# A Study on Stress, Coping Strategies, and Resilience among College Students

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College students are particularly vulnerable to academic stress due to transitions at an individual and social level. Academic stress can be identified as the primary source of the alarming reports of student stress. Students are constantly under pressure due to the taxing demands and expectations, peer competition, excessive workload and assignments, fear of failure, etc. The educational system further plays an enabling role in increasing the stress levels experienced by students. An individual's reaction to stress depends directly on the coping resources he has. Coping serves to allow the student to manage a problem and regulate the emotional response to stressful situations. Resilience and coping are two interrelated variables that influence students' adjustment to stress. Limited researches on these three variables report high resilience positively relating to active coping strategies. The present study aims to study the type of relationship between resilience and the various coping strategies used by students during stressful situations. It also attempts to analyse the effect of gender on the types of coping strategies. The study employed standardized tests of stress, coping, and resilience on 61 college students from Chandigarh. The results report a significant gender difference in coping strategies. It also reports a positive correlation between perceived stress and the coping strategies of positive reinterpretation and growth, and planning. The results further report a negative correlation between perceived stress and resilience. The study provides evidence of the importance of understanding effective coping strategies that would facilitate the development of stress management interventions to help students adjust to stress.

Keywords: Stress, coping strategies, resilience, college students

## Introduction

College can be stressful as it is an unfamiliar and new environment for students. With a new place and a change in the support environment, it can prove challenging to adjust. Even though stress has a different impact on each individual, for some students it can have dismal consequences. The growing demands and increasing competitiveness in the educational field have made the student population more susceptible to stress. A cross-sectional study (Rasheed et al., 2017) conducted at a public sector university in Dammam, Saudi Arabia, reported 64% of students had perceived moderate stress that increased as students progressed from preparatory year to 4th year. When we experience or perceive challenges to our physical or emotional well-being that go beyond our coping resources and abilities, the resulting psychological condition is referred to as stress (Shalev, 2009). Among the various types of stressors, academic stress is the most common stress experienced by college students. Academic stressors include exam pressures and fears, poor grades, assignments, and competing deadlines, excessive homework, high expectations to excel, fear of failure, etc. Students also report encountering non-academic stress that includes financial concerns, future prospects, parental pressures, demands, and expectations. In such circumstances, the state worsens due to a lack of social support, low self-esteem, and further self-blame. Stress has a substantial detrimental impact on the mental as well as physical health of students, exposing risks to the immune, endocrine, gastrointestinal, and cardiovascular systems of the students. It is imperative to study the different types of coping strategies individuals use to cope with stress and what proves to be most effective. Coping plays a significant role in our adaptation to the challenges in life. According to existing research, there are two primary functions of coping strategies: managing the stress causing problem and governing emotions relating to those stressors (Folkman & Lazarus, 1980, 1986; Lazarus & Folkman, 1984, Lazarus, 1990). Stressors which are perceived as controllable elicit more proactive coping mechanisms (Karasek & Theorell, 1990) while those perceived as uncontrollable elicit more avoidance strategies (Anshel & Kaissidis, 1997). Individuals show consistent differences in the coping strategies they adopt to handle stressful situations. Most students commonly use active coping strategies consisting of leisure activities, social support, and exercising. Some students indulge in risky behaviours such as increased substance abuse, physical inactivity, poor eating, and sleeping patterns. Also, some students deviate to avoidant and reclusive behaviour patterns. More effective types of coping strategies are those which enable an individual to adapt effectively to the stressful events in life. More resilient individuals have generally been found to be less susceptible to experiencing illness in response to stressful conditions in their lives. Resilience refers to the belief an individual has in his/her ability to adapt to stressful situations. Research suggests that to adjust and achieve academic success at university requires high levels of resilience (Munro & Pooley, 2009). These protective factors include social support, caring, supportive parents, opportunities for participation in activities, etc., which positively influence resilience and consequently help to cope with stress. In the limited literature related to resilience and coping in the university setting, studies indicate that resilience is significantly related to the use of active (problem-focused) coping, that emotion-focused coping is more associated with high levels of stress, and that the avoidance style is most characteristic of non-resilient students.

## **Stress:**

Selye (1956) defines stress as "any external event or an internal drive which threatens to upset the organism equilibrium, is stress". Cohen, Kessler, and Gordon (1997) hold that stress is a process in which environmental demands tax or exceed the adaptive capacity of an organism, resulting in psychological and biological changes that may place risk of disease on a person. Pierceall & Keim (2007) in a study to determine the degree of stress perceived by students in southern Illinois, reported 75% of students were moderately stressed; 12% were in the high category of stress, and 13% on the category of low stress.

A study by Saipanish (2009) aimed to determine the prevalence and sources of stress among Thai medical students. The results showed that about 61.4% of students had some degree of stress and 2.4% of students reported a high level of stress. In addition, Ongori & Agolla (2009) conducted a study on undergraduate students in Botswana and found that academic workload, inadequate resources, low motivation, poor performance in academics, continuous poor performance in academics, overcrowded lecture halls, and uncertainty of getting a job after graduating from the university lead to stress among students.

## **Coping**

Lazarus and Folkman (1984) define coping as constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised to be taxing or exceeding the resources of the person. Coping strategies are the behavioural and psychological specific efforts, that individuals employ to master, tolerate, reduce, or minimize stressful events (Watson, Tomar, Logan, 2008). Additionally, coping resources are operationally defined as those inherent resources in individuals that enable them to handle stressors more effectively, to experience fewer or less intense symptoms upon exposure to a stressor, or to recover faster in stressful situations (Hammer & Marting, 1988).

Charles Carver's Coping Orientation of Problem Experience (COPE) identifies some common strategies for coping responses such as accepting the situation or one's role in it, active coping to remove the stressor or oneself from the stressor, avoiding/escaping the stressor or associated feelings of distress, denying the problem or feelings, disengaging mentally or behaviourally (giving up), planning the steps to solve the problem, reinterpreting the stressor as a positive or growth-oriented experience, seeking social support, using substances to dull feelings, suppressing competing activities until the problem subsides, turning to religion, using humour, and venting emotions.

In a study on the French population by Muller, Spitz (2003) results showed that functional coping strategies (e.g., active coping) are linked to good self-esteem, to lower perceived stress, and to lower psychological distress, whereas less functional strategies (e.g., denial or self-blame) are widely linked to poor self-esteem, to high perceived stress, and psychological distress. A cross-sectional study in Malaysia aimed to assess the perception of stress among medical students and their coping strategies reported that students used active coping, religious coping reframing, planning, and acceptance to cope with stress (Al-Dubai et al., 2011).

A study (Liverant et al., 2007) on indirectly affected college students after the September 11th terrorist attacks demonstrated that the majority of college students were severely psychologically impacted initially by the terrorist attacks. Several potentially maladaptive coping strategies were found to be predictive of initial anxiety, including denial, behavioural disengagement, mental disengagement, and focus on and venting of emotions.

### Resilience

"I have been bent and broken, but - I hope - into a better shape." -Charles Dickens

Resilience is defined as the flexibility in response to changing situational demands, and the ability to bounce back from negative emotional experiences (Tugade et al., 2004). Psychological resilience is a developmental and psychosocial process through which individuals exposed to sustained adversity or potentially traumatic events experience positive psychological adaptation over time (Graber, Pichon & Carabine, 2015).

A study by Campbell-Sills, Cohen & Stein (2006) reported that a positive relation between task-oriented coping and resilience and also mediated the relationship between conscientiousness and resilience while, emotion-oriented coping was associated with low resilience. Another study that examined the relationship between perceived resilience and academic stress among social work students, the sample reported high levels of resilience and moderate levels of academic stress and social support. A negative relationship was found between academic stress, social support and resilience. Social support was reported as positively influencing resilience (Wilks, 2008).

## Purpose

The purpose of the current study is to study resilience, stress and the coping strategies between male and female college going students.

# Hypothesis

- 1. There will be gender differences in the coping strategies.
- 2. There will be a correlation between stress and coping strategies.
- 3. There will be a negative correlation between stress and resilience.

## **METHOD**

## Sample

The sample used for the present study was of 61 college students from the city Chandigarh, aged 18-25 years. The sample consisted of 30 females and 31 males.

#### Measures

The following standardized tests were used

- 1. Perceived Stress Scale (PSS): Perceived Stress Scale is a 10-item scale created by Sheldon Cohen in 1983. The PSS scale measures the perception of stress i.e., the degree to which individuals perceive their life situations as stressful. Perceived Stress Scale is a 5 point scale, ranging from 0 (never) to 4 (very often). The respondents were required to answer how often they felt a certain way during the last month.
- 2. Coping Orientation to Problems Experienced (COPE): The COPE Inventory was given by Carver in 1989. It is a 60-item inventory. The COPE model consists of 15 scales which assess different dimensions of coping: 1) positive reinterpretation and growth, 2) mental disengagement, 3) focus on and venting of emotions, 4) use of instrumental social support, 5) active coping, 6) denial, 7) religious coping, 8) humour, 9) behavioural disengagement, 10) restraint, 11) use of emotional social support, 12) substance abuse, 13) acceptance, 14) suppression of competing activities, 15) planning. It is a 4 point scale including a list of statements that the participants had to respond to on a range of 0 (I usually don't do this at all) to 4 (I usually do this a lot). The scores for each subscale out of the 15 subscales are added to inform which coping strategy is used the most by participants.
- 3. Brief Resilience Scale (BRS): Brief Resilience Scale is a 6-item scale developed by Smith et al., in 2008. It is a brief scale to assess the individual's ability to recover from stressful situations. BRS is a 5 point scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The responses (1 to 5) are added for all the six items and divided by 6 to get an average resilience score.

#### **Procedure**

The participants were informed about the purpose of the research and the questionnaires were filled through google forms. The participants were assured of the confidentiality of the information to elicit their honest responses without any fear or inhibitions. Standardized psychological tests were administered to participants.

#### Analysis of data

#### **Results**

Table 1: Showing Gender Based Statistics for Perceived Stress, Coping Strategies and Resilience N = 61 (Males = 31 Females = 30)

	N	Mean Rank	Mann- Whitney U
Perceived Stress	30	32.90	408.000
	31	29.16	
Positive Reinterpretation and Growth	30	30.12	438.500
	31	31.85	
Mental Disengagement	30	33.93	377.000
	31	28.16	4 42 70011
Focus on and Venting of Emotions	30	41.05	163.500**
II CI ( 10 '10 '	31	21.27	210 0004
Use of Instrumental Social Support	30	35.90	318.000*
Acting Coning	31 30	26.26 31.13	461.000
Acting Coping	31	30.87	401.000
D '1			422.500
Denial	30 31	29.92	432.500
Delicious Coning	30	32.05 34.10	372.00
Religious Coping	31	28.00	372.00
Humour	30	26.42	327.500*
Tullioui	31	35.44	321.300
Behavioural Disengagement	30	33.68	384.500
Benavioural Bisengagement	31	28.40	2011200
Restraint	30	32.33	425.000
	31	29.71	
Use of Emotional Support	30	37.72	263.500*
11	31	24.50	
Substance Use	30	27.48	359.500*
	31	34.40	
Acceptance	30	30.95	463.500
	31	31.05	
Suppression of Competing Activities	30	31.53	449.000
	31	30.48	
Planning	30	32.90	408.000
D '''	31	29.16	250,000
Resilience Average	30	27.17	350.000
	31	34.71	

Note. \*p<.05. \*\*p<.01.

Table 2: Showing Correlations of Perceived Stress, Coping Strategies and Resilience

	Percei ved Stress	Positive Reinterpr etation and Growth	Mental Disengage ment	Focus on and Venti ng of Emot ions	Use of Ins. Soci al Supp ort	Acti ve Cop ing	Den ial	Religi ous Copi ng	Hum our	Behaviou ral Disengag ement	Restr aint	Use of Emoti onal Suppo rt	Subst ance Use	Accept	Suppre ssion of Compe ting Activiti es	Plan ning
Perceived Stress			•				•	,								
Positive Reinterpr etation and Growth	.353**															
Mental Disengag ement	.040	.208														
Focus on and Venting of Emotions	.173	.081	.176													
Use of Instrumen al Social Support	003	.254*	.070	.548**												
Acting Coping	233	.644**	.111	.125	.357*											
Denial	.119	.006	.228	.152	.110	- .134										
Religious Coping	029	.209	.124	.255*	.386*	.093	.176									
Humour	103	.319*	.226	065	.108	.425	.144	.012								
Behaviour al Disengag ement	.258*	180	.235	.278*	.236	.162	.508	.041	.038							
Restraint	001	.382**	.147	.026	.243	.264	.015	.192	.110	.221						
Jse of Emotional Support	.124	.194	.077	.590**	.688*	.319	.000	.337**	.060	.162	.030					
Substance Use	.053	141	.129	205	136	035	.153	062	.253*	.053	071	112				
Acceptan	251	.636**	.329**	.002	.208	.504	.086	.039	.364*	.238	.489**	.077	.070			
Suppressi on of Competin Activities	.016	.480**	.373**	.246	.349*	.526	.242	.287*	.316*	.185	.354**	.354**	067	.401**		
Planning	258*	.644**	.201	.170	.328*	.816	- .119	.196	.423*	244	.344**	.324*	047	.489**	.602**	
Resilience	- 394**	.451**	145	298*	032	.432	- 046	034	.311*	330**	.107	159	035	.265*	.191	.350

Note. \*p<.05. \*\*p<.01.

.394\*\*

# Discussion

Average

Findings from the study indicate that there is a significant gender difference in the coping strategies of focus on and venting of emotions (.000, p<.01), instrumental social support (.033, p<.05), use of emotional support (.003, p<.05), humour (.046, p<.05) and substance use (.023, p<.05). This proves the hypothesis that there are gender differences in the coping strategies used by college students.

.046

Moreover, the results provide evidence that there is a significant negative correlation between perceived stress and resilience (r = .394, p<.01). Hence, the hypothesis is accepted which means that as stress increases, resilience decreases. This implies that less resilient students experience more stress.

The results derived also indicate that there is a positive correlation between perceived stress and the coping strategy of behavioural disengagement (r = .254, p<.05). On the contrary, there is a negative correlation between stress and the coping strategies of positive reinterpretation & growth (r = -.353, p<.01) and planning (r = -.258, p<.05).

There is further evidence of a significant positive correlation between resilience and coping strategies of positive reinterpretation & growth (r = .451, p<.01), active coping (r = .432, p<.01), humour (r = .311, p<.05), acceptance (r = .265, p<.05) and planning (r = .350, p<.01). This positive correlation shows that students who are high on resilience employ effective coping strategies of positive reinterpretation and growth, active coping, humour, acceptance, and planning. Resilient students use more productive coping strategies than students who are low on resilience and are subsequently able to handle stress better. Whereas, there is a significant negative correlation between resilience and coping strategies of focus on and venting of emotions (r = -.298, p<.05) and behavioural disengagement (r = -.330, p<.01), which means that students with high resilience do not engage in the coping strategies of focus on and venting of emotions and behavioural disengagement.

In a study, González-Torres et al., (2014) attempted to study the students' profile of resilience and strategies for coping with stress, and observe the type of relationship between these two variables. The results reported medium-high scores of resilience in students and a report of general use problem-focused coping strategies by the students. The study also provided information about how some indicators of stress and resilience can be influenced by gender and context, such as the type of university.

#### Conclusion

Stress is a pervasive and detrimental problem that college students find impossible to elude. It interferes with all areas of students' lives and makes it onerous for them to lead fully functioning lives. Therefore, it becomes fundamental for the adequate management of this condition. The present study examined the coping strategies employed by college students during stress and studies its relationship with resilience. It was hypothesized that there will be gender differences in the coping strategies, that there will be a correlation between stress and resilience, and also between stress and the type of coping strategies. The study was conducted on 61 college students, 31 male students, and 30 female students. The standardized tests employed for this purpose were administered on the participants through google forms. The results proved evidence for the acceptance of the hypotheses. Not only is the connection between stress and coping strategies important, but gender and resilience were also shown to have significant effects on the coping strategies used by college students. The coping strategies of positive reinterpretation and growth, planning, and active coping are related to high resilience which subsequently proves to be efficient in decreasing stress. The results, thus provide the support that resilience students employ healthier coping strategies for stress than less resilient students. The study provides evidence that students need to identify their strengths and subsequent protective factors against stressful situations. The results of the study can be beneficial for educational institutions to help in guiding preventive and intervention strategies to help students adequately cope with stress.

#### References

Al Rasheed, F., Naqvi, A. A., Ahmad, R., & Ahmad, N. (2017). Academic Stress and Prevalence of Stress-Related Self-Medication among Undergraduate Female Students of Health and Non-Health Cluster Colleges of a Public Sector University in Dammam, Saudi Arabia. *Journal of pharmacy & bioallied sciences*, 9(4), 251–258. https://doi.org/10.4103/jpbs.JPBS\_189\_17

- Al-Dubai, S. A., Al-Naggar, R. A., Alshagga, M. A., & Rampal, K. G. (2011). Stress and coping strategies of students in a medical faculty in Malaysia. *The Malaysian journal of medical sciences: MJMS*, 18(3), 57–64.
- Anshel, M. H., & Kaissidis, A. N. (1997). Coping style and situational appraisals as predictors of coping strategies following stressful events in sport as a function of gender and skill level. *British Journal of Psychology*, 88(2), 263–276. <a href="https://doi.org/10.1111/j.2044-8295.1997.tb02634.x">https://doi.org/10.1111/j.2044-8295.1997.tb02634.x</a>
- Bhargava, D., & Trivedi, H. (2018). A Study of Causes of Stress and Stress Management among Youth. *IRA-International Journal of Management & Social Sciences* (ISSN 2455-2267), 11(3), 108. https://doi.org/10.21013/jmss.v11.n3.p1
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, 44(4), 585–599. https://doi.org/10.1016/j.brat.2005.05.001.
- Cohen, S. (1994). Perceived Stress Scale Mind Garden. https://www.mindgarden.com/132-perceived-stress-scale#horizontalTab1
- Cohen, S., Kessler, R. C., & Gordon, L. U. (Eds.). (1997). Measuring stress: A guide for health and social scientists. Oxford University Press on Demand.
- Dickens, C. (1998). Great Expectations. Oxford World's Classics.
- Folkman, S., & Lazarus, R. (1980). An analysis of coping in a middle-aged community sample. Journal of health and social behavior, 21 3, 219-39.
- Folkman, S., Lazarus, R., Gruen, R.J., & Delongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of personality and social psychology*, 50 3, 571-9.
- González-Torres, M. C., & Artuch-Garde, R. (2014). Resilience and Coping Strategy Profiles at University: Contextual and Demographic Variables. *Electronic Journal of Research in Educational Psychology*, *12*(3), 621–648. <a href="http://repositorio.ual.es/bitstream/handle/10835/3834/Art\_34\_978\_eng.pdf?sequence=1">http://repositorio.ual.es/bitstream/handle/10835/3834/Art\_34\_978\_eng.pdf?sequence=1</a>.
- Graber, R., Pichon, F., & Carabine, E. (2015). Psychological resilience State of knowledge and future research agendas. *Overseas Development Institute*, 1–28. <a href="https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-">https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-</a>
  - $\underline{files/9872.pdf?fbclid=IwAR0kKpgMIqib81R7\_2sX5GMx1P3KfwxZHQaRMgMppaklW1eJBJN7px539Hs}$
- Hammer, A. L., & Marting, M. S. (1988). *Manual for the coping resources inventory*. Consulting Psychologists Press.

Hartley, M. T. (2013). Investigating the Relationship of Resilience to Academic Persistence in College Students With Mental Health Issues. SAGE Journals, 46(4), 240–250. https://doi.org/10.1177/0034355213480527.

Jayasankara Reddy, K., Rajan Menon, K., & Thattil, A. (2018). Academic Stress and its Sources Among University Students. Biomedical and Pharmacology Journal, 11(1), 531–537. https://doi.org/10.13005/bpj/1404

Karasek RA, Theorell TG. Healthy Work. New York: Basic Books; 1990.

Kausar, R. (2010). Perceived Stress, Academic Workloads and Use of Coping Strategies by University Students. Journal of Behavioural Sciences, 20–31. https://www.semanticscholar.org/paper/Perceived-Stress%2C-Academic-Workloads-and-Use-of-by-

Kausar/b2abbac896f4ddd1b43f50cde9456491975ebb95?p2df

Lazarus RS, Folkman S. Stress, Appraisal and Coping. New York: Springer; 1984.

Lazarus, R. (1990). Theory-Based Stress Measurement.

Liverant, G. I., Hofmann, S. G., & Litz, B. T. (2004b). Coping and anxiety in college students after the September 11thterrorist attacks. Anxiety, Stress & Coping, 17(2), 127–139. https://doi.org/10.1080/0003379042000221412.

Muller, L., & Spitz, E. (2003). Multidimensional assessment of coping: validation of the Brief COPE among French population. L'encephale, 29(6), 507–518. https://europepmc.org/article/med/15029085.

Munro, B. & Pooley, J.A. (2009). Differences in resilience and university adjustment between school leavers and mature entry university studentes. The Australian Community Psychologist, 21(1), 50-61.

Ongori, H., & Agolla, J. E. (2009). An assessment of academic stress among undergraduate students: the case of University of Botswana. *Academic Journals*, 63–70. http://ithuteng.ub.bw/handle/10311/837.

Pierceall, E. A., & Keim, M. C. (2007). Stress and Coping Strategies Among Community College Students. Community College Journal of Research and Practice, 31(9), 703–712. https://doi.org/10.1080/10668920600866579.

Saipanish, R. (2003). Stress among medical students in a Thai medical school. *Medical Teacher*, 25(5), 502–506. <a href="https://doi.org/10.1080/0142159031000136716">https://doi.org/10.1080/0142159031000136716</a>.

Selye, H. (1956). The Stress of Life. New York: McGraw-Hill

Shaley, A. Y. (2009). Posttraumatic stress disorder and stress-related disorders. *Psychiatric Clinics*, 32(3), 687-704.

Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of personality* and social psychology, 86(2), 320.

Watson, J. M., Logan, H. L., & Tomar, S. L. (2008). The influence of active coping and perceived stress on health disparities in a multi-ethnic low income sample. BMC Public Health, 8(1), 41.

Wilks, S. E. (2008). Resilience amid Academic Stress: The Moderating Impact of Social Support among Social Work Students. Advances in Social Work, 9(2), 106– 125. https://doi.org/10.18060/51.