

Attitude toward Online Learning: A Study of Tribal Undergraduate Students Residing in Rural Areas of Kashmir Valley

*¹Sajad Ahmad Mir and ²Shams Kamal Anjum

*¹ Department of Education, BGSB University, Jammu and Kashmir, India.

² Associate Dean & Head, School of Islamic Studies and Languages, BGSB University, Jammu and Kashmir, India.

Article Info.

E-ISSN: 2583-6528

Impact Factor (QJIF): 8.4

Peer Reviewed Journal

Available online:

www.alladvancejournal.com

Received: 19/Dec/2025

Accepted: 23/Jan/2026

Abstract

The present study intended to investigate attitude towards online learning (ATOL) of tribal students pursuing their undergraduate courses at rural degree colleges of Kashmir Valley. Initially, 199 questionnaires related to ATOL were distributed to respondents (92 male and 107 female) through randomization, of which 3.01% questionnaires were received back with half filled. As a result, only 193 usable questionnaires (90 from males and 103 from females) were selected for statistical analysis. Percentage analysis identified a majority of students with moderate ATOL, and differential analysis connoted a significant difference on ATOL between tribal male and female undergraduate students residing in rural areas of Kashmir Valley. Gender digital divide found in the study needs to be discouraged. In light of its major findings, the study offers suggestions for developing e-learning environments.

*Corresponding Author

Sajad Ahmad Mir

Department of Education, BGSB

University, Jammu and Kashmir, India.

Keywords: Attitude, online learning, tribal education, rural Kashmir.

Introduction

Digital initiatives by the government of India and advancements in technology are on the rise. The Digital India Project aims to empower the lifestyle of the general public. In higher education, digitalisation is geared to meet objectives of accessibility, quality, and equity (Mir, 2019). However, the most underprivileged and the most vulnerable section of society i.e., scheduled tribes, are still lagging behind the objectives realised in the digital campaign. The Ministry of Tribal Affairs (MoTA) is responsible for empowering tribals through digitalization. A number of new technology initiatives and projects have been introduced in this regard by MoTA. In the field of education, varied options of learning include blended learning, online learning, and on-campus learning. In the conventional paradigm of on-campus learning, teachers and students engage in physical interaction for the students' overall growth. The sole chance of academic transactions during the COVID-19 outbreak has been made possible through online platforms, and indeed, it is because of this Chinese virus that online learning has become more expansive. Earlier in the pandemic period, open and online learning modes were limited to distance and non-formal agencies of education. However, the internet and web-based

technology have changed the paradigms of formal schooling. Autonomy, accessibility, and flexibility are the chief tenets of online schooling (Dhawan, 2020). Under the shade of 2019 pandemic, Google Classroom, Zoom, Google Meet, Facebook, Whatsapp, Instagram, Moodle, Team, Progress, etc. were the sole mediums used by educators for curriculum transaction processes to ensure the continuation of academic activities (Souheyla, 2020). In the 2019 lockdown period, students believed that having access to the Internet, cellphones, laptops, or tablets was essential for successful online learning (Feroz, 2021). These amenities, which are being investigated in the Kashmir Valley, where unequal socioeconomic strata are being examined, raise questions about whether or not they have been made possible for every student. It becomes exceedingly difficult for the most marginalised groups such as gujjars and bakarwals to make their hand-to-mouth ends meet. Consequently, it is unimaginable for them to afford digital devices for online education. Moderate satisfaction with online learning among second-year undergraduate students (non-tribal) was revealed by Oducado & Estoque (2021), Lal (2021). Low to neutral ATOL due to some practical reasons, including unawareness regarding the new mode of learning, a lack of ICT skills, and

inadequate infrastructure facilities was established by Aneesh, Mathew & Adithya (2021). Furthermore, satisfactory ATOL has been tailored to academic performance of students (Mir & Bhat, 2018; Mir & Paray, 2018; Paray & Mir, 2018). However, the same depends on the behavioural intentions, perceived usefulness and self-efficacy of e-learners (Bhat & Mir, 2020).

NEP (2020) has widened the scope of online education courses/programs and digital repositories at higher education level by minimising the digital divide and maximizing adult literacy rates. However, these online/digital initiatives are particularly challenging to implement in an internet environment that moves slowly. Unfortunately, tribal students who travel frequently and live nomadic lives have very little to no access to the internet. It is worth noting that India is home to the world’s biggest population of scheduled tribes, and their marginalisation and inequity have origins that date back thousands of years. Despite significant advancements following Indian independence, it has been shown that tribal communities' socioeconomic health standards progresses at a snail’s pace.

Significance of the Study

The learning experience becomes pleasurable and satisfying when learners are loaded with a positive attitude. A negative attitude towards learning plants a dissatisfying and annoying note for stakeholders in education.

During and after the COVID-19 pandemic, a sudden pedagogical shift from offline mode to purely online mode without warning has altered the perception and attitude of students towards learning. There are manifold tribal higher education students without smartphone facilities who are vulnerable to developing ineffective study habits for further learning (Mir, 2019). Negative emotional expressions aroused by tribal students due to online learning can exacerbate their psychological wellbeing. This, in turn, affects the academic and social lives of students.

Manifold studies conducted on non-tribal higher education students with respect to online learning attitude have been found in the literature, but no such study on tribal higher education students was found. Generalising the major findings of non-tribal students to those of tribal ones put doubt on objectivity and the ethical arm of research (Sue, 1999).

Hence, in the course of its expansion, consolidation and innovations have been kept vacuumed, and to fill up this gap, researchers have made a humble appeal of beating an unbeaten area. Meanwhile, for the study, tribal undergraduate students are students enrolled in various rural degree colleges of Kashmir Valley for their bachelors programme from semester I to VI in regular mode.

Objective of the Study

- To study and compare ATOL of tribal undergraduate students residing in rural areas of Kashmir Valley with respect to gender and academic stream.

Hypothesis of the Study

- There is no significant difference on ATOL among tribal undergraduate students residing in rural areas of Kashmir Valley with respect to gender and academic stream.

Method and Procedure

Questionnaire based survey has been used for the collection of data.

Population and Sample

Tribal students pursuing higher education in rural degree colleges of Kashmir Valley on regular time basis constituted the population of the study.

A sample of 199 tribal undergraduate students (92 male and 107 female) studying at rural degree colleges of Kashmir Valley on a regular basis has been selected through randomization. However, six questionnaires (two from male and four from female respondents) received back half-filled have been excluded from the study. Three rural degree colleges of Kashmir Valley with highest concentration of tribal population (one each from three geographical regions of Kashmir Valley i.e. one government degree college from south Kashmir, another from central Kashmir and next one degree college from north Kashmir) have been included in the study. From these three selected rural degree colleges, approx. 50% tribal male and female students studying bachelor’s programme from semester I to VI have been taken through proportionate randomization. The breakup of the sample is given below:

Table 1: Data of tribal respondents with their gender and HEI

Name of RDC	Np			Ns			Tr
	Male	Female	Total	Male	Female	Outliers	
GDC Dooru	74	31	105	37	16	04	49
GDC Kangan	42	91	133	21	46	-	67
GDC Kupwara	68	90	158	34	45	02	77
Total	184	212	396	92	107	06	193

HEI= Higher educational institution; RDC= Rural degree college; GDC= Government degree college; Np= Population; Ns= Sample taken; Tr= total respondents chosen for data analysis

After excluding half-filled six questionnaires (outliers), the

sample size becomes 193 with 90 male and 103 female respondents belonging to different academic stream i.e. science (Ns=45), humanities (Ns=68), social science (Ns=48) and commerce (Ns=32) as shown in below given Table 2.

Table 2: Data of tribal respondents with their gender and academic stream

RDC	GDC Dooru								GDC Kangan								GDC Kupwara							
	Science		Hms.		S.Sc.		CAs.		Science		Hms.		S.Sc.		CAs.		Science		Hms.		S.Sc.		CAs.	
Academic Stream	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Gender	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Number	11	04	09	08	05	01	10	01	08	05	09	19	04	22	-	-	09	08	07	16	07	09	11	10

Hms.= Humanities; S.Sc.= Social science; CAs.= Computer applications; M= Male; F= Female; - = Non-availability of academic stream

Tool Used

Self-developed ‘Attitude towards Online Learning Scale’ (ATOLS) has been used to measure the ATOL of tribal undergraduate students. The scale has 20 items with five dimensions. Each dimension has four items with a five-point response varying from strongly agree to strongly disagree. The maximum score is 100 and minimum score is 20 in the scale. ATOLS is attributed with high validity and reliability (r=0.81).

Data Analysis and Interpretation

Raw data was analysed through percentage and t-test measures. Percentage was used to explore the various levels, such as favourable, moderate, and unfavourable attitudes towards online learning, among tribal undergraduate students. A t-test was applied to find out the mean differences between tribal male and female undergraduate students on ATOL.

Table 3: Distribution of ATOL Questionnaires

Gender	Nature of Respondent	Number	Percentage
Male	Full responded	90	45.23
	Partially responded	02	1.01
Female	Fully responded	103	51.75
	Partially responded	04	2.01
Total		199	100

Table 3 demonstrates that 90 tribal male and 103 tribal female undergraduate students residing in rural areas of Kashmir Valley behaved as full respondents. Further, it is to be noted that only fully completed ATOL questionnaires were included for statistical analyses and those that were found partially completed/outliers have been cancelled from the study.

Table 4: Distribution on various levels of ATOL of tribal undergraduate students residing in rural areas of Kashmir Valley

Levels of ATOL	Number	Percentage
Favourable	74	38.35
Moderate	99	51.29
Unfavourable	20	10.36
Total	193	100

Table 4 reveals that 51.29% of tribal undergraduate students residing in rural areas of Kashmir Valley have exhibited a moderate level of ATOL. 38.35% of tribal undergraduate students residing in rural areas of Kashmir Valley have earned favourable ATOL. The major concern is that 10.36% of tribal undergraduate students residing in rural areas of Kashmir Valley have revealed unfavourable ATOL. The findings of Table 4 get clearer under pie chart number 1.

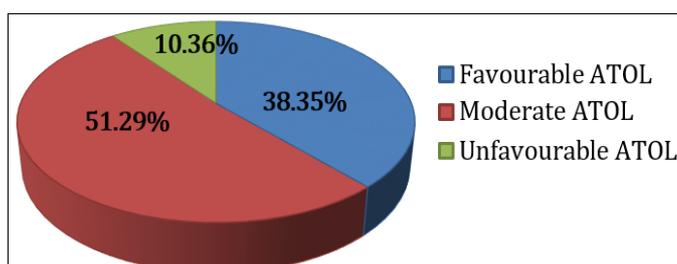


Fig 1: Distribution of tribal undergraduate students on various levels of ATOL

Table 5: Mean differences on ATOL between tribal male and female undergraduate students residing in rural areas of Kashmir Valley

Dimensions	Group	Mean	SD	t-value
Motivation	Male	11.65	2.88	2.84*
	Female	15.12	2.62	
Digital Skills	Male	14.78	3.32	3.36*
	Female	12.68	2.94	
Level of Interaction	Male	14.60	3.45	1.34**
	Female	15.34	2.52	
Subject Comprehension	Male	13.87	3.21	3.55*
	Female	15.72	2.47	
Challenges of online learning	Male	12.90	3.31	5.14*
	Female	15.59	2.42	
ATOLS (Composite)	Male	66.80	16.17	2.86*
	Female	74.45	12.97	

*Significant at 0.01 level; **Not Significant

Table 5 represents tribal female undergraduate students residing in rural areas of Kashmir Valley who are highly motivated toward ATOL possessed high subject comprehension when transacted through various online platforms, but faced more challenges with online learning than their male counterparts. Overall, their ATOL was found more favourable than that of tribal male undergraduate students. Meanwhile, tribal male undergraduate students residing in rural areas of Kashmir Valley had higher digital skills than their female counterparts.

Major Findings

- 51.29% of tribal undergraduate students residing in rural areas of Kashmir Valley have exhibited a moderate level of ATOL, 38.35% with favourable ATOL and 10.36% with unfavourable ATOL.
- ATOL of tribal female undergraduate students residing in rural areas of Kashmir Valley was found more favourable than that of tribal male undergraduate students. However, tribal male undergraduate students were found highly digitally skilled than tribal female undergraduate students.

Discussion of Results

The study concluded that about 10.36% of tribal undergraduate students have an unfavourable ATOL. The factors attributed to this unfavourable attitude among tribal undergraduate students are threefold, i.e., personal, institutional, and familial. First, the tribal students were found to be digitally low literate with inadequate learning styles, unawareness about various online learning platforms, technical phobias, demotivation towards ATOL due to low digital accessibility, low socio-economic background, no electricity supply to their ‘Kothas’ where they reside, and high absenteeism from computer classes. Unfavourable attitude of teachers towards tribal communities, less monitoring from teachers, no proper assessment after instructions, unavailability of computer instructors, disruption of electricity supply in rural colleges, availability of out-dated computer systems, and inadequate design of computer labs are the factors related to institutional ones. Familial factors include a low socio-economic background, no parental pressure for studying, a nomadic life, residences in hilly and far-flung areas, illiterate parents, and the unavailability of smartphones in the family. Students’ ATOL depends on teacher-led and multimedia instructions besides their own impressions, self-efficacies, perceived usages, and behavioural influences (Smith, 2006; Liaw, Huang & Chen, 2007).

Moderate perceptions of ATOL have been revealed by 51.29% of tribal undergraduate students belonging to science and commerce streams. Their parents are mostly working in government sectors, which shifted their residency closer to town areas with almost no electricity disruption issues. Their economic conditions were found to be better. They possessed smartphones and tablets easily to upgrade their self-esteem and influence the peer relationships.

The major reasons behind the low digital skills of tribal female undergraduate students are- absence of smartphone/digital device ownership, lack of familiarity with digital tools, having humanities and social science streams in the bachelors programme with no computer science as a subject of study, parental preference for online learning opportunity vests to their respective sons, low socio-economic background, socio-cultural assumptions about the role and place of women in society, discrimination attitude in the family, irregular access to digital platforms and services, and no certified computer courses.

Conclusion

The J&K tribal community struggles to make ends meet and is extremely impoverished. The tribal higher education students likewise do not have easy access to digital technology. In addition, internet access has been non-existent or very poor in tribal and far-flung areas. Higher education institutions use a variety of online learning tools and data management systems that might be challenging to use in an internet ecosystem with sluggish speeds. As a result, it is important for policymakers to record their policies on the optical fibre network and access for teachers and students. A free digital kit for tribal students shall be documented. Other needy students shall be made eligible for discounted rates on certain internet services. Tribal female undergraduate students encounter more challenges with online learning due to low digital skills and the absence of smartphone ownership in the family. This digital gender divide needs to be addressed immediately with innovative initiatives like making digital gadgets accessible to tribal female students cheaply, coupled with community-based workshops preferably led by female inspectors and tech experts. Furthermore, a sparked concern while going through this study is online safety, and tribal female students need to be acquainted with safety settings, as tribal male students were found more aware than tribal female students about these settings. Online safety measures in this regard must be oriented to tribal students.

To help students build better digital skills and a favourable ATOL, a mandatory training programme for creating and utilising education-focused applications shall be implemented. ICT-integrated curricula must be organised and implemented at the higher education level.

Acknowledgement

The PDF Fellow namely Dr. Sajad Ahmad Mir is the awardee of ICSSR PDF Research Project. This paper is largely an outcome of the PDF Research Project sponsored by the Indian Council of Social Science Research (ICSSR). However, the responsibility for the facts stated, opinions expressed and the conclusions drawn is entirely that of the author.

References

1. Aneesh MS, Mathew A, Adithya PK. Attitude of tribal students towards online classes in Kerala. *Elementary Education Online*. 2021; 20(5):1649-1656.
2. Bhat MS, Mir SA. Social media usage and academic achievement among post-graduate students: A case study of Central University of Kashmir. *Elementary Education Online*. 2020; 19(2):2404-2413.
3. Dhawan S. Online Learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*. 2020; 49(1):5-22. Retrieved from: <https://doi.org/10.1177/0047239520934018>
4. Feroz MS. Covid-19 pandemic and my schooling. Kashmir Horizon, article. 2021. Retrieved from: <https://thekashmirhorizon.com/2021/10/12/covid-19-pandemic-and-my-schooling/> on 12th October, 2021.
5. Lal M. Digital information literacy among tribal with special reference to rural areas of Chhattisgarh. PhD. thesis, Guru Ghasidas Vishwavidyalaya, 2021. Retrieved from: shodhganga.com
6. Liaw SS, Huang HM, Chen GD. Surveying instructor and learner attitudes toward e-learning. *Computers & Education*. 2007; 49(4):1066-1080.
7. Mir SA. ICT integrated higher education: Prospects and challenges. *International Journal of Research in Economics & Social Sciences*. 2019; 9(2):1-4.
8. Mir SA, Bhat MS. Internet usage and academic achievement: School location differences in 10th class students of Kashmir Valley. *Insight Journal of Applied Research in Education*. 2018; 23(1):253-258.
9. Mir SA, Paray AA. Internet usage and academic performance: An empirical study of secondary school students in Kashmir. *International Journal of Computer Sciences and Engineering*. 2018; 6(3):38-41.
10. National Education Policy: Ministry of Human Resource Development, GOI, 2020. Retrieved from: https://www.education.gov.in/sites/upload_files/mhrd/files/NEP
11. Oducado RM, Estoque HV. Online learning in nursing education during COVID-19 pandemic: Stress, satisfaction, and academic performance. *Journal of Nursing Practice*. 2021; 4(2):143-153.
12. Paray AA, Mir SA. Does smart phone use cure or hurt academic performance? An empirical study of secondary school students. *International Journal of Movement Education and Social Sciences*. 2018; 7(2):220-225.
13. Smith E, Oosthuizen HE. Attitudes of entry-level University students towards computers: A comparative study. *Computers & Education*. 2006; 47(3):352-371. DOI: 10.1016/j.compedu.2004.10.011
14. Souheyla B. Google Meet during COVID 19 pandemic: When teachers raise the challenge. *Arab World English Journal*. 2021; 2:169-182. DOI: <https://dx.doi.org/10.24093/awej/covid2.11>
15. Sue S. Science, ethnicity, and bias: Where have we gone wrong? *American Psychologist*. 1999; 54(12):1070-1077.