

*Opportunities, Issues and Best Practices in Online  
Education and Examination of University Students*

## MASTER'S PROGRAM HIGH PERFORMANCE SPORT E-LEARNING DURING COVID-19 PANDEMIC

**Daniela Dasheva, Hristo Andonov, Liliya Doncheva**

*National Sports Academy "Vassil Levski" (Bulgaria)*

**Abstract.** The COVID-19 pandemic put to the test the learning process in master's degree High Performance Sport. An urgent reorganization of both the theoretical and the sports modules was made. The main problems were what online platforms or tools of communication to be used and how effective this learning would be. Over the last few decades, online learning in higher education has been studied extensively.

The aim of this research was to examine the efficacy of the E-learning in Master program High Performance Sport during COVID-19 pandemic. The main research method used was observation study where the researcher becomes part of the group to be observed. The sample consisted of 92 cases. Sixteen theoretical modules were included together with some of the specialized subjects such as Conditioning, Basketball, Volleyball, Tourism and Orienteering, Biathlon, Tennis, Table Tennis, Weightlifting, Wrestling and Rhythmic Gymnastics. The math-statistical analysis of the data included frequencies and crosstabulation statistics. The software package used to analyse the data was IBM SPSS software platform version 23. The results showed that emails and distance studies platform [www.virtual.nsa.bg](http://www.virtual.nsa.bg) were the most often used online platforms or tools for communication. The crosstabulation showed that the theoretical modules were taught mostly through virtual platform (79.2%) and Viber (74.4%) although the professors teaching specialized sports subjects predominantly used email communication (57.9%) or other social online platforms (62.5%).

This work provides an overview of the extent to which blended education has been highlighted by the pandemic. It helps understand the challenges lecturers may face in the new Internet era in relation to designing applicable materials and using non-standard learning methods to support students and education as a whole. We will have to rethink the very nature of sport and sports education. Perhaps this is a chance for a new beginning.

*Keywords:* education methods; evaluation; problems; opportunities; sport

### Introduction

Due to the invention and quickly development of internet, the accumulated knowledge and information has violent development. E-Learning is a trend of ed-

ucation, it can assist teacher and reduces the loading of teaching. Students can develop the relative knowledge or skills through experience in virtual laboratories and simulated environments<sup>0</sup>. However, the most existent E-Learning systems focus on general subjects such as linguistics, mathematics, management, or science. The E-learning should try to lay more stress on physical education since sports activities are placed importance on our daily lives progressively and can strengthen someone's mind and body (Chun-Hong Huang et al, 2011).

Multimedia contents of teaching material not only increase the learning efficient but also the interesting of learning, especially in the area of Physical education and Sport (Chun-Hong Huang et al, 2010).

Online learning in higher education has been studied extensively over the last few decades. Online Masters programs are on the rise, perhaps unsurprisingly for a field that often requires virtual conferencing and remote collaboration. Universities now offer online master's degrees to accommodate full-time work and long commutes, or to circumvent the financial barriers of moving to a new location with family (Yoshiko Iwai, 2020).

The shift into virtual classrooms is the culmination of the past weeks' efforts to prevent COVID-19 from entering university populations and spreading over local communities: cancellation of university-funded international travel for conferences, blanket bans on any international travel for spring break, cancellation of study-abroad programs.

The National Sports Academy "V. Levski" organized all Master classes in High Performance Sport program online as of March 16 (after declaring the state of emergency).

The pandemic has affected over 114 countries and shows no sign of abating, leading to chaos in the universities and among students. Cancellations are affecting future students as well—admitted students' events, open houses, and campus tours are all being cancelled to minimize contagion. Some subjects are much harder to be transferred online. The screen creates an emotional distancing that makes it difficult for both professors and students to have back-and-forth dialogue. Also, it is almost impossible for lecturers to provide thoughtful feedback without feeling like they are speaking into a void.

The World Bank investigates how countries are using EdTech (including online learning, radio, television, texting) to support access to remote learning environment during the COVID-19 pandemic. The results show that almost all countries have introduced educational technologies of all sorts to provide remote learning opportunities for students while schools are closed as a result of the COVID-19 pandemic (World Bank, 2020).

Hopefully, these phases of trouble shooting can provide universities, professors and students with the opportunity to practice adaptability, patience and resilience. And hopefully, these experiences will serve as a preparation for future challenges that come with the next epidemic, pandemic and other disasters.

It is also important to reconsider the current delivery and pedagogical methods

in master education by seamlessly integrating classroom learning with e-learning modes to build a unified learning system.

Digital learning management systems, communication tools and e-learning platforms are playing a crucial role during this pandemic (COE Team, 2020; EPALE – Electronic Platform for Adult Learning in Europe, 2020; UNESCO, 2020; World Economic Forum, 2020). Software and apps can help learning providers to manage, plan, deliver and track the learning process.

In this time of crisis, a well-rounded and effective educational practice is the thing needed for the capacity-building of young minds. It will develop skills that will drive their employability, productivity, health, and well-being in the decades to come, and ensure the overall progress of Bulgaria. But no technology will be able to replace the expertise, enthusiasm and human approach to education!

Nevertheless, we believe that although much has been said about the present and future impact of this pandemic, much less is known.

### **Aim and tasks of the research**

The aim of this research is to show the effectiveness of online learning in Master program High Performance Sport during COVID-19 pandemic.

### **Goals of the research**

1. What will the role of online learning be in master's degree in High performance Sport in the future?
2. Will the organisational structure of the master's program change in response to the pandemic?
3. What was the most used online platform or method for communication?
4. Was the education provided efficient or not?
5. Did you meet some problems during the E-learning education?

### **Methods**

The main method used was observation study where the researcher becomes part of the group to be observed. This means the researcher must fit in, earn the trust of the members of the group and at the same time remain sufficiently detached as to be able to carry out the observation. The observation is based on what people do, the explanations they give for what they do when teaching the master students, the communications amongst them and the features of the situation which is new to them.

The observation was carried out in the time of COVID-19 pandemic. The professors sent their reports which included: the module taken, the form of learning (regular or par correspondence), the number of hours taught, the description of the educational materials, examinations, the form of communication, and the number of the students. The master students were from regular and par correspondence form of education.

The sample consisted of the 92 cases. Sixteen theoretical modules some of them were -Fundamentals of the Multiannual Preparation, Specific statistical methods, Sport Management and Marketing, English in sport, Biochemical bases of biostimulation in sport, Simulators and equipment for complex scientific control in sport, Injury prevention in Top Level performances sport were included together with the specialized subjects such as Conditioning, Basketball, Volleyball, Tourism and Orienteering, Biathlon, Tennis, Table Tennis, Weightlifting, Wrestling and Rhythmic Gymnastics. The math-statistical analysis of the data included frequencies and crosstabulation statistics. The software package used to analyse the data was IBM SPSS software platform version 23.

### **Results**

The first issue that drew our attention over the past months was to what extent online education would affect the master's degree in High Performance Sport in the future. In the process of teaching and learning online we asked ourselves several very topical questions: How might this change the forthcoming new educational year? What are the advantages/disadvantages of teaching and learning online? In what ways does the teacher's role change as classes go online? What tools turn out to be the most/least useful?

One of the major conclusions drawn was that online learning is significantly easier in technical and theoretical subjects than in sports disciplines or areas that require creativity. Human tutoring – having a teacher who motivates, inspires and supports the advance of independent thinking is still indispensable. However, it is crucial that in times like these, human tutoring can be facilitated through online and digital means that are equally accessible to everyone.

A recent article, however, notes that nearly 1.3 billion secondary and tertiary school-age students worldwide are unable to attend school due to the ongoing crisis, which is likely to have a huge impact on global education; current UNESCO statistics put this figure at over 1.5 billion.

The anticipated changes could be grouped as following: (1) immediate changes to deal with the issue of continuity of teaching; (2) long-term changes caused by the sudden shift in the process, behaviour and new resource development; (3) changes in the working model of National Sports Academy as regards students' ability to afford education; and (4) needs for regulating and facilitating quality higher education in sport in changing times.

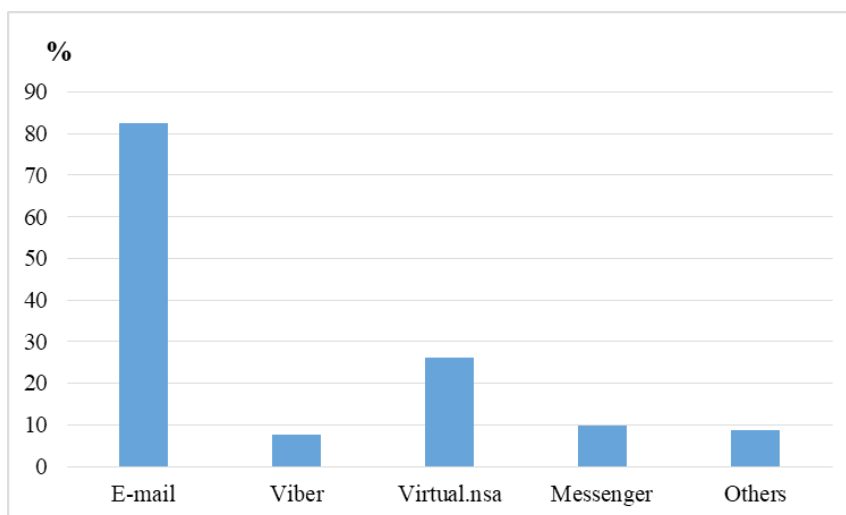
How to prepare for tomorrow in online education in Master program High Performance Sport.

For those who teach in sports master programs, this period imposed a fundamental restructuring of the way they were engaged in the process of instructing their students. In sport, where technique and physical skills are paramount, this could limit the effectiveness of many kinds of learning practices. Similarly, the

ability of teachers and professors to ensure the development of togetherness and belonging within groups is likely to be altered as well. It will be interesting to observe the extent to which the digitalisation of sport master's education that started with the COVID-19 pandemic wins' territory and takes up a larger share of sports practices and education. Probably it is possible to create a greater reliance upon sight and kinesthesia and change the ability of students and professors to share feedback (e.g. McNarry et al., 2020).

The results obtained from the analysis of the data regarding the most often used online platform or method for communication indicated the following (Figure 1):

Most of the professors – 82.6% used the E-mail as a method for communication; 7.6% – Viber; 26.1% – distance studies platform [www.virtualnsa.bg](http://www.virtualnsa.bg); 9.8% – Messenger, and 8.7% – other Internet environments such as Google classroom, zoom.us.



**Figure 1.** What was the most used online platform or method for communication?

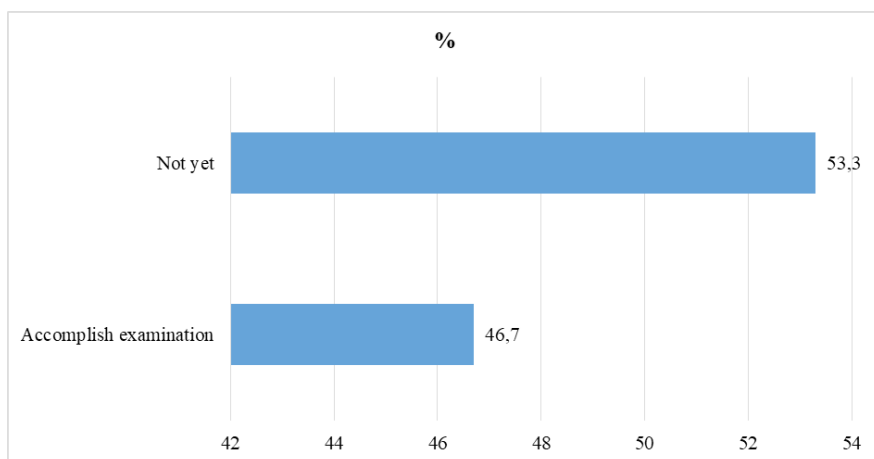
Crosstabulations showed that the theoretical modules were mostly taught through the virtual platform (79.2%) and Viber (74.4%) although the professors teaching specialized sports subjects predominantly used email communication (57.9%) or other social online platforms (62.5%). They mentioned that they also used the video registration to show the exercises and full training session.

The effectiveness of the learning process, according to experts, is mostly determined by the platform's capabilities to ensure the relevance of learning material, accessibility to learning materials and re-sources, and a user-friendly

virtual environment (platform) (Kuleva, 2017). The platform provides opportunity for highly efficient preparation for the theoretical subjects. The skilful combination between the different forms of education will undoubtedly raise the quality of the education process in all universities, including the National Sports Academy (Kuleva, 2017).

The other task we set regarding the efficiency of online learning was resolved with the analysis of the results from the final exams the students took. We found out that many of the master students accomplished their examination tasks successfully (Figure 2).

The results regarding lecturers' attitude towards this entirely new kind of teaching showed that all of them had a higher positive attitude to distance studies than to the normal face to face learning. This is perhaps due to the fact that they were free to use different materials at home, had more time for preparation and worked in a less stressful environment which helped them. Consequently, we can assume that the quality of the educational process did not suffer much, however, no real control over students' participation and gained knowledge was exerted.



**Figure 2.** Was the education provided efficient or not?

The last goal to resolve in this research was connected to some problems that the professors face during E-learning COVID-19 education.

The 50% mentioned that that they found the difficulties to enter in the virtual. nsa platform and they believe that it is necessary to upgrade this platform. The 30% had no problems, and 20% only occasionally. The Crosstabulations showed that statistically significant the professor from specialized practical modules

faced more frequently the problems that those from theoretical modules ( $\chi^2=7.6$ ,  $\alpha\leq 0.03$ ,  $C=.61$ ).

### **Discussion**

The educational uses of the information and communication technologies have been increasing considerably during the last years.

This research is nothing more than a snapshot; written at a moment when much about the future of sports master education seems to be uncertain, seen from a specific set of perspectives, contexts and structure. Much remains to be done to ensure the long-term survival of this practice, and we would argue that specialist in sports education could and should play an important role in providing knowledge about how sports master education can weather the storm. We also realize that there is a need for improving the initial and continuous education of Sport Science lecturers.

The forthcoming months will prove whether online education is something good or not, or what else should be done to improve practice. All commentaries or opinions are very important for building a scientifically robust empirical and theoretical basis. We are confident that specialists' contribution will be hugely valuable in various ways. This work provides an overview of the extent to which blended education has been highlighted by the pandemic. It helps understand the challenges lecturers may face in the new Internet era in relation to designing applicable materials and using non-standard learning methods to support students and education as a whole. We will have to rethink the very nature of sport and sports education. Perhaps this is a chance for a new beginning.

**Acknowledgements.** We want to express our gratitude to all the professors teaching in master's degree High Performance Sport for their full dedication to participate and experience those difficult days.

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✉ **Daniela Dasheva**

ORCID ID: 0000-0002-9107-8481

**Hristo Andonov**

ORCID ID: 0000-0001- 6854-4651

**Liliya Doncheva**

ORCID ID: 0000-0001-8545-0147

National Sports Academy "Vassil Levski"

Sofia, Bulgaria

E-mail: danieladasheva@abv.bg