
Sport Participation through Information Technology during Pandemic (COVID-19)

Dr. Ashish Pratap Singh

Associate Professor, Department of Physical Education, K.S. Saket P.G. College, Ayodhya, U.P.

Abstract:

Most of the educational organizations such as school and universities have change to used information technology for education such as online learning platforms to keep the academic activities going on in India. In same time, the designing, effectiveness and the preparation of e-learning is still not clearly understood. The availability of information technology infrastructure is huge concern for all countries. All of the business, sport activities and schools has to close physically because of the pandemic and assist all organizations to shift to online platforms. Online learning is the use of information technology for example, internet and some other important technologies. In order to develop materials for educational purposes (Fry, 2001). Hrastinski (2008) stated that there are two types of online learning. Those types are namely asynchronous and synchronous online learning. The online learning to be effective and efficient the teachers and organizations must understanding of the benefits and limitations of the online learning Sports participation has an important role to play. Sports activities are change environment to another. Also, using information and communication technology such as distance learning has become a rapidly growing trend. Online delivery platform becomes very important methods for the graduate and undergraduate students to achieve the advanced degrees and knowledge.

The aim of this study to investigate the impact of online learning on sports participation during pandemic and unseen circumstances. This study used the previous studies to investigate the use of online learning on Sports participation during pandemic (COVID-19). This study comes with obstacles like internet and expenses of recharge that face student in Uttar Pradesh to practice the sport activities during the pandemic (COVID-19).

Keywords: Pandemic Covid-19, Online Learning, Sports Participation.

Received: 16.06.2021

Accepted: 30.07.2021

Published: 30.07.2021



This work is licensed and distributed under the terms of the Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any Medium, provided the original work is properly cited.

1. Introduction:

In March 2020, World Health Organization, decide to announce the COVID-19 as global pandemic. According to the World Health Organization (WHO), this virus can be separate very easy between the people. They did not have any reasons for this virus (WHO, 2020). This virus spread in the most countries in the world. The decrease of social interactions as much as possible is the best way the reduce the separation of the virus. In addition, educational organizations and other places which have people gather has to be closed (Karasmanaki & Tsantopoulos, 2021). Most of the educational organizations such as school and universities have change to used information technology for education such as online learning platforms to keep the academic activities going. In same time, the designing, effectiveness and the preparation of e-learning is still not clearly understood. The availability of information technology infrastructure is huge concern for all countries (T et al., 2020). All of the business, sport activities and schools have to close physically because of the pandemic and assist all organizations to shifted to online platforms. Online learning is the use of information technology for example, internet and some other important technologies. In order to develop materials for educational purposes (Fry, 2001). Hrastinski (2008) stated that there are two types of online learning. Those types are namely asynchronous and synchronous online learning. The online learning to be effective and efficient the teachers and organizations must understanding of the benefits and limitations of the online learning (Adedoyin & Soykan, 2020). This paper will discuss the impact of using information and communication technology such as online learning to deliver the sport class and sport participation.

Review of Related Literature:

The Khelo India and other national physical education aims to maintain and improve health and fitness, achievement, human qualities, Install morals values and noble character, sportsmanship, discipline, and build up strengthen national unity, strengthen national defense, as well as raise the dignity, the dignity and honor of the nation. Also, the benefit of sports has a momentous role

amongst other extra-curricular activities. In this respect, the academic institutions act as a core whose impact on the youngsters matters a lot in society. Those institutions in which university is one of them are responsible for stressing the importance of sports in the community. According to (Willett et al., 2019) the new technologies have affected the landscape of education is in the rapid growth of using information and communication technology such as online learning. Distance learning has been active in some way for more than two centuries. Also, online learning is still in the first stage with respect to the overall higher education process. All of the areas of education need to be linked to information technology to deliver the teaching. Most of the previous studies indicate the lack of the online materials for teaching the sport online (Willett et al., 2019). This lack affects directly the progress of teaching the sport class in schools. According to (Chen et al., 2006) online learning has become an important component to obtain advanced degrees and knowledge. With the development of the information technology more people learn and update their information from the internet, online learning systems become the new approach for the world to enrich the knowledge. An online learning system depends on chat and video conference, which makes the accessible of information very easy for students and teachers (Xu & Yao, 2016). According to (Pustišek et al., 2019) there are a lot of new technology can be used to deliver the sport activities such as internet of things and cloud computing. According to (Koedinger et al., 2015) there are many countries use the MOOC (Massive Open Online Course) for delivering the teaching materials for their student. MOOC is an online video providing an online course for student. Some of the sport teachers ask their student to practice sport by watching the courses online via MOOC, YouTube. Also, there are various applications in the internet allow student to do the physical activity online. Those applications are designed well to achieve the objectives of sport class. In addition, most of the students got high benefits by using those applications (Lonsdale et al., 2019). According to (Xu & Yao, 2016) nowadays, traditional teaching mode can meet learning needs of student and the outcomes needed by the instructors. There is a lack of the technology to assist the need of both student and teachers. Panoramic technology is a system that helps student and teachers to achieve the learning outcomes of the subjects. There are some advantages of using panoramic



technology such as it is online without time and space limitations, such that one-to-one communication can be achieved more easily, the system is very easy, teachers' can make electronic course, allow teachers to share voice and other kind of data, allow teachers and students to records and allow students to upload and download their assignment. Machine learning and deep learning are the new technology in the computer world. According to (Cust et al., 2019) indicate the positive affect of using machine learning and deep learning to enhance the sport activity. It is mean sport activity can enhance and practices with using the technology. Virtual reality becoming the new technology to solve industries problems. Virtual reality is tools use for product design, shopping, training and education. Most of previous studies indicate the grow the Virtual reality marketing. Many sport fans like to attend the sport activities and people like to do sport in the real place. VR technologies could support and enhance the feeling of people to feel that there are in real games (Kim & Ko, 2019). According to (Pueo & Jimenez-Olmedo, 2017) evaluate the performance of athletes become the most critical part in sport activities. Always it is depending on the experience of the evaluator. Now, there are motion capture systems for the analysis of sport performance. Analysis of human motion can be regarded as one of the most precise technique to address elite sports' outcomes. Those systems can sport the decision makers to give the correct decision and decrease the rate of the mistake. Decrease the rate of mistakes will increase the rate of competitive between the athletes. According to (Kim & Ko, 2019) using VR will support the people to enhance their fitness during the time of COVID 19. Sport exercise sciences like other areas of science have been influence by technologies. Sport should adopt the new technologies to increase the fitness level of the people. There are number of technologies can use in sports.

Self-Technology - Landscape Technologies- Implement Technologies-
Rehabilitative Technologies- Movement Technologies- Database

Database Technologies involves computer innovations

Received: 16.06.2021

Accepted: 30.07.2021

Published: 30.07.2021



This work is licensed and distributed under the terms of the Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any Medium, provided the original work is properly cited.

Database Technologies involves computer innovations that allows players know about everything need to know about their opponents. Database programmes have greatly affected the way that many and most professional coaches and players do their business (OMOREGIE, 2016). According to (O'Reilly & Rahinel, 2006) technology is one of the most important components in the sport organization to enhance and develop the sport activities.

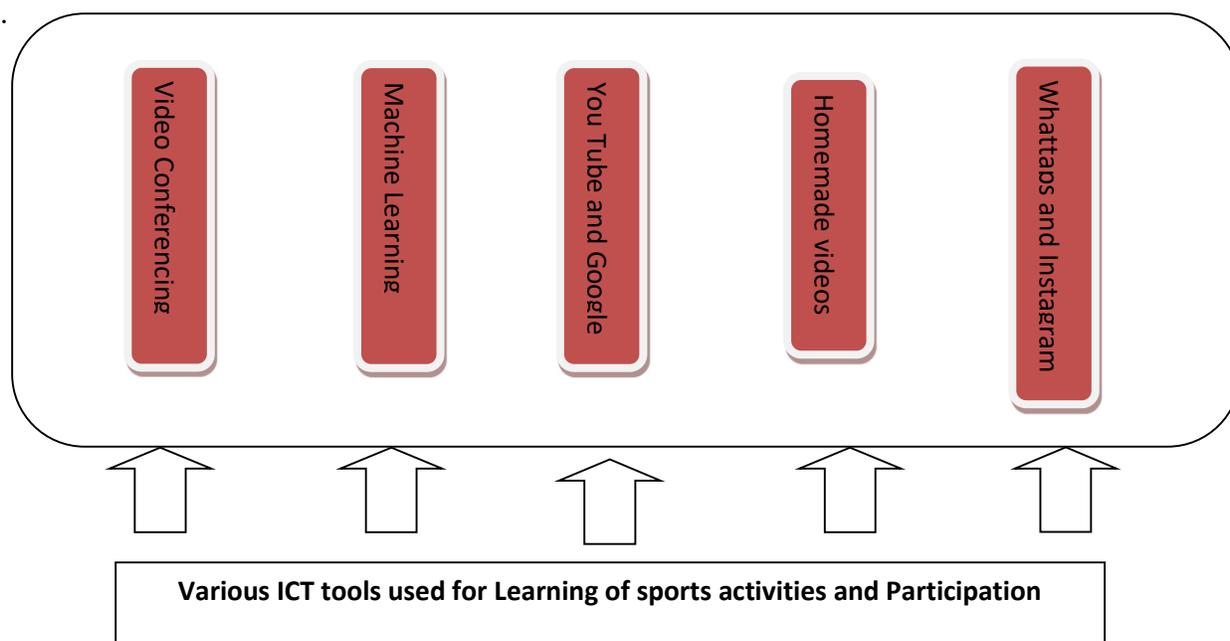
Methodology

This study used various online data base to review the current studies on using the new technologies on sport activities. Also, the impacts of COVID 19 on practise the sport activities on school or outside the school. As well as this paper reviewed the influence of using information technologies to evaluate the performance of players. This study used Science direct and Google Scholar, Scopus and other databases which help to obtain related theses in the focus domain up to January 10, 2021. In addition, authors used some keywords such as the impact of online learning on sports activities, Sports participation, virtual reality with sport activities, machine learning with sport exercise and former technology use to deliver the sport classes. Authors download more than 69 papers which related directly to using technology on sport activities. After that, authors have three criteria to include or exclude the paper. Those criteria are: is this paper using technology on sport, the publish year and publishers. At the end authors reviewed 26 papers which related directly to the main topics.

4. Results and Discussion:

Online learning can be used to help distance learners in all filed. The student experience of online learning is positive. Most of the students agree that online learning provide the different learning experience compared with traditional, teaching. The majority student agrees that using information and communication technology provide different approaches. Those approaches lead to learn and assist student. Also, it facilitated skills such as information retrieval, development of an evidence based stance and collaborative learning strategies that could also be used in other areas of study.

On the other hand, based in the previous studies indicate that limited data is available to offered online classes in the field of sport management. As well many players did not agree with practice the sport online by using new technologies and they prefer to attend the class and matches. Most of students did not practice sport daily during the lockdown. Doing exercise during extended periods of quarantines will effects on mental and physical health. Also, some researchers agree that online learning for sport leads to many health risks and conditions such as cardiovascular disease, one of the leading causes of death. This study finds the positive impact of using online learning to practice sport during COVID 19 time. There are a lot of technologies can use to practice the sport during lockdown for student, teachers and players. As well, there are many applications can enhance and improve the sport competitive between teams and players. Those applications will assist the decision makers to give the right decision and good time. According to (Kim & Ko, 2019) using virtual reality will assist people to enhance their fitness during the time of COVID 19. Sport exercise sciences like other areas of science have been influence by technologies. Sport should adopt the new technologies to increase the fitness level of the people.



Next model presents the technologies those can use for sport to enhance the sport practice, student performance and teams competitive during the COVID 19. This model is summarizing the final results of this study.

Conclusion and future work:

Sports exercise is very important activities to enhance the health. The community health, governmental policy and university can encourage people to participate in sport. Using information technology is best approach to assist people to practice sport in every time. While it might not be feasible for all sport activities within an online model, education and more specifically Sports participation programs and students are evolving, and it is important for all involved to consider online education and its important and relevance within Sports participation. However, most of the students agree that e-learning classes could be more difficult than traditional classroom. The reason is the technological constraints, delayed feedback and inability of the instructor to handle effectively the Information and Communication Technologies. This study finds that sports participation needs to be enhanced to improve the lifestyle of sportsmen by using online learning. Also, online learning has a strong correlation to student health. This research recommend applications and technologies can use by management of sport to enhance the sport activities. Consequently, general obstacles during pandemic (COVID-19) that students are study sports activities online and not to practice them on the ground.

References

1. Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, 0(0), 1–13. <https://doi.org/10.1080/10494820.2020.1813180>
2. Dongthi Thao Nguyen & Kieuthi Thu Chung, " New Trends in Technology Application in Education and Capacities of Universities Lecturers during the Covid-19 Pandemic 17", *International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)*, Vol. 10, Issue 3, pp.1709-1714

3. Chan, M., & Waugh, R. (2007). Factors Affecting Student Participation in the Online Learning Environment at the Open University of Hong Kong. *The Journal of Distance Education / Revue de l'education Distance*, 21(3), 23–38.
4. Chen, S., Marciani, L., Ryder, C., Ward, R., & Allen, D. (2006). Service Quality Assessment of Online Sport Education at a Sport-Specific Graduate Institute. *Online Journal of Distance Learning Administration*, 9(2).
5. Ehab M. Almetwally & Gamal M. Ibrahim, " Discrete Alpha Power Inverse Lomax Distribution with Application of COVID-19 Data ", *International Journal of Applied Mathematics & Statistical Sciences (IJAMSS)*, Vol. 9, Issue 6, pp. 11–22
6. Cust, E. E., Sweeting, A. J., Ball, K., & Robertson, S. (2019). Machine and deep learning for sport-specific movement recognition: a systematic review of model development and performance. *Journal of Sports Sciences*, 37(5), 568–600.
7. Degrees in Sports. (2019). systematic review of model development and performance.
8. Duncan, M. (2009). The student experience of online problem based learning in sport and exercise science. *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education*, 95–115.
9. Felege, C., & Olson, M. (2015). Online education: Faculty perceptions and recommendations. *Focus on Colleges, Universities, and Schools*, 9(1), 1–9.
10. DeepaPandey , " Impact of Mental Health on Job Involvement in Nursing Personnel ", *BEST: International Journal of Humanities, Arts, Medicine and Sciences (BEST: IJHAMS)*, Vol. 3, Issue 11, pp. 149-154
11. Karasmanaki, E., & Tsantopoulos, G. (2021). Impacts of social distancing during COVID-19 pandemic on the daily life of forestry students. *Children and Youth Services Review*, 120 (September 2020), 105781. <https://doi.org/10.1016/j.chilyouth.2020.105781>
12. Kim, D., & Ko, Y. J. (2019). The impact of virtual reality (VR) technology on sport spectators' flow experience and satisfaction. *Computers in Human Behavior*, 93, 346–356
2. Koedinger, K. R., Kim, J., Jia, J. Z., McLaughlin, E. A., & Bier, N. L. (2015). Learning is not a spectator sport: Doing is better than watching for learning from a MOOC. *Proceedings of the Second (2015) ACM Conference on Learning@ Scale*, 111–120.

13. Lonsdale, C., Lester, A., Owen, K. B., White, R. L., Peralta, L., Kirwan, M., Diallo, T. M. O., Maeder, A. J., Bennie, A., & MacMillan, F. (2019). An internet-supported school physical activity intervention in low socioeconomic status communities: results from the Activity and Motivation in Physical Education (AMPED) cluster randomised controlled trial. *British Journal of Sports Medicine*, 53(6), 341–347.
14. Edenedo Edward Edirin, Akarah Emmanuel Oghenebrorien&Tayire Favour Okagbare , " Budgeting as a Panacea to Sports Development in Universities in South-South Nigeria ", *International Journal of Educational Science and Research (IJESR)*, Vol. 8, Issue 3, pp. 71-76
15. McPherson, A., Mackay, L., Kunkel, J., & Duncan, S. (2018). Physical activity, cognition and academic performance: An analysis of mediating and confounding relationships in primary school children. *BMC Public Health*, 18(1), 1–9. <https://doi.org/10.1186/s12889-018-5863-1>
16. O'Reilly, N., & Rahinel, R. (2006). Forecasting the importance of media technology in sport: the case of the televised ice hockey product in Canada. *International Journal of Sports Marketing and Sponsorship*.
19. OMOREGIE, P. O. (2016). The Impact of technology on sport performance. *INCEDI 2016 Conference*, 896–905.
17. Pustišek, M., Wei, Y., Sun, Y., Umek, A., & Kos, A. (2019). The role of technology for accelerated motor learning in sport. *Personal and Ubiquitous Computing*, 1–10.
18. Sayyd, S. M., Abidin, Z., Zayed, F. M. G., Altowerqi, M., Alkuhaili, W. A., & Alsayegh, M. A. (2020). A Preliminary Study of the Factors Influencing Sports Participation in Saudi Universities. *International Journal of Advanced Science and Technology*, 29(10), 896–903. Retrieved from <http://sersc.org/journals/index.php/IJAST/article/view/14526>
19. Sayyd, S. M., Asnaldi, A., & Putri, R. L. (2020). Eye-Hand Coordination of Skill Gyaku Tsuki Karateka Gokasi. *International Journal of Kinesiology and Physical Education*, 1(1), 165–171.
20. Sayyd, S. M., Zainuddin, Z. A. B. Z. A. B., Ghan, D. Z. B. A. D. Z. B. A., & Altowerqi, Z. M. Z. M. (2020). Sports activities for undergraduate students in Saudi Arabia universities: A systematic literature review. *International Journal of Human Movement and Sports Sciences*, 8(1), 1–16. <https://doi.org/10.13189/saj.2020.080101>
21. T, M., S, A., Aditya, K. S., & Jha, G. K. (2020). Students' Perception and Preference for Online Education in India During COVID -19 Pandemic. *SSRN Electronic Journal*, 3(1), 100101. <https://doi.org/10.2139/ssrn.3596056>

-
22. Tan, W., Zhao, X., Ma, X., Wang, W., Niu, P., Xu, W., Gao, G. F., & Wu, G. (2020). A novel coronavirus genome identified in a cluster of pneumonia cases—Wuhan, China 2019–2020. *China CDC Weekly*, 2(4), 61–62.