

## EVALUATING THE EFFICACY OF ONLINE SPORTS PROFESSIONAL DEVELOPMENT ON FACULTY MEMBERS' ENGAGEMENT AND CONFIDENCE

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### ABSTRACT

*This research aimed to examine the relationship between physical education and sports teachers' subject knowledge of web-technological pedagogy and their readiness to participate in online learning. The participants included instructors from a range of demographics, including gender, school level, and tenure. Techniques: A total of 180 PE and high school instructors generously offered their time to the study. Data was collected for the study using a researcher-developed form as well as the Web-Technological Pedagogy Content Knowledge Scales and the Online Learning Readiness Scales. Participants demonstrated a high degree of expertise and readiness for online learning, according to research in web-technological pedagogy. Despite no statistically significant difference in subject knowledge of web-technological pedagogy or service time characteristics, the results demonstrated that women were more prepared for online learning. Additional research found a positive correlation between having a firm grasp of web-technological pedagogy topics and being prepared to study online. Finally, it was shown that understanding web-technological pedagogy accounted for 38% of the variance in readiness for online learning. Online learning, physical education, and internet literacy are among the key topics, along with familiarity with web-technological pedagogy. Recent years have seen a plethora of studies devoted to the concept of "technological readiness and online learning self-efficacy" across several disciplines. The vast majority of studies that have looked at this issue have shown a negative correlation between the two factors.*

**KEYWORDS:** Online Learning Opportunities, Undergraduate Learners in Sports Studies, Physical Education and Athletics, Readiness.

## INTRODUCTION

Sport development is an essential objective for any nation since it helps to boost elite performance and opens doors for participation from the general public. Both the process of coming into being and the process of reaching one's maximum potential are phases of development. What the researchers call a "sport" might mean anything where two or more people compete against one another. Developing a sport means taking it from an amateur level and bringing it to the next level while considering and accounting for all the aspects that go into making it a reality (Alzahrani et al., 2021). Sport is a universally provided social service by nations across the world. The success of sports, however, depends on the establishment of rules and regulations. Statistical analysis shows that varsity sports at Nigerian institutions are losing ground. Academics throughout the world are increasingly dismissive of student sports, seeing them as having little bearing on their pupils' ability to succeed in the classroom. Schools should be the first and foremost locations to focus on athletic development. PE programs are effective because they appeal to children's natural inclination to be active, regardless of how timid they may be. There has never been a time when sports didn't expand thanks to physical education, which starts in schools with graded, organised instruction given by trained specialists. Physical education programs in secondary schools in Nigeria are now in a terrible condition. What Nigerians call the colonial period was characterised by a lack of instruction on this topic in schools. Physical education classes were mandatory in all schools at that time, and they were highly controlled and militaristic in character. Each teacher was obligated to conduct a 30-minute period of "vigorous regimented physical activities" during which students played. Aside from that, there was a daily break during which other games and events were scheduled. That way, every single kid would have heard the message about how important it is to be active and participate in sports. Near the end of elementary and secondary school, it became much easier to find students who had inherent athletic ability. In Nigerian schools, physical education and sports are slowly but surely fading away. It is common practice to include physical education into the last year of high school curriculum. So, nobody is really excited about it, not even the kids or the school administration. While a few of interest schools hurriedly plan what is often known as an annual inter-house sports competition, very few secondary schools really include this into their academic calendar. Students are expected to play sports in this environment without any actual training or background knowledge, which is perplexing (Bonfield et al., 2020).

## BACKGROUND OF THE STUDY

Before sports could be considered a legitimate profession, the role of coaches had to be defined. The position had been firmly established by 1914, having begun to take shape during the Victorian era. The sports industry has its roots in the growing popularity of organised sports in the Americas and Europe in the middle to late 19th century. Many historians regard the 1870s American debut of professional baseball to be a watershed moment in the evolution of the sports industry (Cabero-Almenara et al., 2022). Over the years, China's sports industry has gone through three main stages. From 1978 to 1992, the first phase was called the Exploratory Stage. The second phase, known as the formative years, began in 1993 and ended in 1996. The third phase, development, began in 1997 and continues to the present day. This historical research includes an analysis of physical education's pedagogical content, as well as its historical contexts, policies, faculty training, and curricular settings. PE as a subject area in school curricula is also examined in relation to these four major historical periods. Primary focus is on PE in Chinese primary and secondary schools, with a brief overview of PE in Chinese universities also included. An examination of the four main phases of PE reform in China may provide light on the evolution of PE throughout different eras (CAR et al., 2020).

## PURPOSE OF THE RESEARCH

By studying the evolution of the sports management field through time, both academic study and professional training can shed light on the rules and processes that have shaped the field and help put a theoretical framework in place for its future growth. In addition to outlining future directions for the field of sports management, this document also encourages the establishment of such a profession in China, gives theoretical guidance for its growth, and guarantees and supports the expansion of both the sports discipline and the country's sporting prowess. The growth of the field of sports management depends on all of these factors. One active educational approach is experiential learning, which allows students to put what they have learnt in the classroom into practice in authentic contexts. Students may discover that internships, job shadowing, and other work-related experiences, together with classroom reading and debate, are more useful than academic settings for figuring out their professional goals before they leave school. Students are required to do an internship as part of the curriculum in around 80% of sport management programs in the US.

## LITERATURE REVIEW

Sports management as a field in China is in its early stages of development, in contrast to other nations where it has been around for a while and is now well-established. It has not yet matured into a completely operational system, but it has already generated some early results. The area of sports management makes use of a wide variety of approaches and strategies (Cutri & Mena, 2020). Skills learnt in sports administration programs are woefully inadequate when weighed against societal needs. The country's sports management major should not emerge organically but rather be systematically organised, dug up, studied, summed, and polished in accordance with the findings of the historical process and the principles of discipline development. It is important to accomplish this so that the division's traits and the internal rules governing its evolution may be summarised. Both of these things are used as kinds of punishment. A person's needs for personal growth align with the standards established by the establishment of China's sports management profession. The training of teaching instructors, the improvement of the theoretical level of professional sports management teachers, and the level of teaching that integrates theory and practice to teach are all benefited by the development of a mature and

comprehensive professional system for sports management. Not only that, but it also helps with disciplinary team building, scientific research team structure, and the cultivation of future discipline leaders (Cesco et al., 2021).

## RESEARCH QUESTION

- What are the effects of multimedia integration on faculty members' confidence?

## RESEARCH METHODOLOGY

### RESEARCH DESIGN:

The quantitative data analysis was performed with SPSS version 25. The odds ratio and 95% confidence interval were used to determine the degree and direction of the statistical association. The researchers established a statistically significant criteria at  $p < 0.05$ . A descriptive analysis was conducted to identify the main features of the data. Quantitative methods are often used to assess data acquired via surveys, polls, and questionnaires, as well as data altered by computing tools for statistical analysis.

### SAMPLING:

The investigation used a simple sampling method. Questionnaires were used in the study to collect data. The Rao-soft program established that the sample would consist of 1200 individuals. We sent 1,350 questionnaires, got 1,280 responses, and discarded 80 due to incomplete information. A total of 1200 surveys were used for the investigation.

### DATA AND MEASUREMENT:

A questionnaire survey served as the principal tool for data gathering in the study. The survey had two sections: (A) General demographic information and (B) Responses on online and offline channel variables assessed using a 5-point Likert scale. Secondary data was gathered from many sources, mostly on internet databases.

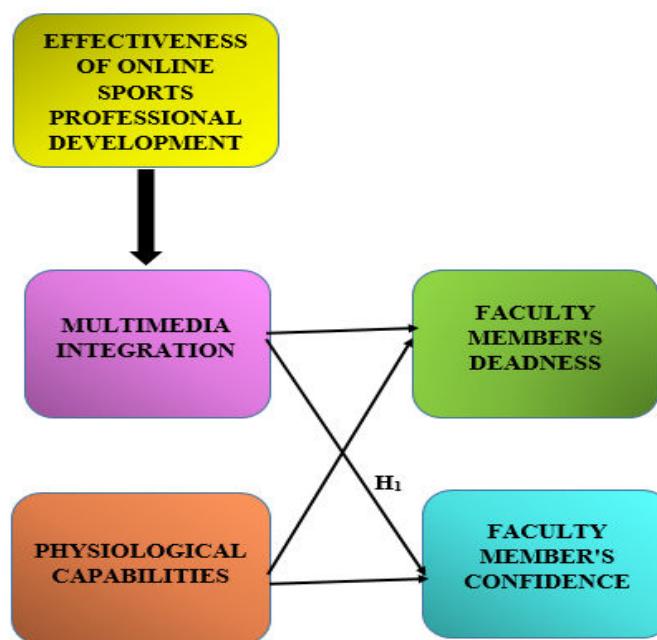
### STATISTICAL SOFTWARE

The statistical analysis was conducted using SPSS 25 and MS Excel.

### STATISTICAL TOOLS

Descriptive analysis was used to understand the fundamental characteristics of the data. The researcher must analyse the data using ANOVA.

## CONCEPTUAL FRAMEWORK



## RESULTS

### • FACTOR ANALYSIS

One common use of Factor Analysis (FA) is to check for hidden parts in data that is already apparent. When there are no clear visual or diagnostic signals, assessments are made using regression coefficients as a matter of routine. Models are necessary for FA to work. The fundamental goals of modelling are to find errors, intrusions, and relationships that seem to be there. One way to check the quality of datasets from numerous regression investigations is to use the Kaiser-Meyer-Olkin (KMO) Test. They check to make sure that the model and sample variables are representative of the entire. It seems like there is duplicate data based on the numbers. Data is simpler to grasp when the proportions are smaller. When you run KMO, you get a whole number between 0 and 1. The sample size should be big enough if the KMO value is between 0.8 and 1. Kaiser says these are the limits that are allowed: Here are the standards that Kaiser has established for approval:

A score of 0.050 to 0.059 is very low, while a score of 0.60 to 0.69 is below normal.

Middle grades are usually between 0.70 and 0.79.

With a score of 0.80 to 0.89 for quality.

They are amazed at the range of 0.90 to 1.00.

Table 1: KMO and Bartlett's Test.

The Kaiser-Meyer-Olkin test shows that the sample size is good enough at .850.

The results of Bartlett's test of sphericity are as follows: approx. chi-square

df=190

sig.=.000

This proves that claims made only for sampling are legitimate. Researchers put the correlation matrices via Bartlett's Test of Sphericity to make sure they were relevant. According to Kaiser-Meyer-Olkin, an appropriate sample is indicated by a value of 0.850. According to Bartlett's sphericity test, the p-value is 0.00. If the correlation matrix does not pass Bartlett's sphericity test, then it is not an identity matrix.

**Table 1:** KMO and Bartlett's Test

KMO and Bartlett's Test <sup>a</sup>		
<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		<b>.850</b>
<b>Bartlett's Test of Sphericity</b>	<b>Approx. Chi-Square</b>	<b>4350.175</b>
	<b>df</b>	<b>190</b>
	<b>Sig.</b>	<b>.000</b>
<b>a. Based on correlations</b>		

Furthermore, Bartlett's Test of Sphericity offered further confirmation that the correlation matrices were statistically significant. The Kaiser-Meyer-Olkin statistic, indicating sample adequacy, is 0.850. The researchers obtained a p-value of 0.00 using Bartlett's sphericity test. In light of the significant result from Bartlett's sphericity test, the researcher concedes that the correlation matrix is flawed.

#### ❖ INDEPENDENT VARIABLE

##### • EFFECTIVENESS OF ONLINE SPORTS PROFESSIONAL DEVELOPMENT:

When educators can participate in high-quality professional development programs, they are better equipped to grow professionally, improve their teaching methods, and push their students to greater heights (Cutri et al., 2020). By investing in high-quality professional development, the researchers are essentially saving for the future of the educational system. In order to foster future professional progress, the educational staff should build upon their current body of knowledge, talents, and experience. Professionals may expand their horizons via continuing education by combining new knowledge with what they already know and can do. One kind of education is online learning, which makes use of technological advancements that provide direct interaction. Researchers are hoping that by taking part in this event, parents and educators will find it easier to assist their children with online sports education. As a whole, athletes strive to improve their health, athleticism, analytical thinking, emotional resilience, and mental toughness via sports-based learning. If they want their students to succeed in sports education, teachers must have a firm knowledge of learning systematics and know how to use it effectively. Students' motivation to study may increase if they are more informed and conscious of the world around them, especially in the context of athletics. Furthermore, the researchers may aid in the prevention of psychological troubles by strengthening their immunity via the instruction of sports in the classroom. Physical exertion and skill are often at the center of human activities that are recognised as sports. Some sports also include elements of competition or social involvement. Rules and guidelines of behaviour set by groups formally control the activity. Students develop stronger time management skills when they take online courses because they are more accountable for their own learning and participation, rather than depending on professors to dictate when and how they should attend. Students enhance their time management skills while acquiring course material (Dhawan & Shivangi, 2020).

#### ❖ FACTOR

##### • MULTIMEDIA INTEGRATION:

"Integrated multimedia" describes a presentation that uses picture, video, and audio files as its primary components. Integrated multimedia is the name given to this kind of technology. An example of "interactive multimedia" would be a project where the spectator (or end user) may choose which multimedia elements to see and when to see them. A digital platform or application that incorporates text, audio, images, video, and interactive elements is called a "multimedia"

platform or application. By combining several types of media, the researchers can build an experience that is more captivating and immersive than the usual fare of multimedia content. Because of the universality of the digital format of ones and zeroes, the phrase "media integration" describes the blending of many forms of media without quality loss. Thanks to this structure, all of these different kinds of data may be processed by a single computer. Multimedia refers to the presentation of text, images, music, and video on a computer with the help of links and tools that enable the user to access, interact with, and create content. Entertainment and interactivity are two of the main goals of multimedia in the information dissemination process (Elisondo et al., 2023).

#### ❖ DEPENDENT VARIABLE

##### • FACULTY MEMBER'S CONFIDENCE:

Having faith in one's ability to plan, execute, and manage one's performance to accomplish a task or issue to one's satisfaction is a sign of competence. Members of the teaching staff are referred to as "faculty" in the context of an educational institution. The faculty at postsecondary institutions is composed of academics, as opposed to the teachers who work in primary and secondary schools. Furthermore, academics, researchers, and lecturers are all potentially regarded as faculty members at different universities. Everyone with a position in an educational institution, whether in teaching or administration, or in an administrative role with academic rank, is regarded as a teacher. An outstanding mathematical faculty exists. Because of this, the researchers are better able to face any challenges life throws the way. When researchers feel confident, they are less likely to back down from individuals or circumstances, and they are also more likely to go forward with them. Being confident also allows us to attempt again if the first time doesn't succeed (García-Morales et al., 2021).

##### • RELATIONSHIP BETWEEN MULTIMEDIA INTEGRATION AND FACULTY MEMBER'S CONFIDENCE

By making online professional development courses more interactive, interesting, and successful, multimedia plays a big part in boosting faculty members' confidence. Being a successful educator, especially in fast-paced areas like sports education, requires not only knowledge but also faith in one's own abilities to put that information to use. The use of multimedia technologies like animated tutorials, interactive quizzes, virtual demonstrations, and real-time feedback systems simplifies complicated teaching methods and makes learning more concrete and relevant (Guillén-Gámez & Mayorga-Fernán, 2020). The use of these technologies facilitates a greater level of comfort and familiarity with new information for faculty members by allowing them to visualise teaching strategies, examine best practices, and practise skills in simulated contexts. A sports teacher, for instance, can gain confidence and competence in their teaching abilities by watching slow-motion video analysis of sporting skills or by taking part in virtual coaching simulations. In addition, by catering to different learning styles, multimedia makes learning more inclusive and personalised, which in turn increases retention and understanding, two aspects that are crucial to building self-assurance in one's professional abilities. Teachers may re-visit difficult subjects whenever they choose, thanks to on-demand information, which helps alleviate tension and gives them agency over their own education. Also, by recording and reviewing one's own coaching or teaching performances, multimedia may help educators with reflective learning by highlighting both good and bad points. Faculty members are empowered to take initiative, adopt creative teaching tactics, and confidently lead students in multimedia-integrated learning settings because of the immersive and supportive character of these spaces. This is because confidence is intimately related to experience and perceived self-efficacy. Thus, multimedia is more than simply a technical upgrade; it is an essential educational tool that promotes greater comprehension, inspires experimentation, and, in the end, boosts the professional self-assurance of teachers in both online and traditional classrooms (Ishak & Mansor, 2020).

Consequent to the above discussion, the researcher proposed the following hypothesis to evaluate the link between Multimedia Integration and Faculty Member's Confidence.

***H<sub>0</sub>*: There is no significant relationship between Multimedia Integration and Faculty Member's Confidence.**

***H<sub>1</sub>*: There is a significant relationship between Multimedia Integration and Faculty Member's Confidence.**

Table 2: H<sub>3</sub> ANOVA Test

ANOVA					
Sum	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	39588.620	478	5290.418	1015.240	.000
<b>Within Groups</b>	492.770	721	5.211		
<b>Total</b>	40081.390	1199			

The results of this investigation will be substantial. The F statistic is 1015.240, attaining significance with a p-value of 0.000, which is below the alpha threshold of 0.05. This signifies the "***H<sub>1</sub>*: There is a significant relationship between Multimedia Integration and Faculty Member's Confidence**" is accepted and the null hypothesis is rejected.

## DISCUSSION

The premise that variables should be related in order to do multiple regression analysis is flawed, according to previous academic research; yet, it is based on this premise that this study's correlational analysis is based. This study's results showed that, on the whole, TR predicted OLSE and was directly associated to it. Students' OLSE was likely greatly enhanced by their preparedness to utilise state-of-the-art technology via a variety of online educational platforms. The only research that examined the relationship between the two variables supported the findings, even though the methodology was quite different from the current standard. Online educational platforms are examples of new technology that students are likely to embrace. This openness to new experiences may help students become more proficient users of these platforms, which in turn might improve their performance and achievement in online courses. Furthermore, students' confidence in their ability to complete the online academic assignments may be positively impacted by their level of technical preparation. On top of that, optimism has a beneficial effect on OLSE and is strongly associated to it. Earlier, the researchers established that OPT refers to the concept that individuals may gain more control over their lives by using existing technology. Also, optimists have a tendency to think they're adept with technology and that it will help them work faster and more efficiently. Therefore, students' competence with technical tools, such online learning platforms, may enhance their capacity to accomplish educational assignments in a digital setting. Researchers have also shown that optimism may help with things like self-control, optimism, and psychological regulation—all of which are very important in the digital realm.

## CONCLUSION

Putting an emphasis on the practical repercussions that the results of the research brought about is of the utmost relevance for the purpose of reaching a conclusion. This is because it is of the greatest significance. When it comes to the dynamics of online learning in sports students, it is possible that having a more in-depth understanding of these dynamics might offer useful insights that could be utilised to build educational platforms and instructional methods that are much more effective. Acquiring more knowledge is one way in which this objective might be achieved. However, despite the fact that it is placed inside a specific context, the current study provides early information that has the potential to be useful to a broad variety of educational settings all over the world. It is vital to conduct out further research in the future in order to validate and expand upon the results that the researchers have acquired. This is because of the reasons stated above. The findings of the research have the potential to provide insightful information that might be used in the formulation of educational policies and programs at the central level of government. Considering that the study has the potential to be expanded to a greater extent, this potential is brought into focus.

## REFERENCES

1. Alzahrani, B., Bahaitam, H., Andejany, M., & Elshennawy, A. (2021). How ready is higher education for quality 4.0 transformation according to the LNS research framework? *Sustainability*, 13(9), 5169.
2. Bonfield, C. A., Salter, M., Longmuir, A., Benson, M., & Adachi, C. (2020). Transformation or evolution? Education 4.0, teaching and learning in the digital age. *Higher Education Pedagogies*, 5(1), 223–246.
3. Cabero-Almenara, J., Guillén-Gámez, F. D., Ruiz-Palmero, J., & Palacios-Rodríguez, A. (2022). Teachers' digital competence to assist students with functional diversity: Identification of factors through logistic regression methods. *British Journal of Educational Technology*, 53(1), 41–57.
4. ÇAR, Bekir, and Latif AYDOS. "Examination of Physical Education and Sports Teachers' Competencies Related to Technological Pedagogical Content Knowledge." *Gazi Journal of Physical Education and Sports Sciences* 25.4 (2020): 441-454.
5. Cesco, S., Zara, V., De Toni, A. F., Lugli, P., Betta, G., Evans, A. C., & Orzes, G. (2021). Higher education in the first year of COVID-19: Thoughts and perspectives for the future. *International Journal of Higher Education*, 10(3), 285–294.
6. Cutri, R. M., & Mena, J. (2020). A critical reconceptualisation of faculty readiness for online teaching. *Distance Education*, 41(3), 361–380.
7. Cutri, R. M., Mena, J., & Whiting, E. F. (2020). Faculty readiness for online crisis teaching: Transitioning to online teaching during the COVID-19 pandemic. *European Journal of Teacher Education*, 43(4), 523–541.
8. Dhawan, Shivangi. "Online learning: A panacea in the time of COVID-19 crisis." *Journal of Educational Technology Systems* 49.1 (2020): 5-22.
9. Elisondo, R. C., Suárez-Lantarón, B., & García-Perales, N. (2023). University students' emotions in forced remote education. *Multidisciplinary Journal of Educational Research*, 1–20.
10. García-Morales, V. J., Garrido-Moreno, A., & Martín-Rojas, R. (2021). The transformation of higher education after the COVID disruption: Emerging challenges in an online learning scenario. *Frontiers in Psychology*, 12, 616059.
11. Guillén-Gámez, F. D., & Mayorga-Fernández, M. J. (2020). Identification of variables that predict teachers' attitudes toward ICT in higher education for teaching and research: A study with regression. *Sustainability*, 12(4), 1312.
12. Ishak, R., & Mansor, M. (2020). The relationship between knowledge management and organisational learning with academic staff readiness for Education 4.0. *Eurasian Journal of Educational Research*, 85, 169–184.