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Physical Education Teachers' Perceived Digital Competences: Are They Prepared for the Challenges of the New Digital Age?

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Abstract: The development of information and communication technologies impose great changes that require teachers to be constantly updated. Therefore, it is interesting to analyze the Digital Competence perceived by teachers and their ability to use digital devices in the classroom. The aim of this study is to investigate the technological resources and difficulties that Physical Education teachers have in schools, in addition to the training and methodological strategies required to adequately teach Physical Education classes in present times. For this, through a previously validated survey, we will observe the Digital Competence of teachers and whether there are differences between genders, according to age and teaching experience. A survey has been undertaken by 50 Physical Education teachers of secondary school students. The results show statistically significant differences according to teaching experience and age. In addition, younger teachers have a better perception of their ability to apply Digital Competence in the Physical Education classroom setting.

Keywords: Digital Competence; physical education; teachers perceptions; ICT; information technologies; communication technologies

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1. Introduction

The basic competencies of compulsory education should be developed from all areas of the curriculum [1]. However, as argued by Atienza-Gago and Gómez-Gonzalvo [2], the regulatory framework does not make explicit reference to the degree of contribution of the area of Physical Education in the acquisition, development, and evaluation of students' Digital Competence. In the present study, it is considered that there is a direct relationship between the use of Information and Communication Technologies (ICT) by Physical Education teachers and the degree of acquisition of students in such competence. In addition, the attitude or predisposition of teachers towards the use and didactic application of ICT in the classroom setting is directly related to their knowledge and degree of competence [3]. In this sense, it can be stated that attitudes, beliefs, and interest in ICT are predictors of teachers' use of Digital Competence [4].

The technological revolution of recent decades has brought with it a huge global transformation in all sectors of society [5]. The generation, processing, and transmission of information have been influenced by a digital revolution due to the immersion of computers and digital networks, a fact that generates multiple benefits in people [6]. The school environment has not been oblivious to this revolution, in fact, there is a broad consensus among the educational field to affirm that Information and Communication Technologies (ICT) are inherent to the current culture and therefore must be integrated in a significant way in all areas of the curriculum [7–9]. Moreover, Digital Competence is a key competence to promote lifelong learning [10].

Information and communication technologies (ICT) play, therefore, a key role in the educational sector, producing new demands and changes that significantly affect teachers, mainly, generating a constant need for training and updating [6,10,11].

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Several studies highlight the use of ICT in educational practice have not yet reached desirable levels [12,13]. This is because many didactic processes implemented with the use of technological devices do not show a clear and true innovation or increase in learning with respect to traditional forms of teaching and learning [12]. This is because on most occasions, new technologies are incorporated into centers without having a well-founded pedagogical project around the transversality of ICT [13]. Moreover, teachers are not provided with the optimal training necessary to carry out this process [8,10,14]. Therefore, only insignificant modifications in the way of teaching and learning occur, since in many cases both teachers and students are accustomed to traditional methods of teaching [3,15].

A broad focus of research has been directed at delimiting the basic components that define an effective and didactic use of Digital Competence, analyzing its impact on learning outcomes and academic performance. These studies have focused on teachers' knowledge, skills, abilities, and attitudes insofar as they become determinant variables in the application of ICT [5,16]. Moreover, other studies have identified the main difficulties to effectively implement ICT in education: insufficient number of computer devices, a lack of technical-educational training of teachers, high cost of telecommunication services, and the scarce European production of multimedia materials especially aimed at education [9,17].

This fact, as pointed out [10,18], can lead to negative attitudes in teachers, such as inhibition and rejection of ICT. Therefore, teachers may feel uncomfortable using them, due to fear and uncertainty, misinformation, or the change they may bring with them [14].

Thus, [10] emphasizes the combination of education and technology has given rise to numerous analyses and publications which have generated arguments for and against their implementation. Along these lines, it is emphasized the use of ICT is presented as an opportunity to improve teaching practices and curriculum development [18,19]. In addition, they allow for the widening of the margins of action and decision making between teachers and students, allowing the latter to access new means to explore, represent and deal with knowledge in a different way [13]. As pointed out by [19], the support of ICT in the teaching-learning process does not only allow the students' level of knowledge to be expanded, but also provides tools for them to access knowledge. Therefore, ICT are instruments that help students construct their own knowledge and, subsequently, to be able to represent, express, communicate, and disseminate the information gathered [12]. For this reason, it is important that with the implementation of ICT in schools, a paradigm shift is provided giving greater relevance to new technologies in the teaching-learning process. Thus, the introduction of digital media in schools is not only undertaken to contribute to the development of Digital Competence and as this arises as a social need, but there is also a desire to improve the teaching-learning process and the interaction between teachers and students [20].

Digital competencies, therefore, are defined as competencies that teachers must acquire and develop in order to improve their educational practice. A number of studies point out that younger teachers show greater interest and knowledge in the use of ICT, compared with older teachers, so as teachers get older, they have less experience and lower skill levels in the use of this type of technology [21]. However, other studies consider the age of teachers does not affect their perception of technologies [4].

With regard to Physical Education, Ref. [19] argues that this is an ideal subject for the introduction and development of competencies. For their part, Ref. [22] suggest actions such as: the choice of teaching-learning tasks that favor the ability to think and reason, the acquisition of knowledge that facilitates problem solving, the use of educational intervention strategies that include active methodologies and cognitive teaching styles, and resources conducive to optimal acquisition of competencies in each area. In addition, the use of technology in the classroom leads to an improvement in the relationship between teacher and student, so it is necessary to promote and enhance this educational link, to promote the teaching and learning process [8]. In this line, Refs. [19,21,22] argue that the incorporation of technological tools in Physical Education, and the subsequent innovation

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achieved in the subject, varies greatly depending on the knowledge and use the teacher makes of them.

The application of new technologies in Physical Education necessarily implies the inclusion of Digital Competence in the classroom [19]. It should be noted at this point that Digital Competence is one of the basic competences of the compulsory education curriculum. This is why Physical Education teachers understand that Digital Competence is not simply a technological or technical-instrumental skill, but that it helps transcend the simple handling of information or technological tools and is necessarily composed of other knowledge, dimensions, and skills, both personal and social. Therefore, it is necessary to train and prepare for digital teaching [8,9].

With the inclusion of ICT in the field of Physical Education, teachers have the possibility of organizing and programming more attractive didactic units, something that not only benefits the students, but the entire educational community [10]. Thus, teachers who are able to adequately combine ICT with the methodological requirements of Physical Education will be able to create new perspectives and meet educational needs [23]. However, authors such as [19] suggest that the use of Digital Competence could make the activities carried out in the Physical Education classroom sedentary, reducing motor engagement, and diminishing the playful and social attractiveness of the subject. This has presented some attention in recent years. Works such as that of [21] validated a survey to measure the attitudes and interest towards ICT of Physical Education teachers, accounting for variables such as age and gender. Further works such as that of [8] point out that, specifically in the subject of Physical Education, the development of the competencies of the subject is unequal, with Digital Competence being one of the least important. Likewise, it is pointed out that the limitations present in the subject of Physical Education are mainly due to a lack of: resources in the center or its environment, training or knowledge, motivation and interest of the teaching staff with the successive legislative reforms or the scarce involvement of students and families in the educational process.

According to [8], the development of Digital Competence in Physical Education has a positive impact on student motivation, generating meaningful and dynamic learning environments while expanding the pedagogical possibilities and the limits of the subject by substantially improving their educational practices. As this same author stresses, it is important to emphasize that ICT alone does not contribute to the improvement of educational quality, and it is the teacher's task to use them as a tool [21]. That is why the limitations in teacher training, the lack of resources and technological means in the centers and the difficulty in adapting to the social changes mentioned, are what determine the limitations and benefits of the application of ICT [24]. However, at present, many teachers have a sufficient level of Digital Competence to be able to use it in their classes, but still distrust its usefulness [10]. Therefore, it should be added that, if teachers lack specific training, it will be difficult to incorporate technological tools into their educational practices, thus hindering its development [9,14,25].

Although numerous studies have been published on the acquisition of basic skills in compulsory education, there are still few studies that have focused on the analysis of the Digital Competence of Physical Education teachers [3,21]. Therefore, the general objective of this work is to analyze the perceived Digital Competence of teachers of Physical Education at the Secondary Education stage, considering three relevant variables: age, gender, and teaching experience.

2. Materials and Methods

2.1. Procedure

Data were collected during three weeks between April and May of the 2020–2021 academic year. In the questionnaire, a preamble has been included in the survey with information presented about the research (topic and purpose), benefits that the information collected by the survey can bring, willingness to participate, and the anonymous treatment of data (Data Protection Act). It is also mandatory to indicate a contact person to request

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further information and to include a paragraph in which the respondent voluntarily accepts participation in the research and gives their tacit consent by answering the survey. Thus, following these guidelines indicated by the Ethics and Human Research Committee of the Catholic University of Valencia to develop this type of research, all information was added at the beginning of the survey. In total, 75 secondary school teachers were contacted, of which only 50 teachers were used. The reason for the exclusion of the remaining 25 teachers was inadequate completion of the scales.

2.2. Participants

The participants in this study were 50 Physical Education teachers (34 men and 16 women) at the Secondary Education stage. The sample used for this study was obtained through non-probabilistic convenience sampling. The mean age of the teachers surveyed was 40.34 years (SD = 10.07) with ages ranging from 26 to 58 years. Regarding the work experience of the participants: 26% of the respondents indicated that they had between 1 and 6 years, 40% between 7 and 18 years, and 34% between 19 and 35 years of teaching experience. The mean value for teaching experience of the teachers surveyed was 14.72 years (SD = 10.38).

2.3. Instruments

For the preparation of the instrument, we used as a reference the surveys on Digital Competence and ICT of the authors [26–28]. These scales were previously validated. In addition, different socio-demographic questions were included. The instrument consisted of 21 items that measured perceptions on the Digital Competence of Physical Education teachers. The different items of the scale explored the degree to which Physical Education teachers use resources such as: computers and peripherals (scanner, printer, etc.), interactive whiteboards, devices for recording and editing audio, video and other multimedia supports such as iPads or tablets. They additionally evaluated the perceived Digital Competence in relation to network management, the use of computer programs, and the competence to use ICT to promote research with students on various contents related to the discipline of Physical Education. Finally, the degree of competence in the use of methodologies to develop and support collaborative network work was explored. The internal consistency of the instrument was determined by Cronbach's Alpha coefficient (=0.93). Cronbach's Alpha value is above the recommended cut-off point of 0.70 [29].

2.4. Data Analysis

SPSS Statistics version 23 was used to perform the statistical analyses. Thus, the normal distribution of the data was tested by means of the Kolmogorov-Smirnov test. The results showed there is no normal distribution of the data since the test was statistically significant (p < 0.05). Therefore, it was decided to use nonparametric tests. In addition, different descriptive statistics were performed, as well as statistical inference through nonparametric Mann–Whitney U tests for two independent samples and Kruskal–Wallis H test for three or more independent groups. The Mann–Whitney U test for two independent samples was used to test the differences between pairs. A Spearman correlation analysis was also performed.

3. Results

The subsequent results obtained from the analysis of the 50 Physical Education teachers report, after data cleaning, considered the data to have a non-normal distribution. In total, 75 secondary school teachers were contacted, of which only 50 surveys could be used. The reason for the exclusion of the remaining 25 was inadequate completion of the scales.

Regarding the results, Table 1 shows the item with the highest mean value is item 11 related to basic knowledge about the operation of a computer, iPad or similar, with a mean value of 4.53 (SD = 0.92). On the contrary, the item with the lowest overall rating by

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respondents is item 20 related to knowledge of different methodologies to develop and support collaborative work on the network, with a mean value of 3.37 (SD = 0.95).

Table 1. Descriptive analysis of the Digital Competence perceived by physical education teachers.

| | Mean | SD | Asymmetry | Kurtosis |
|---|------|------|-----------|----------|
| 11. I have basic knowledge about the operation of a computer, iPad or similar. (11. CD) | 4.53 | 0.92 | -0.59 | -0.57 |
| 12. I am able to use ICT to research, explore, interpret information or solve problems in a variety of subjects and contexts related to my discipline. (12. CD) | 4.28 | 0.71 | -0.12 | -0.46 |
| 13. I am able to perform bibliographic searches for my students through different databases available on the web. (13. CD) | 4.40 | 0.85 | -0.36 | -0.29 |
| 14. I consider myself capable of using different ICT to achieve specific learning in my students. (14. CD) | 3.97 | 1.06 | -0.22 | -0.73 |
| 15. I am able to apply different strategies and methodologies on ICT, such as favoring a cooperative model among my students. (15. CD) | 3.67 | 1.09 | -0.87 | -0.95 |
| 16. I am able to promote among my students the ethical and legal use of computer, telematic and audiovisual applications. (16. CD) | 3.95 | 0.95 | -0.74 | -0.78 |
| 17. I use electronic resources for my scientific updating in my area of knowledge. (17. CD) | 3.83 | 0.84 | -0.89 | -0.23 |
| 18. Design of evaluation procedures and instruments for learning (18. CD) | 3.50 | 1.04 | -0.20 | -0.79 |
| 19. I can identify educational needs in my students that can be addressed with information and communication technologies. (19. CD) | 3.47 | 0.92 | -0.45 | -0.27 |
| 20. I am aware of different methodologies to develop and support collaborative networking. (20. CD) | 3.37 | 0.95 | -1.34 | -0.39 |

Note. SD = Standard Deviation.

3.1. Gender

Regarding gender differences in relation to Digital Competence in the area of Physical Education, it was found that there were no statistically significant differences in any item of the scale (Table 2).

Table 2. Differences between genders in relation to Digital Competence in the area of Physical Education.

| | Male | | Fen | nale | Mann-Whitney U | Sig. | |
|--------|------|------|------|------|----------------|-------|--|
| | Mean | SD | Mean | SD | Z | 3 | |
| 11. CD | 4.44 | 0.89 | 4.62 | 0.62 | -0.633 | 0.527 | |
| 12. CD | 4.26 | 0.67 | 4.31 | 1.20 | -1.211 | 0.226 | |
| 13. CD | 4.29 | 0.80 | 4.50 | 0.73 | -0.919 | 0.358 | |
| 14. CD | 3.94 | 1.01 | 4.00 | 1.15 | -0.367 | 0.714 | |
| 15. CD | 3.65 | 1.04 | 3.69 | 1.01 | -0.110 | 0.913 | |
| 16. CD | 4.03 | 0.90 | 3.88 | 1.09 | -0.373 | 0.709 | |
| 17. CD | 4.06 | 0.78 | 3.56 | 1.31 | -1.123 | 0.262 | |
| 18. CD | 3.62 | 1.07 | 3.38 | 1.26 | -0.533 | 0.594 | |
| 19. CD | 3.50 | 0.99 | 3.44 | 1.55 | -0.359 | 0.719 | |
| 20. CD | 3.56 | 0.99 | 3.19 | 1.22 | -0.959 | 0.338 | |

Note. SD = Standard Deviation

3.2. Age

Regarding the analysis of Digital Competence, according to the age of the Physical Education teachers, after performing the Kruskal–Wallis H-test, it is observed that there are only statistically significant differences in item 11 CD (I have basic knowledge about

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the operation of a computer, iPad or similar) between the groups of 35 to 46 years (=4.75; SD = 0.45) and the group between 47 and 58 years (=4.00; SD = 1.12). As can be seen in Table 3, statistically significant differences were also observed between the groups aged 26 to 34 years (=4.76; SD = 0.44) and the group aged 47 to 58 years (=4.00; SD = 1.12). CD (I consider myself capable of using different ICT to achieve specific learning in my students) there are statistically significant differences between the groups aged 35 to 46 years (=4.44; SD = 0.63) and the group between 47 and 58 years (=3.41; SD = 1.33). Finally, statistically significant differences are observed in item 18 CD (Design evaluation procedures and instruments for learning) between the groups aged 35 to 46 years (=3.81; SD = 0.66) and the group between 47 and 58 years (=2.88; SD = 1.36). Statistically significant differences were observed between the groups aged 26 to 34 years (=3.94; SD = 0.97) and the group between 47 and 58 years (=2.88; SD = 1.36). In relation to the rest of the items, no statistically significant differences were observed.

Table 3. Differences of Physical Education teachers in relation to Digital Competence according to age.

| | From 26 to 34 Years Old | | From 35 to 46 Years Old | | From 47 to 58 Years Old | | Kruskal-Wallis H | Sig. |
|--------|-------------------------|------|-------------------------|------|-------------------------|------|------------------|---------|
| | Mean | SD | Mean | SD | Mean | SD | Chi-Square | 8 |
| 11. CD | 4.76 | 0.44 | 4.75 | 0.45 | 4.00 | 1.12 | 9.066 | 0.011 * |
| 12. CD | 4.53 | 0.62 | 4.44 | 0.51 | 3.88 | 1.17 | 3.634 | 0.163 |
| 13. CD | 4.59 | 0.71 | 4.50 | 0.52 | 4.00 | 0.94 | 4.926 | 0.085 |
| 14. CD | 4.06 | 0.83 | 4.44 | 0.63 | 3.41 | 1.33 | 6.053 | 0.048 * |
| 15. CD | 3.71 | 0.85 | 4.06 | 0.77 | 3.24 | 1.25 | 4.000 | 0.135 |
| 16. CD | 4.29 | 0.59 | 4.00 | 0.82 | 3.65 | 1.27 | 2.226 | 0.328 |
| 17. CD | 4.12 | 0.60 | 4.00 | 0.89 | 3.59 | 1.33 | 1.175 | 0.556 |
| 18. CD | 3.94 | 0.97 | 3.81 | 0.66 | 2.88 | 1.36 | 7.685 | 0.021 * |
| 19. CD | 3.76 | 0.97 | 3.56 | 1.26 | 3.12 | 1.27 | 2.225 | 0.329 |
| 20. CD | 3.76 | 0.90 | 3.69 | 0.79 | 2.88 | 1.27 | 5.806 | 0.055 |

Note. SD = Standard Deviation; * Statistically significant correlation ≤ 0.05 .

3.3. Teaching Experience

Regarding the analysis according to the teaching experience of the Physical Education teachers in relation to Digital Competence, after performing the Kruskal–Wallis H-test, Table 4 shows there are statistically significant differences only in item 11 CD (I have basic knowledge about the operation of a computer, iPad or similar) between the groups of 1 to 6 years (=4.85; SD = 0.38) and the group between 19 and 35 years (=4.00; SD = 1.12). Statistically significant differences were also observed between the groups from 7 to 18 years (=4.70; SD = 0.47) and the group between 19 and 35 years (=4.00; SD = 1.12). For its part, item 14 CD (I consider myself capable of using different ICT, to achieve specific learning in my students), shows statistically significant differences between the groups of 7 to 18 years (=4.40; SD = 0.68) and the group between 19 and 35 years (=3.41; SD = 1.33). Finally, statistically significant differences are observed in item 18 CD (Design assessment procedures and instruments for learning) between the groups aged 7 to 18 years (=3.95; SD = 0.69) and the group aged 19 to 35 years (=2.88; SD = 1.36). Regarding the rest of the items, no statistically significant differences were observed.

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| Table 4. Inequalities of Physical Education teacher | s in relation to Digital Competence according to |
|---|--|
| teaching experience. | |

| | From 1 to 6 Years | | From 7 to | From 7 to 18 Years | | 5 Years Old | Kruskal-Wallis H | Sig. |
|--------|-------------------|------|-----------|--------------------|------|-------------|------------------|---------|
| | Mean | SD | Mean | SD | Mean | SD | Chi-Square | 8 |
| 11. CD | 4.85 | 0.38 | 4.70 | 0.47 | 4.00 | 1.12 | 9.659 | 0.008 * |
| 12. CD | 4.46 | 0.66 | 4.50 | 0.51 | 3.88 | 1.17 | 3.323 | 0.190 |
| 13. CD | 4.46 | 0.78 | 4.60 | 0.50 | 4.00 | 0.94 | 4.572 | 0.102 |
| 14. CD | 4.00 | 0.82 | 4.40 | 0.68 | 3.41 | 1.33 | 6.267 | 0.044 * |
| 15. CD | 3.69 | 0.85 | 4.00 | 0.79 | 3.24 | 1.25 | 3.545 | 0.170 |
| 16. CD | 4.31 | 0.63 | 4.05 | 0.76 | 3.65 | 1.27 | 2.097 | 0.351 |
| 17. CD | 4.08 | 0.64 | 4.05 | 0.83 | 3.59 | 1.33 | 1.130 | 0.568 |
| 18. CD | 3.77 | 1.01 | 3.95 | 0.69 | 2.88 | 1.36 | 7.577 | 0.023 * |
| 19. CD | 3.69 | 1.03 | 3.65 | 1.18 | 3.12 | 1.27 | 2.129 | 0.345 |
| 20. CD | 3.77 | 0.83 | 3.70 | 0.86 | 2.88 | 1.27 | 5.762 | 0.056 |

Note. SD = Standard Deviation; * Statistically significant correlation \leq 0.05.

3.4. Correlations

Table 5 shows the correlation analysis performed. This reveals several of the items present a statistically significant correlation. It is noteworthy that teachers who state they have a basic knowledge of computers or similar also perceive themselves as capable of using ICT to investigate, explore or solve problems related to physical education. At the same time, these also indicate that they do not consider themselves capable of using ICT to achieve specific learning for their students or to identify needs that can be addressed with ICT. The perceived ability of teachers is related with statistical significance to their perceived ability to apply different ICT strategies. On the other hand, promoting an ethical and legal use of computer applications is related to the use of scientific updating resources in the area of knowledge, but is negatively related to developing and supporting collaborative work in networks.

Table 5. Variable correlation analysis.

| | 11. CD | 12. CD | 13. CD | 14. CD | 15. CD | 16. CD | 17. CD | 18. CD | 19. CD | 20. CD |
|--------|---------|----------|----------|----------|----------|----------|----------|--------|--------|--------|
| 11. CD | 1 | | | | | | | | | _ |
| 12. CD | 0.340 * | 1 | | | | | | | | |
| 13. CD | 0.322 * | 0.318 * | 1 | | | | | | | |
| 14. CD | -0.068 | -0.361 * | -0.184 | 1 | | | | | | |
| 15. CD | -0.092 | -0.237 | -0.311 * | 0.414 ** | 1 | | | | | |
| 16. CD | 0.209 | 0.317 * | 0.136 | -0.027 | -0.211 | 1 | | | | |
| 17. CD | 0.175 | -0.164 | 0.176 | 0.362 * | -0.111 | 0.316 * | 1 | | | |
| 18. CD | 0.197 | 0.028 | 0.201 | -0.152 | -0.008 | -0.061 | 0.191 | 1 | | |
| 19. CD | -0.185 | -0.353 * | 0.176 | 0.129 | 0.415 ** | -0.258 | 0.176 | 0.24 | 1 | |
| 20. CD | -0.015 | -0.029 | 0.359 * | -0.263 | -0.17 | -0.310 * | -0.360 * | 0.073 | -0.017 | 1 |

Note. * Statistically significant correlation \leq 0.05; ** \leq 0.01.

4. Discussion

The overall objective of this work is to analyze the perceived Digital Competence of Physical Education teachers in Secondary Education. In this way, analyzing the perception of teachers' teaching skills is essential in viewing the change of paradigm that has arisen in the teaching—learning process. In this process, there are often a few drawbacks that hinder access to the use of these new technologies in the classroom. Several authors point out that there remains little research focused on the dimensions that structure Digital Competence in Physical Education (attitude towards ICT, technological knowledge and didactic use), as well as on the level of Digital Competence according to gender [8,30]. Moreover, Ref. [31] states that the failure to use new technologies in the classroom is often due to poor availability or access to resources. Therefore, the computer equipment available

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in schools should be made available to teachers, thus facilitating its use in different subjects. In addition to correct usage, they must be able to integrate it into their classes so that students achieve necessary learning in the desired way [13]. Similarly [30] also understand Digital Teaching Competence as the skills, attitudes and knowledge required by educators to stimulate student learning in the digital era. The authors point out that students should have the ability to use technology to enrich and transform teaching practices, as well as to reflect critically on how to learn new elements in relation to technology and teaching

The results of our research coincide with the studies of [32], which indicate that ICT play a key role in classroom teaching, allowing teachers to obtain resources that enable them to capture the students' attention.

In an increasingly digitally-connected world, Digital Competence in teaching should be a fundamental skill developed in teacher training, as it can enhance the acquisition of other competencies and can even help to optimize the effectiveness of teaching and learning processes [11,20]. Digital Competence involves the critical and safe use of information society technologies [17]. This competence, basic in teacher training, encompasses a set of skills, knowledge, abilities, and attitudes related to the integration of technology in the design and development of teaching-learning processes [7].

Works such as that of [14] consider that teachers should be in continuous training since the integration of ICT, specifically in the subject of Physical Education, depends above all on the teachers and the Digital Competence they possess. In the present study, the assessment of the respondents on the basic knowledge about the operation of hardware is assumed to be high, although in turn, they point out with a lower score to know the different methodologies to develop the work in a technological environment. In addition, other authors point out the difficulty of using these resources in the Physical Education classroom [15]. On the other hand, works such as that of [6] highlight Digital Competence in the subject of physical education occurs unevenly, being one of the least applied in the classroom.

For the degree of knowledge and use of different methodological strategies, it was observed that teachers consider themselves capable of applying ICT for a cooperative learning model. This observation is important since authors such as [15] affirm that in schools where they use cooperative learning and active methodologies through technologies, they obtain positive results in the classroom, as well as an improvement in the work environment, and the motivation and involvement of students in the subject. In terms of gender, the results of our work coincide with those found by [30], who found no significant differences in teachers' attitudes towards ICT according to gender. This finding also coincides with the results of [33] who pointed out that gender was not significant in terms of teachers' application and knowledge of digital competencies.

Regarding the inequalities of Physical Education teachers in relation to Digital Competence according to age, it was revealed that, in general, the Digital Competence of teachers decreases as the years go by. This fact corroborates the results obtained by [28], which argues that the incorporation of informatics tools, and the improvement achieved with them in the classroom, depends greatly on the teacher's knowledge of technology and the use they make of them. Thus, if they are not considered capable of applying ICT, as teachers grow older, their use in Physical Education classes will decrease. Similarly [6], points out that younger teachers show greater interest and knowledge in the use of new technologies, in relation to older teachers. On the contrary, Ref. [31] found that, specifically in the subject of Physical Education, the age of the teachers does not influence their perception of the technologies. In this line, it is important to emphasize that, if teachers do not have training in new technologies, it will be difficult to integrate ICT in their classes, therefore they will not be able to promote the development of Digital Competence in the subject of Physical Education [19,22,24].

As for the limitations of this study, it is necessary to increase the sample both in the number of participating teachers and in the distribution by sex. Additionally, it would be interesting to extend this research to other educational stages with the aim of analyzing

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whether there are significant differences depending on the age of the students, the educational stage, and the sociocultural context in which they are schooled. These improvements would make it possible to generalize the results on perceived Digital Competence to all Physical Education teachers.

5. Conclusions

In conclusion, ICT is a useful didactic resource that allows one to differ from the traditional teaching style. In addition to its significance for students, the use of ICT facilitates the teaching and learning process. The use of ICT offers flexibility in teaching, as well as immediacy in obtaining information. Regarding training, knowledge, and use of ICT, it corroborates those teachers consider that they have good training and knowledge about ICT, although these are not applied in Physical Education sessions.

Regarding Digital Competence in Physical Education, according to gender, there are no differences between men and women. On the other hand, according to age, there are differences among younger teachers, who are considered to have greater knowledge and use of technology in Physical Education. Similarly, considering the years of teaching experience, those teachers with more experience perceive themselves as less competent in digital matters.

For future lines of research, specifically in the field of Physical Education, more depth in data analysis is needed. For this reason, it would be interesting to carry out more studies on the subject in future to determine the deficiencies that exist in the subject in relation to the use of technological resources. Moreover, it could be determined whether there are such differences depending on the type of center, thereby determining the level of technological resources that can be used in each typology. Additionally, it would be convenient to present an analysis of a larger sample population, which would include other types of variables related to teaching performance. Finally, it should be added that the results of this research cannot be extrapolated to the total population, thus their interpretation should be taken with caution.

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