

## **COVID-19 and Higher Education: Students' perception toward academic support system**

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**Abstract:** The purpose of this study is to examine the perception of student towards the academic support system and its impact on their level of satisfaction towards their educational institutions. This paper aimed to study that, is there any significant difference among the selected variables of student perception and student satisfaction. A structured questionnaire was used to collect the data. A structured questionnaire was administered on 187 students to collect the data. Data was analysed using SPSS. Based on the statistical findings it was found that there is a significant difference exists between the selected variables of student perception with respect to academic support system in educational institutions. The findings of this study will serve as important inputs for higher technical educational institutions in identifying the key factors for students to increase their level of satisfaction. Results also acts as guidelines to academic policy makers and implementers to develop certain strategies to deal with and progress the quality of work environment and academic support system to increase the level of satisfaction among the students.

**Key words:** Student perception, Higher educational institutions, online learning, COVID-19, pandemic, Academic support system, student satisfaction

### **Introduction**

The COVID-19 pandemic, whose flare-up occurred in March 2020, has changed human being lives all over the world. Governments have chosen to move numerous regular policies and standard operating procedures, like work or education, online to forestall the spreading of the virus (Strzelecki, Azevedo, & Albuquerque, 2020). People are restricted not to move out of their homes, maintaining social distancing, wearing masks, sanitizing their hand for some time. Since the primary reports affirming instances of 2019-nCoV and passing brought about by the virus, a year has passed (Staszkiwicz, Chomiak-Orsa, & Staszkiwicz, 2020). In this unprecedented situation as we were probably aware that, learning offline is not possible for some days until and unless this pandemic leaves. The procedure of self-learning goes on through one's life. An educational institution has a direct impact not just on the improvement of skills, learning and capacities of students yet additionally escort to an expansion in national annual production and gross generation of each nation.

We comprehend that education plays a critical job in every society in preparing students for future age who are all the property of a nation. Higher educational institutes define the basic framework of education where schooling gives us the rudiments (Pagach, & Wiczorek-Kosmala, 2020). We specialise in fields of our interest during degree courses, the number of educational environments offering various courses and those offering educational institutions are increasing by the day. These professional courses help earn specialized education proven to be of great help for many. The primary inquiry presently isn't the means by which long the pandemic will last, but instead what sway it will have on the regular day to day existences of thousands of individuals all throughout the planet, and regardless of whether this effect will be perpetual (Pagach, & Wiczorek-Kosmala, 2020).

The satisfaction of customers is regarded as a strong tool for the attainment of competitive advantage in any business atmosphere (Alzamel, 2014). Satisfied students are more productive, confident, and resourceful in their academic, life endeavour and academic activities determine student satisfaction. According to DeShields, Kara, and Kaynak (2005) skills developed such as critical thinking and moral awareness along with preparation for the future are important factors influencing student satisfaction. The objective of an education is not only to teach knowledge but also to enhance the student's skill set and academic performance (Elliott, 2002).

One of the fields contacted by the COVID-19 pandemic is educational institutions. The shift to remove learning after the pandemic episode is an around the world perceptible reality (Staszkiwicz, Chomiak-Orsa, & Staszkiwicz, 2020). Albeit a portion of the schools, just as the colleges, utilized distant learning before the pandemic, it was not mandatory it and did not focus on the whole teaching proces. (Rizun, & Strzelecki, 2020). Regarding the importance of the educational environment and their effect on the educational satisfaction and comfort of students and teachers, all experts are unanimous. However, insufficient emphasis is put on the psychological aspect and effects of the educational environment on the educational satisfaction of students and teachers when an educational space is designed. Regarding the importance of the educational environment, it is ending that the educational environment is the second home for faculty and student they spend maximum hours (Patricia, & Aguilera-Hermida, 2020).

If educational environments are not appropriately designed, that is the necessity for the welfare of body and spirit; it becomes boring places that are unbearable (Rizun, & Strzelecki, 2020). Concerning the importance of educational environments in promoting quality of education and learning, many researchers have been made an attempt to understand the scenario. Higher education plays a crucial role in growth and development of a nation by effective utilization of dynamic, intellectual, human and technical skill set of human resource (Siron, Wibowo, & Narmaditya, 2020). This study aims to investigate the factors affecting the student perception about academic support system in educational institutions.

### **Literature Review**

Since the COVID-19 pandemic flare-up, considers have been led around the world to investigate not just the colleges' and universities reactions to the new circumstance (Aucejo, French, Ugalde Araya, & Zafar, 2020) yet additionally its effect on students and teachers. Investigations for the most attentive the quality of students' life during a pandemic (Rizun, & Strzelecki, 2020, Crawford et al., 2020). World over, studies have made known that education is the most powerful instrument for the development of a nation. Higher education, in particular, is measured to be an influential tool for transforming the economy of a country and is believed as a long term social venture for intellectual and cultural development, social consistency, equity, and integrity.

The interaction of internet learning or online learning itself (Aristovnik et al., 2020) and the effect of the pandemic on the circumstance of higher education institutions just as the portability of students (Wu, Chang, & Sun, 2020). Higher educational institutions are considered as the highest source of knowledge and responsiveness production institutions, which train the workforce for different fields of life. Therefore, the quality-teaching staffs is the foundation of a flourishing educational system as the HTEI teaching staff role is essential in providing education, creating knowledge, enriching the national customs and employing the rational, intellectual, and teaching skills to educate and empower the students.

Colleges and higher education institutions have confronted more complex circumstances during the COVID-19 pandemic particularly those requiring extraordinary gear, labs, or eye to eye contact, e.g., clinical students with patients. A few analysts have seen that online learning can be hazardous for courses where research facility presence is required, such as drawing, science, electronics, hardware (Tanveer, Bhaumik, Hassan, & Ul-Haq, 2020). There are a few motivations to be careful while applying the satisfaction approach in advanced education. There is a contrast among organizations and subject-fields concerning the most significant STS factors (Wiers-Jenssen et al., 2002). Also, prior studies (Alzamel, 2014) concluded that quality of education, cost of education, nature of the learning condition, staff evaluation and conveyance of administration, and acknowledgment of the organization have an effect on student satisfaction.

Similarly other researchers have expressed their view that financial elements, parent's instructive foundation salary (Astin and Oseguera, 2005), money related issues (Astin and Oseguera, 2005) and public activity (Roberts and Styron, 2010) higher education challenges and e-learning. (Bhagat, & Kim, 2020; Alqahtani, & Rajkhan, 2020). Then again, scientists found that utilizing Massive Online Open Courses MOOC for showing reporting and correspondence has a positive potential, as far as utilizing innovation and further developing intelligence and interactivity among students and tutors (Mok, Xiong, Ke, & Cheung, 2020). After the episode of the COVID-19 pandemic, colleges and schools all throughout the planet were closed down and the online learning for each subject or course has become a day by day practice. This change constrained the two instructors and students to adjust to another reality, in spite of the issues the two of them encountered (Aristovnik et al., 2020).

Elliott and Shin (2002) recognized a few measurements which decide STS for example; relationship with staff, positive emotions about their study hall and social cooperation, and a feeling of fitting in with the campus culture. A huge relationship exists between STS, maintenance, and institutional objectives (Almaiah, Al-Khasawneh, & Althunibat, 2020). A few exploration examines stressed that departmental culture and atmosphere have altogether decided understudy learning and satisfaction (Umbach and Porter, 2002). Lipka, Forkosh, and Meer (2019) studied post-secondary school students with learning disabilities; results indicated that academic support system enhances the learning ability, which in turn leads to STS.

### **Methodology**

Data has been collected from students from higher technical educational institutions. The present study has applied a stratified and simple random sampling technique to depict samples from the universe to collect the views of the respondents.

### ***Data Collection & Procedure***

The objectives of the present study have been achieved through a combined data methodologies the literature review which is secondary data and questionnaire administered which is the primary data. For all the items the response format was based on a five-point Likert scale, ranging from 1 "strongly disagree" to 5 "strongly agree". A structured questionnaire was distributed among 250 students. The percentage of valid response rate from the total number of questionnaires received is 75% (N =187) after not including non-response and unfinished questionnaires. A researcher should attempt to attain a response rate of at least 60 % to receive participant's responses of the sample (Punch, 2003). The present study has integrated secondary data from journals, case studies, research reports, articles, books, and other related documents available in websites. The researcher has tested content validity before the endorsement and usage of the research tool for data collection. To measure the scales reliability, the present study has examined internal consistency reliability. Coefficient alpha or Cronbach's  $\alpha$  is used to calculate the internal consistency reliability. The coefficient alpha varies from 0 to 1, and a value of 0.6 or less than generally point out in most of the cases as per the results unsatisfactory internal consistency reliability.

### ***Measures***

This scale was a self-designed questionnaire, which was developed by the researcher based on constructs defined in the literature (Bolliger & Martindale, 2009; Noel-Levitz, 2006; Sahin & Shelley, 2008). The instrument was used for this study due to its added benefit of measuring students' perception towards academic support system as well as their level of satisfaction with these factors. The instrument with 21 items was piloted prior to the data collection phase and had a reliability coefficient of .830.

### **Results & Discussion**

Academic success enhances personal confidence and status, which helps the students to retain in their future life. The sufficient facilities, which include textbooks, libraries, teaching materials, and learning, are one of the factors that facilitate students toward academic success. Martirosyan et al. (2014) also reported in his study that there is a significant relationship exists student level of satisfaction and academic support system.

**Table 1. Descriptive Statistics**

N	Minimum	Maximum	Mean	Std. Deviation
187	1.00	5.00	3.02	1.19
187	1.00	5.00	3.08	1.20
187	1.00	5.00	3.03	1.18
187	1.00	5.00	3.08	1.17

Multiple regression analysis was conducted to identify the parameters of academic support system that significantly predict student level of satisfaction. The model summary shown in table 2 provides the value of R<sup>2</sup> as .312, which implies that the parameters of academic support system explain 31.2 % of the observed variability in student perception. The remaining 68.8 %, not explained by this particular variable, which might be related to other factors, which are not explained in this particular model. The adjusted R<sup>2</sup> is a customized measure and has a value of .309 (close to the value of R<sup>2</sup>), thus representing the generalizability of the model. The F value (F=126.813, p <.001) emphasize that the variance explained by the predictor variable are highly significant. The examination of the regression coefficients reveal that the effect of academic support system on student satisfaction was strong and significant ( $\beta = .558, p <.01$ ). Thus, H11 is supported.

**Table 2. Model Summary, ANOVA, Coefficients and Collinearity Statistics**

**Model Summary**

R	R Square	Adjusted Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.558 <sup>a</sup>	.312	.309	.42409	.312	126.813	1	186	.000

a. Predictors: (Constant), Academic Support system

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	22.808	1	22.808	126.813	.000 <sup>b</sup>
Residual	50.359	186	.180		
Total	73.167	187			

a. Dependent Variable: Student Satisfaction

b. Predictors: (Constant), Academic Support system

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.106	.074		28.273	.000		
Academic Support	.258	.023	.558	11.261	.000	0.684	1.475

a. Dependent Variable: Student Satisfaction

The t-value is the measures of whether the predictor is making a significant contribution to the model. The t-values connected with the beta coefficients are important which give details of the academic support system parameter towards student perception. The collinearity statistics include the tolerance and variance inflation factor (VIF) that depict the degree of interrelation among independent variables and the inflation of variances in the regression coefficients due to interrelation among independent variables respectively. The tolerance index should be greater than .2, where as in terms of VIF index it should be less than 10 (Field, 2009). The tolerance index is .684, and the VIF index is 1.475, which reveals the absence of multicollinearity among the items under academic support system

In today's rapidly changing academic environment, technology advancement, social and demographic inclination, and globalization, the sustainability of an educational institution in the long term is a challenging task. To retain the students in educational institution at this pandemic and new normal work hours is a challenging task for management (Adedoyin, & Soykan, 2020). Educational institutions must bridge the gap between perception of students towards academic support system and its impact on their level of satisfaction. Dissatisfied students are not willing to interact with others, depressed, increased absenteeism, and intention to quit the institution (Longwell-Grice & Longwell Grice, 2007; Jenkins et al., 2013). Those students who are not satisfied with the academic support system seem to be more depressed and anxious which in turn leads to internet addiction and has a strong negative effect on academic performance. The elaboration provided in the foregoing sections reveals that higher technical education in India has seen remarkable growth over the past few decades in terms of both numbers of students and the number of institutions (Kakada, & Deshpande, 2021).

### Conclusion

Students' experience in the process of getting academic support from the institution makes them believe that they will learn more remotely and gain knowledge than during classroom activities. Their high computer skills, technical skills and e-learning skill explore more possibility and relevant data that is prerequisite for studies. Students are not worry that online learning can cause them technical difficulties (related to the use of tools). The perception of students about academic support at this times of online learning impact their behaviour has a positive effect on level of satisfaction. In addition to this, research also indicates that stakeholders such as administrators, policymakers, and educational consultants should be careful to include academic support system factors, which are the determinants student satisfaction, and benefits for growth and development.

### References

1. Adedoyin, O.B.; Soykan, E. Covid-19 pandemic and online learning: The challenges and opportunities. *Interact. Learn. Environ.* 2020, 1–13.
2. Almaiah, M.A.; Al-Khasawneh, A.; Althunibat, A. Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Educ. Inf. Technol.* 2020, 25, 5261–5280.
3. Alqahtani, A.Y.; Rajkhan, A.A. E-learning critical success factors during the COVID-19 pandemic: A comprehensive analysis of e-learning managerial perspectives. *Educ. Sci.* 2020, 10, 216.
4. Alzamel, S. (2014). Factors that influence student satisfaction with international programs in institutions of higher learning: A proposed case study of University of Dayton. *International Journal of Global Business*, 7(1), 15.
5. Aristovnik, A.; Keržič, D.; Ravšelj, D.; Tomaževič, N.; Umek, L. Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability* 2020, 12, 8438.
6. Astin, A. W. (1993). Diversity and multiculturalism on the campus: How are students affected?. *Change: The Magazine of Higher Learning*, 25(2), 44-49.
7. Aucejo, E.M.; French, J.; Ugalde Araya, M.P.; Zafar, B. The impact of COVID-19 on student experiences and expectations: Evidence from a survey. *J. Public Econ.* 2020, 191, 104271.
8. Bhagat, S.; Kim, D.J. Higher education amidst COVID-19: Challenges and silver lining. *Inf. Syst. Manag.* 2020, 37, 366–371.
9. Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance education*, 30(1), 103-116.
10. Chen, T.; Peng, L.; Yin, X.; Rong, J.; Yang, J.; Cong, G. Analysis of user satisfaction with online education platforms in China during the COVID-19 pandemic. *Healthcare* 2020, 8, 200.
11. Crawford, J.; Butler-Henderson, K.; Rudolph, J.; Malkawi, B.; Glowatz, M.; Burton, R.; Magni, P.A.; Lam, S.

- COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *J. Appl. Learn. Teach.* 2020, 3,9–28.
12. DeShields, O., Kara A., & Kaynak, E. (2005) Determinants of business student satisfaction and retention in higher education. *International Journal of Educational Management*, 19(2), 128-39.
  13. Elliott, K. M., & Shin, D. (2002). Student satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, 24(2), 197-209.
  14. Field, A. (2009). *Discovering Statistics Using SPSS*, Third Edition.
  15. Kakada, P., & Deshpande, Y. M. (2021). Working conditions and effective supervision: Does it matter for engineering faculty job satisfaction. *The International Journal of Electrical Engineering & Education*, 58(2), 101-112.
  16. Lipka, O., Forkosh Baruch, A., & Meer, Y. (2019). Academic support model for post-secondary school students with learning disabilities: student and instructor perceptions. *International Journal of Inclusive Education*, 23(2), 142-157.
  17. Longwell-Grice, R., & Longwell-Grice, H. (2008). Testing Tinto: How do retention theories work for first-generation, working-class students?. *Journal of College Student Retention: Research, Theory & Practice*, 9(4), 407-420.
  18. Martirosyan, N. M., Saxon, D. P., & Wanjohi, R. (2014). Student satisfaction and academic performance in Armenian higher education. *American International Journal of Contemporary Research*, 4(2), 1-5.
  19. Mok, K.H.; Xiong, W.; Ke, G.; Cheung, J.O.W. Impact of COVID-19 pandemic on international higher education and student mobility: Student perspectives from mainland China and Hong Kong. *Int. J. Educ. Res.* 2021, 105, 101718.
  20. Pagach, D.; Wiczorek-Kosmala, M. The Challenges and Opportunities for ERM Post-COVID-19: Agendas for Future Research. *J. Risk Financ. Manag.* 2020, 13, 323.
  21. Patricia Aguilera-Hermida, A. College students' use and acceptance of emergency online learning due to COVID-19. *Int. J. Educ. Res. Open* 2020, 1, 100011.
  22. Rizun, M.; Strzelecki, A. Students' acceptance of the COVID-19 impact on shifting higher education to distance learning in Poland. *Int. J. Environ. Res. Public Health* 2020, 17, 6468.
  23. Siron, Y.; Wibowo, A.; Narmaditya, B.S. Factors affecting the adoption of e-learning in Indonesia: Lesson from Covid-19. *J. Technol. Sci. Educ.* 2020, 10, 282.
  24. Staszkiwicz, P.; Chomiak-Orsa, I.; Staszkiwicz, I. Dynamics of the COVID-19 contagion and mortality: Country factors, social media, and market response evidence from a global panel analysis. *IEEE Access* 2020, 8, 106009–106022.
  25. Strzelecki, A.; Azevedo, A.; Albuquerque, A. Correlation between the Spread of COVID-19 and the Interest in Personal Protective Measures in Poland and Portugal. *Healthcare* 2020, 8, 203.
  26. Tanveer, M.; Bhaumik, A.; Hassan, S.; Ul Haq, I. Covid-19 pandemic, outbreak educational sector and students online learning in Saudi Arabia. *J. Entrep. Educ.* 2020, 23, 23.
  27. Umbach, P. D., & Porter, S. R. (2002). How do academic departments impact student satisfaction? Understanding the contextual effects of departments. *Research in Higher Education*, 43(2), 209-234.
  28. Wu, S.-J.; Chang, D.-F.; Sun, F.-R. Exploring college student's perspectives on global mobility during the COVID-19 pandemic recovery. *Educ. Sci.* 2020, 10, 218.