

Psychological Empowerment Scale for Physical Education and Sports Teachers in the Chamchamal District, Directorate of Education

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This research examines psychological empowerment among physical education teachers in the Chamchamal region, where it is regarded as a fundamental component for enhancing individuals' sense of control and capacity to influence their lives. The study conceptualizes psychological empowerment as a dynamic process shaped by multiple factors that contribute to improved well-being and performance. A descriptive approach, using a field survey method, was adopted for the study, targeting a sample of teachers. A specific instrument for measuring psychological empowerment was utilized, following rigorous scientific procedures. The study aimed to assess the current state of psychological empowerment among teachers and explore its impact on professional performance. Findings revealed that psychological empowerment among physical education teachers results from the interaction of cultural, social, institutional, and educational factors. The research recommends fostering an educational and sports environment that supports psychological empowerment by promoting collaboration and coordination among sports supervisors, school administrators, and teachers. It emphasizes the importance of sharing information and expertise in physical education and strengthening communication between all parties involved in school physical education and sports programs.

Keywords: *Psychological Empowerment, Physical Education, Sports Teachers, Policy Recommendations*

Introduction

Psychological empowerment is a significant topic in modern psychology, recognized for its ability to enhance an individual's sense of control and capacity to influence both personal and professional aspects of life. This empowerment helps individuals engage positively with the challenges and opportunities they encounter. It is considered essential in psychological and social research, as it aims to improve individual well-being and increase the capacity for personal and professional success.

Psychological empowerment is defined as a feeling of control, self-efficacy, self-confidence, and the ability to influence important decisions in one's life. This definition highlights that psychological empowerment is a dynamic process shaped by both internal and external factors affecting the individual (Granville and Brown, 2023).

Some believe that psychological empowerment has far-reaching effects on both individuals and communities. It can be defined as the process that enables a person to gain psychological and moral support to improve their quality of

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life and achieve personal and professional goals. This definition enhances our understanding of psychological empowerment as a crucial means of improving individual well-being and equipping people to face diverse challenges (Kamal, 2022).

Others view psychological empowerment as a significant factor in enhancing individuals' performance at work by boosting their self-confidence and decision-making abilities. This perspective illustrates how psychological empowerment can positively influence one's professional life, contributing to improved performance and productivity (Al-Khateeb, 2022).

Currently, educational institutions face considerable challenges due to rapid global changes. To adapt, schools must reevaluate their strategies and practices. With technological advancements, globalization, and intense competition, it has become essential to develop new management and educational approaches that can keep pace with these transformations.

In this context, teachers play a crucial role in education and development. They are no longer simply transmitters of knowledge; instead, they act as facilitators of the learning process and catalysts for creativity. To perform these roles effectively, teachers need both psychological and professional empowerment.

In the field of physical education, in particular, psychological empowerment is especially important. Physical education teachers play a vital role in shaping students' personalities and enhancing their physical and mental health. By empowering these teachers psychologically, they can become leaders of positive change, better equipped to face contemporary challenges and meet students' needs.

Therefore, it is essential to focus on enhancing teachers' capabilities, especially those of physical education teachers, by providing psychological empowerment and motivation to raise the quality of education. Through this research, we aim to contribute to the development of a more adaptable and effective educational system that can keep up with global changes.

Physical education teachers face significant challenges in achieving the necessary level of psychological empowerment due to a gap between the urgent need to improve their performance and the obstacles they currently encounter. They struggle to adapt to increasing professional pressures and to achieve the required level of efficiency in their work, largely because of a lack of specialized studies on psychological empowerment specifically within the field of physical education. Insufficient involvement in decision-making processes and the limited effectiveness of current strategies for fostering their psychological empowerment further hinder their ability to overcome challenges and enhance educational quality.

Therefore, it is crucial to study and understand how to enhance psychological empowerment for physical education teachers so they can improve their performance and better respond to the demands of today's educational landscape. The research problem can be defined through three key questions:

1. What is the current level of psychological empowerment among physical education teachers, and what are the primary factors affecting it given contemporary challenges?
2. How does psychological empowerment impact the professional performance

of physical education teachers and the overall quality of education in physical education?

3. What effective strategies can enhance psychological empowerment among physical education teachers, and how can these be implemented within the current educational context?

The importance of this study lies in its focus on a critical topic related to educational quality and teachers' effectiveness in addressing contemporary challenges. Theoretically, this research helps bridge a knowledge gap concerning the psychological empowerment of physical education teachers, enriching educational literature and offering a comprehensive framework for understanding this phenomenon.

On a practical level, the findings of this research will aid in developing effective strategies to enhance teachers' psychological empowerment, which will positively impact their professional performance. Additionally, understanding the factors that influence psychological empowerment will support decision-makers in designing policies and training programs that meet teachers' needs and build their capacities.

At the student level, empowering teachers psychologically will contribute to higher-quality education and improve learning outcomes in physical education. Finally, this research highlights the essential role of physical education teachers within the educational system, supporting broader efforts for comprehensive educational development and reform.

The objectives of this study are to construct and apply a psychological empowerment scale for 180 physical education teachers in the district of Chamchamal and to assess the current level of psychological empowerment among these teachers. This research is limited to physical education teachers at public schools in the district of Chamchamal, Kurdistan Region of Iraq, during the period from January 5, 2024, to April 5, 2024.

This paper is organized in five sections including this introduction. The second section discusses the concept of psychological empowerment. The third section is the research methodology. In addition, the empirical findings of this study are reported. The fourth section provides a number of recommendations based on the discussion and the findings of this paper. The last section concludes.

Psychological Empowerment

According to Young (2020), psychological empowerment is a multidimensional concept that reflects an employee's positive psychological state toward their work. It manifests in their perception of the importance of their role, confidence in their abilities, independence in decision-making, and influence over work outcomes. This state enhances the employee's intrinsic motivation, encouraging them to take initiative and persevere in the face of organizational challenges.

Psychological empowerment involves enhancing the capabilities of those working in the field of education through both psychological and moral support, aiming to equip them to efficiently overcome modern challenges. This support

focuses on strengthening self-confidence and decision-making abilities, which in turn improves performance and helps educational institutions adapt to global and technological transformations.

The final score obtained by a respondent on the psychological empowerment scale serves as an indicator of how well their responses align with their actual state of empowerment. This is implemented in this study.

Research Methodology and Findings

This study uses a descriptive style method based on primary data collected by a questionnaire. The research sample included 140 physical education teachers in the district of Chamchamal, representing 77.8% of the total population. The sample consisted of the following subgroups: the construction sample (74), the exploratory experiment (6), those excluded for various reasons (10), the reliability sample (20), and the application sample (30).

The exploratory experiment aimed to assess the clarity of the statements and scale instructions, calculate the time taken to respond to the questionnaire, address any inquiries, and prepare the final version of the statements before statistical analysis.

For this purpose, the researcher distributed the questionnaire to a sample of 6 physical education teachers who were later excluded from the main sample. These teachers were asked to read the instructions and statements, raise any questions about unclear points, and indicate any difficulties they encountered during the response process. The time required to complete the questionnaire ranged from 20 to 22 minutes, with an average of 21 minutes per teacher.

To measure the variable of psychological empowerment, the researcher developed a tool to assess this variable, following a set of scientific steps for constructing reliable scales.

The theoretical foundations were based on an international literature review.

The theoretical foundations were defined as follows:

- Relevant theories were used to define key concepts, using the principle of analyzing and breaking down these theories into basic elements. Each element was considered a specific area or reference framework from which statements were derived. The relative importance of each area in measurement was determined, which guided the preparation of statements for each area.
- The scale construction relied on the common method of using declarative statements, following the identification of the theoretical foundations and basic concepts of the current study.

To ensure the validity of these areas and their representation of the scale, the researcher presented them to a group of specialized experts for evaluation. The experts assessed the validity and coverage of the concept of psychological empowerment.

To verify the level of agreement among the experts' opinions, the Chi-square goodness of fit test was applied. The researcher set an agreement threshold of 75%

or higher, using the Chi-square critical value of 3.84, with degrees of freedom $(2-1) = 1$, and a significance level of 0.05. Table 1 reports the results of the Chi-square test and the percentage of experts' opinions on the validity of the domains of the Psychological Empowerment Scale.

Table 1. *Experts' Opinions*

	Areas Psychological Empowerment	#	#		#		#	χ^2
			A	%	D	%		
1	Organizational support	23	23	100	0	0	-	23
2	Competency Area	23	22	96	1	4	Domain2, Domain4	19
3	freehand, discretion	23	22	96	1	4	Domain3 Domain5	19
4	Impact Group	23	21	91	2	9	Domain4 Domain2	16
5	Self-determining domain	23	20	87	3	13	Domain5 Domain3	13
6	Meaning domain	23	19	83	4	17	-	10

#: Number of Experts; A: Agree; D: Disagree

In Table 1, after merging and modifying the domains, we observed a shift from the "competence and qualification" domain to the "competence and impact" domain, while the "discretion and self-determination" domain became part of "autonomy." The final scale consists of four domains, as shown in Table 2.

Table 2. *Domains of Psychological Empowerment*

	Areas
1	Organizational support
2	Area of Competence and Influence
3	Autonomy (freedom of action and self-determination)
4	Meaning domain

Table 3 shows the arithmetic mean, relative importance, and the number of items for each dimension of psychological empowerment.

Table 3. Mean and Phrases

	Areas Psychological Empowerment	Mean	Domains	Mean	Phrases
1	Organizational support	3.03	25	$(3.03 \times 25) / 100 = 0.75$	$0.75 \times 2 = 15$
2	Area of Competence and Influence	2.87	25	$(2.87 \times 25) / 100 = 0.71$	$71 \times 2 = 14$
3	Autonomy (freedom of action and self-determination)	2.63	25	$(2.63 \times 25) / 100 = 0.65$	$2 \times 0.65 = 13$
4	Meaning domain	2.56	25	$(2.56 \times 25) / 100 = 0.64$	$2 \times 0.64 = 13$
5	Total	mean for each domain	$100 / 4 = 25$ per area	$(\text{mean per area} \times 25) / 100$	55 Primary Phrases

The process of drafting initial statements is a crucial step in developing psychological and pedagogical scales. This process aims to create a set of statements that accurately reflect the attribute or phenomenon to be measured while ensuring validity and reliability (DeVellis and Thorpe 2022). The statements were prepared in their initial form through several steps:

1. Some statements were derived from analyzing responses to an open questionnaire distributed to a random sample of six teachers of physical and sports education in Chamchamal district, who were excluded from the study sample. They were asked to write statements for each dimension of the scale.
2. Additional statements were derived from the theoretical framework, definitions, and existing measures addressing the concept of psychological empowerment, with adaptations to suit the context of this study. The researcher also formulated new statements, structuring them as declarative statements to which respondents select one of five options: Always Applies, Often Applies, Occasionally Applies, Slightly Applies, Never Applies.

During the statement preparation, several key points were emphasized:

1. Avoid lengthy statements to prevent response fatigue.
2. Ensure each statement is clear, understandable, and interpretable in a single way.
3. Make statements comprehensive to encompass all aspects of the evaluation.
4. Use simple and straightforward language for ease of understanding.
5. Avoid hints or wording that might bias the respondent, and refrain from using negatives like "no."
6. Avoid statements containing multiple ideas.

Logical analysis is essential at the outset of statement preparation to assess whether each statement accurately represents the intended attribute. This step is a preliminary measure to verify the scale’s validity, as the scale can be considered valid if it is reviewed by subject-matter experts. Experts provided feedback on the

statements' validity and their suitability for each dimension, suggesting modifications where necessary.

Apparent validity is a foundational form of validity in the construction of psychological and educational standards. It refers to the extent to which the scale appears to measure its intended attribute, based on an examination of the content and structure (Al-Zamili et al. 2023). Apparent validity is often confirmed by presenting the scale to a panel of experts to evaluate the clarity and relevance of each statement. Researchers note that apparent validity can enhance respondents' motivation to complete the scale, thereby improving reliability (Al-Subaie 2023).

It is important to note that apparent validity does not replace other forms of validity but serves as an initial step toward more precise validation methods, such as content and construct validity (Hammouri and Abdul Jawad 2024). A tool is considered valid if its structure and content align with the behavior it intends to measure. The statements were reviewed by a panel of experts, who evaluated their validity. The chi-square test for goodness of fit was applied to assess the level of agreement among experts, with a minimum agreement threshold of 75%, a chi-square value of 3.84 (for a degree of freedom of 1), and a 0.05 error level. Results indicated that all statements met the criteria for measuring their intended constructs. Table 4 presents the chi-square results and the percentage of expert agreement on the validity of the psychological empowerment statements.

Table 4 confirms the validity of 44 statements across four dimensions. Statements in Table 4 were reviewed by experts to assess the directionality (positive or negative) of each statement. The researcher incorporated expert guidance, and the statements were then organized according to the structure outlined above.

Table 4. Chi-square and Expert opinions

	Areas	Phrases	#	#		#		χ^2
				A	%	D	%	
1	Organizational support	8,10,11,13	23	23	100	0	0	23
		1,2,5,12,15	23	21	91	2	9	16
		3,4	23	18	78	5	22	7
		6,7,9,14	23	<16		>7		5
2	Efficiency and Impact	17,21,22	23	22	96	1	4	19
		16,20,23,26	23	21	91	2	9	16
		18,19,24,27	23	20	87	3	13	13
		25,28,29	23	<16		>7		4
3	Independence	34,35,41	23	22	96	1	4	19
		31,33,36,42	23	20	87	3	13	13
		32,37,39,40	23	18	78	5	22	7
		30-38	23	<16		>7		4
4	Meaning	44,49,51	23	23	100	0	0	23
		53,54	23	20	87	3	13	13
		43,46,50,55	23	19	83	4	17	10
		45-52	23	18	78	5	22	7
		47,48	23	<16		>7		4

#: Number of Experts; A: Agree; D: Disagree

Table 5 presents the distribution of positive and negative statements by dimension.

Table 5. Numbers of Positive and Negative Statements

Sr	Areas Psychological Empowerment	Positive Phrase Numbers	Negative Phrase Numbers
1	Organizational support	2, 4, 8, 10, 11, 12, 13, 15	1, 3, 5
2	Efficiency and Impact	16, 17, 18, 19, 20, 21, 22	23, 24, 26, 27
3	Autonomy (freedom of action and self-determination)	31, 32, 34, 35, 39, 42	33, 36, 37, 40, 41
4	Meaning	43, 46, 51, 52, 53, 54, 55	44, 45, 49, 50
5	Total	28	16

After administering the questionnaire to a sample of 74 physical education teachers, the responses were analyzed to determine the discriminative power of each statement. The total scores from the responses were ranked from highest to lowest, with the two extreme groups representing the top and bottom 27% of scores, respectively. Each group consisted of approximately 20 participants after rounding.

To assess differences in scores between these groups for each statement, an independent-samples t-test was used, with the calculated t-value representing the statement’s discriminative power. The t-values ranged from a minimum of 0.36 to a maximum of 6.34. Four statements were removed because their t-values did not reach the critical value at the 95% confidence level, indicating insufficient discriminative power.

Experts in measurement, evaluation, and psychometrics emphasize the importance of validity in the items of measurement scales, as the validity of the overall scale largely depends on the validity of its individual items (Al-Sharifain and Abu Zaytoun 2020). While certain statements may initially seem suitable for measuring a particular trait, empirical validity—how each statement correlates with the scale’s overall score—provides a more accurate assessment. This is because empirical validity reveals each statement’s capacity to measure the same concept as the scale as a whole, ensuring item homogeneity (Al-Khatib and Al- Hadidi 2019).

To assess the discriminatory power of the statements, the internal consistency coefficient was calculated to ensure a homogeneous scale in which each statement reflects the same behavioral dimension as the scale overall, highlighting inter-item correlations (Murad and Abdulaziz 2019).

When a statement is correlated with an internal or external criterion, this relationship indicates its validity. In the absence of an external criterion, the respondent’s total score is considered the best internal criterion. After removing non-significant items, the validity of each statement was calculated using Pearson’s correlation coefficient with the overall score (Suleiman and Abdulsalam, 2021). The correlation coefficients (r) ranged from 0.19 to 0.72, and all statements were statistically significant, with coefficients above the critical value at a 0.05 significance level—except for four statements, which were excluded because their correlation coefficients fell below the critical threshold. The final scale thus includes 36 statements.

Correlation values between each dimension's total score and the overall scale score were also calculated, as these correlations are fundamental indicators of homogeneity and help define the behavioral dimension measured. Results showed that the subscale correlation coefficients were statistically significant, exceeding the critical correlation value at a 0.05 significance level.

Reliability is a key criterion in evaluating psychological and educational tools, as it reflects the stability of measurement results over time and across conditions. In this study, the split-half method was used to estimate reliability, a time- and resource-efficient approach that requires administering the test only once. This method involves dividing the items into two halves—odd-numbered items in one half and even-numbered items in the other.

Following scale administration, the Pearson correlation coefficient was calculated for the split halves. Since this value reflects the reliability of only half of the test, correction methods were applied to estimate the overall reliability. Specifically, the researcher used the Spearman-Brown and Guttman formulas for correction, along with Cronbach's alpha, which is suitable for this scale's structure (Al-Ansari 2022).

Results from the three methods showed a Spearman-Brown reliability coefficient of 0.924 for the psychological empowerment scale, a Guttman-corrected reliability coefficient of 0.926, and a Cronbach's alpha of 0.923. These values meet the study's reliability standards, indicating a high degree of reliability for the psychological empowerment scale.

The final version of the scale was administered to a sample of 30 physical education teachers and instructors in the Chamchamal district. Respondents were given the psychological empowerment questionnaire with instructions on how to respond to each item. Confidentiality and the scientific use of responses were emphasized. The final administration period ran from June 9, 2024, to June 25, 2024, with a response time of 20-22 minutes. The results, which will be presented and discussed according to the study's objectives, were derived from these analyses. To ensure methodological rigor, statistical analyses were conducted to examine the distribution of data obtained from the measurement tool. This analysis provides insight into the data's distribution characteristics, aiding in the selection of appropriate statistical tests and enhancing the reliability of study findings.

Based on the data presented in Tables 6 and 7 and Figures 1 and 2 give the scores for the research sample show a moderate distribution. Therefore, parametric inferential statistical methods are appropriate for analyzing the data. After administering the scale to the application sample, teachers' responses were analyzed based on the provided answer choices. The results showed an arithmetic mean of 120 with a standard deviation of 13.6. When compared with the hypothetical mean of 108 using a one-sample t-test, the calculated t-value of 4.9 exceeded the critical t-value of 2.04 at a 0.05 significance level, with a degree of freedom of 29. This indicates a statistically significant difference between the two means, suggesting that teachers have a high level of mood. Table 8 presents these results.

The results of this study align with Abdullah's (2022) findings that organizational support significantly enhances professional performance by fostering a work environment that encourages innovation and development. Such support encourages the adoption of effective new teaching and training methods, thereby raising creativity

and independence in the workplace.

Moreover, institutions that provide ongoing organizational support contribute to greater job satisfaction among teachers, which positively impacts overall performance. Organizational support also expands opportunities for professional development and peer interaction, helping to create an integrated learning environment aimed at excellence in teaching and sports training.

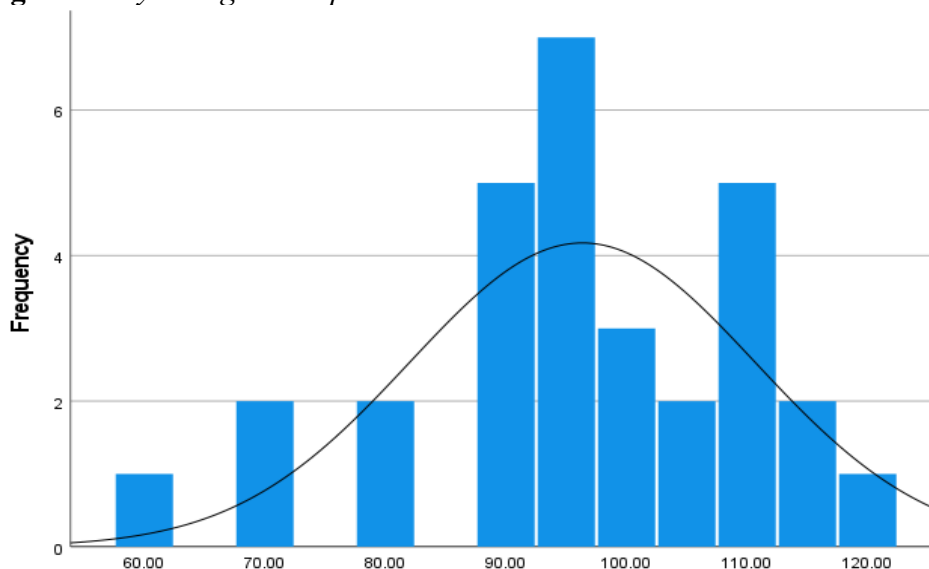
Table 6. Summary Statistics

Statistic	Value
Mean	96.3
Standard Deviation	14.3
Range	59
Skewness	-0.573
Kurtosis	0.222
Minimum	60
Maximum	119

Table 7. Test of Normality

Kolmogorov-Smirnova			Shapiro-Wilk		
Statistical	df	Sig	Statistical	df	sig
0.115	30	200	0.960	30	0312

Figure 1. Psychological Empowerment Scale



Al-Qahtani (2023) also emphasizes that investing in skill and competency development enhances teachers' effectiveness and their capacity for innovation within the work environment, improving educational and training outcomes and the quality of educational outputs. This development fosters a generation of teachers capable of leading change within their fields.

Based on these results, it can be concluded that the professionalism of teachers

and physical education instructors plays a vital role in enhancing the quality of the educational and training process. Institutional support and continuous professional development strengthen self-efficacy, enabling teachers to confront challenges and implement innovative, effective teaching strategies. Enhanced proficiency also increases teachers' confidence in their ability to positively impact students, both cognitively and physically, and improves job satisfaction.

Figure 2. *Psychological Empowerment*

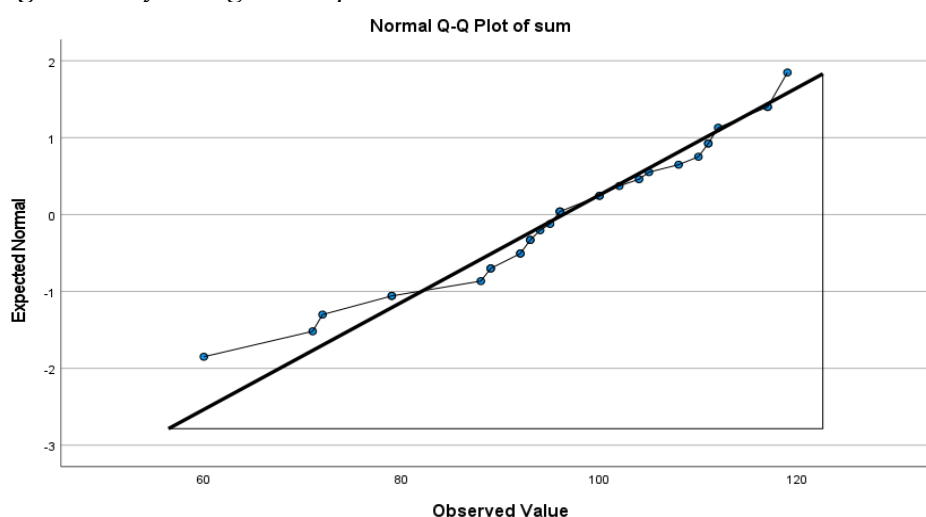


Table 8. *T-test Results for the difference between the means*

	M	SD	Expected	T value		N	df
				Estimated	Critical		
Psychosocial Empowerment	120	13.57	108	4.92	2.04	30	29

This study's results are also consistent with those of Samir and Laila (2023), who found that a stimulating educational climate fosters creativity and independence in educational and sports practices. This aligns with self-determination theory, which highlights the importance of autonomy and competence in motivating and psychologically empowering individuals, leading to improved teaching methods and sports training by teachers and physical education instructors.

In light of these findings, it is evident that the psychological empowerment of teachers and physical education instructors in the Chamchamal district results from a complex interplay of cultural, social, institutional, and educational factors. These findings underscore the importance of a holistic approach to fostering psychological empowerment, emphasizing the need for a supportive environment, opportunities for professional development, and meaningful participation in educational and sports decision-making. Such measures contribute to enhancing the quality of both education and sports training in the region.

Recommendations

Based on the discussion and empirical findings of this paper, the following recommendations are proposed:

1. **Establishing a Supportive School Environment for Psychological Empowerment:** Schools should foster an environment that supports the psychological empowerment of physical education teachers by:
 - a. Enhancing collaboration between sports supervisors, school administrators, and physical education teachers.
 - b. Promoting the exchange of information and expertise in sports and physical education.
 - c. Improving communication among all stakeholders involved in school physical education and sports.
2. **Developing Awareness of Teachers' Abilities and Skills:** Increase physical education teachers' awareness of their sports and educational skills by:
 - a. Allowing them greater autonomy in planning and implementing sports activities and lessons.
 - b. Encouraging innovative solutions to challenges encountered in teaching and organizing sports events.
3. **Organizing Seminars and Training on Psychological Empowerment:** Provide newly appointed physical education teachers with seminars and training focused on:
 - a. Spreading awareness of psychological empowerment among professionals in physical education and school sports.
 - b. Making psychological empowerment a core component of the school's physical education culture.
4. **Addressing Educational and Administrative Challenges:** Support physical education teachers in overcoming challenges by:
 - a. Removing barriers to implementing sports activities and practical lessons.
 - b. Emphasizing the importance of psychological empowerment within physical education.
 - c. Strengthening teachers' sense of purpose, competence, and independence.
 - d. Enabling teachers to positively impact the school's sports environment.
5. **Developing Programs to Foster Psychological Empowerment:** Conduct research to create programs that enhance psychological empowerment in physical education and sports science teachers, focusing on:

- a. Building self-confidence, physical abilities, and teaching skills.
- b. Developing sports leadership abilities and effective management of sports classes and teams.

Conclusion

The psychological empowerment of physical education and sports science teachers results from a complex interaction of cultural, social, institutional, and educational factors, highlighting the need for a holistic approach to fostering such empowerment. According to self-determination theory, creating a stimulating learning environment that promotes creativity and autonomy in physical education and sports science practices is essential.

The findings of this paper suggest that opportunities for professional development and involvement in decision-making within physical education and sports science enhance the competence of teachers and specialists in this field.

This aligns with other studies indicating that societal appreciation for physical education and sports science strengthens teachers' and specialists' sense of value and purpose, as suggested by social exchange theory.

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