

# Anxiety, Optimism and Academic Achievement among Students of Private Medical and Engineering Colleges: A Comparative Study

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Received: March 22, 2013 Accepted: April 7, 2013 Online Published: April 16, 2013

doi:10.5539/jedp.v3n1p222

URL: <http://dx.doi.org/10.5539/jedp.v3n1p222>

## Abstract

Courses related to medical and engineering fields are quite extensive and demanding, which often lead to stress and anxiety among students. As optimism was hypothesized to reduce anxiety and enhance academic achievement, the purpose of the current study was to assess the level of anxiety and its relation with optimism and academic achievement among medical and engineering students. Since these two courses differ in many aspects and the gender roles in the society are changing, the secondary objective of the study was to find differences in anxiety, optimism and academic achievement across genders and academic majors. A total of 346 students (171 medical and 175 engineering) from 3 medical and 4 engineering colleges of Uttar Pradesh, India participated in the study. Academic results of the latest two semesters were considered as academic achievement of the students, whereas anxiety and optimism were tested using Sinha's Comprehensive Anxiety Test (SCAT, 2007), and Learned Optimism Scale (LOS, 2000) respectively. Both measures are constructed and standardized on Indian students. Results revealed that anxiety had a significant negative relationship with optimism and academic achievement, whereas a significant positive relationship was found between optimism and academic achievement. Significant differences were revealed between medical and engineering students, but the gender differences in the variables under study were insignificant. The results of this study provide insights for faculty members and institutions for better academic performance of the students.

**Keywords:** anxiety, optimism, academic achievement, medical and engineering students, private colleges

## 1. Introduction

Pursuing higher education is considered to be stressful, especially medical and engineering education. Studies have revealed that stress levels of medical students are genuinely high (Miller, 1994; Saipanish, 2003; Ray & Joseph, 2010) and as compared to other students, medical students have more distress, anxiety and depression (Lloyd & Gartrell, 1984). Study conducted at Cornell's College of Engineering revealed that 62% of Engineering students felt extremely anxious about their grades (Schneider, 2007). Academic reasons like enormous syllabus, the difficulty of the curriculum, long studying hours, and emotional factors like lack of peer support, competitive environment, rigid authoritative and non encouraging faculty, lack of recreational activities, staying away from home, financial problems, uncertain future, cultural and minority issues, mismatch between capability and expectation are some reasons of stress and anxiety among medical and engineering students (Wolf, 1994; Supe, 1998; Foster & Spencer, 2003; Schneider, 2007). However there can be other reasons for anxiety among the students like stress due to family problems, a natural disaster, victimization by crime, physical abuse, medical illness, intoxication etc. Students also have test anxiety, performance anxiety and choice anxiety. With so many options, students in the present era are faced with greater choice, more competition and less time to consider their options or seek out the right advice which many a time leads to anxiety (Downey, 2008).

With India becoming one of the leading developing nations there is an increase in awareness among people for the need of higher education. Rising aspirations of the youth in India for better job opportunities and acute shortage of seats for general category students in government professional colleges due to various reservation policies has created a lot of stress and anxiety among Indian students aspiring to pursue medical and engineering courses. To meet the aspirations of the students a significant number of private colleges have been established

across the country. But according to reports available on internet (Krishnaswamy, 2011; Chi, 2011) and newspapers (Alvi, 2012; Times of India, 2013) it has been observed that in past few years, suicide and depression cases have increased considerably in both government and private medical and engineering colleges. Hence it has become necessary to find out the negative and positive predictors of students' academic achievements so that they can be trained to cope efficiently with academic stressors. Even the faculty members need to be trained to understand these factors and help the students in better academic performance.

Mwamwenda (1994) in his study found that highly test-anxious students performed poorly regardless of the amount of exam preparation. Other Researchers have also established that people with high levels of anxiety are associated with low academic achievement (Idaka, Egbona, & Basse, 2011; Rana & Mahmood, 2010; Yousefi, Talib, Mansor, Juhari, & Redzuan, 2010; Zeidner & Safir, 2001; Williams, 1996). But no research literature could be found on any such study with medical and engineering students. Moreover, the findings of the earlier studies could not be generalized because they were specific to certain population and culture. Therefore, one of the primary objectives of the current study was to find the level of anxiety and its relation with the academic achievement of medical and engineering students.

Anxiety is one of the most widely experienced emotion and one of the most essential constructs of all human behavior. It is a displeasing feeling of uneasiness, nervousness, apprehension, fear, concern or worry (Barlow, 2002). It is also described as the mental state that results from a difficult challenge for which the subject has insufficient coping skills (Heide & Borkovec, 1983). Anxiety is a normal reaction to a stressor and it may help an individual to deal with a demanding situation by motivating him/her to cope with it, but when anxiety becomes excessive it can have a serious impact on daily life and interferes with the normal functioning of a person (Hartley & Phelps, 2012). According to Yerkes-Dodson law, an optimal level of arousal is necessary to best complete a task however, when the level of arousal exceeds that optimum, the result is a decline in performance. Thus, anxiety has a wide range of perspectives (P. Norton, Asmundson, Cox & G. Norton, 2000).

Anxiety can be identified by a variety of physical, emotional, cognitive and behavioural symptoms. Palpitations, sweating, trembling, shortness of breath, sense of choking, chest pain, headache, nausea, stomach upset, dizziness, numbness or tingling, chills or hot flashes, restlessness, fatigue, muscle tension and sleep problems are the physical changes (Bourne, 2005). The emotional effects of anxiety may include feelings of apprehension or dread, a general sense of depression, doom and gloom, anticipating the worst and having nightmares/bad dreams. The cognitive effect is being unable to think, feeling as if the mind has gone blank, difficulty in concentrating, irritability and watching for signs of danger (Ohman, 2000). The behavioural effects of anxiety may include withdrawal from situations which provoke anxiety, nervous habits, and increased motor tension like foot tapping (Barker, 2003).

In a study conducted by Buchanan and Seligman (1995) learned optimism techniques were found to significantly reduce depression in a class of college freshmen. Study by Darvill and Johnson (1991) on college students revealed that subjects who believed that positive events were more likely to occur and negative events were less likely to occur felt that they were in moderate to strong control over event occurrence. Studies have also shown a positive relationship between optimism and performance of a task (Medlin & Green, 2009; Kluepfer, Little, & DeGroot, 2009; Yousef & Luthans, 2007; Jensen, Luthans, S. Lebsack, & R. Lebsack, 2007; Dixon & Schertzer, 2005; Green, Medlin, & Whitten, 2004; Norem & Chang, 2002). Some of the studies on school students and psychology graduates have also indicated a significant positive relation between optimism and academic achievement (Ruthig, Haynes, Perry, & Chipperfield, 2007; Owayed 2005). But Rand (2009) found no significant relation between optimism and grade expectancy. As the findings on optimism and academic performance are not very consistent and they could not be generalized across population and culture, the second main objective of the current study was to find if optimism has any relationship with anxiety and academic achievement of medical and engineering students.

Scheier and Carver (1993) have defined optimism as a generalized expectancy that good as opposed to bad outcomes will generally occur when confronted with problems across important life domains. It is a strong expectation that despite the inevitable setbacks and frustrations, events and experiences will eventually turnout all right. In general optimism is used to denote a positive attitude and is a part of positive psychology. Optimism can be temperamental, that is, some people by nature are more positive about life, but at the same time it can also be learned with the right type of experiences. According to the concept of learned optimism, proposed by Seligman (1991), optimism can be enhanced by selecting achievable goals. Optimistic statements are usually based on logical and concrete facts and depend upon the explanatory styles of a person. Attributions to temporary, unstable, controllable and specific causes vis-a-vis permanent, stable, uncontrollable and universal causes for setbacks and failures relate to optimism and pessimism respectively (Seligman, Nolen, N. Thornton, & C.

Thornton, 1990). Therefore, reshaping these attributions may help undo some of the harmful motivational and emotional consequences of failures (Forsyth & Macmillan, 1991). However, optimism needs to be realistic because being over-optimistic may hamper the performance as an individual may overlook the negative outcomes thus may not be well prepared for undesirable situations (Isaacowitz & Seligman, 2001; Goleman, 1996; Showers, 1992).

Academic achievement can be defined as what a student does or achieve at school, college or university, in class, in a laboratory, library or project work. Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important: procedural knowledge such as skills or declarative knowledge such as facts (Ward, Stoker & Murray, 1996). In the present study the examination scores of the students for their latest two semesters were considered as their academic achievement. Individual differences in academic performance have been linked to differences in intelligence and personality. For better academic performance, apart from IQ, other competencies like emotional self-awareness, self-control, optimism, achievement motivation, and communication skills are also required (Goleman, 1996). For example, students who are higher in conscientiousness (component of emotional intelligence linked to effort and achievement motivation) and curiosity tend to achieve highly in academic settings (Sophie, Benedikt, & Tomas, 2011).

The courses related to medical and engineering fields differ in many aspects like course duration, curriculum, fees structure, number of seats and colleges, faculty experience, competition, career perspectives, future job opportunities and working conditions. These factors may directly or indirectly affect students' anxiety, optimism and academic achievement. Therefore, one of the secondary objectives of the current study was to find the difference in anxiety, optimism, and academic achievement of medical and engineering students.

According to O'Hara, cited by Johnston (2005) in Stanford University report, we are still very much in a state of mixed findings when it comes to gender and brain processing. Therefore, more gender studies are needed that address constructs like anxiety, optimism and academic performance. Gender stereotypes that males have a better understanding of science and mathematics based subjects whereas females are better at languages and social sciences (Beilock, Gunderson, Ramirez, & Levine, 2010), is generally prevalent in many societies. But most of the research findings do not support this notion (Ceci, Williams, & Barnett, 2009; Azar, 2010). Chandler (2006) found no significant gender difference in test anxiety among 10th grade students, but 6th grade male students were more anxious than the girls of same grade. Some studies have found significant gender differences with regard to general as well as specific test anxiety (Rodarte-Luna & Sherry, 2008; DeCesare, 2007; Abdel-Khalek & Alansari, 2004; Mackinaw-Koons, 2000). But the findings of the studies conducted by Fiore (2003), Baloglu (2003), Gierl and Rogers (1996), and D'Ailly and Bergering (1992) reveal that males and females experience no significant difference in academics related anxiety.

Gender differences in optimism are visible when we consider different aspects of life. For example males are more optimistic in financial matters (Chang, Tsai, & Lee, 2010; Jacobsen, Lee, & Marquering, 2008). Patton, Bartrum, and Creed, (2004) indicated gender difference in optimism related to career goals. Lai and Cheng (2004) and Song (2003) found no significant gender difference in optimism related to health issues. Puskar (2010) established that among rural youth men were more optimistic than women but Ickson and Kaplan (2011) found that female college students were more optimistic than male students. Studies conducted by Padhy, Rana, and Das (2012), Tusaie (2003), and Sitz and Poche (2002) did not reveal any gender differences in students' optimism. Therefore, the objective of the study was, also, to find if male and female students in medical and engineering colleges differ in the three variables, i.e., anxiety, optimism, and academic achievement.

## **2. Method**

The present research is exploratory and empirical in nature. It utilized a correlation research design using standardized tools. The population of reference for this research consisted of all students studying in private medical and engineering colleges in Uttar Pradesh, India. With districts like Gaziabad, Meerut, Bareilly, Kanpur, and Lucknow having many private professional colleges, Uttar Pradesh becomes a major representative of professional education in North India. Population-wise also it is the largest state in India.

### *2.1 Participants*

The final sample size consisted of 346 students; 171 medical (99 females and 72 males) and 175 engineering students (62 females and 113 males). Thus, a total of 161 female and 185 male students participated in the study. The important representative districts of Uttar Pradesh each having population over one million and having at least one private medical college and five private engineering colleges were selected. Well established colleges of these districts were then selected on the basis of their infrastructure and courses offered. Convenience and

approachability factors were also taken into consideration. The districts selected were Gaziabad, Lucknow, Kanpur, Meerut and Bareilly. Twelve colleges (6 each of medical and engineering) were shortlisted and contacted for seeking permission to conduct the study but only seven colleges (3 medical and 4 engineering) granted the permission. The students from 2<sup>nd</sup> to 4<sup>th</sup> semester were selected randomly from these colleges.

## 2.2 Materials

### 2.2.1 Sinha's Comprehensive Anxiety Test (SCAT)

SCAT, constructed and standardized on Indian population (humanities undergraduate students) by A. Sinha and L. Sinha (2010), was used to measure anxiety among the students. The internal consistency reliability of the scale is 0.92 and the validity is 0.62. The test consists of total 100 items with response pattern of "Yes" or "No". The items are based on physiological, psychological, cognitive and behavioural symptoms of anxiety. Example of an item is: "Do you have the fear of being unsuccessful even after thorough preparations?"

### 2.2.2 Learned Optimism Scale (LOS)

LOS was used to measure learned optimism among the students. Constructed and standardized on Indian population (undergraduate students), it is developed by Pethe, Chaudhari, S. Dhar, and U. Dhar (2000). The split half reliability coefficient of the scale is 0.99 and its content validity is also 0.99. The test consists of total 22 items with the response categories - strongly agree, agree, neutral, disagree, and strongly disagree. The items are based on believes and attitudes towards work, criticism, failures, challenging situations, abilities, and social support. Example of an item is: "I believe present crisis will form strong basis for tomorrow."

### 2.2.3 Academic Achievement

Academic results of the latest two semester examinations of the participants (students) provided by their respective colleges were taken as scores for the Academic Achievement of the students.

## 2.3 Procedure

Approval for the investigation was acquired from the Principal, Director and the Chairman of the respective colleges. With the help of faculty members the students studying in 2<sup>nd</sup> to 4<sup>th</sup> semesters were selected randomly. After general introduction and instructions both anxiety and optimism measures were handed over to them. The confidentiality of the information obtained from the respondents was guaranteed. On average students took 10 to 15 minutes to complete each questionnaire.

## 2.4 Data Analysis

All analyses were conducted using Statistical Software (SPSS) 16.0 version. Pearson r correlation coefficients, regression analysis and t test were used to determine the association among the variables and the groups.

## 3. Results

The mean age of the total participants (N = 346, medical students = 171, engineering students = 175) was 19.76 years (S.D = 1.41). Gender ratio was male (N = 171, 53.47%) versus female (N = 161, 46.53%). The minimum age of the total sample was 17 years and maximum age was 22 years. The mean age of female students was 19.48 and that of male students was 20.01 years.

Table 1. Percentage of students with different levels of anxiety

Categories	N	Very Low (%) Score (1-10)	Low (%) Score (11-20)	Normal (%) Score (21-30)	High (%) Score (31-40)	Very High (%) Score > 41
Med-Stud	171	1	11	32	30	26
Engr-Stud	175	8	23	33	17	19
Female-Stud	161	5	14	35	22	24
Male-Stud	185	4	19	30	23	24
Total N	346	4	17	33	24	22

Note. The above scores are compared with the norms of humanities students as the scale used in the study (SCAT) is standardised on humanities graduates.

The percentage of students with different levels of anxiety is presented in table 1. It reveals that out of total participants 46% (24 high and 22 very high) of the students had higher level of anxiety as compared to other graduates. It was also observed that 56% (30 high and 26 very high) of medical students were high on anxiety scores as compared to 36 % (17 high and 19 very high) of engineering students. There was not much of a difference in the percentage of male (47%) and female (46%) students on the higher scores of anxiety.

Table 2. Anxiety, optimism and academic achievement of the students: Descriptive statistics and correlations

Variables	Min	Max	Mean	SE	SD	1	2
1. Anxiety	1	70	30.77	.655	12.18		
2. Optimism	63	110	89.62	.414	7.70	-.452**	
3. Acad-Ach	37.50	81.94	63.70	.456	8.49	-.455**	.448**

Note. N = 346, \*\*p < 0.01, Acad-Ach = Academic Achievement

Mean of anxiety, optimism and academic achievement scores of the total sample (N = 346) as indicated in Table 2 was 30.77 (SD = 12.18), 89.62 (SD = 7.70) and 63.70 (SD = 8.49) respectively. Probability test indicated that the distribution of the scores was normal. Table 2 also indicates the correlation between anxiety, optimism and academic achievement of the students. There was a significant negative correlation between anxiety and optimism ( $r = -.452$ ,  $p < .01$ ) and also between anxiety and academic achievement ( $r = -.455$ ,  $p < .01$ ) indicating that higher the anxiety, lower would be the optimism and academic achievement of the students. The correlation between optimism and academic achievement was found to be positive ( $r = .448$ ,  $p < .01$ ) which shows that the more optimistic a student is, the better is his/her academic achievement.

Table 3. Regression of optimism, anxiety and academic achievement

	Optimism			Anxiety		
	R	R <sup>2</sup>	F	R	R <sup>2</sup>	F
Anxiety	.452	.204	88.280			
Acad-ach	.448	.201	86.56	.455	.207	89.823

Note. N = 346, p < .001, Acad-ach = Academic Achievement

Regression of optimism on anxiety and academic achievement, indicated in Table 3, revealed that optimism was a significant predictor for both anxiety and academic achievement, accounting for 20% of the variance in both the variables. Regression of anxiety on academic achievement showed that it accounted for 21 % of the variance in academic achievement and was a significant predictor.

Table 4. Difference in anxiety, optimism and academic achievement of medical and engineering students

Variables	Category	N	Mean	SD	t-test
Anxiety	Med-stud	171	33.68	11.20	4.503**
	Engnr-stud	175	27.94	12.47	
Optimism	Med-stud	171	88.11	7.92	3.667**
	Engnr-stud	175	91.09	7.21	
Acad-ach	Med-stud	171	59.33	7.98	10.991**
	Engnr-stud	175	67.97	6.60	

Note. \*\*p < .01

As indicated in Table 4 the mean of anxiety, optimism and academic achievement scores of medical students was 33.68 (SD = 11.20), 88.11 (SD = 7.92), 59.33 (SD = 7.98) respectively and for engineering students it was 27.94 (SD = 12.47), 91.09 (SD = 7.21), 67.97 (SD = 6.60) respectively. The value of *t* on anxiety scores ( $t = 4.503$ ,  $p < 0.01$ ), optimism scores ( $t = 3.667$ ,  $p < 0.01$ ) and academic achievement scores ( $t = 10.991$ ,  $p < 0.01$ ) of the two groups indicates that anxiety among medical students was significantly higher and their optimism and academic achievement was significantly lower than that of engineering students.

Table 5. Difference in anxiety, optimism and academic achievement of male and female students

Variables	Category	N	Mean	SD	t-test
Anxiety	Male	185	31.20	12.11	.696 (n. s.)
	Female	161	30.29	12.28	
Optimism	Male	185	89.43	7.64	.502 (n. s.)
	Female	161	89.84	7.79	
Acad-ach	Male	185	62.89	8.23	1.898 (n. s.)
	Female	161	64.62	8.63	

Note. n. s. = non-significant at .05 level

The mean of anxiety, optimism and academic achievement scores of male students, indicated in Table 6, is 31.20 (SD = 12.11), 89.43 (SD = 7.64) and 62.89 (SD = 8.23) respectively whereas, that of female students is 30.29 (SD = 12.28), 89.84 (SD = 7.79) and 64.62 (SD = 8.63) respectively. The value of *t* on anxiety scores ( $t = .696$ ), optimism scores ( $t = .502$ ), and academic achievement ( $t = 1.898$ ) of male and female students shows that there were no significant gender differences in these variables.

#### 4. Discussion

The study reveals that of total participants, 46 % students had high level of anxiety and in case of medical students it was still higher (56 %) as compared to the students of humanities stream. This could be because of huge difference in the curriculum, long studying hours, competition and the environment of the college/hostel. A significant negative correlation between anxiety and academic achievement was found in the study. Anxiety was also a significant predictor of students' academic achievement. This may be because anxiety adversely affects learning and study skills by interfering in cognitive activities such as memory recall and concentration due to additional psychological and physiological changes (Gross, 1990). Students under anxiety are not able to recognize relevant information, are unable to integrate their knowledge into their long-term memory, and do not possess the skills to self-evaluate their learning state (Gross, 1990). Individuals with low levels of anxiety maintain their focus throughout information processing and retrieval. They process information as it is presented and develop adequate study habits. They stay on task and perform well in exams because they have less disruptive thoughts and less cognitive breakdowns (Wigfield & Eccles, 1989).

While a significant positive relationship between optimism and academic achievement was found in the current study, the relationship between optimism and anxiety was significantly negative. Earlier studies in different educational setups have also indicated that academic performance is positively associated with optimism (L. Bressler, & M. Bressler, 2010; Crosono, 2009; Siddiqui, LaSalle-Ricci, Glass, Arnkoff, & Díaz, (2006); McCulloch, 2006; Huan, Yeo, Ang, & Chong, 2006). This could be because optimists have better stress coping strategies and higher achievement striving (Lee, Ashford, & Jamieson, 1993). Optimists are more likely than pessimists to engage in positive health habits and cope more adaptively with stress (Segerstrom, 2007; Scheier & Carver, 1993). Optimists rely more on problem-focused coping strategies, while pessimists are more likely to engage in emotion-focused coping (Brissette, 2002; Strutton & Lumpkin, 1993). Optimists may have better social support to accomplish their tasks (Davis, Hanson, Edson, & Ziegler, 1992). The broaden-and-build theory of positive emotions suggests that positive emotions (e.g., happiness, interest, anticipation) broaden one's awareness and encourage novel, varied, and exploratory thoughts and actions. Over time, this broadened behavioral repertoire builds skills and resources (Karademas, 2006).

Society has different expectations for the genders. Many children are reared according to societal norms that determine which roles are appropriate for which gender (Silvestri, 1986). After reviewing decades of research on gender differences, Ceci and Williams (2010) concluded that culture plays by far the bigger role in men and

boys' higher interest and achievement in math, science and spatial ability. However, with changing socio-cultural norms, this gender stereotype is gradually reducing and girls are taking math and science courses in a significantly larger number (Ceci & Williams, 2010). When girls see opportunities for themselves in science and technology, they're more likely to pursue such careers (Else-Quest, Hyde, & Linn, 2010). The results of the present study are convergent with this view, as there were no significant gender differences found in the academic achievement of the students.

The present study did not show any significant gender differences in anxiety and optimism, as well. The findings are convergent with the findings of some of the earlier studies on gender differences in anxiety (Fiore, 2003; Baloglu, 2003; Gierl & Rogers, 1996) and gender differences in optimism (Padhy, Rana, & Das, 2012; Tusaie 2003; Sitz & Poche, 2002). Researchers have indicated that reasons for some of the studies indicating lower anxiety level in males than in females could be due to societal expectations; males may report low anxiety because they do not want to admit their weaknesses and are less likely to be completely honest on reporting anxiety (El-Zahhar, 1991; Zoller & Ben-Chaim, 1990; Silvestri, 1986; Sowa & LaFleur, 1986). The reason for decreasing gender gap on these constructs is probably because social perceptions and societal beliefs regarding gender roles and gender abilities are changing due to which females are becoming emotionally equally competent (Bolzendahl & Myers, 2004).

Anxiety among medical students was significantly higher and optimism was relatively lower than that of engineering students, probably because medical students have more syllabi and more competition. The academic achievement of engineering students was higher than those of medical students, probably because of lower anxiety level and comparatively better level of optimism. Hence, it is suggested that an emotional intelligence intervention program, highlighting the importance of realistic optimism, for the students of medical and engineering colleges is required, as it will help the students in reducing anxiety and coping with stress in a better manner. An emotional intelligence intervention program is suggested for the faculty members as well, to help them understand the emotional aspects of anxiety among the students and create a positive learning environment enhancing the learned optimism of their students. It is also important for the management and authorities of the institutions to take care of the good academic performance of the students as it is one of the major factors in building the reputation of a college.

#### *4.1 Limitations of the Study*

This study has certain limitations. Firstly, the design of the learned optimism scale, with only 22 items for assessing beliefs and attitudes towards various real life situations, may limit the thorough assessment of learned optimism. Also, it was based on self report hence social desirability factor could have come into play to some extent. However in anxiety scale social desirability factor was not much, because the scale is based on symptoms of anxiety and an individual is not able to correlate them with desirable or undesirable attributes. Secondly, as the selection of the students in private medical and engineering colleges differs from that of government colleges, the sample was restricted only to private institutions. There were also geographical constraints in the study as it was limited to institutions situated within Uttar Pradesh, India. Therefore, it is suggested that future researchers could conduct this type of study with students at government colleges as well, and also in other states, countries and cultures, to provide more evidence to generalize findings from this study. Thirdly, the present report is based on correlations; therefore no causal relationship should be drawn from the study. Experimental research is recommended in the future to establish cause-effect relationships between anxiety, optimism and academic achievement.

#### **5. Conclusion**

As the world is advancing technologically and various job opportunities are opening globally, the need for adequate educational preparation has become vital. Due to tough competitions, a focus on educational success has permeated every society. With this drive to achieve, many psychological aspects have become apparent in the field of education. The more that is known about why one succeeds or fails in academic situations the better one can change cognitively or behaviourally to achieve optimum individual success. The current study indicated a high level of anxiety among medical and engineering students, with medical students showing even higher anxiety than engineering students. The study also concluded that enhancing optimism among students may help them in reducing their anxiety and thus improving their academic performance. As optimism is an important aspect of emotional intelligence, it is suggested that an emotional intervention programme should be organized for the students as well as for the faculty members, in every academic session, so that the faculty members and the students can work together in finding solutions for better stress management and handling anxiety among students. The study also revealed that there were no gender differences with regard to optimism anxiety and academic

performance among students.

### Acknowledgements

The researchers acknowledge with sincere gratitude the support and cooperation extended by the chairmen, directors and principals of the following institutes for granting permission to conduct the study in their establishments, and also to the students who participated in this research for their contribution and time:

- 1) Subharti Medical College, Meerut, Uttar Pradesh, India
- 2) Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, Uttar Pradesh, India
- 3) Hind Medical College, Lucknow Metro, Barabanki, Uttar Pradesh, India
- 4) Vidya College of Engineering and Technology, Meerut, Uttar Pradesh, India
- 5) Shri Ram Murti Smarak College of Engineering and Technology, Bareilly, Uttar Pradesh, India
- 6) Bharat Institute of Technology, Meerut, Uttar Pradesh, India
- 7) Northern India Engineering College, Lucknow, Uttar Pradesh, India

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