



Change in Attitude and Perception of School Students towards achieving Sustainable Development Goals During Covid-19 Pandemic

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Abstract

The present paper aims at explaining students' attitudes and perceptions towards online Management Education. It will try to elucidate how online Management Education was perhaps possible for attaining sustainable goals during Covid-19 Pandemic. Practicing sustainable development is necessary so that the world can be safeguarded from threatening developments. Sustainable developments can protect the present and future generations. From an educational perspective, sustainable development would help in attaining demographic dividend, increase human skillsets, optimum utilization of the scarce resources, improve poverty levels, speed up the trickle-down effect of education, and others. This will help ensure sustainability in actions as a holistic effort for the leverage of future learners or generations, in India & in West Bengal in particular. It will help the students, online facilitators, and instructors to provide responsible education to the students thus inculcating a sense of accountability and responsibility toward the attainment of sustainable development goals (SDG). The researcher will highlight an integrated theoretical research model taking into consideration the SDG inclusions aligned with online education aspects (accessibility of an instructor, easy usage of technology, high-quality education, and proactive usage of online resources). The research study will implement quantitative research methods to provide reliable and valid insights based on both primary and secondary methodology for attaining sustainable evaluated findings. The research paper will attempt to conclude that a learner's attitude and perception can be developed through the affective and cognitive domains of learning.

Keyword: Attitude, Covid-19 Pandemic, Management Education, Online Perspective, Perception, Sustainable Development Goals

I. Introduction

The pandemic had a severe effect on the Sustainable Development Goals (SDGs) that were endorsed by the United Nations. The fourth goal, in the context of "Quality Education," was implemented to meet the requirements of education at a global level. The fourth goal highlights that every learner must attain the knowledge and skills that are necessary to provide seamless sustainable development in the work for the advancement and growth of the upcoming generation, environment, and global population. But the pandemic has impacted the education sector especially due to the temporary closure of universities, colleges, and schools. Even after two years, the pandemic did not leave its reins thus making the government, educational institutions, and other organized institutions come up with new and pedagogical approaches / innovative teaching/learning solutions. This has made the policymakers adopt a new instructive approach as the "new normal", specifically in the educational stratum.

This shift, from real to virtual, has impacted the domain of Management education on a large scale; Management facilitators/educators have encountered different online teaching characteristics that are different from the usual classroom teaching techniques. The delivery of MBA subjects as per specializations or teaching case studies or taking Presentations in the offline situation require diverse educational ambiance, educational tools, and guidelines to obtain the viable, sustainable, and optimum knowledge acquisition by the students in comparison to online learning. These facets or parameters are significantly distinctive due to the elements that mental, physical and as well as learning and teaching resources are comprehended in different manners and the lesson delivery and lesson management in an online educational environment to that of class room-oriented setting, are characteristic and unique unquestionably.

The paper has tried to focus on the attitudes and perceptions of Management students in the context of the online learning and teaching environment. It will also throw light on the alignment of the new pedagogical with respect to the attainment of sustainable development goals.

II. LITERATURE REVIEW

Because of recent technological breakthroughs, we can create internet content using a variety of approaches. It is essential to consider learners' interests and views while designing online courses in order to make them useful and productive. The preference of the learner is related to his or her readiness for collaborative learning and the factors influencing that readiness for online learning. In the section that follows, we will provide a summary of the major themes from the review of pertinent literature. Warner et al. (1998) developed the idea of willingness for online learning in the Australian sector of vocational education and training. They primarily used three criteria to define readiness for online learning: (1) students' preference for the delivery method over in-person instruction; (2) students' confidence in using electronic communication for learning, including competence and trust in using the Internet and computer-based communication; and (3) students' capacity for independent learning. Many scholars expanded on the idea, including McVay (2000, 2001), who developed a 13-item questionnaire that looked at student conduct and attitude as predictors. Smith et al. (2003) conducted an exploratory study to examine the McVay's, (2000) questionnaire for online readiness and created a two-factor framework, "Comfort with e-learning" and "Self-management of learning." Later studies concentrated on online communication self-efficacy (Palloff and Pratt (1999); McVay (2000); Roper (2007)), as well as computer and internet self-efficacy (Bandura (1977,1986, 1997); Compeau and Higgins (1995); Eastin and LaRose (2000); Tsai and Tsai (2003); Tsai and Lin (2004); Hung et al. (2010)).

III. RESEARCH METHODS

The research methods that have been implemented to attain viability and reliability in the research study include "quantitative" evaluation. Here the researcher has collected primary data and secondary data to understand the manner in which online teaching and learning programs have helped in the attainment of sustainable development goals (SDGs).

The questionnaire was designed for attaining primary responses from the MBA pursuing students. For getting insights concerning MBA pursuing students' online learning perception, a sample size of 117 students of 4 private Universities [University of Engineering & Management (UEM), Adamas University, JIS University, Techno India University] in Kolkata, West Bengal, was taken into consideration.

IV. ANALYSIS

In order to comprehend the acceptability and sustainability of digital technology or online education, it is essential to put forward the TAM (Technology Accepted Model) that will help in elucidating the facilitating conditions that have catalysed the integration and acceptance of the technology. Usage and implementation of the TAM model have helped the attainment of sustainable implementation of online teaching and learning aspects.

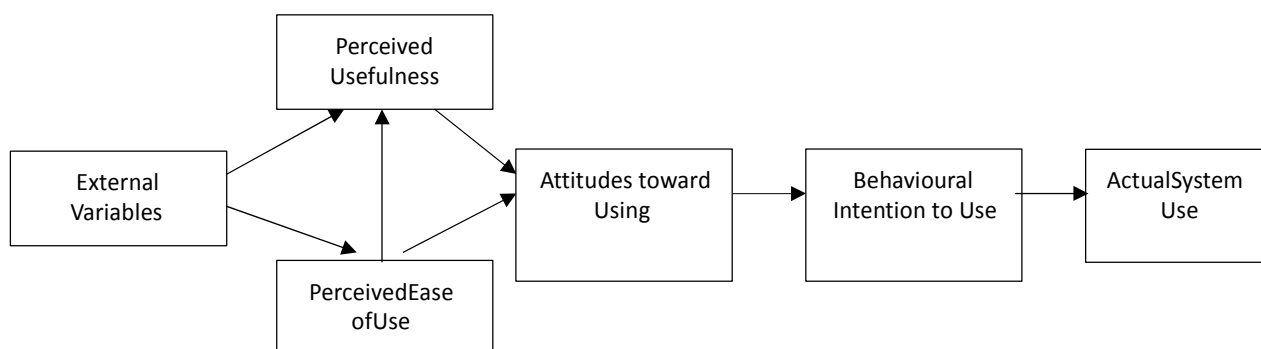


Fig 1: Technology Acceptance Model

(Source: Davis et al. 1989)

Actualizing the Sustainable Development Goal with the Adoption of Enhanced Classroom

Some of the technical inclusions that have led to the attainment of the viable change include:

1. Smart Classroom

We have observed a discernible rise in educational levels, developments, and inventions during the epidemic. The use of virtual whiteboards, projectors, and other audio/visual tools has led to the adoption of current teaching techniques by business schools and other educational institutions. These components of a smart classroom allowed teachers to instruct students successfully while making learning engaging and exciting for the pupils.

2. E-Learning Pedagogy

Since the breakdown of the Covid-19 pandemic, e-learning has become an indispensable and normal pedagogy in professional and academic education. The manner in which the pedagogical methods can facilitate research activities, learning, and teaching are as follows:

- i. Presentation of the students can be modified to the e-learning environment.
- ii. Facilities for visual presentation of connections between the lesson concepts for pupils learning, highlighting relationships between the lesson concepts.
- iii. Provision of asynchronous discussions Here an instructor can start classroom discussions with a set of lesson-related questions. This can be attained through the help of the Learning Management System (LMS).

3. E-Learning Tools

For the sustainable implementation of the E-Learning tools it is necessary for the elearning tools to have the following:

Table 1: Function of the E-Learning Tools

Create	This takes into consideration the curriculum of integrating and locating separate courses in coherent order and also the navigational functions which include content, index or table, entering text, creating pages and also putting media and other related graphics.
Offer	Hosting or offering organized curriculum and setting up online education institutions that involve the collection of several courses so that the learners can show the links/relationships among the single products.
Access	This involves the availability & accessibility of the lesson collections by subscribing and enrolling in them

Findings and Evaluation

The questionnaire was designed to collect responses from 117 MBA students;

1. The online learning application that I use mostly

The researcher identified 6 (Web Ex, WhatsApp, Zoom, Skype, and Google Hangout) online learning applications that were used by the MBA pursuing students for online learning. The table below mentions the number of students that used the mentioned online learning apps.

Sl. No.	Online Learning Applications	Number of Students
1	Web Ex	3
2	WhatsApp	24
3	Zoom	77
4	Skype	0
5	Google Hangout	3
6	LinkedIn	10

2. The expertise and usability of the computer make sure the effectiveness in computer-mediated academic learning.

1. 81.20% of MBA students agreed concerning the expertise and usability of the computer make sure the effectiveness in computer-mediated academic learning.
2. 13.70% of MBA students strongly agreed concerning the expertise and usability of the computer make sure the effectiveness in computer-mediated academic learning.
3. 2.60% of MBA students strongly disagreed concerning the expertise and usability of the computer make sure the effectiveness in computer-mediated academic learning.
4. 2.60% of MBA students disagreed concerning the expertise and usability of the computer make sure the effectiveness in computer-mediated academic learning.

3. Online learning makes sure of the effectiveness concerning coping with the missed lectures

Here, the researcher used the Likert Scale again to seek the primary responses. The table below mentions the number of students and their responses.

Sl. No.	Likert Scale	Number of Students
1	Strongly Disagree	1
2	Disagree	13
3	Agree	69
4	Strongly Agree	34

4. When I learn through online tools then my productivity increases compared to the traditional learning methods

The table highlights the number of students concerning their learning through online tools that productivity increases compared to the traditional learning methods:

Sl. No.	Likert Scale	Number of Students
1	Strongly Disagree	5
2	Disagree	40
3	Agree	59
4	Strongly Agree	13

5. The interaction/communication through online learning methods with the teachers is impactful and proactive. The table below mentions the number of students and their opinion concerning the impactful Ness of online learning.

Sl. No.	Likert Scale	Number of Students
1	Strongly Disagree	12
2	Disagree	38
3	Agree	57
4	Strongly Agree	10

6. Academic presentation with the help of online learning methods is very effective
The table below highlights the responses of the students concerning the efficacy of online learning:

Sl. No.	Likert Scale	Number of Students
1	Strongly Disagree	3
2	Disagree	19
3	Agree	81
4	Strongly Agree	14

7. According to me the quality of learning can be increased with the help of online learning techniques as it involves various kinds of media. The table below highlights the number of student responses concerning the quality of learning and whether various learning techniques could improve online learning:

Sl. No.	Likert Scale	Number of Students
1	Strongly Disagree	4
2	Disagree	15
3	Agree	82

4	Strongly Agree	15
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8. Effective presentation skills can be learned and attained through online learning methods. The table below highlights the responses concerning the efficacy of presentation skills and whether it can be learned through online learning methods:

Sl. No.	Likert Scale	Number of Students
1	Strongly Disagree	5
2	Disagree	26
3	Agree	80
4	Strongly Agree	6

10. The online class materials provided by the teachers are very accurate and useful for studying various management course. The table highlights the responses concerning the usefulness of the online materials provided by the teachers for engaging the students in various management courses:

Sl. No.	Likert Scale	Number of Students
1	Strongly Disagree	2
2	Disagree	15
3	Agree	81
4	Strongly Agree	19

11. I encounter signal/network problems when I take the help of online learning aspects. The table highlights the responses of the students concerning the internet signal problems related with the online learning aspects:

Sl. No.	Likert Scale	Number of Students
1	Strongly Disagree	4
2	Disagree	22
3	Agree	78
4	Strongly Agree	13

12. How E-learning has helped me

Around 44 students responded that online learning helps in comprehending the basic course aspects. 29 students said that online learning helps them to know the gist/synopsis of the basic course topic. 27 MBA students said that online learning helps them to attain the subject knowledge in a proper manner. The rest 17 students said that e-learning helps them to get wide exposure to real-life applications, thus making the learning enjoyable and interesting.

13. I enjoy Online learning

The table mentions the number of responses concerning internet signal problems and online learning:

Sl. No.	Likert Scale	Number of Students
1	Strongly Disagree	4
2	Agree	78
3	Strongly Agree	13
4	Disagree	22

14. What is the main reason for not having a smooth network connection. The learners of today want mobile, self-paced, relevant/significant, and customized content. This need has been catered to with the assistance of online learning mode. The table below mention the number of students and their responses linked with the given options:

Sl No.	Options	Number of Students
1	In understanding the basic course topic aspects	44
2	Understanding the gist of the course topic	29
3	Attaining the subjective knowledge	27
4	Exposure to the real-life applications	17

15. Online learning helps in Active Learning Engagement. The table below highlights the number of students who believe that online learning helps in Active Learning Engagement:

Sl No.	Likert Scale	Number of Students
1	Strongly Disagree	3
2	Disagree	19
3	Agree	79
4	Strongly Agree	16

16. I use online learning due to its visual appeal (information design and appeal)
Around 86 students think that visual appeal in online learning plays a huge role in educating students. Around, 17 students disagreed with the given statement “I use online learning due to its visual appeal (information design and appeal)”. Whereas 4 students strongly disagreed with the given questionnaire question and 10 students strongly agreed.

17. It is easy to access online course materials than compared to traditional study materials which makes me easily and effectively organized. The table below highlights the number of students and their responses concerning the efficacy of the online study materials compared to the traditional study materials:

Sl No.	Likert Scale	Number of Students
1	Strongly Disagree	2
2	Disagree	11
3	Agree	76
4	Strongly Agree	28

18. Professional development is effective with the advent of the online study learning solutions. The table below highlights the number of students and their responses concerning the efficacy of the online study solutions:

Sl No.	Likert Scale	Number of Students
1	Strongly Disagree	4
2	Disagree	20
3	Agree	83
4	Strongly Agree	10

Apart from providing quantitative evaluation of the research questionnaire, the researcher has also tried to elucidate and relate the responses with the secondary source of information. This information has been related and elucidated in link with the macro aspects of sustainable implementation and attainment of the online education goals (as a service). Broad aspects related to the given questions (overall sustainability) were looked for.

1. Internet Adoption in West Bengal
2. Acceptance of online education tools in West Bengal
3. Online education programs in West Bengal
4. What do you understand by educational sustainability?

Conclusion

With online education becoming the primary teaching medium, the structure of the educational system is evolving in an effort to contain the spread of the Novel Coronavirus. To keep up with the curriculum, colleges, businesses, and other organisations are switching to online platforms. Although it may still be too soon to predict how management students and facilitators/teachers will approach online learning as they become aware of its drawbacks and refocus their efforts to overcome them, we have attempted to capture the opinions and attitudes of both teachers and students. Practicing sustainable development is necessary so that the world can be safeguarded from threatening developments. Sustainable developments are able to protect the present and future generations.

REFERENCES

- [1] Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.

- [2] Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- [3] Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- [4] Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, 19(2), 189–211.
- [5] D. Warner, G. Christie, S. Choy, (1998) *Readiness of VET clients for flexible delivery including on-line learning* Australian National Training Authority, Brisbane
- [6] Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management science*, 35(8), 982-1003.
- [7] Eastin, M. A., & LaRose, R. (2000). Internet self-efficacy and the psychology of the digital divide. *Journal of Computer-Mediated Communication*, 6(1).
- [8] Evans, T. (2000). Flexible delivery and flexible learning: Developing flexible learners? In V. Jakupec, & J. Garrick (Eds.), *Flexible learning, human resource and organizational development* (pp. 211–224). London: Routledge.
- [9] Hung, M. L., Chou, C., Chen, C. H., & Own, Z. Y. (2010). Learner readiness for online learning: Scale development and student perceptions. *Computers & Education*, 55(3), 1080–1090.
- [10] McVay, M. (2000). *Developing a web-based distance student orientation to enhance student success in an online bachelor's degree completion program*. In D. Program (Ed.), *Unpublished practicum report presented to the*. Florida: Nova South-eastern University.
- [11] McVay, M. (2001). *How to be a successful distance learning student: Learning on the Internet*. New York: Prentice Hall.
- [12] Palloff, R. M., & Pratt, K. (1999). *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco: Jossey-Bass.
- [13] Peng, H., Tsai, C. C., & Wu, Y. T. (2006). University students' self-efficacy and their attitudes toward the internet: The role of students' perceptions of the internet. *Educational Studies*, 32(1), 73–86.
- [14] Roper, A. R. (2007). How students develop online learning skills. *Educause Quarterly*, 30(1), 62–64.
- [15] Smith, P. J. (2005). Learning preferences and readiness for online learning. *Educational Psychology*, 25(1), 3–12.