

# Deteksi Plagiasi

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# Digital readiness of students in colleges of physical education and sport sciences in light of the requirements of the updated curricula

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## ABSTRACT

**Background.** The role of digital technology has expanded significantly in recent years. Although curriculum development trends in physical education and sports science departments are aligned with the requirements of digital transformation, the reality of education shows that there is a gap between students' mastery of basic digital skills and their ability to use the modern technologies employed in the educational process. **Objectives.** This study aims to explore the digital readiness of students in the Faculty of Physical Education and Sports Science based on the curriculum requirements that have been developed. **Method.** This study employed a descriptive method (survey method) with specific steps and procedures to provide an understanding of the digital readiness of students in the faculties of physical education and sports science based on the requirements of the developed curriculum. A questionnaire served as the primary data collection tool for a sample of 285 students from nine Physical Education and Sports Science faculties at universities in Iraq. The analysis was conducted using SPSS software with a statistical significance level of 0.05. **Results.** The results showed that students use educational platforms to conduct digital and practical tests, and they apply what they learn digitally in practical training according to curriculum requirements. **Conclusion.** The researcher emphasizes the need to enhance training on the use of digital platforms and educational tools among all students, focusing on less experienced students or those from rural areas to ensure equal educational opportunities. The researcher also recommends developing the digital infrastructure in faculties of Physical Education and Sports Sciences, including providing modern devices, specialized software, and supportive digital resources to facilitate following both practical and theoretical curricula.

**Key words:** Digital readiness, developed curricula, polytechnic college.

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## INTRODUCTION

The role of digital technologies has grown significantly over the past years, as digitization refers to the use of any communication device or application, including radio, television, mobile phones, computers, software, satellite systems, and any other applications related to all aspects of individuals' daily lives such as education, health, work, communication, shopping, travel, and housing, and also interferes with government business and daily business practices, and therefore it affects the entire process of economic development (Kabongo et al., 2014). The COVID-19 pandemic has drastically shifted the paradigm of education, transforming online learning from a mere emergency alternative into a key driver of digital transformation (Al-Kadri et al., 2020; Hammerstein et al., 2021; Zhu & Tongdecharoen, 2023). This has highlighted the importance of digital technology, particularly during global lockdowns and social distancing measures, thereby prompting individuals and organizations

around the world to adapt to new ways of working and living (Kim et al., 2025; Sadr et al., 2024; Vidal-Vilaplana et al., 2023).

The corona crisis caused radical changes in the economic structures of most sectors (Amer & Nemenqani, 2020; Rosales et al., 2020; World Bank Group Education Report, 2020; Zhu et al., 2025), and the solution was to accelerate the digital transformation process in those sectors and take advantage of solutions related to digital technology and services, where digital technologies played a fundamental role in maintaining the continuation of social, educational and economic activities (De et al., 2020). The value of the digital economy in the twenty major countries reached 2.3 trillion dollars in 2010, and then increased to 4 trillion dollars in 2016, with an annual growth rate of up to 10%, which exceeds the growth of other sectors of the economy in this article countries, while the growth rate of the digital economy in developing countries ranges between 15 and 25% (World Economic Forum, 2015).

6 In Iraq, the Ministry of higher education and scientific research announced the launch of the IQ LEARN platform in the university education system to support the quality of teaching and learning and the efficiency of academic performance through the use of advanced digital technologies and artificial intelligence applications. The platform provides an integrated interactive system to manage academic content in an automated manner, in line with the path of comprehensive digital transformation as part of the global transformations in the patterns of higher education and the knowledge economy (Mahmood, 2026). The ministry emphasizes that the platform represents a pivotal pillar in improving the quality of the educational process, updating modern and interactive teaching tools, providing a qualitative impetus to enhance academic efficiency, strengthen internationalization, establish a competitive university environment, knowledge production and active participation in the comprehensive development path (Ministry of higher education and scientific research, 2026).

1 The importance of digital transformation in higher education is also highlighted in the development of curricula and improving learning outcomes, as the use of digital technologies has become one of the main pillars to keep pace with the requirements of the digital age. Thus contributing to the preparation of graduates who possess the digital knowledge and skills necessary for the labor market (Alenezi et al., 2023; Bellas et al., 2022; Keiper et al., 2023; Takehara et al., 2021). The faculties of physical education and sports sciences are educational institutions that require effective integration of digital technologies, both in theoretical and applied aspects, such as the use of educational platforms, Sports Performance Analysis, e-learning, and academic digital communication. Hence, the importance of digital readiness for students at these colleges is highlighted as a decisive factor in the success of applying the developed curricula

and achieving their educational goals. Broadband fixed broadband ([The Global Economy.com, 2023](#)).

1 Despite the trend towards developing curricula in the faculties of physical education and Sports Sciences in line with the requirements of digital transformation ([Galily et al., 2024](#); [Pisaniello, 2024](#)), the educational reality indicates that there is a discrepancy in the level of students' possession of basic digital skills and their ability to deal with modern technologies used in the educational process ([Baladaniya & Choudhary, 2025](#); [Khmelnitska et al., 2025](#); [Novatchkov & Baca, 2013](#)). Through the researcher's experience and field observation, in addition to reviewing some previous studies, it was noted that some students face difficulties in using digital educational platforms, interacting with electronic content, and employing digital applications associated with the developed curricula, which may negatively reflect on achieving the desired educational goals ([Wang et al., 2025](#); [Yuan, 2025](#)).

7 The results of the study were confirmed by [Abdulnabi et al. \(2025\)](#); [Zhao et al. \(2021\)](#); [El-Kasaby et al. \(2024\)](#); [Kuluşaklı \(2024\)](#) on the existence of significant differences in students' perceptions of their digital competence depending on the variables of type, Study Group, place of residence, previous training. The studies recommended the need to develop basic areas of digital competence, especially the production of digital content, and provide students with the necessary knowledge to deal with daily technological problems, while supporting female students, students of lower teams and rural areas to enhance their digital readiness ([Abdulnabi et al., 2025](#); [Zhao et al., 2021](#); [El-Kasaby et al., 2024](#); [Kuluşaklı, 2024](#)).

4 In the preliminary study, the researchers conducted a survey of a sample of 40 individuals from outside the main research sample to identify the level of digital readiness among students in the Faculty of Physical Education and Sports Science, to verify the clarity and significance of the research problem, and to use the findings to develop a research instrument. The survey was applied to 40 male and female students to answer the following question: Do students have sufficient digital skills to cope with the requirements of the developed curricula in the faculties of physical education and sports science? The results of the survey study resulted in the following:

- 1
1. Yes, I have sufficient digital skills: 14 students (35%)
  2. I have some digital skills but not enough: 18 students (45%)
  3. Do not have the necessary digital skills: 8 students (20%)

4 These results indicate that 65% of the respondents do not have the full digital readiness to deal with the requirements of the developed curricula, which confirms the existence of a real research problem that requires study and analysis, and reinforces the importance of addressing the topic of digital readiness among students of the colleges of physical education and Sports

Sciences in Iraq. In fact, according to the findings and recommendations of several previous studies, some schools lack full digital readiness to meet the requirements of the technology-based curriculum that has been developed (Çınar et al., 2021; van de Werfhorst et al., 2022; Zakir et al., 2025).

Therefore, it is important to assess the digital readiness of physical education students in relation to the requirements of the developed curriculum. This study aims to assess the extent to which physical education and sports science students possess the digital skills necessary to navigate the newly developed curriculum, and to what extent are digital devices, programs, and resources available to support students in the Faculty of Physical Education and Sports Science in following the newly developed curriculum?

This study contributes to enriching the Arabic-language scientific literature in the field of digital readiness among higher education students. Furthermore, it explains the concept of digital readiness and its dimensions based on curriculum requirements developed in the faculty of physical education and sports science. It also links digital readiness and digital transformation in university education, particularly within the field of sports science. This study paves the way for future research addressing educational and technical variables related to digital readiness.

## METHOD

### Participants

The research community consists of students from the faculties of physical education and Sports Sciences, which are represented by (9) Iraqi universities (Maysan University, Kufa, Baghdad, Babylon, Kirkuk, Maysan, Karbala, Basra, Diyala, Qadisiyah), for the academic year 2025/2026.

Table 1. Distribution of the research sample

| No | Faculties of Physical Education and Sports Science | Number of Students | Percentage Ratio |
|----|----------------------------------------------------|--------------------|------------------|
| 1  | Maysan University                                  | 46                 | 16.1             |
| 2  | University of Kufa                                 | 30                 | 10.5             |
| 3  | University of Baghdad                              | 34                 | 11.9             |
| 4  | University of Kirkuk                               | 23                 | 8.1              |
| 5  | University of Basra                                | 39                 | 13.7             |
| 6  | Karbala University                                 | 23                 | 8.1              |
| 7  | University of Babylon                              | 38                 | 13.3             |
| 8  | University of Diyala                               | 31                 | 10.9             |
| 9  | University of Qadisiyah                            | 21                 | 7.4              |
|    | Total                                              |                    | 100%             |

1 Scientific transactions (honesty-constancy) for the digital readiness questionnaire for students of the faculties of physical education and Sports Sciences in the light of the requirements of the developed curricula.

## Research Design

1 The researcher used the descriptive method (survey method) with its steps and procedures, which provides an understanding of the digital readiness of students of the faculties of physical education and Sports Sciences in light of the requirements of the developed curricula; this method studies the research variables as they are among the sample members without the researcher having a role in adjusting the variables subject to measurement.

## Research Procedure

First: honesty: The researcher relied on Miley's honesty calculation: Believe the content (content):

1 The researcher conducted a systematic analysis of references, books and specialized scientific research related to the subject of digital readiness, the developed physical education curricula, and based on the data collected through personal interviews and the scientific studies and references reviewed by the researcher, two main axes were identified that represent the axes of digital readiness for students of the faculties of physical education and Sports Sciences in light of the requirements of the developed curricula under study, and he was keen to verify the consistency of the content of each axis with the phrases included under it and the questionnaire as a whole, based on the reference survey he conducted of theoretical frameworks, previous studies, and related metrics the topic of digital readiness for students of the faculties of Education Physical and Sports Sciences in the light of the requirements of the developed curriculum.

Logical honesty (honesty of arbitrators)

2 To gather the opinion of the appropriateness and adequacy of the proposed questionnaire, the researcher provided the axes to seven professionals in the sphere of physical education, who had at least ten years of experience in the field. According to their returned responses, axes with approval rate equal to or greater than 85 -percent were adopted as indicated in Table 2.

Table 2. Initial image of axes of digital readiness questionnaire for college students' physical education and sports science in light of requirements of developed curriculum (n=7)

| No | Questionnaire topics                                                                                                                                                             | Expert opinion |          |        |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------|--------|
|    |                                                                                                                                                                                  | Agree          | disagree | ratio  |
| 1  | The extent to which students of the faculties of physical education and sports sciences possess the necessary digital skills to deal with the developed curricula                | 7              | 0        | 100%   |
| 2  | The availability of devices, programs, and digital resources to support students of the faculties of physical education and Sports Sciences in following the developed curricula | 6              | 0        | 85.71% |

The researcher created subsidiary phrases that were outlined within all the identified axes to allow the researcher to create the questionnaire. Thus, the inventory consisted of thirty items, based on the information that was summarized in the literature reviewed and recognized sources. These were then shown to seven experienced practitioners in the field of curriculum design of physical education who had had at least ten years of professional practice. They are based on their appraisals on appropriateness and adequacy of the questionnaire elements.

After the researchers recommended the questionnaire axes, the items were allocated to the axes. The instrument was assessed by the same group of seven experts with experience in the field of physical-education curriculum development, which was no less than 10 years, during the period between 3 October 2025 and 13 October 2025. According to their overall impressions, everything that achieved the approval rating of fifty-seven percent or higher was kept, and a few phrases in particular axes were updated within the recommendations of the experts (see Table 3).

Table 3. Topics of the digital readiness questionnaire for college students' physical education and sports science in the light of the requirements of the developed curriculum (n=7)

| No | Questionnaire Topics                                                                                                                                              | Number Of                  |                           |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------|
|    |                                                                                                                                                                   | Before Expert Opinion Poll | After Expert Opinion Poll |
| 1  | The extent to which students of the faculties of physical education and sports sciences possess the necessary digital skills to deal with the developed curricula | 15                         | 15                        |
| 2  | The availability of devices, programs, and digital resources to support students of the faculties of physical education and                                       | 15                         | 14                        |

Sports Sciences in following the developed curricula

Total

30

29

2

The researcher used the triple estimation balance to respond to the vocabulary according to the following:

Yes: three degrees, yes.

Quite uncomplicated: it is a two degrees estimate.

There is controversy: the estimate is one degree.

### Believe internal consistency

After submitting the questionnaire to the research sample, the researcher evaluated the validity of the hypothesis formulation through an internal consistency method and found the extent of adequacy of the questionnaire items representation, correlation of each item with the total score of the respective domain and interdependence of the domains scores and total questionnaire score, as demonstrated in Tables 4 and 5.

2

Table 4. Correlation coefficients between degree of each singularity and degree of first axis (n= 20)

1

The first axis: (the extent to which students of the faculties of physical education and sports sciences possess the necessary digital skills to deal with the developed curricula)

12

| No | Correlation coefficient | No | Correlation coefficient | No | Correlation coefficient | No | Correlation coefficient |
|----|-------------------------|----|-------------------------|----|-------------------------|----|-------------------------|
| 1  | 0.696**                 | 5  | 0.660**                 | 9  | 0.643**                 | 13 | 0.784**                 |
| 2  | 0.777**                 | 6  | 0.792**                 | 10 | 0.717**                 | 14 | 0.611**                 |
| 3  | 0.689**                 | 7  | 0.701**                 | 11 | 0.721**                 | 15 | 0.790**                 |
| 4  | 0.736**                 | 8  | 0.850**                 | 12 | 0.756**                 |    |                         |

3

3

1

\* Tabular Value (t) at the level of significance (0.05) = (0.444) \* \* at (0.01) = (0.561) Studying tables (4), (5) it becomes clear: there is a statistically significant correlation between the phrase and the total score of the axis of the digital readiness questionnaire for students of the faculties of physical education and Sports Sciences in light of the requirements of the developed curricula;

3

3

The items have an internal consistency to the overall construct, as shown by the analysis at the traditional levels of the statistical significance (0.05 and 0.01). The internal consistency estimates were used by the investigator to assess the quality of the questionnaire as well, with the computation of the correlation coefficients of the certificates of each dimension with the total questionnaire certificate (Table 6).

Table 6. Correlation coefficients between score of each axis and overall score of questionnaire (n= 20)

| Themes                                                                                                                                                                           | Correlation coefficient |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| The extent to which students of the faculties of physical education and sports sciences possess the necessary digital skills to deal with the developed curricula                | 0.789**                 |
| The availability of devices, programs, and digital resources to support students of the faculties of physical education and Sports Sciences in following the developed curricula | 0.801**                 |

\* Tabular Value (t) at the level of significance (0.05) = (0.444) \* \* at (0.01) = (0.561)

By studying Table (6), it is clear that there is a statistically significant correlation between the total score of the axis and the total score of the questionnaire, ranging from (0.789) to (0.801), at the level of statistical significance (0.05), (0.01), which indicates the existence of internal consistency between the axes of the questionnaire.

#### Secondly: constancy

To determine whether the dimensions scores of the questionnaire are internally consistent, and the total grade of the questionnaire, the researcher used Cronbachs alpha, and it is only dependent on the homogeneity of the scores of the respondents (see Table 7).

Table 7. Alpha coefficients of cronbach which show how reliable digital readiness dimensions are with college students in physical education and sports science in respect of intentions of newly developed curriculum (n = 20).

| No | Topics of questionnaire                                                                                                                                                          | Alpha coefficient values |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 1  | The extent to which students of the faculties of physical education and sports sciences possess the necessary digital skills to deal with the developed curricula                | 0.764**                  |
| 2  | The availability of devices, programs, and digital resources to support students of the faculties of physical education and Sports Sciences in following the developed curricula | 0.780**                  |

\* Tabular Value (t) at the level of significance (0.05) = (0.444) \* \* at (0.01) = (0.561)

Studying Table (7), it becomes clear: the stability of the questionnaire axes, where the stability coefficient by the cronbach's Alpha method reached between (0.764) and (0.780), which indicates a high stability coefficient of the questionnaire axes.

7

## Data Analysis

Statistical analysis of the research data was conducted using the SPSS statistical software, and the researcher employed statistical measures such as KA2, duplicates, percentages, weighting ratios, and weighted scores. The results were round to the nearest two decimal places, and the results were based on a statistical significance level at the level of 0.05.

Field study: The researcher used the questionnaire on a basic research sample of 285 participants by confirming the honesty and consistency coefficients and then applied it to the sample, followed by an application to verify the integrity and reliability of the research instruments after which the data were collected, sorted, unbundled, and tabulated to support the other statistical process, and so on, this was done between Octobers of 15, 2025 to 30, 2025.

2

## FINDINGS AND DISCUSSIONS

2

The researcher current, interpret and deliberate the results reached to response the first question "to what extent do students of the faculties of physical education and sports sciences possess the necessary digital skills to deal with the developed curricula", through Table 8.

2

1

Table 8. Repetitions, estimated total, relative weight and chi<sup>2</sup> value of responses of study sample for first axis (extent of ownership of students of faculties of physical education and sports sciences for digital skills needed to deal with developed curriculum) (n=285)

| No | Phrases                                                                                         | Iterations |             |               |                      |                  | Chi <sup>2</sup> |
|----|-------------------------------------------------------------------------------------------------|------------|-------------|---------------|----------------------|------------------|------------------|
|    |                                                                                                 | Agree      | some extent | Discretionary | Degree Discretionary | ratio Discretion |                  |
| 1  | I use computer programs to analyze sports performance according to the developed curricula.     | 84         | 108         | 93            | 561                  | 65.61            | 3.09             |
| 2  | I apply digital educational applications in the follow-up of practical and theoretical lessons. | 85         | 170         | 30            | 625                  | 73.10            | 104.74           |
| 3  | I am learning to use the new digital analysis tools provided by the developed curricula.        | 111        | 132         | 42            | 639                  | 74.74            | 46.67            |
| 4  | I am looking for scientific information related to sports online regularly.                     | 80         | 85          | 120           | 530                  | 61.99            | 10.00            |
| 5  | I apply simple artificial intelligence techniques to analyze sports performance data.           | 79         | 95          | 111           | 538                  | 62.92            | 5.39             |
| 6  | Create digital tables and graphs of the results of practical activities.                        | 81         | 73          | 131           | 520                  | 60.82            | 20.80            |
| 7  | I use email and digital platforms to communicate with faculty members.                          | 52         | 120         | 113           | 509                  | 59.53            | 29.45            |

| No | Phrases                                                                                                | Iterations |             |               | Degree<br>Discretionary | ratio<br>Discretion | Chi <sup>2</sup> |
|----|--------------------------------------------------------------------------------------------------------|------------|-------------|---------------|-------------------------|---------------------|------------------|
|    |                                                                                                        | Agree      | some extent | Discretionary |                         |                     |                  |
| 8  | I deal with video files and photos for the analysis of sports movements.                               | 91         | 71          | 123           | 538                     | 62.92               | 14.48            |
| 9  | I apply digital simulation programs to understand sports tactics and plans.                            | 78         | 67          | 140           | 508                     | 59.42               | 32.61            |
| 10 | I am learning to use smart devices dedicated to mathematical measurement within the curriculum.        | 112        | 88          | 85            | 597                     | 69.82               | 4.61             |
| 11 | I apply computing skills in the collection and analysis of mathematical data.                          | 68         | 147         | 70            | 568                     | 66.43               | 42.72            |
| 12 | I take advantage of digital programs to improve my individual and team sports performance.             | 49         | 79          | 157           | 462                     | 54.04               | 65.43            |
| 13 | I use educational platforms to conduct digital and practical tests.                                    | 198        | 51          | 36            | 732                     | 85.61               | 168.69           |
| 14 | I am learning how to design practical digital activities to support learning.                          | 181        | 69          | 35            | 716                     | 83.74               | 122.86           |
| 15 | I apply what I learn digitally in practical exercises according to the requirements of the curriculum. | 200        | 41          | 44            | 726                     | 84.91               | 174.13           |

The tabular value of KA2 is when (0.05) = (5.99)

By studying Table (8), it developed clear that the qualified weight of the first axis (the extent to which students of the faculties of physical education and sports sciences possess the digital skills necessary to deal with the developed curricula) ranged from (54.04% to 85.61%). It is also clear that the value of Chi2 ranged between (3.09) and (174.13), which is a purpose statistically in all the statements of the first axis except the statements number (1), (5), (10).

The findings of the first axis displayed that phrase number (13), which states "I use educational platforms to conduct digital and practical tests," received the highest response rate among the respondents, reaching (85.61%), which reflects students' awareness of the importance of using digital educational platforms in assessing their knowledge and skills, and indicates a good level of awareness of the practical side of digital learning. This also reflects the willingness of students to interact with digital tools directly, which enhances the effectiveness of the educational process and emphasizes the role of technology in supporting continuous assessment and effective monitoring of student performance.

The phrase number (15), which states "I apply what I learn digitally in practical exercises according to the requirements of the curriculum," came in second place with a response rate (84.91%), indicating the ability of students to transfer the acquired digital knowledge to practical applications, which is a

positive indicator of the integration of digital learning with the Applied side of the curriculum. This result reflects students' awareness of importance of integrating technology in the performance of practical tasks, which enhances their digital readiness and enables them to deal efficiently with the requirements of the developed curricula, and confirms that digital training is not limited to the theoretical aspect but extends to the practical application necessary to develop comprehensive skills.

Taking together, these results indicate that students possess a good level of digital competence in the aspects of using educational platforms and applying digital knowledge in practice, reflecting the success of some digital transformation strategies in enhancing interactive and Applied Learning. However, attention should be paid to the potential gaps between the use of technology and advanced digital skills, and work to provide additional support programs to comprehensively and balance enhance students' digital abilities.

A study by [El-Kasaby et al. \(2024\)](#) has shown that digital readiness and cognitive flexibility are key factors for predicting academic well-being among students at King Khalid University in Saudi Arabia during digital learning. The results showed a statistically significant relationship between academic well-being and both digital readiness and cognitive flexibility, and the study also showed a high predictive ability for academic well-being through these two variables.

2 This is consistent with the results of the study of [Abdulnabi et al. \(2025\)](#) and [Zhao et al. \(2021\)](#) and [kuluşaklı \(2024\)](#), which stressed the importance of digital competence and readiness in improving students' educational outputs, enhancing their ability to interact with digital content and apply it in practice, which reflects the vital role of digital technologies in enhancing interactive and applied learning among higher education students. In general, on the first axis related to the extent to which students of the faculties of physical education and sports sciences possess the necessary digital skills to deal with the developed curricula, the researcher believes that the results reflect a good level of digital competence among students in using educational platforms and applying digital knowledge in practice ([Athaya et al., 2023](#); [Ebrahim & Hussein, 2025](#); [Yusroni, 2024](#)), but they also show some gaps between the digital skills available to students and the actual requirements of the developed curricula ([Carballo-Fazanes et al., 2020](#); [O'Loughlin et al., 2013](#); [Zhang & Zhang, 2019](#)).

1 These gaps indicate the need to continue to enhance digital readiness through dedicated training programs, and support female students, students of lower teams and rural areas, to ensure the integration of digital learning with the practical side and achieve the goals of the educational process efficiently and effectively. The investigator extant, interpret and discuss the results obtained in responding the second question "to what extent are devices, programs, and

digital resources available to support students of the faculties of physical education and Sports Sciences in following the developed curricula," Table 9.

Table 9. Repetitions, projected total, relative weight and  $\chi^2$  value of replies of research sample for second axis (availability of hardware, software, and digital resources to support student's faculties of physical education and sports sciences in follow-up of developed curricula)

| No | Phrases                                                                                              | Iterations |             |               |                      |                  | Chi <sup>2</sup> |
|----|------------------------------------------------------------------------------------------------------|------------|-------------|---------------|----------------------|------------------|------------------|
|    |                                                                                                      | Agree      | some extent | Discretionary | Degree Discretionary | ratio Discretion |                  |
| 1  | I have a computer or tablet that allows me to easily follow the digital curriculum.                  | 204        | 54          | 27            | 747                  | 87.37            | 191.43           |
| 2  | I use the available digital programs to study and analyze sports performance.                        | 185        | 66          | 34            | 721                  | 84.33            | 133.28           |
| 3  | I take advantage of the updates of digital applications provided within the developed curricula.     | 165        | 66          | 54            | 681                  | 79.65            | 78.13            |
| 4  | I have a stable internet for studying digital materials.                                             | 214        | 23          | 48            | 736                  | 86.08            | 226.88           |
| 5  | I take advantage of technical support when encountering any technical difficulties.                  | 216        | 49          | 20            | 766                  | 89.59            | 235.60           |
| 6  | I use digital sources and e-books available at the University.                                       | 167        | 71          | 47            | 690                  | 80.70            | 84.88            |
| 7  | I apply the available digital tools to analyze practical activities.                                 | 205        | 43          | 37            | 738                  | 86.32            | 191.24           |
| 8  | I deal with smart devices in laboratories and training halls.                                        | 150        | 80          | 55            | 665                  | 77.78            | 51.05            |
| 9  | I participate in digital activities based on available hardware and software.                        | 193        | 75          | 17            | 746                  | 87.25            | 169.35           |
| 10 | I use educational apps and software to support self-learning.                                        | 183        | 61          | 41            | 712                  | 83.27            | 124.38           |
| 11 | I use digital resources to develop my practical and theoretical skills.                              | 147        | 86          | 52            | 665                  | 77.78            | 48.78            |
| 12 | I apply digital devices and technologies in the follow-up of individual and team sports performance. | 217        | 48          | 20            | 767                  | 89.71            | 239.14           |
| 13 | I get smart applications for analyzing sports videos.                                                | 187        | 61          | 37            | 720                  | 84.21            | 136.67           |
| 14 | I use digital measurement tools to improve training efficiency.                                      | 181        | 69          | 35            | 660                  | 77.19            | 43.20            |

The tabular value of KA2 is when (0.05) = (5.99)

Reviewing Table (9), it developed clear that the relative weight of the second axis (the availability of devices, programs, and digital resources to support students of the faculties of physical instruction and Sports Sciences in following the developed curricula) ranged from (77.19% to 89.71%). It also

turns out that the value of Chi2 fluctuated between (43.20) and (239.14), which is statistically a function of all the terms of the second axis. The results of the second axis exposed that axiom number (12), which states "I apply digital devices and technologies in monitoring individual and group sports performance", received the highest response rate among the respondents, reaching (89.71%), which reflects the students' awareness of the importance of using digital devices and modern technologies in monitoring sports performance and analyzing results accurately, which is an indicator of their awareness of the role of technology in improving the level of individual and group training and follow-up.

The phrase number (1), which states "I have a computer or tablet that allows me to easily follow the digital curricula," came in second place with a response rate of 87.37%, indicating the availability of basic digital resources among most students, and reflects their willingness to interact with the digital content of the developed curricula. This result also reflects the importance of the availability of personal devices as an essential enabler to achieve effective digital learning, ensuring students' ability to access educational content and digital applications associated with lessons and practical exercises. Taken together, these results indicate that students have a good level of digital readiness in terms of using digital devices and technologies, which contributes to enhancing their practical efficiency and applying digital knowledge in sports performance, while emphasizing the need to continue supporting digital infrastructure and providing appropriate training to enhance the overall digital competence of all students.

This is consistent with the results of the study of [Abdulnabi et al. \(2025\)](#); [Zhao et al. \(2021\)](#); [El-Kasaby et al. \(2024\)](#), and [kuluşaklı \(2024\)](#), which stressed the importance of digital competence and digital readiness in enhancing students' ability to use digital devices and technologies and apply digital knowledge in practice, whether in following up academic or training performance, which reflects the vital role of digital technologies in improving learning and practical application in higher education institutions. In general, on the second axis related to the availability of devices, programs, and digital resources to support students of the faculties of physical education and Sports Sciences in following the developed curricula ([Otero-Saborido et al., 2020](#)), the researcher believes that the results indicate the availability of a good level of basic digital resources among students, including personal computers, tablets, and educational programs, making it easier for them to follow the digital content and practical applications associated with the curricula ([Benítez-Sillero et al., 2020](#); [Farias et al., 2018](#); [Han, 2018](#); [Legrain et al., 2021](#)).

### Limitations

The researchers noted that more support is needed to provide advanced technology and specialized programs to enhance integrated digital interactions, ensure the full utilization of digital education, and efficiently link theoretical knowledge with practical applications, while taking into account the need to provide support to students who are less prepared or from rural areas to ensure equal access to digital education.

### CONCLUSION

The research results clearly show that the weight of the first axis (the extent to which students in the Faculty of Physical Education and Sports Science possess the digital skills necessary to handle the developed curriculum) ranges from (54.04% to 85.61%). Findings from the first axis indicate that statement number (13), which states, "I use educational platforms to take digital and practical tests," received the highest response rate among respondents, reflecting students' awareness of the importance of using digital educational platforms to assess their knowledge and skills, and demonstrating a good level of awareness regarding the practical aspects of digital learning. It is clear that the relative weight of the second axis (the availability of digital devices, programs, and resources to support students in the Faculty of Physical Education and Sports Science in following the developed curriculum) ranges from 77.19% to 89.71%. The results for the second axis indicate that axiom number (12), which states, "I use digital devices and technology to monitor individual and group athletic performance," received the highest response rate among respondents. This also reflects students' willingness to interact directly with digital devices, which enhances the effectiveness of the educational process and emphasizes the role of technology in supporting continuous assessment and effective monitoring of student performance.

The recommendations from this study could promote training on the use of digital platforms and educational tools among all students, with a focus on those with less experience or from rural areas, to ensure equal educational opportunities. Developing the digital infrastructure in the faculties of physical education and sports sciences, including the provision of modern devices, specialized programs, and supporting digital resources to facilitate the follow-up of practical and theoretical curricula. Integrate additional learning modules focused on the production of digital content and the practical application of digital knowledge to enhance the overall digital competence of students. Encouraging female students to participate in various areas of digital competence to ensure gender equality in obtaining digital skills. Following up the continuous digital development in higher education and updating curricula and educational programs in line with the requirements of the digital labor market.

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**AI DISCLOSURE STATEMENT**

The author states that no AI was used in the completion of this manuscript.

**CONFLICTS OF INTERES**

No Conflicts of Interes