3,531) = 16.13, p .01; Time, with Wilks's =.91, F(1, 531) = 16.99, p .01; and Group Time interaction, with Wilks's =.99, F(1, 531) = 18.04, p .01.

The primary effect on the group. When the several groups were compared to one another, the results of an examination of the univariate F showed that there were significant variations in the overall means for felt stress, test anxiety, and personal burnout. When compared to the other groups, the C group had the highest level of perceived stress (M = 35.9), which was significantly greater than the SM group (M = 35.0), the PA group (35.3), and the CF group (38.6). On the measure of test anxiety, the SM group (M = 33.9) scored higher than both the PA group (M = 25.9) and the CF group (M = 28.2) The PA group also scored lower than the C group (M = 31.6). On the scale of personal burnout, the SM group (M = 30.4) and the PA group (M = 28.8) scored lower than the CF group (M = 33.9).

The primary influence of time. An examination of the univariate F revealed that there was a statistically significant difference in the overall mean for perceived stress. The students' levels of perceived stress at the beginning of the semester (M = 38.6) were not substantially greater than they were at the conclusion of the semester (M = 31.6); however, this mean is modified by an increase in felt stress for the C group but reductions in the other three groups. Both personal burnout and test anxiety were shown to lack statistical significance (Table 2).

The effect of the interaction between group and time. Review of univariate F values for Group by Time interaction revealed that, from the beginning through the conclusion of the semester, both the SM and PA groups exhibited substantial reductions in felt stress, test anxiety, and personal burnout. The CF group had a large reduction in both felt stress and personal burnout, despite the fact that they exhibited a significant drop in perceived stress.

The C group had a statistically significant rise in their levels of perceived stress, but they did not demonstrate any significant increases or decreases in their levels of test anxiety or personal burnout.

# Result

According to Nguyen-Michel et al. (2006), stress is a complex and diverse construct that is impacted by a large range of circumstances. The college experience may be extremely stressful (Ferrante et al., 2002), and this can be particularly visible throughout the experience. As a result, the goal of this research was to establish whether or not various stress reduction treatments were capable of lowering the levels of stress experienced by male and female college students from the beginning to the conclusion of a semester.

Regarding our first hypothesis, it was anticipated that the SM group, which we categorized as a complete, global intervention, would exhibit the highest decrease in stress levels for perceived stress, test anxiety, and burnout over the course of the semester. This prediction was based on the fact that it was anticipated that this group would show the most improvement over the course of the semester. However, as expected, the reduction in stress International Advance Journal of Engineering, Science and Management (IAJESM) ISSN -2393-8048, July-December 2022, Submitted in August 2022, <u>iajesm2014@gmail.com</u> indices was larger, albeit only slightly, in the SM group. It is interesting to note that both the SM group and the PA group revealed significant reductions in all three variables. This conclusion is corroborated by earlier research demonstrating that broad, universal therapies with a strong cognitive-behavioral component may be extremely successful in lowering stress indicators (Bahrke & Morgan, 1978; Berger et al., 1988; Deckro et al., 2002). These studies were conducted by Bahrke and Morgan in 1978, Berger et al. in 1988, and Deckro et al. in 2002.

It's interesting to note that the PA group also had a large reduction in their stress indicators, and their decrease was only slightly lower than the SM group's. Research (such as those done by Carmack et al. in 1999 and Nguyen-Michel et al. in 2006) has shown that engaging in physical exercise is an efficient way to lower stress levels. Therefore, those working in the field need to think carefully about which approach would be the most successful. For instance, if a stress reduction program were to be adopted, the intensive SM course in addition to the distribution of a stress reduction work book may be time-consuming and impracticable.

#### Table -2

#### The following are the means and standard deviations for stress Management, Physical Activity, Cardiovascular Fitness, and Control Groups on stress Variables at the Beginning and End of the semester:

Instead, the availability of or obligation for students to participate in physical exercise during the course of a semester might help reduce student stress without necessitating the contact time needed to provide a stress management program.

According to our second hypothesis, it was anticipated that the levels of stress for perceived

Stress Condition	Stress Management	Physical Activity	Cardiovascular Fitness	Control	Total Mean
Beginning academic year			- 5 8		
Perceived Stress	36.1 (6.2)	36.3 (5.4)	36.3 (4.6)	37.9 (5.1)	36.59
Test Anxiety	37.3 (5.2)	28.7 (6.4)	29.2 (5.9)	30.8 (5.9)	31.54
Personal Burnout	29.7 (5.4)	29.9 (4.8)	30.7 (5.7)	33.9 (5.5)	30.12
End of academic year					
Perceived Stress	31.6* (5.9)	31.8* (4.7)	32.2* (8.7)	39.2 (5.2)*	34.09
Test Anxiety	25.2* (5.1)	21.2* (3.3)	29.4 (6.2)	30.3 (6.2)	30.4
Personal Burnout	25.8* (4.7)	25.8* (7.3)	34.8* (5.6)	31.1 (4.9)	31.6

stress, test anxiety, and burn out would be reduced towards the conclusion of the semester in comparison to the beginning for all treatment groups. At the conclusion of the semester, all stress indicators were lower in the SM and PA groups, whereas the CF group produced a more mixed set of findings. While the individuals in the group showed a substantial drop in levels of perceived stress, there was no change in levels of text anxiety, and levels of personal burnout showed a large rise.

Increasing one's cardiovascular fitness is a common method recommended for lowering stress levels (for example, Keller and Seraganian (1984) and Sinyor and colleagues (1983). However, the results of our study indicate that this strategy is not as successful as other approaches. This runs counter to the results of VanKim and Nelson (2013), who found that students who fulfilled the criteria for intense physical exercise reported reduced levels of perceived stress. This conclusion is quite inconsistent. It was not assessed, despite the fact

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ISSN -2393-8048, July-December 2022, Submitted in August 2022, <u>iajesm2014@gmail.com</u> that achieving these recommendations was one of the aims and anticipated participant outcomes for the courses that were included in our research; this may explain why our results vary from those of VanKim and Nelson.

On the other hand, it's possible that the findings aren't comparable since people have different preferences when it comes to the motivation, style, activity, and atmosphere of their workouts (Brue, 2002). It is possible that the emphasis placed on fitness rather than physical exercise is a contributing to personal burnout in certain individuals, particularly those who may have seen the high intensity of the activity as unsustainable.

This might be the reason for the contradictory findings, and as a consequence, medical professionals should assess whether or not cardiovascular exercise is the most effective technique for reducing stress. This is especially important to do if the client is inexperienced or unaccustomed to engaging in strenuous physical activity.

The third and final hypothesis claimed that the C group would experience greater levels of stress in terms of perceived stress, exam anxiety, and burnout at the conclusion of the semester compared to when they first started the course. This hypothesis was verified, and the results showed that the treatment groups had much less stress by the time the semester was through. There was neither a significant rise nor reduction in levels of test anxiety or personal burnout among those in the C group. Even though we were unable to account for individuals in this group who had previously engaged stress reduction measures, it seemed as if the tactics, if they were used at all, were not especially successful. This is despite the fact that we were able to.

The current investigation does have a few flaws, which need to be pointed out. To begin, we did not determine how significant the courses that were selected were to the individuals who participated. For instance, a student may have been strongly involved in cardiovascula- r exercise, or the student may have just been attempting to pass a class for credit. Both of these scenarios are possible. The goal of identifying that amount of investment may have been accomplished via the incorporation of some kind of evaluation. Second, since different teachers led the different sessions, both the return on investment and the outcomes of attending a specific class may have been contingent on the characteristics of the leading instructor or on the quality of the instruction provided by that instructor. For instance, a student's impression of the teacher's physical appearance may have a favourable or bad impact on the student's learning as well as the student's view of the instructor and the class (Baghurst & Bryant,

#### **Further Studies**

It is possible that a future study may decide to restrict the number of teachers in order to achieve more uniformity. Third, the participants in this research were only drawn from a single big institution. It would be fascinating to investigate whether or not the same results are obtained from students attending smaller colleges in other regions of the globe.

In conclusion, it is possible that the most effective method of lowering stress indices in male and female college students is to use a mix of several techniques that reduce stress. Despite the fact that this research did not make an effort to investigate the long-term or lasting effects of the several treatments on stress, doing so seems like an essential and natural extension of the work that has been done thus far. Even though it was shown that all treatment groups were able to lower at least one indication of stress, it was discovered that the combination of psychological stress management techniques was able to considerably decrease all stress indicators the most.

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