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Students' Perception Towards Online Learning at University During COVID-19 in Nepal

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Abstract

The COVID-19 pandemic has forced the closure of educational institutions worldwide. The study reports the students' perception of online learning during the COVID-19 pandemic. The research was constructed using a descriptive research design. Data were obtained from the 225 students of Tribhuvan University, Kathmandu University, Purbanchal University, Pokhara University, and Rajarshi Janak University through simple random sampling techniques and entered into SPSS version 20 for the analysis. The result revealed that online learning was less effective than physical learning. The majority of respondents, 69 % at each university, state that online learning was less effective than physical learning. In contrast, 19 % believe it was more successful, a nd12 % believe it was the same. It is probably due to a lack of genuine engagement and feelings of isolation that impeded online learning. However, M.Phil. and Ph.D. students were enthused about online learning. They considered online learning to be precious. It also found that students at Kathmandu University felt online learning was beneficial. Several elements, including teachers, students, management, and government legislation, influence online learning success, particularly pandemics.

Keywords: - COVID-19, Online Learning, Students Perception, University

1. Background of the Study

COVID-19, a member of the severe acute respiratory syndrome (SARS) coronavirus-2 (SARS-CoV- 2) family, first surfaced in Wuhan, the capital city of Hubei province in the People's Republic of China, in December 2019, and has drastically changed global perceptions of online learning. In the end of 2019, the WHO China Country Office received notification of cases of pneumonia with uncertain etiology in Wuhan, Hubei Province, China. China's national authorities reported 44 case-patients with pneumonia of unclear cause to WHO between December 31, 2019, and January 3, 2020. The causative agent was not discovered throughout this period. The World Health Organization (WHO) proclaimed

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the virus an international public health emergency and a pandemic (WHO, 2020) on January 31, 2020. During the COVID-19 pandemic, businesses, universities, and schools worldwidewere shut down. UNESCO has released the data on school/college closures affecting 1.5 billion children and youth in 195 nations, ranging from pre-primary to higher education. Even though this number is decreasing, 1.3 billion students in 186 countries remain unable to attend school (UNESCO, 2020).

Most colleges throughout the world have begun to offer their courses online using various teaching-learning technologies (Acharya *et al.,* 2020; Gautam and Gautam, 2021; Gopal *et al.,* 2021; Imsa-ard, 2020; Khan *et al.,* 2020; Sharma*et al.,* 2020; Thomas, 2020). Across the globe, the mode of teaching-learning activities is being forced to shift from physical classroom teaching to virtual online teaching. Regardless of other countries, Nepal is affected by COVID-19, which has resulted in the loss of regular college activities for over 441,819 students (UGC, 2019), and universities have been compelled to postpone examination and admission schedules. The COVID-19 has adversely affected the education sector.

In the current COVID 19 pandemic condition, the contribution of information technology has gained pace due to the closure of educational institutions, which poses barriers to students' learning. Information technology serves as a solution for the continuous learning process during quarantine period through creative and learning management systems. It has allowed educators to adopt Information Technology solutions for teaching and evaluating students' completion of course work. Different stakeholders, such as instructors, students, and administrators, were working together to make the most use of technology and ensure an efficient learning experience (Khan *et al.,* 2020).

Institutions and students worldwide have embraced and valued the online learning platform. The ease of use, time flexibility, customizable environment from instructor and management are the reasons for its acceptability. Despite its numerous benefits, online learning has several drawbacks, including social isolation and lack of face-to-face interaction, technological knowledge, skills, internet problem, heavy investment to purchase mobile, tablet, or laptop, and learning autonomy (Imsa-ard, 2020; Khan *et al.,* 2020; Thomas, 2020). According to UNESCO, the pandemic had disrupted learning for 9 out of 10 kids (87 percent) worldwide, preventing thousands of pupils from attendingschool or college (UNESCO, 2020). Online learning was never adopted and acknowledged as actual learning or the formal manner of education before this ongoing pandemic forced the world to resort to electronic learning alternatives.

In Nepal, there are eleven full universities: Tribhuvan University (TU), Nepal Sanskrit University (NSU), Kathmandu University (KU), Purbanchal University (PU), Pokhara

University (PokU),Lumbini Bauddha University (LBU)), Far-Western University (FWU), Mid-Western University (MWU), Agriculture and Forestry University (AFU), Nepal Open University, and Rajarshi Janak University, as well as four medical academies (NAMS), B.P. Koirala Institute of Health Sciences (BPKIHS), Patan Academy of Health Sciences (PAHS), and Karnali Academy of Health Sciences (KAHS) (UGC, 2019).

There are 1141 TU campuses (61 constituents and 1080 affiliated campuses). PU, PokU, and KU are the other prominent universities in student numbers. These institutions have over 18000 students and more than 20 campuses: PU has 116 (8.1%) campuses, PoKU has 67 (4.68%) campuses, and KU has 24 (1.68%) campuses. Four hundred forty-one thousand eight hundred nineteen (441,819) students enrolled in higher education in the 2018-19 academic years (UGC, 2019).

In terms of provinces, 621 (43.37 %) campuses are in Bagmati Province, 185 (12.92 %) in Lumbini Province, 196 (13.69 %) in Province One, 123 (8.59 %) in Province Two, 151 (10.54 %) in Gandaki Province, 95 (6.63 %) in Sudurpaschim Province, and 61 (4.26 %) campuses in Karnali Province. In terms of the number of students, TU has 335,543 (75.95 %) students, PokU has 30,542 (6.91 %) students, PU has 27,527 (6.23 %) students, and KU has 18,356 (4.15 %) students and RJU has 153 (0.035 %) students enrolled in universities (UGC, 2019).

Tribhuvan University, Nepal's oldest and largest university, serves students from various socioe-conomic backgrounds, particularly the poor, middle, and high classes. All universities in Nepal, except a distance mode university, have used the virtual class teaching mode for almost all of their programs before Covid-19 (UGC, 2019). However, online learning is new to every university except distance mode university. All stakeholders, including instructors, students, administrators, and the government, are still adjusting to this unique teaching and learning approach (Gautam and Gautam, 2021; K.C., 2020; Sharma *et al.,* 2020).

In the current Covid-19 situation of the virtual teaching-learning process, it is critical to explore learners' perceptions and explain their preferences towards this novel teaching methodology. The degree of adaptation and, if any, amendments they would like to suggest for the same, or their desire to reject it entirely and any improvements (Erliana*et al.,* 2021; Khan *et al.,* 2020; Thomas, 2020; Timperly *et al.,* 2007).

Faculty, administrative personnel, students have difficulties and hurdles in deciding on an online mode of education due to a lack of prior preparation and convincing institutional infrastructure. Therefore, this study rigorously addresses major research questions, which are as follows.

- What are the present statuses of students' perception of online learning at University during Covid-19?
- Do any differences between students' perception by demography and geography features?
- Are students' perceptions affected by the level of education?

On the basis of research questions, the research objectives are as follows:

- To assess the present status of students' perception of online learning at University during Covid-19.
- To assess students' perception by demography and geography features.
- To evaluate students' perception of the level of education.

Online learning becomes effective and successful when instructors, learners, and management are entirely involved in the online teaching and learning process. Building an online education system is significant to create an education-friendly curriculum, updated technology, motivated faculty, and a proactive management system. Thus, active involvement and teamwork of all stakeholders areessential to minimize the potential adverse effect of the move from physical learning to online learning. As this study was limited to only five major Universities, more research should be done on the entire university and a global estimate.

2. Literature Review

Online education is still relatively new, constantly evolving due to fast-changing technologies. All online educators must put more effort into integrating pedagogy with technologyto improve student learning (Khan *et al.,* 2020). Barbour (2006) expressed concern about the digital divide and the impact of different countries' pedagogical techniques on students' online learning experiences. Digital readiness refers to a country's availability and utilization of information technology and infrastructures. The number of studies investigating students' perspectives of online learning has expanded in recent years due to technological improvements. Due to Covid-19, there has been a boom in research into students' perceptions of online learning.

In Nepal, Sharma *et al.* (2020) found 82.4% of the students of Chitwan Medical College felt that they needed to be updated with the latest technology. They also discovered that the majority of students were pleased with the timely response from the concerned faculties and departments over the internet and the content of the lessons. One of the essential variables in students' acceptance and success of the learning process was the efficiency and efficacy of e-learning-based components.

Paudel (2020) conducted a study on the perspectives of 280 teachers and students from five universities in Nepal, including Tribhuvan University, Kathmandu University, Mid-western University, Far-western University, and Pokhara University. The participants found online education beneficial primarily for promoting online research, connecting practitioners to the global community, obtaining an extensive and authentic knowledge resource. However, they identified time management skills, more freedom for teachers and learners, and reliable internet at work as extreme challenges. The study also discovered that time management skills, technological preparedness, and computer literacy are essential attributes for online education practitioners.

Tribhuvan University and Kathmandu University in Nepal, a few organizations, have begun to provide teacher training. In addition, university administrators must ensure that every student has access to technology and the internet (Dawadi *et al.,* 2020). All stakeholders must actively participate and collaborate to reduce the potential adverse effects of the move from traditional learning to e-Learning (K.C., 2020).

In India Khan *et al.* (2020) identified the value of e-learning in the COVID-19 pandemic. E-learning has evolved to increase the learning process, with social media potentially enhancing the learning output even further. Students believed that online programs were appealing because of their flexibility and convenience. Still, broadband connectivity concerns in remote locations make it difficult for students to participate in online learning efforts (Muthuprasad *et al.,* 2021).

Yan *et al.* (2021) conducted a province-wide survey in China to learn about Students' experiences with online learning during the COVID-19 pandemic. They discovered that online learning experiences change significantly between school years. Mollah and Parvin (2020) researched online higher education during the Covid-19 Pandemic in Bangladesh. The results demonstrated that online classes were useless for a long time because higher education was highly technical, professional, specialized, based on practical, lab tests, and field survey data. Expensive internet connections and connection loss were two of the most typical problems students and teachers confront. Khan *et al.(*2021) also found online classes influencing mental health.

According to the logistic model in Thailand, Thomas (2020) discovered that students who were not freshmen or majored in information technology were substantially less likely to be active e-learning users. Ard (2020) found most students preferred face-to-face classrooms over online learning, and the majority were unwilling to learn online in the future.

Alsoud and Harasis (2021) studied Jordanian university students' e-learning experiences and e-learning readiness throughout the epidemic. They discovered that students from remote

and impoverished locations encountered numerous problems, including limited technical access, poor internet connectivity, and difficult study conditions. Romania established a method to prevent and control the spread of the SARS-COV2 virus. Traditional courses have been temporarily discontinued at schools, high schools, and universities while transitioning to an online education model (Butnaru *et al.,* 2021).

The most critical concerns were technological issues, followed by teachers' lack of technical abilities and instructional styles that were not effectively fitted to the online context (Coman *et al.,* 2020). Computer-assisted education, distance learning, and the internet were not commonly used in agriculture programs due to a lack of resources (Shinn, 1997). Technical challenges with technical gadgets may also impact students' online learning perceptions (Acharya *et al.,* 2020; Khan *et al.,* 2020; Mollah and Parvin, 2020; Paudel, 2020; Yan *et al.,* 2021).

Aristovnik *et al.* (2020) researched how pupils see the global impacts of the first wave of COVID-19 crisis in early 2020 on many elements of their lives. Despite the international shutdown and move to online learning, the study found that students were most satisfied with the assistance offered by teaching staff and their university contacts, based on a sample of 30,383 students from 62 countries. Students were primarily concerned about their future careers, studies, everyday boredom, anxiety, and frustration. There were also disadvantages that the online teaching environment cannot be recognized due to inefficiency of computer skills and the perception of an immense burden (Gherheș *et al.,* 2021).

Online learning was less appealing to students and less effective in learning and teaching than face-to-face learning. Furthermore, online education has various drawbacks, such as the lack of a suitable internet network and access to online learning. Students felt less driven to learn online (Azhari and Kurniawati, 2021).

3. Methodology

The current study was conducted using a quantitative method based on the survey method. A descriptive research approach was adopted to achieve research objectives. The study's populations were students from the oldest Tribhuvan University, Kathmandu University, Purbanchal University, Pokhara University, and newly established Rajarshi Janak University. The research sample contained 220 students from the aforementioned significant universities. According to Sekaran and Bougie (2016), sample greater than 30 but smaller than 500 is adequate for the research. Cooper and Schindler (2014) suggested sample size of at least 385 respondents for the research. The sample size accepted scientific standard for the study (Krejcie and Morgan, 1970). A structured questionnaire called seven-point Likert Scales designating "7 – strongly agree" to "1 – strongly disagree" is used as the research

tool, which was prepared in Google Docs. The information was gathered using a simple random sampling techniques via an internet poll between February and March 2021. Internet surveys are less time-consuming, cost less money, and maybe finished in days rather than weeks or months (Paudel, 2020). The descriptive approach was used to analyzed data after entering it into a statistical package for the social sciences.

4. Data Analysis, Results, and Discussion

The study includes the experience of students of TU, KU, PU, PokU and the newly established RJU. Table 1 illustrates the results of the questions on gender, age group, marital status, employment status, faculty, and system with levels of study.

Table 1: Demographic Profile of Respondents

Demographic Status		Bachelor's Degree	Master Degree	M. Phil Degree	Ph D. Degree	Total %
Gender	Male	65	45	5	5	53.33
	Female	53	44	4	4	46.67
Total		**118**	**89**	**9**	**9**	**100**
Age Group	15-24	107	22	0	0	57.33
	25-34	8	59	4	0	31.56
	35-44	3	8	3	1	6.67
	Above 45	0	0	2	8	4.44
Total		**118**	**89**	**9**	**9**	**100**
Marital Status	Unmarried	111	59	4	0	77.33
	Married with no child	7	20	0	0	12.00
	Married with children	0	10	5	9	10.67
Total		**118**	**89**	**9**	**9**	**100**
Employment status	Private Employed	20	28	5	0	23.56
	Government Employed	2	3	3	9	7.56
	Unemployed	87	50	0	0	60.89
	Other	9	8	1	0	8
Total		**118**	**89**	**9**	**9**	**100**
Faculty	Science	21	48	0	5	32.89
	Management	88	39	5	1	59.11
	Humanities	3	2	4	3	5.33
	Education	6	0	0	0	2.67
Total		**118**	**89**	**9**	**9**	**100**
System	Annual	30	3	1	2	16.00

	Semester	88	82	8	7	82.22
	Trimester	0	4	0	0	1.78
Total		**118**	**89**	**9**	**9**	**100**

Source: Online Survey, 2021

Table 1 shows a profile of the survey participants' personal information. The majorities of students were males 65 with 53.33%, between the ages of 15 to 24 with 107 with (57.33 %), unmarried 111 with 77.33 %, unemployed 87 with 60.89 %, and enrolled in a management program 88 with 59.11 % in a semester schedule. In terms of study levels, most students of bachelor's degree 118 with 52.44 % followed by master's 89 with 39.56%, Mphil, and Ph.D. degrees 9 with 4%. The geographical features of responders from various universities are shown in Table 2.

Table 2: Geographic Profile of Respondents

Province	**University**					**Total**
	Tribhuvan University	**Kathmandu University**	**Purbanchal University**	**Pokhara University**	**Rajarshi Janak University**	
1	14	3	5	2	0	24
	58.30%	12.50%	20.80%	8.30%	0.00%	100.00%
2	17	7	27	3	16	70
	24.30%	10.00%	38.60%	4.30%	22.90%	100.00%
Bagmati	76	9	1	5	0	91
	83.50%	9.90%	1.10%	5.50%	0.00%	100.00%
Gandaki	5	1	0	5	0	11
	45.50%	9.10%	0.00%	45.50%	0.00%	100.00%
Lumbini	15	2	0	0	0	17
	88.20%	11.80%	0.00%	0.00%	0.00%	100.00%
Karnali	4	1	0	0	0	5
	80.00%	20.00%	0.00%	0.00%	0.00%	100.00%
Sudurpashchim	6	1	0	0	0	7
	85.70%	14.30%	0.00%	0.00%	0.00%	100.00%
Total	**137**	**24**	**33**	**15**	**16**	**225**
	60.90%	**10.70%**	**14.70%**	**6.70%**	**7.10%**	**100.00%**

Source: Online Survey, 2021

Table 2 indicates that most students 137 with 60.90 % from each province studying at TU except Province 2. The majority of Province 2 students, 27 with 38.6 %, are studying at PU, followed by TU with 24.3 %, RJU with 22.90 %, KU with 12.50 %, and PokU with 8.30 %. All universities in Nepal used the virtual class teaching style for practically all of their programs during Covid-19 (Gautam, 2021). All stakeholders, including instructors, students,

administration, and the government, are still adjusting to this new teaching, learning approach. Students' perceptions towards online learning are depicted in Figure 1.

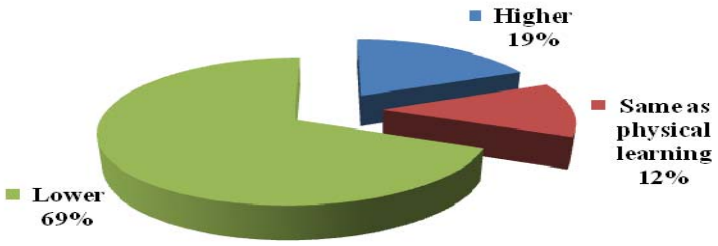

Figure 1: Overall Students' Perception towards Online Learning

Figure 1 shows that 69 % of students believe online learning is less effective than physical learning, 19 % believe it is more effective, and 12 % believe it is the same. Paudel (2020) reported a significant disparity between online and physical classes in the context of Nepal.

Table 3: *Perception toward Online Learning by Province*

Province	Perception Toward Online Learning			Total
	Higher	Same as physical learning	Lower	
1	1	3	19	23
	4.30%	13.00%	82.60%	100.00%
2	15	11	48	74
	20.30%	14.90%	64.90%	100.00%
Bagmati	18	12	61	91
	19.80%	13.20%	67.00%	100.00%
Gandaki	3	0	3	6
	50.00%	0.00%	50.00%	100.00%
Lumbini	3	1	13	17
	17.60%	5.90%	76.50%	100.00%
Karnali	1	0	4	5
	20.00%	0.00%	80.00%	100.00%
Sudurpashchim	1	1	7	9
	11.10%	11.10%	77.80%	100.00%
Total	**42**	**28**	**155**	**225**
	18.70%	**12.40%**	**68.90%**	**100.00%**

Pearson Chi-square value 9.99, P = 0.617

Source: Online Survey, 2021

Table 3 demonstrates that most respondents,155 with 68.9 %, believe online learning is less effective than physical learning, the fewest 42 with 18.7 %, believe it is more effective. Very few 28 with 12.40 %believe it is the same as physical learning. Since P-value 0.617

was more significant than the significance level, i.e., 0.05(5%), there was no significant relationship between the province and perceptions of online learning. Limited technological infrastructure, socio-economic factors, a lack of experience conducting assessment, supervision in an online mode, increased workload for teachers, education staff, and incompatibility with specific subject matters or cultures have all been identified as challenges by instructors, students, administration, and the government (Alsoud and Harasis, 2021; Gautam and Gautam, 2021; Khan *et al.,* 2021; Thomas, 2020). In this regard, institutions could establish training sessions for teachers, students and programs to encourage favorable perception towards online learning and, implicitly, the quality of the educational process (Coman *et al.,* 2020).

Table 4: *Perception towards Online Learning by University*

University	Perception Toward Online Learning			Total
	Higher	Same as physical learning	Lower	
Tribhuvan	26	16	95	137
	19.00%	11.70%	69.30%	100.00%
Kathmandu	8	1	15	24
	33.30%	4.20%	62.50%	100.00%
Pokhara	2	0	13	15
	13.30%	0.00%	86.70%	100.00%
Purbanchal	4	7	22	33
	12.10%	21.20%	66.70%	100.00%
Rajarshi Janak	2	4	10	16
	12.50%	25.00%	62.50%	100.00%
Total	**42**	**28**	**155**	**225**
	18.70%	**12.40%**	**68.90%**	**100.00%**

Pearson Chi-square value 12.36, P = 0.136

Source. Online Survey, 2021

Table 4 shows that most respondents,155 with 68.90 %at each university, believe online learning is less successful than physical learning, the fewest 42 with 18.70 %, believe it is more effective. However, very few 28 with 12.40 %, believe it is the same. Regarding student perceptions of online learning at KU, 8 students (33.30%) believe that it is beneficial due to its infrastructure, educational strategy, and system assist in becoming acquainted with the online learning system. Therefore, it is critical that every university pay attention to educational methods and learners' concerns while utilizing the online learning system (K.C., 2020). Since P-value 0.136 was more significant than the level of significance, i.e., 0.05 (5%), there was nomeaningful relationship between the several university and perceptions towards online learning.

Table 5: *Perception toward Online Learning by Levels of Study*

Levels of Study	Perception Toward Online Learning			Total
	Higher	Same as physical learning	Lower	
Bachelor's	24	12	82	118
	20.30%	10.20%	69.50%	100.00%
Master's	9	13	67	89
	10.10%	14.60%	75.30%	100.00%
M. Phil	4	3	2	9
	44.40%	33.30%	22.20%	100.00%
Ph D.	5	0	4	9
	55.60%	0.00%	44.40%	100.00%
Total	42	28	155	225
	18.70%	12.40%	68.90%	100.00%

Pearson Chi-square value 22.691, P = 0.001

(Source. Online Survey, 2021)

Students in bachelor's and master's degree programs believe that online learning is less effective than traditional learning, as seen in Table 5. While M.Phil. and Ph.D. students are eager about online learning. They consider online knowledge to be beneficial. Therefore, learners' level of study, traits, and technological abilities significantly impact students' approach to online learning. Students who are up to date on the latest technology can complete their studies with ease and satisfaction. However, it was also considered that such seminars could not be a long-term alternative for classroom instruction because higher education is primarily based on practical, lab exams, field visits, professional and highly specialized instruction (Mollah and Parvin, 2020). Since P-value 0.001 was less than the significance level, i.e., 0.05 (5%), there was a significant association between the various levels of study and perceptions towards online learning.

5. Conclusion

The lockdown of COVID-19 has caused significant disruptions to academic activities. This research explored students' learning experiences from several Nepalese universities during the COVID-19 pandemic. The results show that online learning is less effective than physical learning.

Most respondents believe online education is less effective than physical learning at each university. The fewest believe it is more effective, and the very least consider it is the same even though students at KU experience differently than others. According to bachelor's and master's degree programs, online learning is less effective than traditional learning. However, M.Phil. and Ph.D. scholars are encouraged about online learning. They believe that online learning is quite advantageous. It revealed a significant relationship between levels of study and online learning perception.

The effectiveness of online learning, particularly in pandemics, is determined by several factors, including instructors, students, administration, and the policy of governments. Therefore, it is regarded as successful teaching when various stakeholders create clear goals.

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