The social and ethical issues of online learning during the pandemic and beyond

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Abstract
This article describes how the COVID-19 pandemic has forced the higher education institutes in developing nations like India to relook at pedagogical approaches. Due to government imposing nationwide lockdown, higher educational institutes were quickly adopting to imbibe online learning medium. This research takes a qualitative thematic analytical approach to explore the facilitators and challenges to online learning from the perspectives of both learners and educators in higher education institutes. We have specifically explored the ethical and social concerns related to online learning and the possible solution for the same.

Keywords Online learning · Pandemic · Authentic learning · Academic dishonesty · Physical and psychological well-being · Digital divide

Introduction
The new mode of virtual learning at various levels of education that has opened up globally during the pandemic may likely to stay in new forms forever. It has opened up questions on ethical and social concerns of virtual learning from the perspectives of both learners and educators. Online or virtual learning platforms include online chat, asynchronous podcasts, webinars, and synchronous mode of learning.

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The development of theories on virtual learning is still at its nascent state. Hence, several qualitative studies are being carried out on bringing out ethical and social concerns on virtual learning platform. For example, Agostinho (2005) applied naturalistic inquiries; Fitzgerald, et al. (2013) and Steinmetz (2012) have applied ethnography to online training processes; while Postma et al. (2013) applied grounded theory to understand research. Certain ethical dilemmas raised forth by the study of Youn (2009) are issues of informed consent, privacy protection, and identity. Steele et al. (2020) came out with some of the themes and subthemes of ethical concern on virtual reality–based classrooms as psychological safety, social safety, and ethical morality and teachers’ responsibility. Ethical and social concerns identified by Reamer (2013) are student access, quality of course and degree program content and delivery, academic honesty and gatekeeping, and privacy and surveillance. From the perspectives of educators, the question being raised is on whether educators can play the role of friend, philosopher, and guide effectively through the online learning platform. Debate is also raised on how online learning can be made more effective. Suliman et al., (2022) for example found that synchronous and asynchronous learning can be equally effective while learning ethical and moral values of nursing practices. Concerns are also on whether online assessment of learning should use proctored technology. Though the use of proctored technology during assessment reduces academic cheating, but it fails to take into consideration inequality among students in terms of study conditions, family circumstances, and physical and psychological health (Lee et al., 2022). Concerns of academic integrity, non-maleficence, trust, privacy, liberty, and autonomy are raised in case of the use of proctoring technology.

This study intends to answer following research questions:

What are the ethical and social concerns of online learning raised from the perspectives of faculty and students?

What are the strategies adopted by higher education institutes to make online learning process learner centric?

Worldwide, 61.6% of learners were affected by the lockdowns during the pandemic. In India which has the largest cohort of population undergoing primary, secondary, and tertiary education, more than 30 million learners impacted by the lockdown were affected by the social distancing norm declared by government of India. Soon, face-to-face learning were to be replaced by online learning. Issues faced by countries like India and other third-world nations were weak internet connectivity, adaptability of ICT (Information and communications technology) usage, and content development in the new medium (Aung & Khaing, 2015). In this research paper, we have attempted to look at ethical and societal concerns that were raised while higher educational institutes are trying to adopt the new medium of learning from both the perspectives of educators and learners of engineering and management institutes. A qualitative research methodology has been used. In the following section, we have discussed some of the theories to online learning. This was followed by the detailed description of the methodology, findings, critical discussion of the findings, and recommendations.
Theoretical underpinning

Authentic e-learning

Pedagogical approaches often determine the learner’s learning strategies and experiences (Prosser & Trigwell, 1999). With this objective in mind, the concept of authentic e-learning was developed in higher education context. The concept has been used in the context of pre-service teacher education (Valtonen et al., 2015), higher education (e.g., Bozalek et al., 2013), teacher professional development (e.g., Parker et al., 2013; Teräs et al., 2012), vocational education (Pu et al., 2016), and foreign language learning (Ozverir et al., 2016). However, applications of authentic e-learning in industry and organizations are still scarce. Authentic learning attempts to link education to situational learning, apprentice, or internship (e.g., Collis et al., 2009; Pu et al., 2016), especially in the context of professional courses such as management or engineering. This study tries to explore how authentic e-learning was adopted in the pedagogical approach during the pandemic in Indian professional schools.

The authentic e-learning framework calls for adopting a pedagogical approach that imbibes practical approach based on contexts, situations, and culture and business (e.g., Machles, 2003). It can be considered an approach which brings theories into practice, rather than abstract learning (Herrington et al., 2010). It moves away from traditional university mode of course delivery and subsequent assessment to project based learning. Such an approach is well suited for professional development — perhaps even more easily than in a higher education context where the constraints of traditional academic practices are often hindering the development of authentic e-learning courses (Herrington et al., 2010). The role of technology in e-learning depends on whether technology is being used for aiding learning or learning process is totally integrated with technology. Technology for learning is the traditional use of technology for storing, delivering, and assessing learning contents, and evaluation of learning processes. Learning with technology which is the core of authentic learning is the use of technology by the learners to explore knowledge, learn collaboratively, and create new knowledge. The key elements of authentic e-learning are as follows: (i) authentic context in which indicate how learnings are connected to real-life applications putting learners through complex real-life setting, (ii) authentic task which engages learners through situation-relevant content and problem-solving pedagogy, (iii) access to expert performances to see how experts solve a complex problem, (iv) indulging learners in multiple roles and responsibilities like debates, case presentation, and event management, (v) collaborative construction of knowledge in form of interdisciplinary teamwork, collaboration, and interaction between participants, (vi) reflection, in which learners can get access to learning material, reflect, and discuss with co-learners, experts, and mentors, (vii) opportunities for articulation and presentation of thoughts, ideas, learning in a public platform, (viii) coaching and scaffolding support to learners to complete complex task, and finally, (ix) authentic assessment which embeds assessment to day-to-day learning process.
Online academic assessment and integrity

Online assessment often makes the academic learning process more susceptible to academic dishonesty or cheating. Most common form of academic dishonesty that is observed is taking credit of other’s work (Golden & Kohlbeck, 2020). The reason of academic dishonesty can be attributed to disinterest and unpreparedness of the learners about the learning module, collaborative informal agreement between the learners to deceive the system by practicing rampant cheating without fear of getting caught or punished (Yang et al., 2013). Becker and Mehlkop (2006) categorized motives behind academic dishonesty to three major classification incentive, opportunity, and rationalization. The researchers found all three elements drive cheating behaviors. Incentivizing can be due to impact of internal and external environment such as large demanding curriculum and high workload (Finchilescu & Cooper, 2018; Jian et al., 2020). Authentic learning that emphasizes on acquiring mastery in subject than reducing grading (Day et al., 2011; Pulfrey et al., 2019).

The second element of the fraud triangle, opportunity, refers to the ability to engage in dishonest behavior because of inadequate mechanisms to prevent it. In case of non-existence of rules, regulations and punitive actions against cheating can lead to academic dishonesty (Finchilescu & Cooper, 2018; Peled et al., 2019). Instilling ethical values on students with properly laid out rules and regulations on ethics (Arnold et al., 2007; Burrus et al., 2007; Tatum & Schwartz, 2017) may reduce the opportunity. Rationalization, refers to the belief that learner considers dishonesty not violating his/her ethical code of conduct. Researchers have theorized how the Big Five personality traits (neuroticism, extraversion, openness, agreeableness, and conscientiousness) may moderate academic dishonesty and a learner’s ability to rationalize such behavior (Nathanson et al., 2006; Williams and Williams, 2012). The theory of planned behavior has also been used to explain and predict academic dishonesty (Chudzicka-Czupała et al., 2016; Lonsdale, 2017). Academic dishonesty or cheating has been found to be more prominent in online learning platform than offline (Young, 2013). Out of the three dimensions of fraud, the opportunity could be the reason why cheating is more prevalent in online assessment. Unethical practices are frequent in case of unproctored examination than proctored examination. In case of proctored examination, there is not much difference found in practices of unethical means between online and offline examinations and no significant differences are also found between the scores of students. If exams are unproctored, then online environment is more susceptible to unethical practices and students tend to score higher than offline exams (Alessio et al., 2017; Daffin & Jones, 2018; Fask et al., 2014). Students also were observed to score higher if questions are pulled from a question bank than if questions are paraphrased (Golden & Kohlbeck, 2020). The reason is that test takers can look up the items from the online question bank. However, differences in performances on tests based on question bank and that based on paraphrased items were observed to be substantially reduced if exams are proctored.
Foucault’s theory of disciplinary governmentality

Foucault theory (Binkley & Capetillo, 2009) believe in exerting power on subjects not in oppressive or possessive manner but in constructive or progressive manners, so that resistance or expressions of dissent can be minimized. Subjects or learners in an educational set-up can be categorized based on pedagogical schemes into as high achievers or low achievers, well prepared or ill prepared, active or passive students, and well-behaved or misbehaving students. Discipline can be accorded on different categories of learners by stimulating self-regulation rather than coercive action. Rules and regulations can be internalized through individual self-discipline and group control. Surveillance and decentralization of power among subjects seem to be more powerful strategy than punishment. Educational institute can exert power upon their members by allowing (not allowing) specific bodily movements in a chosen space at a chosen time. The subjects are expected to willingly govern themselves — controlling and correcting their thoughts and behaviors even without direct contact or corporal punishment.

Methodology

The aim of this research was to understand that the online learning experiences are perceived by faculty and students of higher education in terms of behavior and expectations. The focus was to interpret the lived experiences of learners and teachers in the context of online learning environment during the pandemic. Qualitative analysis with thematic framework approach was used to collect data in the context of online learning, to understand what is interpreted as effective learning and what were the socio-psychological and ethical challenges to the online learning process. In a thematic framework analysis, the data reduction, data visualization, and interpretation evolve four steps:

1. Transcribe and organize the transcription. The video-recorded interviews through google meets were transcribed.
2. The interview transcripts are reviewed, and evolving themes are identified. Broad themes are pre-conceptualized from the literature review (Miles & Huberman, 1994). While framing the interview schedule, a process termed “a priori categorization” by Sinkovics et al., (2008, p. 704) was applied. Hence, the priori categorization was ethical and social issues. Under the social issues, we further considered technology acceptance and adoption and authentic e-learning.
3. Reviewing the themes to give it a structure.
4. Finally drawing out a theoretical model, in an iterative process by rechecking on the data repeatedly. We, thus, followed Sinkovics et al. (2008)’s coding process which included “a posteriori” categorization, with open coding allowing for the emergence of new themes.
Background

In March 2020, faculty and students were forced to shift the learning platform through online platform such as MS-Team, Google Classroom, or Zoom due to the worldwide lockdown during COVID. Educational institutes quickly adjust to procure technology and get the teachers, learners, and supporting staff trained on the learning platform. The issues raised were what pedagogical changes are to be brought in to make learning as effective as physical classroom, what kind of learning support system and resources to be provided to learners as valued customer of knowledge, and how to ensure the presence and effective participation of learners during the online synchronous session. Furthermore, as examination was carried out in proctored platform in the online platform, it was difficult for the exam supervisors to track what students were writing, whether they were referring to onscreen materials or exchanging notes through messaging systems through smart phones. Mass scale copying and wide similarities of answers were observed among examinees, leading to dissatisfaction of faculty and honest students who did not resort to unfair means.

Sampling

As in a qualitative research method, participants were identified by theoretical considerations rather than statistical representativeness (Eisenhardt, 1989; Miles & Huberman, 1994). A purposive sampling approach was preferred over random sampling so that logic and coherence that are characteristic of social setting is not lost (Miles & Huberman, 1994). The main criteria for interview selection of the perspective the educationists and learners represent the diverse geographies of India and belong to various types of higher educational institutes such as management institutes, engineering colleges, law college, science colleges, art colleges, and also EdTech institutes. We ensured that both genders are equally represented and we have educators of varied cadres and varied prior technical competencies. The educationist and the learner together represented “a sampling unit” for analytical purposes (Eisenhardt, 1989). Though we had initially contacted 40 pairs, but as 12 educationists expressed their unavailability to give us enough time for interview, we had to restrict our study only to 28 pairs. Following is a description of educators who have been interviewed (Table 1).

Some of the indicative questions that were proposed to be asked were as follows:

Questions to the educator:

(1) Share with us a detailed story of your teaching via online mode?
(2) What were your initial challenges? How did you attempt to overcome them?
(3) How did you ensure learning in the online classroom?
(4) How do you describe your students in the online classroom versus physical classroom?
(5) What were the key ethical dilemmas in your online teaching?
(6) At any stage of your teaching, did you feel that your students indulged in some kind of malpractice?
| Educators | Background                                                                                                                                                                                                 | Educators | Background                                                                                                                                 |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1         | Professor of strategy and internationals, with 15 years teaching experience, an entrepreneur for 26 years                                                                                                  | 15        | Teaching consumer behavior at a business school at Delhi for last 10 years                                                                 |
| 2         | Live online trainer since 2009, an award winning corporate coach                                                                                                                                             | 16        | An erstwhile software developer, he is now a management faculty at a top tier business school at Bangalore                                   |
| 3         | With prior experience in financial institutes, he is a visiting faculty of finance in various business schools in Pune and Mumbai                                                                               | 17        | Assistant professor in a management college of a tier 2 city in northern India for 3 years                                               |
| 4         | Assistant professor of computer science in a science college in computer science at Vishakapatnam                                                                                                             | 18        | University rank holder, a management teacher and counselor in a Kolkata based private B-School for last 10 years                          |
| 5         | Associate professor at the faculty of technology and engineering at a college in Vadodara                                                                                                                      | 19        | Head of the department, zoology in a women’s college in Bhubaneswar                                                                       |
| 6         | A mentor to MBA aspirants and job aspirants for 20 years, with prior experience in pharmaceutical Industry                                                                                            | 20        | Professor of digital communication at an engineering college in Pune                                                                      |
| 7         | After retiring as a senior banker, he has been teaching Finance in a business school at Pune as adjunct faculty                                                                                              | 21        | Assistant professor of biological anthropology in science college in central India                                                      |
| 8         | Teaching communication skills to undergraduate students and English to students of 11th and 12th at Rajkot                                                                                                   | 22        | General management faculty in a commerce college at Mumbai                                                                              |
| 9         | Faculty of law with 16 years’ experience at Shimla                                                                                                                                                          | 23        | Professor of digital technology in engineering and management at a Pune-based private university                                         |
| 10        | Junior college faculty in Chan of schools at Uttar Pradesh for last 20 years                                                                                                                               | 24        | Faculty at a women’s online distant learning college at New Delhi                                                                        |
| 11        | Visiting faculty in an infrastructure management for 12 years in Pune- Mumbai region                                                                                                                       | 25        | Assistant professor of physics at a technical college in Indore                                                                        |
| 12        | Professor of economics at Mumbai University affiliated college for 15 years                                                                                                                                  | 26        | Technical instructor in a Coaching Institute for 2 years                                                                               |
| 13        | Teaching assistant of a biological anthropology lab, currently pursuing PhD                                                                                                                                   | 27        | Professor of English in a junior college at Bangalore for last 30 years                                                                    |
| 14        | Faculty of organizational behavior at a Pune-based business for last 7–8 years                                                                                                                              | 28        | An assistant professor at an University at Kamaun training government officials                                                           |

Interviews were conducted through google meetings, recorded, and transcribed
Questions to the students/online learners:

1. What were your takeaways from online learning?
2. How happy or sad have you been since the time classes moved offline?
3. What are the key differences between online and physical classroom teaching?
4. How did you find your learning as a whole in the online mode?
5. How do you describe your teacher’s ability to impart knowledge in the online mode?
6. At any point did you feel a sense of manipulation or malpractice by your teacher?
7. Did you voice it out to your teacher?
8. Do you think your teacher was able to deliver justice in the classroom?
9. Was your teacher impartial at any point in time?
10. Did you notice your fellow friends indulging in any malpractices?

Data analysis

The themes that emerged from the transcription of the interviews were codified using open, axial, and selective coding. Open coding helped in understanding new emerging concepts. Axial coding helped in integrating concepts obtained at the open coding stage through sub nodes into broader themes. These themes were further integrated through various nodes and refined in order to build the final theoretical model. The emergent themes and subthemes are described in Table 2.

Digital inequality in technology acceptance and adoption

In the initial days when the educators were trying to adopt to online learning platforms, the learners and young faculty members who are more digitally competent could adopt to the new technology quickly, and there was reverse mentoring by the students and young faculty members to the more qualified and experienced senior faculty members. Frequent internet connection failure was accepted empathetically by the learners all across as they too were trying to adjust to the new technology. There were plenty of hiccups from the sides of both learners and the educators’ side, but in most cases, they quickly adjusted to it. Perhaps, the success of adoption of e-learning technology can best be explained through unified theory of acceptance and use of technology (UTAUT) model. The effective use of the technology depends on the performance expectancy, effort expectancy, social influence, and facilitating conditions (Qiao et al., 2021). Performance expectancy can depend on the individual perception of the use of technology. For example, in one of top science college where senior scientists and academicians are engaged to teach undergraduate students. One of the young assistant professors had to say,

If you talk about my college, we got 130 + teaching faculties where 60-65 are in the age group of above 50, so suddenly, for last 10 to 15 years, there
were accustomed to the environment where they come morning and deliver the speech on the Dias with their vast experience teaching the same subject again. They are PhD and are top professionals who went to the US and UK to deliver simple lectures, but when coming up to digital learning, that was one of the biggest challenges nearly. It nearly took 3 to 4 days for us to catch them into what they need to do even we told them how to mute how to Unmute how to share a PDF.

Some of these senior faculty members, however, could find ways to somehow mix-up traditional mode of teaching with online teaching, by posting or displaying scanned cases or teaching materials, using multimedia links of cases. It again depended on how interactive they could make the sessions.

If you really want to teach online your approach is supposed to be completely different. You have to be more conversant with the IT dudes, right on multimedia and audio-visual mediums. Probably would have to use slacks, digital pens to start engaging students more like you are doing board work.. We can use animations in our presentations. Continuous innovation and self-examination in terms of whether you are effective in your teaching or not, is the key to upkeep your standards of teaching in these spotlights.

Table 2  Themes and subthemes of the study

| Themes                                                   | Subthemes                                                      |
|----------------------------------------------------------|----------------------------------------------------------------|
| Digital inequality in technology acceptance and adoption | *Performance expectancy*, *Effort expectancy*, *Social influence*, *Facilitating conditions* |
| Authentic E-learning                                     | *Promoters*: *Online internship*, *Live projects*, *Multi-media based learning*, *Role playing* |
| Challenges:                                              | *Lack of collaborative learning*, *Development of social sensitivity*, *Team building*, *Social interaction with faculty* |
| ethical issues in virtual learning platform              | *Privacy concerns versus discipline*, *Physical and mental well-being and perceived institutional support*, *Need for peer to peer support versus academic integrity during assessment* |
Most of the tier 1 higher educational institutes invested in acquiring the required technology, the staff trained in such technology, and provide requisite support while the teachers were working from home. But some of the teachers deal with the difficulty of weaker internet connection at homes sharing same work space with family members either working or studying virtually. These digital divide was also evident in case of students in remote parts of the country where internet connectivity was not good; social and familial environment or support was not conducive for learning digitally from home.

I asked a student to give me some answers to some questions and once he started giving answers, turning his camera on, I could see there are people and vegetable sellers and food sellers in carts everybody was walking around there, a lot of chaos I asked him what the hell is happening? Where are you right now? He was like sir I’m sitting in a chai ki tapir (tea stall). I was like, is this an appropriate place. He said that this is where I can get a good internet connection.

So, to deal with the problem of unreliable and inconsistent internet connection, most class sessions are recorded and stored in platforms such as MS Teams for students to refer to later on or uploaded in YouTube channels.

Another factor which made online teaching was a fear of facing the camera and being closely watched by hundreds of eyes including students, their families, and if the recorded videos go viral, and then large number of unknown people worldwide.

Like, you know, teaching, facing the camera first time I was almost shivering. I don’t know why my hands were shaking, fingers were shaking, and I was not able to teach at all. And I didn’t understand why this was happening. And then I realized there was that fear, now these videos are going to go online, maybe all over the world or something. And people will watch and everyone will watch. And maybe that fear, if I make some mistakes or something, it will be noticed. And now it is not only the students, even the parents will be watching the way we are teaching. So yes, it was very difficult for me.

Some faculty members with support from their family and friends considered opportunity of teaching in virtual platform to learn new skills, pedagogical approach, and opportunity to innovate which enhanced their self-esteem.

I made it a point to learn because I have big children, like 25 and 26. But they said, no, mommy, you have to update yourself and you should learn on your own. And because they did not help me but then I was not discouraged. I was actually like, I felt that I should do things on my own. And now I’m very happy that, yes, a person like me who was not into all this feeling so happy that I am able to conduct online classes can share screen, it’s such a joy for me at this age that I have learned something that I think if not for Corona and lockdown down, I think I would have never learned. So I’m very grateful and thankful to God that I got this opportunity to learn. And I also am able to you know, send the links, you know, like we have a teacher’s meetings and I know how to send links and all that. So, I’m feeling very happy that I got something to learn.
Authentic E-learning: promotors and challenges

One of the lacunas of virtual learning is the lack of opportunities of collaborative learning with peers, development of social sensitivity, and team building social interaction with faculty members which are essential for holistic development specifically in context of business schools.

Classroom teaching is important to encourage and motivate collaborative learning also. Collaborative learning increases student’s self-awareness about how students learn and enables them to learn more easily and effectively, transforming them into keen learners inside and beyond the classroom. Classroom studying provides an opportunity for students to engage in live discussions like moot courts where they can better utilise their critical thinking skills to voice opinions or involve in an argument, whereas in online scenario, it just creates a fish market because everyone wants to speak.

Offline education helps faculty to capture non-verbal cues from the students’ expression about their understanding of a particular topic discussed in a class session which is not possible during online sessions as videos are kept switched off. Faculty members and institutes adopted several measures to give students authentic e-learning platform specially in business schools. Students completed many internship projects, corporate live projects, and case development workshop during the period. Moot court experiences were provided online by one of the interviewed faculty member teaching “Legal Aspects of Business,” who made one group of students to enact the role of prosecuting lawyer; one group of students as defense advocates and somebody will play the role of judge. There would be a researcher who will create the case story based on the concepts taught on the class. Participants of the act were required to wear attires of legal attire during the act.

Faculty members took this opportunity to bring in innovations in the teaching with the help of multi-media and technology.

I invested a lot in my own software, like I bought tablets, I bought an electronic SMART Board. I configured it in with my, with my laptop, you know, if you see me, I also use the smartboard. Well, right? It looks like a blackboard to the students. So it gives a classroom feeling.

We have options of breakout rooms and we can make so many groups inside the team and ask the students to, you know, walk together and then present something based on their learning in the class.

One of the faculty teaching finance used breakout rooms to facilitate huddle between participants just traders do before opening up of the market and facilitated simulated trading environment.

All these big financial institutions that, you know, have trading desks and so on, they actually have a huddle before the market opens in the morning to discuss some of the key ideas and so on. And so forth. Right. I loved too have the option to do in an online format.
Some faculty members attempted to use role plays by engaging two groups of students debating on the pros and cons of a topic on every session. In one of the edutech-based institute, teaching communication skills to practitioners used to teach 5 days a week and 6th day of the week was kept for peer learning, in which one of the learners had to assume the role of teacher and teach and review concepts with the rest of the batch mates.

Ethical issues in virtual learning platform

Privacy concerns versus discipline Most debated issue which came out was if students should be mandated to keep the cameras. There were varied opinions. In case of small class sizes, many faculty members felt cameras should be on, as this builds decom in the session. A faculty in the Edutech industry teaching corporate was of the opinion that since these corporate has to face similar kind of situations in future, in real life, they should attend sessions with corporate dress code. Most other educators expressed that with bigger class size, it is not possible to monitor the entire batch during the session even when the cameras and audios are on.

Most of the educators raised concerns of privacy. Some felt the home environment in which students are studying may be embarrassing from them if the cameras are on, like some of them may have younger siblings making noises, parents quarrelling, houses located noisy surrounding, and dilapidated houses. They were of the views that switching off cameras or mics should be made optional due to privacy concern.

When you are having your zoom gallery view and there are faces, you can expect everyone to stay still. They keep moving, and you kind of feel distracted, unless you are sharing a ppt or something. So I feel privacy needs to be given to the student and they on other hand must not misuse that privacy also.

The United Nation’s Right to Privacy in the Digital Age 2013 (Nyst & Falchetta, 2017) affirms that “rights held by people offline must also be protected online, and it called upon all States to respect and protect the right to privacy in digital communication.”

Given the voluntary option, students were willingly keeping their cameras on for the first few weeks of the sessions but majority of them kept camera and mics switched off after that. So faculty faced a lot of psychological stress while speaking to blank screens with pictures or names of students who had locked in. Many educators complained that students even did not respond even when they were asked questions, which was not only disappointing for the educators, but also kept them wondering if the students were actually physically present onscreen or merely logged in. With non-interactive sessions, faculty could not make out whether students were able to understand the concepts.

Even the opinion of students were divided on the trade off between “disciplinary concerns” and “privacy concerns” on keeping the cameras on. Data privacy concern may be on observed, volunteered, or inferred data from the perspective of both educators and the learners. For example, most of the synchronous sessions were
recorded and shared with students. Online learning management system like Zoom or MS Teams provided sharing co-created learning materials to be shared between the educators and learners. This gave opportunities for the learners to go through them at their leisure or private times, but it raised concerns on these learning materials getting shared by the students with others without consent.

Some of the mischievous students created memes of themselves as profile pictures during the online learning to hide their identity. Some of them posted memes of faculty members while they were teaching and posted them on social media which were gross violation of privacy.

There will be 5% of those Mischief boys who will disrupt the class, and we, of course, look that memes renaming yourself with different cartoon names and coming up with distinct profile pictures and making a Meme out of it, and if that’s happening when I am the Faculty I know how to take care of it, but when it happens with the senior Faculty maybe for the first one or two times he might feel a bit annoyed but later that will surely Ping Pong his confidence.

Sometimes, if the audio was on, there were personal talks on infighting in the family of the students, some mischievous students post it on the social media much to the embarrassment of the victimized students.

Physical and mental well-being and perceived institutional support Prolonged hours of online learning and dependency on screen medium for entertainment and other leisure activities caused vision impairment (CNNIC, 2020), lack of motivation increased (Li & Lin, 2016), attention deficiency (Baumgartner et al., 2014), sleep disturbances, and neck stiffness (Kwon et al., 2013). This was further aggravated by the fact that some of them suffered COVID or have witnessed family members suffering and losing lives due to COVID. They were in need of psychological support to get out of traumatic situations and consultancies for physical and psychological well-being. Some of the institution arranged for weekly activities such yoga, meditation, aerobics, salsa, and lectures on emotional well-being virtually with and without help of smarts apps for students and staffs. In some institutes, faculty mentors engaged in talking with student mentees frequently for academic, career, and psychological counseling. As one of the faculty said

I will say my students- Move your eyeballs, clockwise and clockwise. Okay. Move your shoulders clockwise. And anticlockwise okay. So, this is going to really affect your heads close your eyes for 30 minutes, introspect retrospect, and write down all the things in a diary that you wanted to do in life and figure out how will you complete your dreams? That’s how you get motivation.

Yet, in some cases, students missed the institutional support for psychological well-being and took the support of professional psychiatrists, sometimes without informing family and friends. In some cases, students felt that some faculty members took the opportunity of virtual learning environment to merely touch upon various topics without promoting in-depth discussion. In some cases, student felt the
need of complaining about such faculty members to higher authorities. As one of the students in a business school reported:

I discussed the issue with my classmates and made them understand the importance of voicing our thoughts. It was something which was not ethically incorrect. So we as a group decided to talk to the respective faculty regarding the issue. We developed a plan of action for it as well. Our first step was to talk to the teacher and sort the issue. If the problem still persists, our next step was to reach to the Head of Department and address the issue so that necessary steps can be taken for better learning experience. Final step would be to talk to the administration department and address the issue. However, our teachers were very cooperative and they made us understand the topics by giving us some reference materials and video links.

**Need for peer to peer support versus academic integrity during assessment**  Most educational institutes practiced a continuous evaluation process. The continuous evaluation included pre-recorded video presentation on a topic or cases during class sessions, in-class case analysis by dividing students into groups and allow them to analyze and discuss the cases in breakout rooms and present it before the class, lots of group or individual research–based projects based on primary or secondary, simulation test, written tests, and quizzes based on multiple choice questions. In-class verbal presentation or submissions of video records of case analysis or presentation was less susceptible to ethical violation. Also, it aided the learning assessments of students with disabilities. Though many higher educational institutes used multiple choice questions in proctored examination environment, but large-scale malpractices were observed with all students engaged in cheating and showing elevated performance. Faculty themselves seemed not too keen to use MCQs for evaluation.

I give the options of correct answers to my system, and the computer automatically calculates for the students’ grades. I don’t even see what they’re writing, why they’re writing it, why have they given the answer like that? It’s simply a shortcut of getting the scores without my active involvement in the training process. In physical classrooms, I avoid MCQs altogether because that is not the right way to judge or gauge a students’ performance.

The large-scale cheating was observed in written assignment submission as well as descriptive tests. Proctored environment or use of plagiarism software did not restrict the students from using unfair means. Proctored software was dodged by using sticky note on the laptop screen. Students used Google search options and Google lens to look for answers and pass it to peers using instant messaging systems. For example, one of the faculty members in a business school shared:

There were some issues, or instances where I think there was a lot of plagiarism between the students in terms of let’s say, cooperation and plagiarism, both between the students when it came to some of the assessments. So that way, I think I would say that’s a little bit of both, we could call that an integral dilemma.
One of the reasons with such large-scale malpractices that was observed in almost all the higher educational institute faculty and students was the lack of collaborative learning environment, direct interaction with faculty members, and peer learning opportunities that were missing in the online mode. Most students were undertaking their final professional degree course and were looking for placement. Their academic performance at the degree program will only be considered for screening by their recruiters and all that mattered was how they performed during the selection process. Hence, they were willing to collaborate with each other during the evaluation process to get higher grades. Faculty members and institutions seemed to be liberal or helpless on handling the copying cases as there was a feeling it was informed choices of the students ruining their own future. However, in some cases, Foucault’s theory was satisfied wherein well laid out rules and imposition of self-regulation could check academic non-integrity, as one of the students says that.

I do think that copying and getting marks easily creates a situation of injustice for all those students who have worked hard. Our teachers understood the situation and guided all the students to follow assignment rules. Some of the teachers even warned to give no marks if the content is copied from the internet. The sense of getting less marks made all understand that assignments should be done properly. Also, one important point that all students realized was that it helped them as they were able to understand the topics and implement them.

Some faculty also suggested application based open book test with high difficulty would test students’ critical thinking ability and cognitive scale, better reducing the use of unfair means.

Hence, the result of the study can be diagrammatically represented as given in Fig. 1

Discussion

We have found through this research that success of sudden shift to online learning depends on the support that is provided by the institute during the switch and how faculty are able to accept and adopt the new technology and mold the teaching and learning pedagogy to the new medium to cater the needs of learners with different learning styles and capability. Performance expectancy was low initially. Performance expectancy to the online medium was largely dependent on the socio-demographic characteristics of the participants, both educators and learners and their social capital, the importance of socio-economic characteristics and the social capital, and the importance of socio-demographic characteristics in the online learning (Diep et al., 2016). Effort expectancy to participate actively in the online learning medium was found higher in the beginning but gradually faded out. One of the faculty for example pointed out that the reason why students’ participation that was initially 80–90% which went down to 30–40% could be participants got physically and psychologically tired of the long time that was required to be spent on-screen.
Also, the provision of records of sessions made available to students made them feel that they could go through the sessions at leisure during nights when the family members would not be there to disturb them. The success of online learning medium was much dependent on how engaging and interactive the class sessions were made by engaging students to debate, role play, browse online linkage, participate in polls, participate in short quizzes, etc. Students missed out collaborative learning environment such as learning through peer interaction, socializing, and managing self and others which can be facilitated in residential colleges, development of negotiation skills, while organizing events. But this was facilitated through simulations, multiple projects, research paper writing, multiple virtual internship projects, and scopes of listening to several corporate giants and academicians through leadership talks, etc. Hence, authentic self-paced learning can be facilitated through online learning platform though it gets moderated digital divide among the learners and educators. Both learners and educators seemed to be emphatic towards each other considering that it was necessitated by the criticality of the pandemic situation and agreed hybrid learning could be adopted during the new normal. Aberrations were observed in cases when the students felt delivery of sessions were being made intentionally sub-standard by the educators. They protested by either lodging complaints or using internet tools to disgrace the faculty. Putting cameras during the sessions by learners was considered a mean of disciplining the learners and making them active listeners and participants, but issues about ethical and moral concerns related to privacy arose. Written assessments almost in all the surveyed institutes, either through proctored or non-proctored system, had seen the use of wide-scale unfair means. The only way of

Fig. 1 Diagrammatic representation of the theoretical model
combating it could be through imposing self-discipline or making assessment more application-based. Long hours of online teaching and learning impacted adversely both teachers and learners. This was aggravated by frequent cases of COVID. But educational institutes have adopted measures of physical and emotional well-being of the stakeholders.

**Limitations**

There were limitations to the study. The sample comprised of leaners and educators of engineering and management school and hence may not be generalizable. Secondly, participants were recruited with voluntary participation and self-administered interview schedule which may lead to some bias. The scope can be broadened to encompass various streams and levels of educations in multi-cultural contexts in the future. Sample size though small was based on agreed satisfaction of theoretical saturation among the researchers about the interview responses. An interesting study would be on how the teaching and learning adopted to scientific experimentation in the online medium during the pandemic would have been interesting. The study was based on convenience sampling during a time when educational institutes had only partially opened for offline teaching. The study can form the base for a broader study on feasibility of implementing hybrid of learning in education.

**Recommendations**

Educators in the previous 2 years developed the art and science of planning, applying, reflecting, accessing various technologies, and finally evaluating to make online learning most effective. In the future, effective use of information and communication technology in combining classroom learning with asynchronous and synchronous mode of learning should be debated among experienced educators and learners (Johnston et al., 2018; Patterson & Han, 2019). Discussions should take into account social, physical, ethical, and psychological considerations of online learning. Best practices can be recorded and guidelines for hybrid mode of learning can be laid out for higher education.

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