



---

# ONLINE LEARNING DURING COVID-19 : A GENDER COMPARATIVE STUDY ON ACADEMIC STRESS AND BURNOUT IN UNIVERSITY STUDENTS

*Yarlagadda Sreshtha Praveen*

BSc. Student, Department of Psychology, Jyoti Nivas College Autonomous, Karnataka, India.

Email ID : sreshta.official7@gmail.com

---

## ABSTRACT:

Online learning has been adopted as an endeavour to curb the spread of the COVID-19 virus. The purpose of this research is to investigate the differences between male and female students and the academic stress & burnout they experience as a result of online learning. The study was conducted - on 66 university students from Bangalore. Standardized measures of Perceived Academic Stress and Personal Burnout - were administered to the participants. There was a significant difference in the results of the male and female university students based on their scores on the Perceived Academic Stress Scale (PAS) and the Personal Burnout Scale. The findings revealed a significant positive correlation between the Academic Expectations, Workload and Examinations. We also notice that there is a significant positive correlation between Academic Expectations and Student's Academic Self-perceptions. The results further revealed a significant positive correlation between Workload and Examinations and Student's Academic Self-perceptions, along with a significant negative correlation between Student's Academic Self-perceptions and Personal Burnout. Evidence shows that female students experience higher levels of Academic Stress (Expectation) & Burnout when compared to male students. The study has important implications and suggests the need to implement measures to prevent academic stress and burnout. Mental health support services must be accessible to female university students to help them overcome academic stress and burnout. Universities should strongly emphasize psychological health assistance by renewing health guidelines and providing online instruction and lectures designed to provide strategies to manage academic stress and burnout while adapting and coping with this pandemic.

Keywords: Gender, Academic Stress, Burnout, University Students, Online Learning

---

## Introduction:

“Don’t just climb the ladder of success - a ladder that leads, after all, to higher and higher levels of stress and burnout - but chart a new path to success, remaking it in a way that includes not just the conventional metrics of money and power, but a third metric that includes well-being, wisdom, wonder and giving, so that the goal is not just to succeed but to thrive.”

— Arianna Huffington

The spread of COVID-19 has resulted in the closure of educational institutions. During the pandemic, educational institutions had limited options but to embrace online education as a means of continuing their academic activity (Hassan et al., 2021).

Academic stress refers to an individual's sense of not having enough time to acquire knowledge while also referring to the increasing requirement for knowledge (Fariborz et al., 2019). Academic stress, according to (Crego et al., 2016), may jeopardize students' academic achievement.

Gender differences have an impact on how students perceive and respond to academic pressures (Misra et al., 2000). There are gender differences in coping methods to stressors as well. When comparing men and women with identical levels of stress, women show stress more openly than men (Hyde & Plant, 1995; Thomas & Williams, 1991). Gender has already been linked to burnout before (Salmela-Aro & Tynkynen, 2012).

Burnout is a state of emotional weariness caused by chronic stress syndromes such as rare roles, pressure and time limits, and a lack of resources to complete tasks (Demerouti et al., 2001; Iacovides et al., 2003; Maslach et al., 2001; Toppinen-Tanner et al., 2005). As a result, academic stress is one of the factors linked to academic burnout (Fariborz et al., 2019).

---

## Academic Stress :

Academic stress is defined as the unpleasant situations that arise as a result of the numerous demands placed on students or learners in the form of examinations, maintaining a healthy and academic lifestyle, competing with peers, meeting the academic expectations of teachers and parents, as well as meeting one's academic expectations (Aihie and Ohanaka, 2019). Academic stress refers to a student's sense of the pressure they are under, as well as time restrictions, academic workload, and academic self-image (Bedewy & Gabriel, 2015). Academic stress is mental distress caused by the anticipation of the frustration connected with academic failure, or even the knowledge that such failure may occur (Gupta and Khan, 1987). Academic stress is described by (Bisht, 1989) as a demand related to academics that taxes or exceeds the available resources (internal or external) as perceived cognitively

by the student engaged. Academic stress, she claims, represents an individual's perception of academic frustration, academic conflict, academic pressure, and academic worry. Academic stress is a serious issue that should not be overlooked because it harms the students' overall adjustment (Hussain et al., 2008).

### ***Burnout :***

Burnout is a long-term reaction to chronic interpersonal pressures in the workplace. Emotional exhaustion, depersonalization, and a decline in personal accomplishment are three crucial components (Schaufeli, Leiter, & Maslach, 2009). Students, according to (Schaufeli & Taris, 2005), are neither employees nor can being a student be called work. However, their basic activities might be deemed "work" from a psychological standpoint (e.g., mandatory activities like attending courses and completing assignments, as well as special tendencies such as passing classes) and it states a meaning equal to "work." "Burnout refers to feeling weary because of study expectations, having a pessimistic and detached attitude toward study, and feeling inept as a student," according to (Schaufeli et al., 2002a, p. 465). Student burnout, according to (Yang, 2004), causes more absenteeism, reduced motivation to complete needed course work, a higher rate of drop-outs, and harms academic progress.

### ***Purpose***

The purpose of this study is to examine the relationship between gender, academic stress & burnout of college and/or university students during Covid-19.

### ***Hypothesis***

1. There will be a positive correlation between academic stress & burnout.
2. There will be a negative effect of academic stress & burnout on the samples.
3. There will be a significant gender difference in the experience of academic stress & burnout as university students during Covid-19.

---

## **Method**

### ***Sample :***

The sample consisted of 66 (34 female & 32 male) university students from Bangalore who were studying via the online/virtual mode due to COVID-19. The subjects were from the age group of 18-25 years.

### ***Measures :***

The following standardized tests were used -

1. **Copenhagen Burnout Inventory** : (CBI) was developed by Borritz and Kristensen (1999) to assess personal burnout based on self-report responses to items. The personal-burnout sub-scale has six items, measured on a five-point Likert scale ranging from 100 - always to 0 - never/almost never.
2. **The Perception of Academic Stress Scale** : (PAS) was developed by Bedewy and Gabriel (2015) to measure academic stress among university students. The PAS Scale has 18-items, measured on a five-point Likert scale ranging from 1=extremely irrelevant to 5=strongly relevant. The Perception of Academic Stress Scale has three subscales: (1) the academic expectations subscale (four items), (2) workload and examinations subscale (eight items), and (3) students' academic self-perceptions subscale (six items).

---

### **Procedure :**

The participants were informed about the purpose of the research and the questionnaires were filled out through Google forms. The participants were assured of the confidentiality of the information to elicit their honest responses without any fear or inhibitions. Each participant was thanked for their support & kind cooperation. Standardized psychological tests were administered to participants.

---

## **Results :**

**Table 1** : Shows the descriptives

	Gender	Academic Expectations	Workload and Examinations	Students' Academic Self-perceptions	Personal Burnout
N	Female	34	34	34	34
	Male	32	32	32	32
Mean	Female	14.1	24.9	21.5	55.7
	Male	12.7	24.6	21.6	38.6
Standard deviation	Female	2.64	5.79	5.53	20.5
	Male	2.67	5.20	4.18	15.9

**Table 2 :** Shows the correlation between the studied variables

	Academic Expectations	Workload and Examinations	Students' Academic Self-perceptions	Personal Burnout
Academic Expectations	—			
Workload and Examinations	0.473 ***	—		
Students' Academic Self-perceptions	0.450 ***	0.493 ***	—	
Personal Burnout	-0.101	-0.180	-0.343 **	—

Note. \* p < .05, \*\* p < .01, \*\*\* p < .001

**Table 3 :** Shows the independent samples t-test

	Group	N	Mean	SD	Statistics	p
Academic Expectations	Female	34	14.1	2.64	2.1879	0.032
	Male	32	12.7	2.67		
Workload and Examinations	Female	34	24.9	5.79	0.1909	0.849
	Male	32	24.6	5.20		
Students' Academic Self-perceptions	Female	34	21.5	5.53	-0.0530	0.958
	Male	32	21.6	4.18		
Personal Burnout	Female	34	55.7	20.52	3.7681	<.001
	Male	32	38.6	15.86		

**Table 4 :** Shows the group descriptives

	Group	N	Mean	Median	SD	SE
Academic Expectations	Female	34	14.1	14.0	2.64	0.453
	Male	32	12.7	13.0	2.67	0.472
Workload and Examinations	Female	34	24.9	26.0	5.79	0.993
	Male	32	24.6	25.0	5.20	0.919
Students' Academic Self-perceptions	Female	34	21.5	22.0	5.53	0.949
	Male	32	21.6	21.5	4.18	0.739
Personal Burnout	Female	34	55.7	54.1	20.52	3.519
	Male	32	38.6	37.5	15.86	2.803

### Discussion :

The results found that there is a significant positive correlation between academic expectations, workload and examinations ( $r = 0.437, p < .001$ ). The results also observed a significant positive correlation between academic expectations and students' academic self-perception ( $r = 0.450, p < .001$ ). The results also found that there is a significant positive correlation between workload and examinations and students' academic self-perception ( $r = -0.343, p < .01$ ). The results further found a significant negative correlation between students' academic self-perception and personal burnout ( $r = 0.378, p < .01$ ). Thus, the hypothesis that there will be a negative effect of academic stress & burnout on the samples is accepted. Further, the hypothesis that there will be a significant positive correlation between academic stress & burnout is accepted. Overall, the hypothesis that there will be a significant gender difference in the experience of academic stress & burnout as university students during Covid-19 is accepted.

Confirmed sources of academic stress include the exams and elements of assessments from the curricula (Kipping, 2000). Students may have specific personality traits and coping strategies, or even gender-specific stressful personal events, that influence mental health and contribute to burnout (Dyrbye et al., 2006). The learning environment is generally important for achievement and it also has a profound impact on student burnout (Tyssen et al., 2001). The findings of this study disclosed that female students experience significantly more academic stress compared to their male counterparts. It might be a reflection of the seriousness of female students about academic pursuits (Banu et al., 2015). Beiter et al., (2015) stated that with the propensity for mental health issues to hinder the success of college students, it is vital that colleges continually evaluate the mental health of their students and tailor treatment programs to specifically target their needs.

### CONCLUSION:

The consequences of the COVID-19 pandemic have demanded substantial alterations in terms of university teaching-learning methods. Academic stress involves stressors and responses within the educational sphere. As the degree of perceived academic stress among students increases, students experience higher levels of academic burnout.

It was hypothesized that there will be a positive correlation between academic stress & burnout. It was also hypothesized that there will be a negative effect of academic stress & burnout on the samples. Finally, it was hypothesized that there will be a significant gender difference in the experience of academic stress & burnout as university students during Covid-19. The study was conducted on 66 university students from Bangalore. The standardized measures of perceived academic stress and burnout were administered to participants through google forms. The results revealed a significant positive correlation between academic stress & burnout of university students. The findings also showed a significant negative effect of academic stress & burnout on the samples. Finally, the results also confirmed significant gender differences in the experience of academic stress & burnout as university students during Covid-19.

This research has significant implications, such as the need to assess the personality traits of university students at the beginning of their academic studies with the intent to screen for possible early problems of mental health (Lievens et al., 2002). The University administration must make an effort to alleviate student stress, & look to adopt strategies intended to lessen potentially traumatic stressors (Collier 2008). Burnout can be prevented, but this requires additional education as well as several structural changes in the system (Sartorius 2009). There has been much research on stress among college students; however, literature and research on academic stress, in general, is scarce (Lin & Huang, 2014). Further research should follow students longitudinally to understand the effects of burnout over extended periods.

### REFERENCES:

1. Aihie, O. N., & Ohanaka, B. I. (2019). Perceived Academic Stress among Undergraduate Students in a Nigerian University. *Journal of Educational and Social Research*, 9(2), 56–66. <https://doi.org/10.2478/jesr-2019-0013>
2. Al - Taweel, D., Al - Haqan, A., Bajis, D., Al - Bader, J., Al - Taweel, A. M., Al - Awadhi, A., & Al - Awadhi, F. (2020). Multidisciplinary academic perspectives during the COVID - 19 pandemic. *The International Journal of Health Planning and Management*, 35(6), 1295 - 1301. <https://doi.org/10.1002/hpm.3032>
3. Backović, D. V., Ilić Živojinović, J., Maksimović, J., & Maksimović, M. (2012). Gender differences in academic stress and burnout among medical

- students in final years of education. *Psychiatria Danubina*, 24(2.), 175-181. <https://core.ac.uk/download/pdf/14469097.pdf>
4. Banu, P., Deb, S., Vardhan, V., & Rao, T. (2015). Perceived academic stress of university students across gender, academic streams, semesters, and academic performance. *Indian Journal of Health and Wellbeing*, 6(3), 231-235.
  5. Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The Perception of Academic Stress Scale. *Health Psychology Open*, 2(2), 205510291559671. <https://doi.org/10.1177/2055102915596714>
  6. Bikar, S., Marziyeh, A., & Pourghaz, A. (2018). Affective Structures among Students and its Relationship with Academic Burnout with Emphasis on Gender. *International Journal of Instruction*, 11(1), 183–194. <https://doi.org/10.12973/iji.2018.11113a>
  7. Calaguas, G. M. (2011). College Academic Stress: Differences along Gender Lines. *Journal of Social and Development Sciences*, 1(5), 194–201. <https://doi.org/10.22610/jsds.v1i5.644>
  8. Campos, J. A. D. B., Zucoloto, M. L., Bonafé, F. S. S., Jordani, P. C., & Maroco, J. (2011). Reliability and validity of self-reported burnout in college students: A cross randomized comparison of paper-and-pencil vs. online administration. *Computers in Human Behavior*, 27(5), 1875–1883. <https://doi.org/10.1016/j.chb.2011.04.011>
  9. Capri, B., Ozkendir, O. M., Ozkurt, B., & Karakus, F. (2012). General Self-Efficacy beliefs, Life Satisfaction and Burnout of University Students. *Procedia - Social and Behavioral Sciences*, 47, 968–973. <https://doi.org/10.1016/j.sbspro.2012.06.765>
  10. Castellanos, J. (2018). Gender Differences within Academic Burnout. *Adult Higher Education Alliance*.
  11. Cazan, A. M., & Năstasă, L. E. (2015). Emotional Intelligence, Satisfaction with Life and Burnout among University Students. *Procedia - Social and Behavioral Sciences*, 180, 1574–1578. <https://doi.org/10.1016/j.sbspro.2015.02.309>
  12. Creedy, D. K., Sidebotham, M., Gamble, J., Pallant, J., & Fenwick, J. (2017). Prevalence of burnout, depression, anxiety and stress in Australian midwives: a cross-sectional survey. *BMC Pregnancy and Childbirth*, 17(1). <https://doi.org/10.1186/s12884-016-1212-5>
  13. David, A. (2010). Examining the relationship of personality and burnout in college students: The role of academic motivation. *Educational measurement and evaluation review*, 1, 90-104.
  14. de la Fuente, J., Pachón-Basallo, M., Santos, F. H., Peralta-Sánchez, F. J., González-Torres, M. C., Artuch-Garde, R., Paoloni, P. V., & Gaetha, M. L. (2021). How Has the COVID-19 Crisis Affected the Academic Stress of University Students? The Role of Teachers and Students. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.626340>
  15. Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>
  16. Dhull, I., & Kumari, S. (2015). Academic stress among adolescents in relation to gender. *International Journal of Applied Research*, 1(11), 394-396.
  17. Duraku, Z. H., & Hoxha, L. (2020). The impact of COVID-19 on education and on the well-being of teachers, parents, and students: Challenges related to remote (online) learning and opportunities for advancing the quality of education. [Manuscript submitted for publication]. Faculty of Philosophy, University of Prishtina.
  18. Fariborz, N., Hadi, J., & Ali, T. N. (2019). Students' academic stress, stress response and academic burnout: Mediating role of self-efficacy. *Pertanika J. Soc. Sci. Humanit*, 27, 2441-2454.
  19. Hassan, S. U. N., Algahtani, F. D., Zrieq, R., Aldhmadi, B. K., Atta, A., Obeidat, R. M., & Kadri, A. (2021b). Academic Self-Perception and Course Satisfaction among University Students Taking Virtual Classes during the COVID-19 Pandemic in the Kingdom of Saudi-Arabia (KSA). *Education Sciences*, 11(3), 134. <https://doi.org/10.3390/educsci11030134>
  20. Huan, V. S., Yeo, L. S., Ang, R. P., & Chong, W. H. (2006). THE INFLUENCE OF DISPOSITIONAL OPTIMISM AND GENDER ON ADOLESCENTS PERCEPTION OF ACADEMIC STRESS. *Adolescence*, 41(163).
  21. Jones, R. W. (1993). Gender-Specific Differences in the Perceived Antecedents of Academic Stress. *Psychological Reports*, 72(3), 739–743. <https://doi.org/10.2466/pr0.1993.72.3.739>
  22. Kar, S. (2017). Academic stress as a determinant of academic achievement. *Nurture*, 11(1), 1-5.
  23. Kumari, S. (2017). A Study Of Gender Difference In Stress Among University Students. *IJRAR-International Journal of Research and Analytical Reviews (IJRAR)*, 4(4), 374-377. <https://ijrar.org/papers/IJRAR19D1049.pdf>
  25. Lal, K. (2014). Academic stress among adolescents in relation to intelligence and demographic factors. *American International Journal of Research in Humanities, Arts and Social Sciences*, 5(1), 123-129.
  26. Maroco, J., & Campos, J. A. D. B. (2012). Defining the Student Burnout Construct: A Structural Analysis from Three Burnout Inventories. *Psychological Reports*, 111(3), 814–830. <https://doi.org/10.2466/14.10.20.pr0.111.6.814-830>
  27. May, R. W., Bauer, K. N., & Fincham, F. D. (2015). School burnout: Diminished academic and cognitive performance. *Learning and Individual Differences*, 42, 126–131. <https://doi.org/10.1016/j.lindif.2015.07.015>
  28. Misra, R., & Castillo, L. G. (2004). Academic Stress Among College Students: Comparison of American and International Students. *International Journal of Stress Management*, 11(2), 132–148. <https://doi.org/10.1037/1072-5245.11.2.132>

29. Mseleku, Z. (2020). A literature review of E-learning and E-teaching in the era of Covid-19 pandemic. *SAGE*, 57(52), 588-597.
30. Mukhtar, K., Javed, K., Arooj, M., & Sethi, A. (2020). Advantages, Limitations and Recommendations for online learning during COVID-19 pandemic era. *Pakistan Journal of Medical Sciences*, 36(COVID19-S4). <https://doi.org/10.12669/pjms.36.covid19-s4.2785>
31. Portoghese, I., Leiter, M. P., Maslach, C., Galletta, M., Porru, F., D'Aloja, E., Finco, G., & Campagna, M. (2018). Measuring Burnout Among University Students: Factorial Validity, Invariance, and Latent Profiles of the Italian Version of the Maslach Burnout Inventory Student Survey (MBI-SS). *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.02105>
32. Praveeni, S. M. N., & Herath, H. M. A. J. (2020). Perceived Academic Stress among University Undergraduates in Sri Lanka. *Wayamba Journal of Management*, 11(1), 30. <https://doi.org/10.4038/wjm.v11i1.7490>
33. Sakti, B. Y. P., Urbayatun, S., & Prabawanti, C. The Role of Self-Efficacy and Optimism on Academic Stress Towards Industrial Engineering Students at Universitas Ahmad Dahlan, Yogyakarta Batch 2017-2019.
34. Sharma, S. (2018). Perceived academic stress among students. *International Journal of Multidisciplinary*, 3(08).
35. Stoeber, J., Childs, J. H., Hayward, J. A., & Feast, A. R. (2011). Passion and motivation for studying: predicting academic engagement and burnout in university students. *Educational Psychology*, 31(4), 513–528. <https://doi.org/10.1080/01443410.2011.570251>
36. Sunawan, S., Amin, Z. N., & Hafina, A. (2021). The Differences of Students' Burnout from Level of Education and Duration Daily Online Learning During COVID-19 Pandemics. In 11th Annual International Conference on Industrial Engineering and Operations Management, IEOM 2021 (pp. 3723-3729).
37. Sveinsdóttir, H., Flygenring, B. G., Svavarsdóttir, M. H., Thorsteinnsson, H. S., Kristófersson, G. K., Bernharðsdóttir, J., & Svavarsdóttir, E. K. (2021). Predictors of university nursing students burnout at the time of the COVID-19 pandemic: A cross-sectional study. *Nurse Education Today*, 106, 105070. <https://doi.org/10.1016/j.nedt.2021.105070>
38. Vu, B. T., & Bosmans, G. (2021). Psychological impact of COVID-19 anxiety on learning burnout in Vietnamese students. *School Psychology International*, 42(5), 486–496. <https://doi.org/10.1177/01430343211013875>
39. Zhang, Y., Gan, Y., & Cham, H. (2007). Perfectionism, academic burnout and engagement among Chinese college students: A structural equation modelling analysis. *Personality and Individual Differences*, 43(6), 1529–1540. <https://doi.org/10.1016/j.paid.2007.04.010>