

Distance Learning During the COVID-19 Pandemic: Student Perception of Aerobic Dance Practical Course

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Abstract. The COVID-19 pandemic requires humans to make adjustments in various aspects of life. In education area, there are also challenges of adjustment with online learning at home. In particular, big challenges are faced by practical subjects such as aerobics dance, which require a practical online learning model. The purpose of study was to determine the perceptions of students in online learning in the aerobic dance course. To obtain these answers, a questionnaire consisting of 20 questions was distributed to all 213 students that follow the course through Google Form. The questionnaire used has met the criteria for the validity and reliability. IBM SPSS Statistics 22 is used in the process of testing the validity and reliability of the questionnaire. With the validity test using Bivariate and reliability test with the Alpha Cronbach formula. The results of respondents' answers in Google Form were converted by Microsoft Excel 2019 program to analyze the average and percentage calculations. The data shows that students have a fairly good perception of practical learning aerobic dance based on the aspects of infrastructure, human resources, media and learning systems and also student competencies. The main problem faced by students in learning is the problem of internet signals that often occurs in online video conferencing meetings. Therefore lecturers must have a passion for work to create interesting and targeted learning innovations so that the weaknesses of online practical course learning can be minimized.

Key words : aerobic dance, lecture, online, perception, practice.

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INTRODUCTION

COVID-19 infects humans when they get together, but gathering together is also the way humans beat this virus. The world has united against COVID 19, from small, personal movements to protect others, to international collaboration in various fields (Luzi & Radaelli, 2020). The COVID-19 pandemic has had a tremendous impact in various areas of life (Schnitzer et al., 2020). The significant impact of the COVID-19 pandemic is felt in fields related to human life, health, tourism and the economy (Simpson & Katsanis, 2020). A study states that education is the area most affected by the COVID-19 pandemic after the health sector (Wong et al., 2020). UNESCO data (2020) shows that in April 2020 it was known that 92% of students experienced the impact of education due to the COVID-19 pandemic.

Recent data shows that more than 1.5 billion students and youth worldwide have been or have been affected by the closure of schools and universities due to the COVID-19 pandemic (UNESCO, 2021). Even so, UNESCO asks the world of education to ensure that the education

process cannot be stopped due to the COVID-19 pandemic. The COVID-19 pandemic demands adjustments in various aspects of life, especially in the field of education. In the higher education level, distance learning has become an opportunity to expand the modality of developing more online learning in the future (IAU, 2020).

The COVID-19 pandemic requires educators to use new ways to interact with students without face-to-face processes in classrooms (Srivastav et al., 2020). For this reason, distance learning is an option that can be made to ensure the continuity of education (Mishra et al., 2020). Even though there are enormous challenges with this pandemic, a strategy is needed to answer the challenge of how to keep learning going and the quality of learning not to decline. For this reason, lecturers can carry out learning online with a wide choice of application types (El-Ghandour et al., 2020).

Online learning using Zoom and WhatsApp is only effective for theoretical courses and a combination of theory-practicum and is less effective for practical and field courses (Ashadi, et al., 2020). The problem is that the aerobic

dance course is a practical course with the main objective of increasing student competence to learn to become an aerobic dance instructor. This course must be implemented in accordance with the existing curriculum even though it has to be done using distance learning methods (Elangovan et al., 2020). The biggest challenge faced by practical lectures is how to arrange learning patterns that are well accepted by students and can improve students' practical skills even though they are not done face-to-face (Ashadi, et al., 2020).

In connection with the challenges of learning aerobic exercise practices, a learning model was developed by optimizing the use of the internet as the main media, with synchronous and asynchronous models (Ashadi, et al., 2020). The direct or synchronous way is through the use of learning media online meeting video conference in the form of Zoom and or Google Meet. The obstacle that often occurs in online learning is the problem of internet networks that are not good so that the lecture material cannot be conveyed properly in the type of learning online video conference (Hoernke et al., 2020). To overcome this problem, in learning aerobic dance practical courses, in addition to using the synchronous mode, asynchronous learning patterns are optimized by creating lecture materials that are distributed via Anchor / Podcast for audio lecture material, Youtube for audio-visual learning and the use of Google Classroom for administration and more instructions details related to lectures (Dutta, 2020).

The problem in this study is that it is not known how students perceptions of the application of this distance learning method. As a form of learning for practical courses that are being developed and tested for the first time, it is not known what form of experience students feel in carrying out the learning process. Therefore it is very important to know the perceptions of students in carrying out this lecture process so that in the future input is obtained in the development and improvement of the long distance practicum course in the aerobic dance course. This is because distance learning will be able to run effectively in the future if improvements and further training are carried out in distance learning services (Tabatabai, 2020).

METHODS

Research Goal

The type of research is a survey using a descriptive quantitative approach. The survey

was chosen with the consideration that it can reach respondents from various regions in Indonesia with a fast response.

Sample and Data Collection

Total 213 students participating in this research with total sampling form used as sampling technique. All of those students follow aerobic dance practical courses in the Sports Coaching Education Department - Faculty of Sports Science – Universitas Negeri Surabaya – Indonesia. To find out the students' perceptions regarding online learning in the aerobic dance course, a questionnaire consisting of 20 questions with a scale of 1 to 5 was compiled with the explanation that 1 is the lowest score and 5 is the highest score.

The questions in the questionnaire consisted of four main variables which were broken down into indicators and a grid of questions that appeared in more detail in the research results.

Before being distributed to all respondents, the questions in the questionnaire had passed the validity and reliability test stages. Based on the value in the table statistical test of two-way significance with a confidence level of 0.01, each question item has a value above 0.1809 so it is considered valid. Furthermore, based on the results of the calculation of the reliability value, the Cronbach's Alpha score is 0.918, greater than 0.6, so that this questionnaire is considered reliable. Furthermore, the list of questions that have passed the validity and reliability test is packaged in the form of a Google Form which is distributed to students via a link on the group WhatsApp. The time limit for filling out the questionnaire is one week from its launch in the WhatsApp group, provided that each student is only given the opportunity to respond once.

Data Analysis

IBM SPSS Statistics 22 were used in the process of testing the validity and reliability of the questionnaire. For the validity test used Bivariate Pearson (Pearson Moment Product), while the reliability test used Alpha Cronbach formula. Furthermore, the data from the respondents answers in Google Form are converted on Microsoft Excel 2019 program to analyze the calculation of the average for each question and the average variable to be used in the digest of the research results. In addition, the percentage calculation is also used in certain sections.

RESULT AND DISCUSSION

213 students participated in filling out this questionnaire with a total response of 100% of the questionnaire returns within one week. The aerobic dance practical course is a compulsory subject for students of class 2017 who are in the seventh semester, but many students of the 2018 class are also taking this course as an additional course. The majority of respondents in this study were male with a percentage of 72.30%, while the other 27.70% were female respondents. Detailed data related to the profile of research respondents are presented in table one.

Table 1. Profile of Respondents (N=213)

Variables	N (%)	Mean Preference Score (SD)
Year of Studi		
Class of 2016	3 (1.41%)	22.33 ± 0.71
Class of 2017	108 (50.70%)	23.30 ± 2.89
Class of 2018	102 (47.89)	21.33 ± 0.82
Gender		
Male	154 (72.30)	22.08 ± 0.76
Female	59 (27.70)	21.67 ± 1.53

Table 2. The Average Value Of Students Perceptions Of Distance Learning In Aerobic Dance Practical Course

Statements	Domain	Mean Preference ± SD
Infrastructure		3.49 ± 0.90
Cellphone / laptop condition		3.73 ± 0.89
Quality of signal		3.22 ± 0.81
Availability of internet quota		3.53 ± 1.01
Human Resources		3.85 ± 0.86
B1. Students		3.57 ± 0.95
Objectives / Motivation to Learn		4.08 ± 0.90
Collaboration Learning with friends and instructors		2.87 ± 1.06
Family & environmental support		3.63 ± 1.01
Enjoyment of music and movement		3.68 ± 0.83
B2. Lecturers		4.13 ± 0.77
Providing information about course achievement targets		4.09 ± 0.77
Providing information about the midtest target achievement		4.15 ± 0.74
Providing information about targets final test achievements		4.06 ± 0.79
Provision of information about the target achievement of tasks		4.2 ± 0.77
Media & Learning Systems		3.72 ± 0.81
Experience		
Lectures using online meetings (Zoom & Google Classroom)		3.6 ± 0.74
Lectures using Anchor / Podcast		3.78 ± 0.84
Lectures using Youtube		3.82 ± 0.84
Lectures using Google Classroom		3.66 ± 0.84
Students Competence		3.49 ± 0.79
Preparing capabilities of choreo footworks		3.31 ± 0.89
Movement coordination ability		3.37 ± 0.81
The ability to compose a warm-up / cool-down choreo		3.44 ± 0.78
Consistency of movement and music		3.38 ± 0.76
Knowledge gained in learning		3.97 ± 0.72

Based on the data in table two, it is known that

the learning infrastructure for aerobic dance course is at a fairly good level. This is indicated by the average variable value of 3.49 from a scale of 1-5 values with the explanation that the lowest score is 1 and the highest value is 5. The majority of students have cellphones/laptops with good quality and can be optimized for learning (Value 3, 73). Besides that, it also has good internet data with the support of free internet from the Ministry of Education and Culture (Score 3.53). The problem that is often faced by students is related to infrastructure, namely the quality of the internet signal which sometimes experiences interference so that an average lecturers. In learning aerobic dance, student indicators value of 3.22 is obtained for internet signals.

Furthermore, the aspects of human resources discussed include students and have a fairly good assessment. This is indicated by the average indicator value of 3.57. The majority of students have high motivation to learn to be aerobic dance (Score 4.08). They also have enthusiasm which tends to be good with respect to music and movement (Score 3.68), as well as support that tends to be good from the family and the environment in their learning efforts (Score 3.63). The problem that exists is that students tend to learn individually and are less able to learn collaboratively during this pandemic period in learning aerobic dance (Score 2.87). In the aspect of the lecturer, the assessment shows that the lecturer has supervised the learning process well. This is indicated by the indicator average value of 4.13. When viewed from the aspect of combined human resources between students and lecturers, the variable value is 3.85 which means that human resources tend to be good.

The next aspect of the media and learning system for aerobic dance tends to be good. This is indicated by the variable average value of 3.72. Students consider that distance learning using online meetings (Zoom and Google Meet), Anchor / Podcast, Youtube and Google Classroom tends to be good for learning aerobic dance. The use of Youtube and Anchor / Podcast is the most liked media by students because these media can be seen and or heard at any time without controlled signal interference (Values 3.82 and 3.78). Meanwhile, online video conferencing meetings such as Zoom and Google Meet are sometimes constrained by problematic internet networks so that there are some parts of the discussion that are not well absorbed (Score 3.60). Furthermore, to accommodate attendance administration, assignments, midterm and final

semester exams, used Google Classroom is as the administrative medium, but students are still not used to using the application so they need to use it often (Score 3.66).

Next, the data on the value of the student competency variables in learning aerobic dance is still shown in table two. It is known that students have good enough competence in aerobic dance learning. This is indicated by the variable average value of 3.49. Students get a good knowledge of the aerobic dance subject in the knowledge / cognitive aspect (Score 3.97). Although learning is carried out using various distance learning methods, students feel that they have quite good practical competence. This is indicated by the ability to choreograph warm-up / cool-down movements (score 3.44), quite consistent in doing aerobic dance in mixing and matching movements and rhythm (score 3.38), being able to coordinate leg, hand and music movements quite well. (Value 3.37) and sufficiently able to compose leg movements choreography for the core of aerobic dance (Value 3.31).

Furthermore, to find out the overall perceptions of students regarding distance learning in the aerobic dance course, the average variable value is calculated based on four variables, including 1) infrastructure, 2) human resources, 3) media and learning systems, 4) students competence. The calculated data is shown in table three.

Table 3. All Aspect Students Perception Average Value of Aerobic Dance Practical Course

Aspect	Domain Mean Preference \pm SD
The whole Aspect	3.68 \pm 0.05
Infrastructure	3.49 \pm 0.90
Human Resources	3.85 \pm 0.86
Media & Learning	3.72 \pm 0.81
Students Competence	3.49 \pm 0.79

Based on the data in table three, it is known that online learning for aerobic dance is considered good enough by students. This is indicated by the final average value of 3.68, with a scale of 1 being the lowest value and 5 being the highest value. Even though in fact, learning aerobic dance is a dominant form of face-to-face practice, but with the COVID-19 pandemic which requires online learning, this requires adjusting the course through the adjustment of the aerobic dance course online learning model which is considered to be quite helpful students in mastering learning material independently through their respective homes.

The majority of students taking the online practical course of aerobic dance in this study were male. This is certainly a challenge because in general there is a tendency for aerobic dance to be preferred by women than men. This happens because men tend to like patterns of masculinity with a strong and assertive character (Martignetti et al., 2020). In addition, in general, male students interest in learning aerobic dance can be said to be in the moderate category (Marín-Díaz et al., 2021). In connection with these facts and challenges, lecturers must have a learning pattern that is able to make teaching and learning activities fun and inspire so that students are motivated to participate in learning optimally (Nahai & Kenkel, 2020).

To support the effectiveness of the online learning process, the availability and smoothness of devices (cellphones and or laptops), internet quota and internet network stability are very vital (Ahmady et al., 2020). In general, students do not experience significant problems with their devices (cellphones and/or laptops). Likewise with the internet quota because students and lecturers have received a free internet data package from the Government of 50 GB per month (Kemdikbud, 2020). The main obstacle faced by students is the problem of a weak and sometimes unstable internet network.

Students who live in urban areas generally do not have serious problems related to internet connection because there are many internet service providers available, but for rural areas, the limitations of internet providers and geographical conditions are a factor in the weak internet network which has an impact on the level of effectiveness of online learning (Chatziralli et al., 2021). In addition, the influence of natural conditions in the form of bad weather and/or heavy rain also worsens the quality of the internet network (Al-Azzam et al., 2020). Sometimes to solve signal problems, students have to move to a garden or a neighbour's house to get good signal quality for online lectures using video conferencing (Harper, 2020).

To anticipate the problems of lectures live online meeting due to internet signal interference, online learning media that has a high level of flexibility are used with the advantages of learning materials that can be played anytime and anywhere as well as limiting live online meetings with the Zoom application for six meetings and the use of optimization of WhatsApp communication media personal and group chat for further lecture coordination. This learning

model was developed by a lecturer in aerobic dance course in dealing with internet signal problems in remote practical learning.

In practical aerobic dance course, the lecturer records theoretical and practical material lectures in the form of sound files through the use of the application Anchor (Podcast). To teach examples of aerobic exercise techniques and instructional movements, recommendations for audio-visual exercise videos are given through the application Youtube. In addition, the application is Youtube also packaged as a medium for uploading the results of the midterm and end-of-semester practice videos with the motivation that students will make the best videos because their performances will be watched by humans all over the world (Vielma & Brey, 2021). This is done because the use of Youtube increases student interest and attention in the educational process (Mukhopadhyay et al., 2020).

Furthermore, for the arrangement of the lecture system (participation, assignments, midterm and final exams), document instructions and assignment returns and/or assignment links are optimized through Google Classroom. This is in line with the perceptions of teachers who use Google Classroom as a basic management place for class management and learning files (Pace et al., 2020). The use of online video conference is increasing during the COVID-19 pandemic (Lockee, 2021). In this learning Zoom and Google Classroom as a form of online video conference application are used for introductory sessions to the beginning of lectures, interactive discussion sessions and checking the development of student competencies which are conducted face-to-face. Meanwhile, things that are unclear and require answers outside class hours can communicate via personal or group chat via the application WhatsApps. The WhatsApp application is feasible, effective and easy to use by students in helping the learning process (Fauzi & Sastra Khusuma, 2020).

In addition to infrastructure, media and learning system factors, student and lecturer factors are human resources affecting the level of effectiveness of online learning (Hussein et al., 2020). When viewed from the research data, it is known that the advantages possessed by students are a high level of learning motivation to become aerobic exercise. This happens because students know that work as aerobic dance instructor is a type of potential work that can be done part-time to increase income in addition to the main job they have. The majority of people pursue a job as

the aerobic dance instructor with the main motive of affiliation, namely to build relationships, increase connections and collaborate networks with others (Lee & Chelladurai, 2018).

Furthermore, the lecturer readiness factor in preparing learning devices certainly also affects the level of learning effectiveness (Moralista & Oducado, 2020). In developing a practical learning model for the aerobic dance course, the lecturer provides directions and aspects of the lecture objectives as clearly as possible including participation, assignments, midterm exams, and final semester exams through the use of various online-based media which have been, as previously mentioned, both done online face to face and online media that can be accessed at any time without being bound by time restrictions. The ability of lecturers to arrange systems and present material has a significant impact on students' enthusiasm for learning (Chakraborty et al., 2021).

To determine the development of student learning in this subject, a self-assessment of the ability to aerobic dance was carried out. Ideally, practical courses are conducted face-to-face because the process of observation, correction and evaluation can be done right at that time with a high level of understanding between lecturers and students.

The practical courses are less effective through distance learning. However, with the COVID-19 pandemic, practical learning was forced online (Muthuprasad et al., 2021). Based on self-assessment, the majority of students have competency in aerobic dance with a fairly good category. This can happen because in general students perceptions regarding the variables of infrastructure, human resources, student competence, media and learning systems are also categorized as good enough to lead well. Even so, there is great hope for students to be able to carry out practical lectures offline in the future because offline practical lectures are still considered more effective than lectures online.

CONCLUSION

Based on the results of the data and discussion, it can be concluded that students have a fairly good perception of learning aerobic dance course based on the aspects of infrastructure, human resources, media and learning systems and student competencies. Even so, offline lectures are considered more effective than online lectures in learning practical courses. The main problem faced by students in learning is the problem of

internet signals that often occurs in online video conferencing meetings.

REFERENCES

- Ahmady, S., Shahbazi, S., & Heidari, M. (2020). Transition to Virtual Learning during the Coronavirus Disease-2019 Crisis in Iran: Opportunity or Challenge? *Disaster Medicine and Public Health Preparedness*, 14(3), e11–e12. <https://doi.org/10.1017/dmp.2020.142>
- Al-Azzam, N., Elsalem, L., & Gombedza, F. (2020). A cross-sectional study to determine factors affecting dental and medical students' preference for virtual learning during the COVID-19 outbreak. *Heliyon*, 6(12), e05704. <https://doi.org/10.1016/j.heliyon.2020.e05704>
- Ashadi, K., Andriana, L. M., & Pramono, A. (2020). Pola aktivitas olahraga sebelum dan selama masa pandemi covid-19 pada mahasiswa fakultas olahraga dan fakultas non-olahraga Sports activity patterns before and during covid-19 pandemic in students of the sports faculty and non-sports faculty *PENDAHULUAN C.* 6(3), 713–728.
- Ashadi, K., Marsudi, I., Herdyanto, Y., & Siantoro, G. (2020). Analysis of the learning style of college student athletes for preparation of distance learning. 390(Icracos 2019), 32–36. <https://doi.org/10.2991/icracos-19.2020.6>
- Ashadi, K., Marsudi, I., Rochmania, A., Jayadi, I., Wulandari, F. Y., & Siantoro, G. (2020). Students Exercise Patterns During the COVID-19 Pandemic. 491(Ijcah), 1230–1237. <https://doi.org/10.2991/assehr.k.201201.206>
- Chakraborty, P., Mittal, P., Gupta, M. S., Yadav, S., & Arora, A. (2021). Opinion of students on online education during the COVID-19 pandemic. *Human Behavior and Emerging Technologies*, 3(3), 357–365. <https://doi.org/10.1002/hbe2.240>
- Chatziralli, I., Ventura, C. V., Touhami, S., Reynolds, R., Nassisi, M., Weinberg, T., Pakzad-Vaezi, K., Anaya, D., Mustapha, M., Plant, A., Yuan, M., & Loewenstein, A. (2021). Transforming ophthalmic education into virtual learning during COVID-19 pandemic: a global perspective. *Eye (Basingstoke)*, 35(5), 1459–1466. <https://doi.org/10.1038/s41433-020-1080-0>
- Dutta, D. A. (2020). Impact of Digital Social Media on Indian Higher Education: Alternative Approaches of Online Learning during COVID-19 Pandemic Crisis. *International Journal of Scientific and Research Publications (IJSRP)*, 10(05), 604–611. <https://doi.org/10.29322/ijsrp.10.05.2020.p10169>
- El-Ghandour, N. M. F., Ezzat, A. A. M., Zaazoue, M. A., Gonzalez-Lopez, P., Jhawar, B. S., & Soliman, M. A. R. (2020). Virtual learning during the COVID-19 pandemic: A turning point in neurosurgical education. *Neurosurgical Focus*, 49(6), 1–10. <https://doi.org/10.3171/2020.9.FOCUS20634>
- Elangovan, S., Mahrous, A., & Marchini, L. (2020). Disruptions during a pandemic: Gaps identified and lessons learned. *Journal of Dental Education*, 84(11), 1270–1274. <https://doi.org/10.1002/jdd.12236>
- Fauzi, I., & Sastra Khusuma, I. H. (2020). Teachers' Elementary School in Online Learning of COVID-19 Pandemic Conditions. *Jurnal Iqra' : Kajian Ilmu Pendidikan*, 5(1), 58–70. <https://doi.org/10.25217/ji.v5i1.914>
- Harper, S. R. (2020). Covid-19 and the racial equity implications of reopening college and university campuses. *American Journal of Education*, 127(1), 153–162. <https://doi.org/10.1086/711095>
- Hoernke, K., McGrath, H., Teh, J. Q., & Salazar, O. (2020). Virtual Learning Innovations for Continuing Clinical Education during COVID-19. *Medical Science Educator*, 30(4), 1345–1346. <https://doi.org/10.1007/s40670-020-01090-0>
- Hussein, E., Daoud, S., Alrabaiah, H., & Badawi, R. (2020). Exploring undergraduate students' attitudes towards emergency online learning during COVID-19: A case from the UAE. *Children and Youth Services Review*, 119, 105699. <https://doi.org/10.1016/j.childyouth.2020.105699>
- Lee, Y. H., & Chelladurai, P. (2018). Emotional intelligence, emotional labor, coach burnout, job satisfaction, and turnover intention in sport leadership. *European Sport Management Quarterly*, 18(4), 393–412. <https://doi.org/10.1080/16184742.2017.1406971>
- Lockee, B. B. (2021). Online education in the post-COVID era. *Nature Electronics*, 4(1), 5–6. <https://doi.org/10.1038/s41928-020-00534-0>
- Luzi, L., & Radaelli, M. G. (2020). Influenza and obesity: its odd relationship and the lessons for COVID-19 pandemic. *Acta*

- Diabetologica*, 57(6), 759–764. <https://doi.org/10.1007/s00592-020-01522-8>
- Marín-Díaz, V., Reche, E., & Martín, J. (2021). University Virtual Learning in Covid Times. *Technology, Knowledge and Learning*, 0123456789. <https://doi.org/10.1007/s10758-021-09533-2>
- Martignetti, A., Arthur-Cameselle, J., Keeler, L., & Chalmers, G. (2020). The relationship between burnout and depression in intercollegiate athletes: An examination of gender and sport-type. *Journal for the Study of Sports and Athletes in Education*, 14(2), 100–122. <https://doi.org/10.1080/19357397.2020.1768036>
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1, 100012. <https://doi.org/10.1016/j.ijedro.2020.100012>
- Moralista, R. B., & Oducado, R. M. F. (2020). Faculty perception toward online education in a state college in the Philippines during the coronavirus disease 19 (COVID-19) pandemic. *Universal Journal of Educational Research*, 8(10), 4736–4742. <https://doi.org/10.13189/ujer.2020.081044>
- Mukhopadhyay, S., Booth, A. L., Calkins, S. M., Doxtader, E. E., Fine, S. W., Gardner, J. M., Gonzalez, R. S., Mirza, K. M., & Jiang, X. (2020). Leveraging technology for remote learning in the era of COVID-19 and social distancing. *Archives of Pathology and Laboratory Medicine*, 144(9), 1027–1036. <https://doi.org/10.5858/arpa.2020-0201-ED>
- Muthuprasad, T., Aiswarya, S., Aditya, K. S., & Jha, G. K. (2021). Students' perception and preference for online education in India during COVID -19 pandemic. *Social Sciences & Humanities Open*, 3(1), 100101. <https://doi.org/10.1016/j.ssaho.2020.100101>
- Nahai, F., & Kenkel, J. M. (2020). Accelerating education during COVID-19 through virtual learning. *Aesthetic Surgery Journal*, 40(9), 1040–1041. <https://doi.org/10.1093/asj/sjaa123>
- Pace, C., Pettit, S., & Barker, K. (2020). Best Practices in Middle Level Quaranteaching: Strategies, Tips and Resources Amidst COVID-19. *Becoming: Journal of the Georgia Middle School Association*, 31(1), 1–13. <https://doi.org/10.20429/becoming.2020.310102>
- Schnitzer, M., Schöttl, S. E., Kopp, M., & Barth, M. (2020). COVID-19 stay-at-home order in Tyrol, Austria: sports and exercise behaviour in change? *Public Health*, 185, 218–220. <https://doi.org/10.1016/j.puhe.2020.06.042>
- Simpson, R. J., & Katsanis, E. (2020). The immunological case for staying active during the COVID-19 pandemic. *Brain, Behavior, and Immunity*, 87(April), 6–7. <https://doi.org/10.1016/j.bbi.2020.04.041>
- Srivastav, A. K., Sharma, N., & Samuel, A. J. (2020). Impact of Coronavirus disease-19 (COVID-19) lockdown on physical activity and energy expenditure among physiotherapy professionals and students using web-based open E-survey sent through WhatsApp, Facebook and Instagram messengers: Impact of COVID-19 lock. *Clinical Epidemiology and Global Health*, 19(May), 0–1. <https://doi.org/10.1016/j.cegh.2020.07.003>
- Tabatabai, S. (2020). Simulations and virtual learning supporting clinical education during the covid 19 pandemic. *Advances in Medical Education and Practice*, 11, 513–516. <https://doi.org/10.2147/AMEP.S257750>
- Vielma, K., & Brey, E. M. (2021). Using Evaluative Data to Assess Virtual Learning Experiences for Students During COVID-19. *Biomedical Engineering Education*, 1(1), 139–144. <https://doi.org/10.1007/s43683-020-00027-8>
- Wong, A. Y. Y., Ling, S. K. K., Louie, L. H. T., Law, G. Y. K., So, R. C. H., Lee, D. C. W., Yau, F. C. F., & Yung, P. S. H. (2020). Impact of the COVID-19 pandemic on sports and exercise. *Asia-Pacific Journal of Sports Medicine, Arthroscopy, Rehabilitation and Technology*, 22, 39–44. <https://doi.org/10.1016/j.asmart.2020.07.006>