

Spirituality and Academic Stress: Among Engineering Students

Shaivya Dixit*
Sagar Varshney**

Abstract

In present scenario we can see that youngsters are facing stress in their day to day lives. Sometimes this is found in chronic stage also. People talked about spirituality to deal with the stress. Spirituality involves many practices like meditation, yoga, spiritual books. Today's generation are mostly found to be least interested in such practices. So, this becomes more important to know the stress level in youngsters and their involvement in spirituality. This research is also discussing about stress and spirituality in the engineering students. Researcher also examined the relationship between spirituality and stress with reference to engineering students. Data has been collected from 200 engineering students through questionnaire. For identifying relation between spirituality and stress among engineering student's researcher used regression analysis by using SPSS.

Keywords: Spirituality, Stress, Engineering students, Meditation, Yoga, Spiritual Books

Introduction

In today's scenario, the level of competition among students is increasing day by day. To take the lead in the crowd or to make their own identity, students are taking pressure which leads to emotional turbulence. These types of disturbances may create isolation in the mind of students from their academics. This may also surface the academic stress among students and may affect their well being as well.

In present era, there is large portion of students in the country but most of the students of our country are showing their interest in Engineering field because of career flexibility, growth opportunities, better future, high salary, demand of engineers all over the world in different sectors etc. This field has emerged as a better career option for the students. There are countless Engineering colleges in India which provides innumerable opportunities to students. Once the student gets their college according to their interest and ready to spend their four years in college, they try to adjust them according to the environment of college. As they are new to this system for the first time, students

bear so much pressure of course curriculum, technical subjects and of assignments in their mind. At the same time they take lot of academic pressure in their mind which leads to mental and physical stress as well. Academic stress is a mental anxiety which is cognate with the academic failures and performance and some anticipated parent's expectations. The performance of Engineering students may also hamper due to this stress. Academic stress may leads to poor performance because of Work load pressure in Engineering courses, Per semester exams ,Fear of back in exams ,Time management to get assignments done, Competitive environment, Lack of interaction with faculties, Lack of proper knowledge about academic subjects Family Pressure for grades etc.

There are so many annoyances which may leads to distraction from studies, anxiety, depression, under pressure, insomniac, tension & changes in eating habits etc. To cope up with stress and emotional turbulence, spirituality plays a very significant role. Spirituality is a tool which helps to reduce stress- related issues and academic stress as well. Spirituality helps the students to find out the gist of happiness. Students must inculcate

*Research Scholar, Dayalbagh Educational Institute, Agra, India, E-mail: shaivyadixit007@gmail.com

**Research Scholar, GLA University, Mathura, India, E-mail: sagarvarshney23@gmail.com

spiritual practices in their normal course of life to enable their learning process, to have a positive attitude towards their life, goals and to have a better perception towards their classmates, family and friends. Spirituality gives inner satisfaction and personal development to students. Students can easily solve their outside problems, personal issues, may develop their interpersonal relationship skills, decision-making abilities, empathy through spirituality in order to achieve their success. Spiritual practices like meditation, yoga, prayer, listening to spiritual music and to read spiritual books helps the students to overcome their stress and makes the students to perform better in their academics. There are numerous measures to cope up with academic stress but spirituality helps the students to mitigate their stress, pain, depression and anxiety. So that students may understand the joy of life.

Spirituality is something connectivity with God. Students with college degree give the best answer about God and faith. There is a direct relationship between spirituality and academic stress. It has been found that if the students are more connected with God than their stress level is low in comparison to those students who are less connected with God. The students who adopt spirituality in their life are thoughtful, chivalrous, develop in a healthy way, self-achiever.

Spiritualism includes:

- **Meditation:** Meditation is an activity which helps to give you deep rest. It helps to release stress. Some benefits of meditation are concentration, humility, correct understanding, patience etc.
- **Yoga:** It is usually practice for health and relaxation. Yoga is nothing but connection, contact, union, method and addition.
- **Spiritual books:** students who read spiritual books had more religious connection; those students have higher positivity feeling and low level of depression.

By adopting spiritualism, they can relieve their mental stress and overcome their problems in a better way.

These all reasons motivate us to do a research, to examine the level of academic stress, to understand the level of spirituality and to find out the correlation between

spirituality and academic stress among Engineering students.

Causes of Academic Stress on Engineering Students

Academic pressure is a remarkable source of stress for much college students (Hashim, 2003; Olpin, 1997; Tyrrell, 1992). In addition students report stress over struggling to meet time management worries, concerns over grades and academic standards (Olpin, 1997). Results showed that spirituality was an effective method against difficult life events. The causes of academic stress are:

Academics Pressure : One of the important causes of stress on student is academic pressure. Mentally pressure of technical course curriculum, time to time assignments/projects submission, competitive environment, fear of back in exams etc. These all factors may lead to distress in the mind of students.

Family Pressure: Parents want to see their children as a successful person in their life. They expect to their child to succeed in every areas of his life where he wants to go. When the student is in school/college they expect to see good grades in their academics and this high expectation becomes the major stress for students.

Environment: Sometimes, to establish a new life or to become a successful person, children must leave their family unwillingly, for further future studies and becomes the part of such new environment where everybody is unknown to each other, unaware about other intentions. etc. Such type of environment may create a mental pressure in the mind of students as well.

Dating: Students may always be curious to date someone throughout their life. It's like their dream to have a relationship once in their life. Dating someone and being ditched by someone may also a part of this game, which may lead to distress in their mind. This may also create a distraction from their goals and academics because it is nothing but just wastage of time for their career.

Extra-curricular Activity: In today's era participating in extracurricular activity is must for the students because of

more competition and showing themselves the best from others but it becomes hectic for students to balance between academics and extracurricular activities and it is the main reason of the stress.

Peers: As peers apply, so much pressure about how to dress up, how to make friends and what to do in life that becomes the reason for stress.

Literature Review

Spirituality

The word Spirituality is derived from Middle French "Spiritualite" and originally developed within early Christianity, referring to a life oriented toward Holy Spirit. The term was used in 15th century for the first time.

Spirituality is something which is not related to the god only but also comes from within. It is a path which motivates a person to understand the bliss of life and gives a reason of being connected with ourselves in a better way. It gives a person a sense of peace, kindness, compassion, love, faith, belongingness and changes in one's personality etc. Many researchers have done their researches on spirituality and can be understood from various aspects.

Bown and Williams (1993) said that, Individual search for their particular goal. Uecker et al.,(2007) said that American universities offer an excessive amount of resources to meet the religious/spiritual needs of students and these Universities often focus on religious tolerance and respect in the classroom. According to Hill, et al., (2003), Most of the people's mindset is that spirituality gave them inner strength. Pargament, Keonig & Perez (2000) examined the people, those who are more spiritual, have better physical and mental health, lower rates of depression and lower mortality rates. Pargament, Keonig and Perez (2000) have discovered 5 main dimensions of spirituality that lead to positive outcomes. 1) Meaning: when a person is in uncertain situation spirituality gives them a means for understanding and interpreting those situations. 2) Control: this is same as to surrender ourselves to spirituality. 3) Comfort: religion helps the person to reduce the fear perplexities happen in life. 4) Intimacy: common spiritual views help people to come closer together. 5) Life transformation: spirituality often involves a transformation process in which one kept

aside their old values and inculcates new ways of thinking in them (Zinnbauer, Pargament, Cole, Rye, Butter, Belavich, Hipp, Scott, & Kadar, 1997).

Academic Stress

The term Stress is derived from the Latin word 'string ere', 'meaning to draw tight', and was used in 17th century to describe hardships or affliction. Stress is defined as a condition or feeling where a person cannot focus on the present activities and that time they are not able to take the decisions on their own. In late 18th century stress denoted "coercion, enforcement, tension or strong effort," referring primarily to an individual or to an individual's organs or mental powers (Hinkle, 1973).

Perceptions of stress vary from one individual to other because stressors have the ability to extract different responses based on people's experiences which are subjective (Dwyer & Cummings, 2001). Dwyer & Cummings, (2001) said that the major life events has been evaluated from the past research i.e. death of a loved one, severe illness etc. but recently researchers have been evaluating regularly conflict with friends or difficulties in college etc. Such research has found that daily conflict can be more dangerous to psychological and physical well being than major life events (Dwyer & Cummings, 2001). Given this relationship this thesis identified stress both in terms of daily conflict and major life events. Because stress among college students has serious physical health and mental implications research has investigated potential coping mechanisms. Generally, coping mechanisms have been divided into two factors: emotional focused and problem focused (Brougham et al., 2009), that favor behavioral problem solving strategies in which action and planning are required i.e. problem focuses strategy. On the other hand, emotion focused strategies involve changing ones expectations, avoidance behaviors and expressing emotions. Problem-focused coping is the more effective than emotional focused and gives the best psychological outcomes (Brougham et al., 2009). Moreover, research has considered social support and self-efficacy because it is helpful for coping stress. Student has the resources and skills required to carry out a certain behavior or arrive at a particular goal is self-efficacy. Students who have high levels of self-efficacy lead to lower levels of stress

suggesting that self-efficacy helps to reduce the stress (Dwyer & Cummings, 2001).

While Research shows that college students are not just affected by the current economic climate has led to increased financial stress for this population but also by an academic load (Northern, O'Brien, & Goetz, 2010). For many student's college has also been found very stressful, 52% report experiencing high levels of stress during a semester 27% of college students report being frequently overwhelmed, 12% are severely stressed, 80% report being moderately stressed, (Abouserie 1994; Pierceall and Keim, 2007; Hudd et al., 2000).

Relation Between Spirituality and Academic Stress

There is a relationship between spirituality and academic stress. To cope up with academic stress spirituality plays an important role. There are few measures which a student must need to inculcate in his life:

- A student must understand their goal of life and spirituality unveil priorities their life. By understanding the priorities of their life they can focus on important things and may eliminate stress.
- The more students have positive perspective towards their life, the less isolated they may feel. This may create a sense of inner peace during the stressful times.
- The students who are supposed to be spiritual may able to cope up with academic stress in a better way and may experience healthier life as well.

Spirituality depends upon the personality of the individual and stress occurs due to personality traits like agreeableness, extra version, trait anger, conscientiousness and neuroticism (Elise E. Labbe' and Ashley Fobes, 2010). Spirituality and stress of the individual depend on the gender as well as age (Jessica Tartaro, Linda J. leuken, Health. E.gunn, 2005). Spirituality may happen in so many different ways either through listening religious music, yoga, and share problems with others. Yoga practices boost body flexibility, muscular strength and improve respiratory etc. beyond this, it reduce stress, improve sleep pattern, chronic pain, depression, anxiety, enhance overall well-being and quality of work life (Catherine woodyard, 2011). In one of the studies using students Graham, Furr,

Flowers, and Burke (2001) found that spirituality and religion were positively correlated to a student's ability to cope with stressful life events. Moreover, students who considered themselves as being spiritual but not religious had less ability to cope with stress than students who considered themselves as being spiritual. This study inspires to add to our understanding of the relationship between social resources, stress and spirituality by examining all three of these constructs at the same time.

Need of the study

In the life span of students, the college age is a unique developmental period and can also be a time where students remain more conscious about their career which may create a mental stress in the mind of students. The other reason for this stress is because the traditional age i.e. 18to25 during which, the life course is characterized by growth, change and stability. This is the age where young people are very much conscious about their career and relationship. They have to make decisions concerning about their career and relationship because that will impact them for the rest of their adult life. The college students experience the vulnerability cognate with the transition from adolescent to adulthood. Such transition is to live independently maintain good grades in academics, to handle finances related issue and to adjust in a new social life. These changes can be positive or negative.

In today's modern era, children are more tempted about their career. From childhood, they are well aware about their preference in career. There are innumerable options in education sector for students like medical, Engineering, management and many more but students are more interested to opt for Engineering as their career. The Engineering students are not mature enough because they are teenagers and are unable to cope up with their stress. When the students join the college, they have to live away from home for four years and they take so much mental pressure related to their academics. The main reasons of their academic stress are course curriculum, per semester exams, fear of back associated with those exams, projects submission, parental pressure etc. To overcome from their distress, they adopt many ways to release their stress like they starts to do hangout with their friends, chilling out, do parties, consume alcohol, drugs, impatient in nature and disobey their elders as

well. This is the reason that they are detaching from Indian Culture, beliefs, traditions, customs etc. and not much aware about spiritualism.

- H3.2: There is significant relationship between spirituality, academic stress in female students.

Objectives of the study

- To know the awareness level of spirituality among Engineering students.
- To study the impact of spirituality on academic stress among Engineering student's life.
- To study the impact of spirituality on academic stress in context to gender.

Hypotheses

- H1: There is significant awareness level of spirituality among Engineering students.
- H2: There is significant relationship between academic stress and spirituality.
- H3.1: There is significant relationship between spirituality, academic stress in male students.

Research methodology

Research Design and Population:

This study used Exploratory research design. It is describing the relationship between spirituality and academic stress. This study is done by identifying significant gap between these variables. Study has been conducted on engineering students.

Sampling Techniques:

Quantitative method has been used through questionnaire. Respondents have been selected on the bases of Judgmental sampling. Total no. of respondents was 200.

Statistical Tool:

Researcher used regression analysis by using SPSS for analyzing Impact of spirituality on academic stress also used ANOVA test for comparing academic stress level on male and female.

Data Analysis

Reliability Statistics of Stress

Cronbach's Alpha	N of Items
.727	10

From table 1.2 we can see that Cronbach's alpha is .727 indicates a high level of internal consistency for our scale with this sample.

Reliability Statistics of spirituality

Cronbach's Alpha	N of Items
.957	22

From table 1.4 we can see that Cronbach's alpha is .957, which indicates a high level of internal consistency for our scale with this sample.

H1: There is significant awareness level of spirituality among Engineering students.

Frequency Table

	Meditation	Yoga	Spiritual Books	Spiritual Music
Strongly agree	5	8	1	9
Agree	19	17	18	52
Neutral	37	43	44	43
Disagree	89	78	70	52
Strongly disagree	50	54	67	44

From the given figure, it has been found that frequency distribution of 200 respondents regarding their awareness level about spirituality, which indicates 52% Students are agree that they listen spiritual music, 18%

read spiritual books, 17% practice yoga,19% do meditation.

H2: There is significant relationship between academic stress and spirituality.

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.090 ^a	.008	.003	.56737	.008	1.600	1	198	.207

a. Predictors: (Constant), AVERAGESP

From the above table, it has been analyzed that the value of R square is .008. This shows variance in data in 0.8%.

Anova^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.515	1	.515	1.600	.207 ^b
	Residual	63.738	198	.322		
	Total	64.253	199			

a. Dependent Variable: AS

b. Predictors: (Constant), AVERAGESP

because the significant value from the given table is .207 which is greater than .005. This shows there is no significant relation between spirituality and academic stress.

This ANOVA test indicates that the regression model predicts the dependent variable significantly is not well

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
	AVERAGESP	.060	.048	.090	1.265	.207	-.034	.154

a. To prese Dependent Variable: AS

To present the regression equation as: AS = 2.505 +.060 (AVERAGE SP)

Hence, the hypothesis is rejected. There is no significant relationship between academic stress and spirituality.

H3.1: There is significant relationship between spirituality,academic stress in male students.

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.083 ^b	.007	.001	.59514

a. Gender of the respondent = 1

a. Predictors: (Constant), AVERAGESP

Anova^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.388	1	.388	1.097	.297 ^c
	Residual	56.670	160	.354		
	Total	57.058	161			

- a. Gender of the respondent = 1
 b. Dependent Variable: AS
 b. Predictors: (Constant), AVERAGESP

From the table 3.2, it has been analyzed that the significant value i.e. 0.297 is greater than 0.05 which show no significant relation between spirituality and academic stress in Male students.

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.503	.179		13.977	.000
	AVERAGESP	.058	.055	.083	1.047	.297

- a. Gender of the respondent = 1
 b. Dependent Variable: AS
 To present the regression equation as:
 $AS = 2.503 + .058 (AVERAGE\ SP)$

In this test hypothesis has been rejected that there is significant relation between spirituality and academic stress in male students.

H3.1: There is significant relationship between spirituality, academic stress in female students.

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.141 ^b	.020	-.007	.43992

a. Gender of the respondent = 2

b. Predictors: (Constant), AVERAGESP

ANOVA^{a,b}

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.141	1	.141	.730	.398 ^c
Residual	6.967	36	.194		
Total	7.108	37			

- a. Gender of the respondent = 2
- b. Dependent Variable: AS
- c. Predictors: (Constant), AVERAGESP

This table indicates that the regression model predicts the dependent variable significantly is not well because the significant value from the given table is .398 which is

greater than .005 which shows no significant relation between spirituality and academic stress in female students.

Coefficients^{a,b}

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.502	.284		8.822	.000
AVERAGESP	.076	.088	.141	.855	.398

- a. Gender of the respondent = 219
- a. Dependent Variable: AS

To present the regression equation as:

$$AS = 2.502 + .076 (AVERAGE SP)$$

In this test hypothesis has been rejected that there is significant relation between spirituality and academic stress.

Conclusion and Suggestion

In this study literature has suggested that spirituality play significant role in coping stress, but researcher have found that there is no significant relation between spirituality and academic stress as In today’s scenario students are less spiritual. Instead of reading spiritual books, spiritual music etc they are more interested in making friends to whom they can share their problems in their difficult times.It has been observed that females are more spiritual in compare to males. There are some variables in the study like Spiritual music, Spiritual books, Meditation, Yoga which are impacting on females regarding spirituality.On the basis of survey results, key suggestions are :

- It is proved that by practicing yoga, an individual can unload stress. Yoga helps the person to lessen

mental tension in their academics. Students are unlike to do regular physical exercises. Practicing yoga should be mandatory for all the students as it improves the concentration and calm both mental and physical system of human body.

- Institutions can help the students in organizing time to time seminar and workshops on spiritual practices and should conduct the guest lectures by renowned spiritual leaders to have a discussion on it.
- Some of the activities like group projects, outdoor activities (hill climbing, community living in hostels etc. leads to developing spirituality.
- To seek out the best teachers and practitioners, the institute can set a fund for enhancing spiritual learning thereby contributing to charity

References

1. Abouserie, R. (1994). Sources and levels of stress in relation to locus of control and self esteem in university students. *Educational Psychology, 14*(3), 323.
2. Brougham, R.R., Zail, C.M., Mendoza, & Miller, J.R. (2009). *Stress, sex differences, and coping among college students. Springer Science 28: 85-97.*

3. Dwyer, A.L. & Cummings, A.L. (2001) *Stress, self-efficacy, social support, and coping strategies in university students. Canadian Journal of Counseling* Vol. 35. 3.
4. Elder, Glen H., Jr., and Rand D. Conger. 2002. *Children of the land: Adversity and success in Rural America*. Chicago: University of Chicago Press (recipient of the 2000/2002 William J. Goode Award, American Sociological Association [Section on Family]).
5. Hill, P., & Pargament, K. (2003). *Advances in the Conceptualization and Measurement of Religion and Spirituality. American Psychologist*, 58(1), 64.
6. Hinkle, L. E. Jr. 1973. *The concept of "stress" in the biological and social sciences. Sci. Med. Man.* 1:31-48.
7. Hodge, D. R. (2007). *Releasing students from class for spiritual instruction: Does it hinder academic performance? Children & Schools* 29(3), 161-171. Retrieved from Academic Search Premier database.
8. Labbé, Elise, Nicholas Schmidt, Jonathan Babin, and Martha Pharr. "Coping with stress: the effectiveness of different types of music." *Applied psychophysiology and biofeedback* 32, no. 3-4 (2007): 163-168.
9. Line, C. R. (2005). *The relationship between personal religiosity and academic performance among LDS [Latter Day Saints] college students at Brigham Young University (Utah)*.
10. Northern, Jebediah J., William H. O'Brien, and Paul W. Goetz. "The development, evaluation, and validation of a financial stress scale for undergraduate students." *Journal of College Student Development* 51, no. 1 (2010): 79-92.
11. Pargament, K., Smith, B., Koenig, H., & Perez, L. (1998). *Patterns of Positive and Negative Religious Coping with Major Life Stressors. Journal for the Scientific Study of Religion*, 37(4), 710-724.
12. Pierceall, E., & Keim, M. (2007). *Stress and Coping Strategies Among Community College Students. Community College Journal of Research & Practice*, 31(9), 703-712.
13. Uecker, J.E., Regnerus, M. D., & Vaaler, M.L. (2007). *Losing My Religion: The Social Sources of Religious Decline in Early Adulthood. Social Forces*, 85(4), 1667-1692.
14. Walker, K., & Dixon, V. (2002). *Spirituality and Academic Performance among African American College Students. Journal of Black Psychology*, 28(2), 107-21.
15. Wong-McDonald, A. & Gorsuch, R.L. (2000). *Surrender to God: An Additional Coping Style? Journal of Psychology & Theology*, 28(2), 149.
16. Woodyard, Catherine. "Exploring the therapeutic effects of yoga and its ability to increase quality of life." *International journal of yoga* 4, no. 2 (2011): 49.
17. Zinnbauer, B., Pargament, K., Cole, B., Rye, M., Butfer, E., Belavich, T., et al. (1997). *Religion and Spirituality: Unfuzzifying the Fuzzy. Journal for the Scientific Study of Religion*, 36(4), 549-564.