Issues and Ideas in Education

Online Teaching-Learning at University Level Education from Psychological Perspective and Consequences: A Post-COVID Scenario

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ABSTRACT

Present study focused on exploring the impact and consequences of online teaching and learning at the university level from the psychological standpoint using an interpretive questionnaire and a barrage of qualitative literature. An online survey was conducted using Google form to understand the post COVID education from student's point of view. Of the 143 student enrolled from India, 72.7% preferred the offline/physical classroom learning mode against only 27.3% that preferred the online. 43.8% students think that online teaching is not as effective as the offline that has been in use since over the years. Obtaining the impact of online teaching, only 25.6% agreed that online teaching had made positive impact on their mind, while 33.6% stated no impact. These results suggest that student believe their diligence to education yields more outcomes with traditional learning environments than with online education.

1. Introduction

The advent of new technologies has given people increased possibilities of reaching their goal of having access to excellent education anywhere and anytime. Among these new technologies used for instructional purposes, online learning is the most important model in contemporary education (Lowenstein & Bradshaw, 2004). Also known as education beyond borders, online teaching and learning refers to the electronic delivery of course contents via the internet space without necessarily being confined to the walls of a physical learning environment or classrooms (Lewis & Abdul-Hamid, 2006).

Over the years, some Indian universities have been using online learning platforms to facilitate lectures and academic activities. However, since the advent of the covid-19 pandemic that compelled governments to enforce lockdown and movement restrictions on cities, online teaching and learning has gained stupendous popularity at the university level in other to ensure academic continuity because it reaches students in their various houses and in the comfort of their various locations (Keefe, 2003; Mishra, Gupta, & Shree, 2020). In India, the Coronavirus outbreak triggered a first phase countrywide lockdown lasting 21 days from 25th March, 2020. Second phase lockdown was then implemented from 15th April, 2020 for 19 days. Third phase and fourth phase lockdowns continued until 1st June, 2020. Subsequently, other lockdown phases, enforcement of strict preventative measures like social distancing adherence to medically instructed quarantine protocol, as well as keeping proper hygiene and sanitation are all measures employed in India and across the globe towards containing the COVID-19 pandemic (Khachfe, Chahrour, Sammouri, Salhab, Makki, & Fares, 2020). Prior to the 2020 pandemic, online teaching and learning is seen as education offered by Indian open universities only. But since the COVID-19 period, online teaching and learning transformed into a massive challenge to confront, exposing the unpreparedness of stakeholders in adjusting into the "new normal" in education because of their lack of technological competence needed to embrace the present situation.

Online teaching and learning is effective because students can continue to learn at the comfort of their homes since they are not accessible to the academic traditional systems because of restrictions, far geological distances from physical classrooms, busy family life and other activities or responsibilities (Sahu, 2020). The blossoming prominence of online teaching and learning in Indian universities has been attributed to associated benefits. Universities cited competitive advantage, resource maximization, cost effectiveness, revenue enhancement, and increased enrolment as reasons promoting online teaching and learning. The majority of high-end public and private universities have switched to using Google classrooms, Zoom, Microsoft Teams, specially designed e-classrooms, etc., while others still find it a herculean task migrating to online classroom (Schiffman, Vignare, & Geith, 2007).

The Ministry of Education has released the 2020 New Education Policy that emphasized on the increasing need for online education in India due to the current pandemic. The 2020 New Education Policy is created for maximizing the benefits of online and digital education in India alongside a consideration of mitigating the downsides that comes with it (Mishra et al., 2020). In this article, the literature has explored how online teaching and learning has influenced faculty teaching techniques including the ability of lecturers to reach out to learner using diverse styles of teaching and learning. Transitioning from the use of chalkboard and overhead projector to a effective academic environment features new thinking and education ways, of which faculty must make adjustment of their pedagogy towards facilitating learning at a distance efficiently and effectively. At the faculty level, the acceptance of online education has been consistently cited as a major setback issue for university leaders (Allen & Seaman, 2007; Rachal, Daigle, & Rachal, 2007).

Owing to university student's psychology during their participation in online learning, it has been reported that students are having a hard time blending to the new learning mode, while others find it easy embracing online learning. Although the future growth of online education is assured, yet research on outcomes, satisfaction and acceptance level of university students and other partakers are yet to be firmly established. Particularly, the perception and acceptance of online teaching and learning amongst university students during and after the ongoing pandemic is scarce in the literature. Therefore, this research seeks to establish the effects of online teaching and learning on participants from the psychological standpoint; analyzing their expectations, delight, acceptance level as well as the outcome of online education on university-level participants in Indian Universities (Zhang, Wang, Yang, & Wang, 2020).

2. Methods

This article presents both quantitative and qualitative approach to analyze the perception of students and teachers separately for online teaching-learning mode. Survey was conducted on 143 UG/PG students across Indian universities using Google form. Of the 143 participants, 54.5% are male while 45.5% were female. List of questions such as; do you think that online teaching is as effective as offline? According to your subject which mode is ideal for learning? Understanding during online theory class: poor to excellent? Impact on Practical subjects/lab? etc., were asked in survey. The set of questions collected demographic data about the participant's psychological view about online teaching and learning. Analysis of the data obtained from the participants was carried out by means of the descriptive statistics and content analysis for quantitative and qualitative data, respectively.
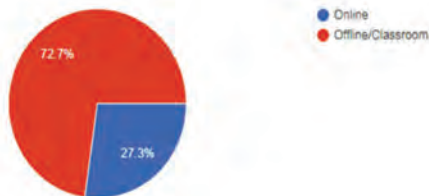
3. Results

We have briefly presented the results of the full survey across all 143 entries in figure 1. We found out that 72.7% of participants preferred the offline/physical classroom learning mode against only 27.3% that preferred the online learning mode, and that 43.8% thinks that online teaching is not as effective as the offline learning mode that has been in use since over the years. 23.8% submitted that online teaching and learning is as effective as offline teaching and learning, but 28% are not sure of the effectiveness of the online learning and teaching as that of the offline mode. Towards obtaining the kind of feeling participants have regarding the use of the new online teaching and learning pattern, 44.8% reported that they have neutral feeling neither (nether positive nor negative). 26.6% agreed that they have positive feeling, while 28.7% are having negative feeling over the new online teaching

and learning pattern. Obtaining the performance of the online teaching and learning during the period of the lockdown, 53.8% of participants attested to improvement in learning, 22.4% reported that they never experienced improvement in learning, while 23.8% were unsure whether they made improvement through online learning during the lockdown period. Assessing personal development of participants during the lockdown period with the new online learning mode, 46.2% attested to the fact that they could learn something extra through online learning to develop them, while 23.1% of participants are not sure whether or not they can learn something extra through online

learning. However, 30.8% submitted that they did not learn something extra for personal development through online learning, during the lockdown period. About the extent of learning comprehension, 40.6% of participants reported that they have no grasping power during online teaching, while only 20.3% attested that they could comprehend learning through online teaching and 39.2% are neutral as to whether they could grasp learning through online teaching or not. 42.7% of the participants are satisfied with the summer online exam and results, 39.9% are not satisfied with it while 17.5% are neither satisfied nor unsatisfied with the summer online exam and results.
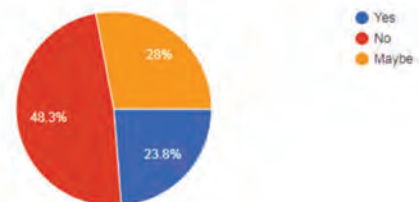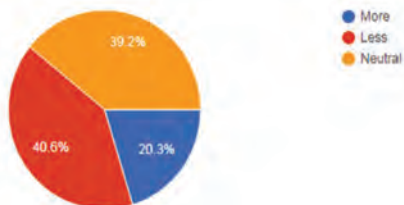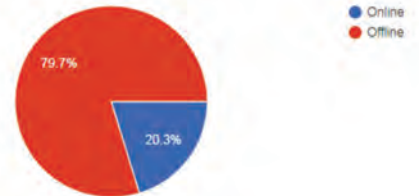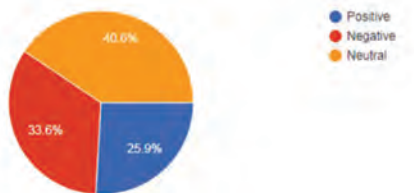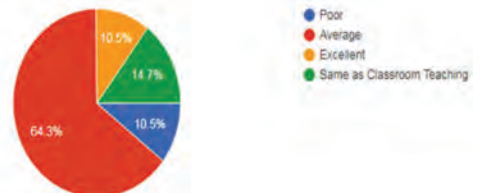

Figure 1: Diagrammatic presentation of data collected from 143 participants across the various universities from India.

In obtaining the mode that students prefer for online exam, 78.3% of the participants said that they feel better using MCQ for online exam, while only 21.7%

feel better using descriptive for online exam. 79.7% is of the opinion that the offline mode is ideal for learning their subject, while 20.3% submitted that the online

learning mode is ideal for their subject. Only 33.6% of participants reported that online teaching has made their education easy. However, 37.15% reported that online teaching has not made their education easy and 29.4% are not sure whether their education has been easy through online teaching or not. On skills development, 48.3% of the participants stated that they have developed some skills through online teaching. 28.7% have not developed any skills through online teaching, while 23.1% are neutral about whether they have developed skills through online teaching or not. Looking into the feeling of students about co-curricular activity, 60.8% of participants submitted that they feel bad about not being able to take part in co-curricular activity. 17.5% agreed that they do not feel bad about being unable to participate in co-curricular activities, while 21.7% are neutral about their feeling regarding not being able to take part in co-curricular activity.

Obtaining the impact of online teaching, only 25.6% agreed that online teaching had impact on their mind, while 33.6% stated that online teaching had no impact on their mind and 40.6% are not sure whether or not online teaching has impact on their mind. Furthermore, 40.6% of participants noted that online learning had impact on theory subjects while 27.3% noted that online teaching and learning had no impact on theory subjects and 32.2% are neutral about the impact of online teaching and learning on theory subjects.

Subjects enrolled for the study are asked to rate their understanding during online theory class. 64.3% rated online theory class as average, while 10.5% agreed that online theory class has been excellent and another 10.5% of participants noted that online theory class has been poor, while 14.7% of participants rated online theory class to be same as classroom teaching. Participants were asked whether they are regular in online class compared to offline class, 51% submitted that they are more regular in online class than in offline class while 30.1% of participants stated they are not as regular attending online class than in offline class, and 18.9% said that they are neutral about whether they are more regular in online class when compared to offline class.

Exploring the impacts of online education on practical subjects/laboratory, 60.8% reported that there has been a negative impact of online education on practical subjects/lab. 15.4% of subjects noted positive impact on online teaching/learning on practical subjects/laboratory, while 23.8% of participants are neutral regarding the impacts of online education on practical subjects/laboratory. When asked about preferable learning mode for practicals, 85.3% said that they prefer offline learning mode for practicals while 14.7% noted that they prefer the online learning mode for practicals.

4. Discussion and Conclusion

Coronavirus had represented an uncommon situation in teaching and learning exercises at the University level. Progressing to online learning because of COVID-19 has been an exceptionally mind boggling undertaking for advanced education foundations (Aguilera-Hermida, 2020). In fact vaccination will take time; online teaching expected to continue during this pandemic. The only option for students and teachers is to continue with Internet-based tools in the conveyance of education. Student engagement during online teaching and learning is crucial to outcome. These results suggest that there is a relationship between outcomes and satisfaction and that students believe that their diligence to education yields more outcomes and produce success with traditional/physical learning environments than with online education. Although a significant number of students attested that there was improvement in learning for them during the lockdown period, majority of students prefers the offline/physical classes than the online ones, and also attest to the fact that they think that online education is less effective to offline education. Students also reckon that their level of understanding is high during physical classes than during online classes, in that they could grasp more during physical classes than during online classes.

Behaviorism, constructivism, and cognitivism are the three learning theories explored in educational psychology. We found out that students are more comfortable with learning theory offline than online, and that 75% of university students prefer face-to-face theoretical learning to online classes. Delayed feedback has been listed as one of the limitations of online courses. Some of the participants reported that theoretical explanations, better understanding and comprehension are achieved in physical classes than in online education because logic, judgment and rationality are fallible. Students who were interviewed

submitted that the feeling of being lost in the cyberspace during online learning hinders the grasping level of concepts, because of the lack of feedback from body language alongside the fact that the teachers don't get to know the students personally during online classes. Additionally, the approach is that discussion during online learning is slow and not as effective as during offline classes, thus limits the type of communication and eliminates feelings of connection amongst students for which these elements aid faster comprehension and retention ability. The fundamental advantage of this offline mode is that it gives adaptability to teachers also, students to understand individually, at their own time furthermore, this is less subject to the quality of either gathering's Internet connection (Azlan, Wong, Tan, Huri, Ung, Pallath et al., 2020).

Although university teachers are committed to advancing technology-embedded learning environment, the present technology evolves at a fast pace and adaptability on the part of students may take a long time. Besides, students are confronted with the challenge of pedagogical integrity towards keeping a harmony between their necessities and that of others in classes. Notwithstanding the way that most of participants who were occupied with this investigation have been affected by technology at one point or the other in their lives, the outcomes shows that a number of them are not enough ready for a technology-rich online education. The use of technology for performing academic research, essay composition, data analysis, presentations preparation, assignment submission etc. is simply not meeting the initial expectation of students, who have always had a registered though and mindset that academic activities has to be done with the four walls of the school. Therefore, migrating to online teaching and learning becomes a serious issue unless there is a change in their perception, thought and mindset regarding how they should receive education. Majority of students reported that they use computer on a daily basis, but not for academic use, rather for social networking. Hence, there is a challenge of acceptance of online learning on the part of university students. Participants also submitted that online learning doesn't prove cognitive presence and competence, suggesting that a cognitive adjustment is necessary in other to create positive learning results. Thus, regardless of whether learning is face-to-face or online, levels of opinion and information building are

the goals of learning, and the higher-order procedure of learning comes up in the system of critical thinking and problem solving.

Online teaching and learning has come to stay, and provision of effective instruction to online learner is critical. There is need for reconceptualization of roles of students and teachers in online teaching and learning, and teachers must develop interpersonal relationships with their students online. Online education requires more time and effort than physical learning; hence teachers must inculcate a learner-centered education environment in which students are empowered to acquire responsibility of their own education towards achieving better outcomes. Although wide efforts have been made in present study towards gaining insight into the psychological narratives of online learning and teaching, deeper information is still needed in this regard. More research may be required towards substantiating and expanding the findings of this study.

As today's students are exploring more convenient and economical ways of earning a university degree, they need to fully embrace the new mode of learning alongside the implication of the use of technology in fulfilling their dreams. On the other hand, university teachers must be willing to provide highly sensitive, robust and lucrative education resources and materials to online learners. Teachers have to expand new pedagogy skills for course plan, delivery and evaluation in online environments. The critical thinking theory is particularly essential in considerate the online learning and teaching experience. Particularly, teaching experience assists in preparing online learners towards enacting their roles properly in the online environment. Teachers must be given adequate continuous support including necessary technology, technical assistance and professional development opportunities in a bid to make online teaching and learning successful and hitch-free.

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