INTEGRATION OF DIGITAL TECHNOLOGY AND IMPLEMENTATION CHALLENGES OF FOOTBALL EDUCATION IN SELECTED UNIVERSITIES IN HENAN PROVINCE, CHINA

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Abstract

This study investigated the integration of digital technology in campus soccer coaching at Henan University and examined its impact on skill development, training effectiveness, student engagement, and ease of use. The study used a quantitative descriptive correlational design and surveyed 209 student respondents who actively participated in campus soccer and interacted regularly with their coaches.

Data collection was facilitated through a researcher-made questionnaire, validated by experts, and administered through an online platform. The findings revealed that although the use of digital tools in soccer training was generally effective, significant challenges were identified, particularly in terms of resource limitations and technological adaptation. The results underscore the need for targeted interventions to improve digital technology implementation in sports education, addressing resource allocation, training support, and adaptability to new technological advancements.

Recommendations include enhanced training programs for coaches, better resource allocation, and improved access to technical support to maximize the benefits of digital tools in soccer coaching.

1. Introduction

This research examined the impact on soccer where video analysis has become a preferred teaching tool. As Liu et al. (2019) showed in their study, it allows players to evaluate how they do in trainings to specify points of improvement. It also gives them a chance to review films, break down the negative aspects of the practice, and obtain data to make responses to what is lacking. In turn, the gap between actual application and theoretical claims is breached, thereby turning into a more efficient skill improvement regime.

Online coaching platforms have also played similar roles. These platforms offer students a variety of tools that provide them with ideal drills and expert guidance for further improving their skills and even their own physical ability and physique. This was supported by a study by Bunker and Thorpe (2019), who also argued that such

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platforms also improve the availability of such resources to students, leading to a more holistic and personalized football training.

Conversely, VR simulations provide near-actual immersions to the real sports experience, where students can practice their abilities in pseudo-in-game situations. Harris et al. (2020) demonstrated that VR can develop spatial awareness and response ability, which also includes decision-making. Using such in-game instances, VR can develop the physical and mental abilities of users required for continuous soccer skill development and eventual success.

Although there have been benefits to using digital technologies, there will also be challenges in terms of their actual use and application. These issues include proper understanding of how to use the devices or tools. With such inability, students may not be able to meet what Potrac et al. (2018) labeled the necessity of good training and assistance, which is optimizing the improvements being received from sports education trainings assisted by digital technologies. This, in turn, lowers the tools' effect on students' learning progress.

The efficacy of digital technology in the delivery of soccer education may be dictated by how it is implemented and its loyalty to the objectives of the institution that uses it. As claimed by Wang et al. (2021), such technology-assistance methods must be of optimal quality in terms of suitability to the target, comprehensibility, and applicability to specific soccer training needs. Poorly prepared tools that are not related to educational goals have fewer chances to yield expected results, which highlights the need for understanding the technology and strategy to be applied.

This study also wanted to put the prospective ability of digital technology into perspective to increase student motivation and engagement. Acknowledging the society's shift to a digital age, such tools featuring game-like and interactive elements may make training appeal more appealing to the present generation (Zhou et al., 2021). Moreover, if applied to football, these principles can encourage more participation and willingness to train, which in turn improves skills and the learning curve.

Looking at the case of Henan University, the aforementioned appeared to be greatly true, as the institution is currently reaping exemplary results from its pedagogical techniques, as reflected in the improvement of its students in the football program. However, it is also essential to remember that different coaches may also have similarly diverse needs for improvement, especially regarding the use of technology in sports education. Hence, integrating such resources and techniques requires a comprehensive look to transform them into efficient and student-centered programs.

1.1. Background of the study

Since the dawn of the digital age, the inclusion of technology in the pedagogy of sports education and training has gradually attracted significant attention. With the continuous evolution of teaching techniques, the importance of using technology in optimizing sports teaching techniques has been growing, namely, in increasing the effectiveness of training regimes for sports- and physical education-related programs. Such changes bring a wider shift in the methods used to maximize methodologies to enhance the performance of students and those being trained by the same program.

The integration of digital tools into physical education programs illustrates the evolution in sports education and the unceasing attempt to reach optimal results in similar skills training. Hence, a focus on technological applications is necessary for the discipline to move forward and keep up with the demands of the time, as well as the needs of coaches, students, and athletes alike.

Using digital technology to deliver physical education to students improves engagement among learners because such tools stimulate curiosity and interest. Considering the current application, technology adds another layer to

learning, which could change the nonphysical lifestyle of students into a fitness-focused one through engaging tools that it can present. Hence, students can be more involved in physical activities, even when using technology. However, technology use in education must ensure that students do not overuse these tools and, in turn, opt to stay indoors. The fact must remain that such activities must still be conducted in outdoor and open spaces, and that technologies are to be used to stimulate interest. Hence, pedagogies must also evolve along with the development of the respective tools in delivering education; that tech must remain as support and not the main medium of teaching and learning (Wyant & Baek, 2019).

This situation leads to the roles that coaches play in students' development. This digital trend has completely changed how education, including physical education and sports, is viewed. With this in mind, coaches are now required to familiarize themselves with technology so that they can smoothly deliver lessons to students who can predominantly be regarded as digital natives (Mansurovich, 2022; Thomas & Stratton, 2006). Similarly, digital technologies offer significant potential to improve physical education classes. By making learning more engaging and interactive, these tools can positively influence students' learning experiences (Lieberman et al., 2014; Tang, 2021).

Acknowledging the aforementioned, the technology tools have also been extended to facilitate the development of relationships between coaches and students. These devices become a medium of exchange of performance data, analyses, and feedback wherein the involved people can utilize the present information in responding to their current state, leading to their own physical and mental progress as well as the general success of the team.

Furthermore, technology tools have made the evaluation of skills more clear-cut by providing more accurate data in the least amount of time that results into learned decision-making practices and specified responses to needs for improvement. This allows students to gain a deeper understanding of their physical and mental states while also appreciating the approaches being applied to them with the assistance of technology tools.

Consequently, by enhancing fan interaction, event administration, and training, the use of digital technology in sports is revolutionizing the sector. To improve relationships between players, spectators, and the sports environment, sports organizations focus on using new tools and technology. Adopting digital innovations is crucial for maintaining competitiveness and satisfying the changing demands of the sports industry.

1.2. Statement of the problem

This research investigated the integration of digital technology and implementation challenges in soccer education at a university in China. Specifically, this study sought to answer the following questions:

Is there a significant difference in the assessment of coaches' integration of digital technology in campus soccer based on the respondents' profiles?

Is there a significant difference in the assessment of the challenges of coaches' integration of digital technology in campus soccer when considering the respondents' profiles?

Is there a significant relationship between student respondents' assessments of the effectiveness of coaches' digital technology applications in campus soccer and perceived challenges?

1.3. The significance of the study

The study aimed to provide significant insights for students to understand the current state of a football training program and is expected to highlight these training's strengths and weaknesses, which, in turn, may serve as guides to properly device a program more suitable for those it aims to.

Hence, this study is beneficial to;

Physical education coaches. The insights derived from the results of the study can be used by physical education coaches as guides in conducting physical education and sports-related classes.

Policymakers. The insights from the results of this study can lead policymakers to create a program that is proactive and student-centered that constantly looks at students' needs rather than being reactive to perceived demands.

Administrators. The results of this study can help administrators to better understand students' perceptions through actual statistical results and not merely based on expert opinion. Hence, any decision-involving tech-assisted training can be more comprehensibly considered, and adjustments that can be implemented once proven essential.

Future researchers. This study shows that although there are existing studies on this topic, there remains countless more research gaps to be explored. Moreover, it proves that there is a need for such a study not only for furthering the arguments but also to apply the results to the development of educational and training processes.

1.4. Scope and delimitation

This study focused on students' assessment of their coaches' efficacy in terms of implementing a tech-assisted sports training program. The study evaluated how these coaches and the technology-assisted activities they implement were optimized to achieve the maximum level of engagement and development for the students. In addition, it looked into potential challenges that may be encountered during the execution of such programs.

The study is confined merely to students of its locus—three schools in Henan Province, China—and the football training program of each, as well as student demographic profiles, namely their age, sex, and year levels. It did not extend to community or professional teams or programs; it highlighted only the technology tools available as resources in the study.

1.5. Theoretical framework

The Technology Acceptance Model (TAM), which was developed in 1989 by Fred Davis, was used in this study. This implies that obvious worth and accessibility are the foremost aspects that affect the appreciation and actual use of technology. Hence, the structure provided by the aforementioned theory can be the most suitable for successfully conducting this study.

This theory points to users' acceptance of technology in their practices, including their appreciation of its respective and relative tools. It uses two considerations that may influence user acceptance of certain tech—perceived usefulness and perceived ease of use. Perceived usefulness refers to a user's perspective on how a technology can improve the chances of achieving a specific goal. Meanwhile, perceived ease of use refers to how a technology can be understood by its intended user.

TAM's framework argues that as perceived usefulness and perceived ease of use are directly interrelated; hence, it can be inferred that the higher the level of both points to a similarly positive outlook toward technology that also makes users want more to use it. Applying this to the context of this study, the technology tools applied in soccer training must also consider not only students' interest but also factors that shape their interest. In the same sense, this also applies to student development.

Using this lens in the topic of this study, it can be seen that comprehending the application of technology in a campus football program can enhance student performance and engagement, although it must also be remembered that TAM may offer an overly generalized notion that may overlook other relative facets.

2. Methodology

This section discusses the methods and processes used in collecting data for this study. The techniques and resources used as techniques and subjects in performing the necessary steps to obtain statistical results that were analyzed and interpreted.

2.1. Research locale

Data were collected using structured questionnaires distributed to students at Henan University, Henan Sport University, and Henan Normal University. The collected data were analyzed using statistical methods appropriate for descriptive and correlational research.

2.2. Sample and sampling technique

The study employed total enumeration involving 209 respondents who met the following criteria: (1) were students from any of the three participating universities; (2) were actively engaged in campus football activities; and (3) consistently interacting with their campus football coaches. This selection ensured that the sample was directly relevant to the research objectives, focusing on students with hands-on experience in soccer training under their respective coaches.

2.3. Data gathering procedure
The researcher followed a rigorous procedure to ensure the accuracy and reliability of the instrument. Upon receiving approval for the research project, the instrument was submitted to three experts for feedback. Their insights were incorporated into the final version of the questionnaire, which was distributed to the participants. Permission to conduct the study was obtained from the Henan University administrators.
To manage the distribution and collection of responses, an online survey platform, Questionnaire Star, was used. Each respondent received a link and was given a week to complete the survey. After the responses were collected, the data were tallied, coded, and analyzed using the Statistical Package for Social Sciences (SPSS) to address the research questions.

2.4. Statistical analysis
The following statistical tools were employed in this study to process the data collected to evaluate students' assessments of their coaches' skills using technology tools for soccer training at Henan University.
The weighted average was used to assess various aspects of coaches' integration of digital technology, such as the perceived impact on skill development and enhancement of training effectiveness. The standard deviation provided insight into the variability of students' responses and helped determine the consistency of their assessments. Analysis of Variance (ANOVA) was used to highlight respondents' perceptions based on their demographic profiles. Finally, Pearson's Product Moment Correlation gauged the strength and direction of the relationship between coaches' efficacy in implementing tech-assisted soccer training and perceived challenges that may arise.
The significance level was set at 0.05, with null hypotheses being accepted if the deliberated value exceeds 0.05; however, if they do not, they are rejected.

3. Results and analysis
The following section presents the findings of the study, analyzing the data collected from the respondents. The results are discussed in relation to the research objectives, focusing on the impact of instructional leadership on student outcomes in music education.

Table 1: *Summary of the Integration of Digital Technology into Campus soccer Teaching*

Domain	Mean	SD	Rank	Interpretation
The perceived impact on skill development	2.74	0.69	2	Manifested
Enhancing Training Effectiveness	2.61	0.64	3	Manifested
Engagement and Motivation during Training	2.60	0.65	4	Manifested
Accessibility and Ease of Use	2.83	0.64	1	Manifested
Overall Mean	2.70	0.49	-	Manifested

Scale: 1.00–1.50: Not Manifested; 1.51–2.50: Slightly Manifested; 2.51–3.50: Manifested; 3.51–4.00: Highly Manifested

Table 1 provides a summary of the integration of digital technology in campus football teaching, encompassing four key domains: perceived impact on skill development, enhancement of training effectiveness, engagement and motivation during training sessions and accessibility and ease of use. The table consolidates the mean scores, standard deviations, and rankings for each domain to provide an overall picture of how digital technology has influenced soccer training.

The overall integration of digital technology in campus soccer teaching received a mean score of 2.70, indicating that the integration was successfully manifested. This reflects the view that digital technology is a beneficial tool for soccer training, facilitating skill development, training efficiency, engagement and ease of use. However, further optimization is needed, particularly in enhancing motivation and training effectiveness, which can be achieved by tailoring technology more closely to the specific needs of football training (Wang et al., 2021).

Table 2: *Difference in the Integration of Digital Technology according to Age*

Domain	Categories	Mean	F-Value	Sig.	Interpretation/ Decision
The perceived impact on skill development	18 years old	2.70	0.51	0.67	Not significant/accept H0
	18–21 years	2.74			
	22–24 years old	3.19			
	25 years old and above	2.78			
Enhancing Training Effectiveness	18 years old	2.59	0.36	0.78	Not significant/accept H0
	18–21 years	2.60			
	22–24 years old	2.86			
	25 years old and above	2.73			
Engagement and Motivation during Training	18 years old	2.69	1.16	0.32	Not significant/accept H0
	18–21 years	2.54			
	22–24 years old	2.86			
	25 years old and above	2.72			
Accessibility and Ease of Use	18 years old	2.84	0.90	0.44	Not significant/accept H0
	18–21 years	2.84			
	22–24 years old	2.24			
	25 years old and above	2.87			
Integration of Digital Technology	18 years old	2.84	0.22	0.88	Not significant/accept H0
	18–21 years	2.84			
	22–24 years old	2.24			
	25 years old and above	2.87			

Level of significance = 0.05.

Table 2 presents the differences in the integration of digital technology into campus soccer teaching based on the respondents' ages. The table evaluates four domains: perceived impact on skill development, enhancement of training effectiveness, engagement and motivation during training sessions, and accessibility and ease of use.

In summary, across all four domains and the overall integration of digital technology, no statistically significant differences were found based on respondents' ages. Thus, the null hypothesis is supported, suggesting that age does not play a significant role in the perceived integration of digital technology in campus soccer teaching. This is noteworthy because younger individuals are often considered digital natives and may be expected to adapt more easily to technology. However, the findings align with research by Miah (2017), which suggests that while younger users may be more familiar with digital platforms, the effectiveness and impact of technology use in education depend more on the quality of integration rather than the user's age.

Table 3: *Difference in the Integration of Digital Technology according to Sex*

Domain	Categories	Mean	t-value	Sig	Interpretation/ Decision
The perceived impact on skill development	Male	2.85	2.17	0.03	Significant/rejective H0:
	Female	2.64			
Enhancing Training Effectiveness	Male	2.69	1.81	0.07	Not significant/accept H0
	Female	2.53			
Engagement and Motivation during Training	Male	2.57	-0.63	0.53	Not significant/accept H0
	Female	2.63			
Accessibility and Ease of Use	Male	2.82	-0.54	0.59	Not significant/accept H0
	Female	2.86			
Integration of Digital Technology	Male	2.73	0.97	0.33	Not significant/accept H0
	Female	2.67			

Level of significance = 0.05.

Table 3 presents the differences in the integration of digital technology into campus soccer teaching based on the respondents' sex. The table evaluates four key domains: perceived impact on skill development, enhancement of training effectiveness, engagement and motivation during training sessions, and accessibility and ease of use.

In summary, the table shows that a significant difference between male and female respondents is only observed in the perceived impact on skill development, where males report a greater impact. For all other domains, including enhancement of training effectiveness, engagement and motivation, accessibility and ease of use and overall integration of digital technology, there were no statistically significant differences between male and female respondents. This suggests that while digital technology impacts skill development differently between sexes, its role in motivation and ease of use is more universally experienced, as supported by literature emphasizing the broad appeal and usability of digital tools in education (Miah, 2017; Wyant & Baek, 2019).

Table 4: *Difference in the Integration of Digital Technology at Year Level*

Domain	Categories	Mean	F-Value	Sig.	Interpretation/ Decision
The perceived impact on skill development	1st year	2.73	1.94	0.13	Not significant/accept H0
	2nd year	2.85			
	3rd year	2.72			
	4th year	2.55			
Enhancing Training Effectiveness	1st year	2.60	1.39	0.25	Not significant/accept H0
	2nd year	2.68			
	3rd year	2.62			
	4th year	2.45			
Engagement and Motivation during Training	1st year	2.91	2.53	0.06	Not significant/accept H0
	2nd year	2.54			
	3rd year	2.76			
	4th year	2.49			
Accessibility and Ease of Use	1st year	2.73	0.30	0.83	Not significant/accept H0
	2nd year	2.87			
	3rd year	2.81			
	4th year	2.79			
Integration of Digital Technology	1st year	2.74	1.36	0.26	Not significant/accept H0
	2nd year	2.74			
	3rd year	2.73			
	4th year	2.57			

Level of significance = 0.05.

Table 4 presents the differences in the integration of digital technology into campus soccer teaching based on the respondents' year levels. The table assesses four domains: perceived impact on skill development, enhancement of training effectiveness, engagement and motivation during training sessions and accessibility and ease of use. In summary, across all four domains and the overall integration of digital technology, no statistically significant differences were found based on the respondents' year levels. Therefore, the null hypothesis is accepted for all domains, indicating that year level does not significantly affect the perceived integration of digital technology in campus soccer teaching. This is consistent with research by Wyant and Baek (2019), who emphasized that when technology is appropriately integrated into sports education, it can be equally beneficial for all learners, regardless of their year level. This uniformity supports the idea that when well-integrated, digital tools can provide consistent benefits across different learning stages (Bunker & Thorpe, 2019).

Table 5: *Summary of Challenges Associated with Implementation*

Domain	Mean	SD	Rank	Interpretation
Technological Barriers	2.90	0.61	1	Evident
Cost and Resource Availability	2.75	0.61	4	Evident
Training and Technical Support	2.82	0.65	2	Evident
Adaptation to New Technology	2.76	0.60	3	Evident
Overall Mean	2.81	0.60	-	Evident

Scale: 1.00–1.50: Not Evident; 1.51–2.50: Slightly Evident; 2.51–3.50: Evident; 3.51–4.00: Highly Evident

Table 5 summarizes the challenges associated with the implementation of digital technology in campus soccer training. The table evaluates four domains: technological barriers, cost and resource availability, training and technical support, and adaptation to new technology. Each domain was assigned a mean score, standard deviation, and rank, with an overall assessment of the challenges.

Overall, the summary of challenges associated with the implementation of digital technology shows a mean score of 2.81, indicating that these challenges are evident across all domains, with technological barriers being the most significant hurdle in integrating digital tools into football training. The most prominent challenge is "Technological Barriers" (mean = 2.90), reflecting the widespread technical difficulties encountered by users, consistent with literature discussing the importance of overcoming such barriers for successful integration (Hughes & Franks, 2018).

Table 6: *Differences in Challenges Associated with Implementation based on Age*

Domain	Categories	Mean	F-Value	Sig.	Interpretation/ Decision
Technological Barriers	18 years old	3.01	1.70	0.17	Not significant/accept H0
	18–21 years	2.86			
	22–24 years old	2.38			
	25 years old and above	2.83			
Cost and Resource Availability	18 years old	2.82	0.49	0.69	Not significant/accept H0
	18–21 years	2.72			
	22–24 years old	2.52			
	25 years old and above	2.70			
Training and Technical Support	18 years old	2.95	1.17	0.32	Not significant/accept H0
	18–21 years	2.77			
	22–24 years old	2.71			
	25 years old and above	2.71			
Adaptation to New Technology	18 years old	2.82	0.61	0.61	Not significant/accept H0
	18–21 years	2.75			
	22–24 years old	2.38			
	25 years old and above	2.71			
Challenges Associated with Implementation	18 years old	2.90	0.90	0.44	Not significant/accept H0
	18–21 years	2.78			
	22–24 years old	2.50			
	25 years old and above	2.74			

Level of significance = 0.05.

Table 6 presents the challenges associated with the implementation of digital technology in campus soccer training, based on the respondents' ages. The table evaluates four domains: technological barriers, cost and resource availability, training and technical support, and adaptation to new technology.

In summary, across all four domains and the overall challenges associated with the implementation of digital technology, no statistically significant differences were found based on respondents' age. Therefore, the null hypothesis is supported, indicating that age does not significantly affect the challenges encountered in the implementation of digital technology in campus soccer training. This suggests that age does not influence how respondents experience challenges related to technology, which is consistent with Miah (2017), who found that the main barriers to digital technology adoption are infrastructural and not age-dependent.

Table 7: *Differences in Challenges Associated with Implementation based on Sex*

Domain	Categories	Mean	t-value	Sig	Interpretation/ Decision
Technological Barriers	Male	2.85	−1.43	0.15	Not significant/accept H0
	Female	2.97			
Cost and Resource Availability	Male	2.73	−0.65	0.51	Not significant/accept H0
	Female	2.78			
Training and Technical Support	Male	2.77	−1.18	0.24	Not significant/accept H0
	Female	2.88			
Adaptation to New Technology	Male	2.74	−0.82	0.41	Not significant/accept H0
	Female	2.80			
Challenges Associated with Implementation	Male	2.77	−1.06	0.29	Not significant/accept H0
	Female	2.86			

Level of significance = 0.05.

Table 7 presents the challenges associated with the implementation of digital technology in campus soccer training, based on the respondents' sex. The table evaluates four key domains: technological barriers, cost and resource availability, training and technical support, and adaptation to new technology. The table provides mean scores for male and female respondents, along with corresponding t-values, significance levels (Sig.), and interpretations or decisions regarding the hypothesis.

In summary, across all four domains and the overall challenges associated with the implementation of digital technology, no statistically significant differences were found based on the respondents' sex. Therefore, the null hypothesis is accepted for all domains, indicating that both male and female respondents perceive similar challenges in the implementation of digital technology in campus soccer training. Both male and female respondents reported similar challenges regarding technological barriers, cost, training, and adaptation, reflecting the universal nature of these issues, as noted by Potrac et al. (2018).

Table 8: *Differences in Challenges Associated with Implementation-based Year Level*

Domain	Categories	Mean	F-Value	Sig.	Interpretation/ Decision
Technological Barriers	1st year	2.76	0.68	0.56	Not significant/accept H0
	2nd year	2.90			
	3rd year	2.84			
	4th year	2.99			
Cost and Resource Availability	1st year	2.55	0.73	0.54	Not significant/accept H0
	2nd year	2.79			
	3rd year	2.68			
	4th year	2.78			

Training and Technical Support	1st year	2.70	1.38	0.25	Not significant/accept H0
	2nd year	2.83			
	3rd year	2.70			
	4th year	2.95			
Adaptation to New Technology	1st year	2.54	1.02	0.39	Not significant/accept H0
	2nd year	2.82			
	3rd year	2.69			
	4th year	2.78			
Challenges Associated with Implementation	1st year	2.64	0.86	0.47	Not significant/accept H0
	2nd year	2.84			
	3rd year	2.73			
	4th year	2.88			

Level of significance = 0.05.

Table 8 presents the challenges associated with the implementation of digital technology in campus soccer training, based on the respondents' year-level. The table evaluates four domains: technological barriers, cost and resource availability, training and technical support, and adaptation to new technology. The data are presented by year level—1st year, 2nd year, 3rd year, and 4th year—along with their corresponding mean scores, F-values, significance levels (Sig.), and interpretations or decisions regarding the hypothesis.

In summary, across all four domains and the overall challenges associated with the implementation of digital technology, no statistically significant differences were found based on the respondents' year level. Therefore, the null hypothesis is supported, indicating that year level does not significantly affect the challenges encountered in the implementation of digital technology in campus soccer training. This uniformity suggests that students across all year levels face similar difficulties with technology integration, which is consistent with literature that points to widespread infrastructural challenges rather than student-specific issues (Hughes & Franks, 2018).

Table 9: *Relationship between the Integration of Digital Technology and Challenges Associated with Implementation*

		The perceived impact on skill development	Enhancing Training Effectiveness	Engagement and Motivation during Training	Accessibility and Ease of Use	Integration of Digital Technology
Technological Barriers	Pearson r	0.59	0.59	0.02	0.85	0.68
	Sig.	0.00	0.00	0.78	0.00	0.00
Cost and Resource Availability	Pearson r	0.63	0.66	-0.01	0.74	0.68
	Sig.	0.00	0.00	0.85	0.00	0.00
Training and Technical Support	Pearson r	0.63	0.63	0.02	0.69	0.66
	Sig.	0.00	0.00	0.81	0.00	0.00
Adaptation to New Technology	Pearson r	0.64	0.64	0.04	0.83	0.69
	Sig.	0.00	0.00	0.58	0.00	0.00
Challenges Associated with Implementation	Pearson r	0.64	0.64	-0.01	0.80	0.70
	Sig.	0.00	0.00	0.95	0.00	0.00

Table 9 presents the relationship between the integration of digital technology and the challenges associated with its implementation in campus soccer training. The table uses Pearson's correlation coefficient (Pearson r) to assess

the strength and direction of the relationships across five domains: perceived impact on skill development, enhancement of training effectiveness, engagement and motivation during training sessions, accessibility and ease of use and overall integration of digital technology. The significance levels (Sig.) are also provided to indicate the statistical significance of each relationship.

In summary, the table highlights those challenges associated with digital technology, particularly technological barriers, cost, resource availability and adaptation to new technology, have a significant impact on accessibility, ease of use and overall integration of digital tools in football training. However, engagement and motivation during training sessions are less influenced by these challenges. This finding aligns with the literature, which emphasizes that overcoming technological barriers is critical for ensuring effective integration of digital tools into sports education (Miah, 2017; Potrac et al., 2018).

Acknowledgment

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