

Conducive Learning Environment and its Role in Improving the Quality of teacher-student Relationships during physical education lessons

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ABSTRACT

Conducting studies on the conducive learning environment and its role in improving the teacher-student relationship quality during physical education lessons is important because it catalyzes transformational change within the sports education scene. Therefore, this research aims to identify the suitability of the physical education teaching environment within the preparatory schools affiliated with the Nineveh Education Directorate (center). Also, it seeks to determine the level of quality in the relationships between physical education teachers and students. In this research, the researcher adopted the descriptive approach using the survey and correlation methods. The researcher identified the research population as physical education teachers in preparatory schools affiliated with the Nineveh Education Directorate (center) for the academic year (2024-2025), whose number is 469 physical education teachers. The researcher randomly selected (212) teachers based on the sample size calculation. After applying the tools, extracting the results, and processing them statistically, the researcher reached several conclusions: the learning environments in physical education lessons within the preparatory schools affiliated with the Nineveh Education Directorate (center) are characterized by being of a low level in terms of their suitability for the educational process from the point of view of physical education teachers there. They also found the physical education teachers in the preparatory schools affiliated with the Nineveh Education Directorate (center) enjoy a low-quality relationship with their students within the lessons from their point of view. The researcher recommended that the responsible educational authorities in the directorates of education and their various departments use the two tools developed to assess the levels of conducive learning environments for different academic subjects and examine the quality of relationships between teachers of multiple subjects and their students.

Keywords: Conducive Learning Environment; Quality of Relationships; Physical Education; Teachers; Students

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INTRODUCTION

The learning environment plays a critical role in fostering comprehensive development and ensuring students' academic success. In a thoughtfully cultivated environment, it is certain that

its fertile spaces will nurture seeds of curiosity, critical thinking, and a thirst for knowledge among students. Therefore, designing and maintaining such an environment requires careful attention to detail. As well as demonstrating empathy and a deep understanding of the multifaceted dynamics that shape the classroom environment. At the heart of this learning space, the teacher strives to create an atmosphere filled with warmth, respect, and a passion for the subject being taught. Through the deliberate use of effective teaching strategies, the teacher aims to engage students in meaningful ways during lessons. In addition to encouraging students to actively participate, collaborate, and freely exchange ideas, the physical space of the learning environment also plays a significant role in shaping this atmosphere. Bright, appealing, and well-organized classrooms provide learners with a sense of order and security, thereby fostering a positive mindset conducive to learning.

Moreover, visual aids, educational displays, and interactive resources collectively serve as constant reminders of the exciting journey of discovery that awaits students. It is evident that fostering a culture of respect, inclusion, and a sense of safety is one of the fundamental pillars of effective learning. Within such an environment, students feel valued, supported, and empowered to express themselves without fear or hesitation. Clear communication channels among all participants in the educational process, along with established standards of mutual respect and a sense of community, help foster an environment where diverse perspectives are acknowledged, and every voice is heard. Moreover, an effective learning environment seamlessly promotes cognitive, social, and emotional skills through constructive feedback, interactive discussions, hands-on activities, and collaborative learning experiences. It offers students opportunities to explore, analyze, and summarize new knowledge while reframing mistakes as valuable learning opportunities, shifting the focus from mere performance to the development of a growth mindset. Thus, the learning environment can sometimes become a source of inspiration, intellectual stimulation, and personal growth. A space where students are not merely recipients of knowledge but active participants in their own learning journey. They are driven to take ownership of their education and embrace a lifelong love of learning.

Hence, a learning environment encompassing all these characteristics and features can be termed a “conducive learning environment.” Creating such an environment during lessons requires a delicate blend of art and science, harmonizing the physical space, teaching methods, and the interpersonal dynamics between teachers and learners. When this environment is carefully and meticulously organized, it becomes a means of intellectual exploration and a pathway to nurturing the minds and hearts of students as they embark on their learning journey. Haan and Yogyakarta (2024) noted that a conducive learning environment refers to the optimal conditions that enhance the learning process and help students achieve the best outcomes. This environment may consist of several essential elements, with the physical setting playing a significant role. Well-organized and orderly classrooms facilitate the effective implementation of lessons. Additionally, the presence of well-equipped educational facilities contributes to meeting learning needs. Furthermore, the social environment is a vital element, as it is essential for a climate of collaboration and mutual support to prevail between students and teachers. A positive social environment helps students feel comfortable and confident when expressing their ideas and sharing their opinions. Overall, a conducive learning environment is one that contributes to creating a positive educational experience, leading to improved learning outcomes and greater efficiency in the educational process (Haan & Yogyakarta, 2024, p. 397).

As the two pillars of the educational triangle, the teacher and the student form the core of the learning experience. The interaction between these two elements extends beyond mere instruction, evolving into a dynamic partnership characterized by empathy, trust, and mutual respect. Within the sacred space of the learning environment and academic engagement, the teacher emerges as a beacon of wisdom and guidance, while the student becomes an eager

participant, keen to absorb knowledge, grow, and thrive under the mentorship provided. Undoubtedly, the teacher is at the core of this relationship, embodying an undeniable depth of educational expertise. Their role goes beyond merely imparting and delivering knowledge; it extends to strengthening educational connections by demonstrating a deep understanding of each student's diverse needs and abilities. As a result, the teacher helps instill confidence in students and nurtures their intellectual and emotional growth. Through guidance, attentive listening, and personalized support, the teacher cultivates an environment of safety and encouragement, empowering students to explore their potential, challenge their assumptions, and strive for excellence. The teacher must also instill a sense of belonging, validation, and inspiration in the students around them. By encouraging students to question, reflect, and engage critically with the subject matter, they find themselves courageous enough to take risks, make mistakes, and learn from their experiences within a supportive and non-judgmental environment.

Thus, this symbiotic partnership between teacher and student establishes the foundation for intellectual curiosity, personal growth, and the development of essential skills that reach far beyond the confines of the classroom. At its core, this relationship embodies the cultivation of a growth mindset, a shared dedication to continuous improvement, resilience in overcoming challenges, and faith in the untapped potential of every learner. Through constructive feedback, praise, and opportunities for reflection, the relationship between teacher and student becomes a catalyst for self-discovery and empowerment, igniting a passion for lifelong learning. The nature of these strong and ideal relationships between teacher and student can be described as academic excellence in the quality of teacher-student relationships. At its core, this reflects the strength of education, showcasing it at its best as a harmonious blend of knowledge, compassion, and personal growth. It also serves as a testament to the lasting impact of authentic communication and guidance in shaping the minds and hearts of the next generation, instilling values of integrity, resilience, and a desire for excellence in them. These values will guide their journey toward a future filled with promise and potential.

Goetz et al. (2021) refer to the quality of teacher-student relationships as a concept that reflects the strength and effectiveness of the bonds between the teacher and their students. This quality is manifested in several key aspects, starting with emotional connection, where students feel comfortable and safe interacting with their teacher. When students perceive that the teacher cares about them and listens to their needs, it enhances their sense of belonging and motivates them to engage. Additionally, mutual trust and respect play a crucial role in building this relationship. Effective communication is also an essential component of the quality of the relationship, through open and honest communication that allows students to express their feelings and needs without fear of judgment. Therefore, investing in building strong and positive relationships between teachers and students is crucial for achieving success in the learning environment (Goetz et al., 2021, p. 3, 34).

The importance of conducting studies on the conducive learning environment and its role in enhancing the teacher-student relationship quality during physical education lessons lies in its potential to serve as a catalyst for transformational change within the educational sports scene. By delving into the nuances of this dynamic interaction, teachers can harness the power of knowledge, empathy, and inclusivity to create an environment that fosters academic growth and paves the way for spreading educational ethics where students thrive, inspire teachers, and satisfy the pursuit of knowledge. In addition to the significance this research may generate in providing two important tools to measure educational variables of great value, these include a tool for measuring the conducive learning environment and highlighting the necessary factors for its existence. As well as a tool for measuring the quality of teacher-student relationships in physical education, which provides the foundations for identifying how to detect their presence.

Research Problem

Based on her experience in the field of education, the researcher has observed that certain challenges may arise in the context of physical education lessons, such as the lack of personal attention for students and the absence of a connection between individual student needs and the teaching strategies provided. Furthermore, the curricula may lack inspiration and are often outdated, in addition to a noticeable lack of empathy or understanding from teachers, which can lead to the breakdown of the relationship between them and their students. Additionally, the researcher has sensed a lack of inclusivity in physical education lessons, limited communication between teachers and students, and weak student participation in learning activities, which may lead to students becoming disengaged from the lessons and losing interest in them. Therefore, the researcher has attempted to formulate a set of questions that may play a role in finding solutions to make physical education lessons a rich educational experience. These questions are as follows:

1. Do physical education lessons possess the characteristics of a conducive learning environment? And what is the level of adherence to these characteristics?
2. Do physical education teachers and students within the lessons have quality relationships? And what is the level of quality in those relationships?
3. Can the presence of a conducive learning environment in physical education lessons play a role in improving the quality of relationships between teachers and students? And what is the nature of this role?

Research Objectives

1. To identify the level of conduciveness of the learning environment in physical education lessons of the learning environment in physical education lessons within the preparatory schools of the Nineveh Education Directorate (Center) from the perspective of teachers.
2. To identify the level of quality in the relationships between physical education teachers and students within the preparatory schools of the Nineveh Education Directorate (Center) from the perspective of the teachers.
3. To identify the nature of the role that a conducive learning environment in physical education lessons can play in improving the quality of relationships between teachers and students.

Research Axes

1. **Human Axis:** Physical Education teachers in the preparatory schools under the Nineveh Education Directorate (Center) for the academic year (2024/2025).
2. **Temporal Axis:** The period between 10/10/2024 and 10/12/2024.
3. **Spatial Axis:** The buildings of the preparatory schools under the Nineveh Education Directorate (Center).

Definition of Research Terms

Conducive Learning Environment (CLE)

A conducive learning environment refers to one that enhances the learning process and supports the achievement of educational objectives. This environment encompasses positive interaction between teachers and students, the use of modern technology to facilitate learning, and the implementation of active learning strategies such as cooperative learning. It also involves providing support and guidance to students and clearly defining educational goals, which helps boost students' self-confidence and motivates them to succeed (Prapulla et al., 2024).

Quality of Teacher-Student Relationships

The quality of teacher-student relationships refers to the strength and effectiveness of the bond between teachers and their students. This quality encompasses elements such as mutual trust, emotional support, effective communication, mutual respect, and individualized attention. When these relationships are strong, they contribute to creating a positive learning environment that enhances academic achievement. (Bjärehed et al., 2024).

METHODS

Research methodology and procedures refer to the comprehensive framework and strategies employed to investigate, understand, and analyze phenomena of interest. This encompasses the principles, procedures, and techniques used in systematically pursuing knowledge and generating new insights. A robust research methodology is essential to ensure study outcomes' validity, reliability, and accuracy. In this study, the researcher adopted the descriptive approach, utilizing both the survey and the correlational methods to conduct the research procedures. These methods were selected for their suitability to the nature and objectives of the study.

Research Population and Sample

The research population refers to the specific group or population that forms the focus of the study. This population is defined by characteristics relevant to the research objectives, such as age, gender, occupation, or other specific factors. Conversely, the sample represents a subset of the research population selected to participate in the study. It is essential for the sample to be representative of the broader research population to ensure the findings can be generalized to the larger group. The researcher defined the research population as physical education teachers in preparatory schools affiliated with the Nineveh Education Directorate (Center) for the academic year 2024/2025. The researcher selected the main research sample consisting of (212) teachers, relying on Thompson's formula to calculate sample sizes, with a confidence level of (95%). Subsequently, the researcher divided the main sample into three sub-samples to complete the procedures for developing and applying the research tools on the application sample. Details of these sub-samples are presented in Table (1).

Table 1. Details of the Main and Sub-Samples of the Research

Sample type	Teacher No.	%
The pilot study	12	%5.7
Preparation	120	%56.6
Application	80	%37.7
Main research sample	212	%100

Preparing Research Tools

The process of preparing tools involves measuring the research variables, enabling researchers to assess these variables quantitatively or qualitatively. These tools serve to collect and analyze data to address the research problems and questions. Researchers must carefully design and validate these tools to ensure their reliability and validity in accurately measuring the intended variables. To measure both the conducive learning environment variable and the quality of the relationship between physical education teachers and students, the researcher developed two measurement tools after reviewing scientific sources related to the research variables, as outlined in Table (2). The researcher formulated a set of items totaling (15) for each measurement tool. Subsequently, the researcher developed a scoring key for the items of both

tools using a set of alternatives based on the five-point Likert scale. These alternatives and their corresponding weights are presented in Table (3).

Table 2. Scientific sources for the research Variables

Variable	Conductive Learning Environment	Quality of teacher-student relationships
Scientific Sources	(Haan & Yogyakarta, 2024)	(Bjärehed et al., 2024)
	(Prapulla et al., 2024)	(Harvey et al., 2024)
	(Rahman et al., 2024)	(Ali et al., 2024)
	(Letuma, 2024)	(Hagenauer et al., 2024)
	(Wahlgren & Aarkrog, 2024)	(Forsberg et al., 2024)
	(Wangchuk & Dendup, 2023)	(Chen et al., 2024)
	(Abidogun, 2022)	(Almalki, 2024)
	(Othman et al., 2021)	(Longobardi et al., 2023)
	(Nasir Shaheen et al., 2020)	(Hejazi & Lari, 2023)
	(Rehman et al., 2017)	(Thornberg et al., 2022)

Table 3. Details of the main and sub-samples of the Study

Answer Choices	Strongly Apply	Apply	Apply to Some Extent	Do Not Apply	Strongly Do Not Apply
Weights	5	4	3	2	1

After formulating the items, the researcher developed the preliminary version of both research tools. The tools were applied to a sample of (12) teachers in the pilot study. This was done to assess the clarity of the item formulations and the ease of understanding by the sample. As well as to identify any challenges the researcher might face when applying the research tools. Additionally, the time required for the sample to answer the items was measured, which was estimated to be an average of (22) minutes. The researcher then moved on to the next step in the preparation process, which involved applying the preliminary version of both the tool for conducive learning environments and the tool for quality relationships between physical education teachers and students to a preparation sample of (120) teachers who were randomly selected. The application process took place during the period from (10-15/10/2024). This step aimed to verify the extent to which the responses from this sample met scientific criteria for validity and reliability and to arrive at the final version of the research tools.

By adopting the split-half method, the researcher aimed to extract the reliability of the tool for conducive learning environments and the quality of relationships between the teacher and students. This method involves splitting the responses to the measurement tool's items into two halves. Then, the correlation coefficient between these two halves is calculated to obtain the half-reliability. The result is subsequently processed using the Spearman-Brown formula for equal halves and the Guttman formula for unequal halves, which provides the overall reliability of the tool. Tables (4 and 5) show the reliability of the research tools.

Table 5. Reliability of the Tool for Conductive Learning Environments

Half-reliability	Spearman-Brown formula	Reliability
0.604		0.7653

Table 7. Reliability of the Tool for the Quality of Relationships between Teachers and Students

Half-reliability	Spearman-Brown equation	Reliability
0.695		0.820

RESULTS

Table 6. Levels of the Tool for Conducive Learning Environments

Item	Content	Hypothetical mean	Mean	Standard deviation	T-value	Sig.	Level
1	The learning environment fosters a sense of inclusion and respect for all students.	3	3.22	1.216	2.010	0.047	High
2	Students are given opportunities to actively participate in decision-making and problem-solving during sports activities.	3	3.10	1.094	0.993	0.323	Medium
3	The physical education environment provides the necessary equipment and resources to facilitate learning and practice.	3	2.58	1.074	4.297	0.000	Low
4	The lesson focuses on developing students' individual skills and team dynamics.	3	2.40	1.162	5.689	0.000	Low
5	The clear and consistent transmission of instructions and knowledge within the lesson fosters a positive learning atmosphere.	3	2.41	0.898	7.261	0.000	Low
6	The learning environment encourages students to take risks and accept mistakes without fear of judgment or punishment.	3	3.05	1.127	0.482	0.631	Medium
7	Teachers work to promote a supportive and collaborative peer culture within the learning environment.	3	3.30	1.198	2.795	0.006	High
8	The lesson plan is flexible and accommodates diverse skill levels and learning styles among students.	3	2.92	0.878	1.032	0.304	Medium
9	All students are encouraged to actively participate in lesson activities.	3	2.42	1.019	6.307	0.000	Low
10	Constructive feedback and self-assessment promote continuous improvement opportunities.	3	2.73	1.021	2.927	0.004	Low
11	The lesson plan integrates links between the curriculum and real-world applications of sports principles.	3	3.07	1.074	0.675	0.501	Medium
12	Teachers demonstrate and explain sports skills and knowledge using modern and effective teaching techniques and strategies.	3	3.08	1.033	0.876	0.383	Medium
13	The teacher fosters a positive and enjoyable learning environment that promotes a love for physical activity among students.	3	2.86	1.055	1.459	0.147	Medium
14	Elements that enhance physical and mental health are integrated into sports activities.	3	2.75	1.063	2.556	0.012	Low

Item	Content	Hypothetical mean	Mean	Standard deviation	T - value	Sig.	Level
15	The learning environment encourages a balance between competition and cooperation, emphasizing the value of teamwork and fair play.	3	2.95	0.986	0.551	0.583	Medium
The total score of the tool		45	42.84	7.027	3.389	0.001	Low

It can be seen from Table (8) that the tool for conducive learning environments has a low level with a mean of (42.84) and a significance level of (0.001). This value is lower than the hypothetical overall means of (45). The tool items have levels ranging from (high, medium, and low). The items (1, 7) showed high levels, as they had mean scores higher than the hypothetical mean value for the items, with values of (3.22, 3.30) at significance levels of (0.047, 0.006). Items (2, 6, 8, 11, 12, 13, 15) appeared with average levels, as their mean scores were (3.10, 3.05, 2.92, 3.07, 3.08, 2.86, 2.95), which are close to the hypothetical mean value for the items, with significance levels of (0.323, 0.631, 0.304, 0.501, 0.383, 0.147, 0.583). Items (3, 4, 5, 9, 10, 14) appeared with low levels, as their mean scores were less than the hypothetical mean value for the items, with values of (2.58, 2.40, 2.41, 2.42, 2.73, 2.75) and significance levels of (0.000, 0.000, 0.000, 0.000, 0.004, 0.012).

The researcher can attribute the low result observed for the tool of conducive learning environments to the stagnation and routine that characterize the teaching plans for physical education lessons. This undoubtedly affects the student's ability to absorb diverse skills and capabilities. Additionally, these plans fail to account for students' diverse learning styles and do not integrate tools for physical and mental health development within the lessons. Thus, the limited active participation of students in lesson activities is attributed to the low level of encouragement provided by the teachers. This has cast a shadow over the learning environment, which has become somewhat ineffective in improving individual student skills and enhancing teamwork within the group dynamics. This, in turn, affects the learning climate prevailing in physical education lessons, making them monotonous, which leads students to avoid attending these lessons and participating in their activities. The appearance of this result is further exacerbated by the lack of material resources for physical education lessons, including the necessary equipment and facilities that help facilitate students' learning of sports skills. Moreover, the learning environment fails to achieve the necessary balance between sport competitions among students and fostering positive cooperation among them. It is evident that the role played by teachers in enhancing the learning process through assessment and evaluation methods capable of providing constructive guidance and feedback to improve the overall level of students and lessons was not up to the required standard. All of this led to physical education lessons in preparatory schools being unsuitable for creating a successful and effective learning environment.

Abidogun (2022) states that conducive learning environments are among the key factors that enhance the learning process's effectiveness. They provide a supportive framework that allows students to interact positively with teachers and their peers, thereby fostering a spirit of cooperation and participation. When students feel comfortable and safe in their learning environment, it increases their motivation to actively participate in lessons, leading to improved interest in the subject and, consequently, better quality education. This enhances the learning experience for students, making it a key element in achieving effective and sustainable educational outcomes. (Abidogun, 2022, p. 3).

Table 7. Levels of the Teacher-Student Relationship Quality Tool

Item	Content	Hypothetical mean	Mean	Standard deviation	T-value	Sig.	Level
1	The physical education teacher demonstrates genuine care for the well-being and progress of each student during the lesson.	3	2.29	1.079	7.298	0.000	Low
2	The teacher provides individual support and feedback to students based on their abilities and needs.	3	2.16	1.094	8.444	0.000	Low
3	Open and respectful communication is consistently maintained between the teacher and the students.	3	3.00	1.150	0.000	1.000	Medium
4	Students feel comfortable expressing their opinions and concerns to the teacher.	3	2.73	1.084	2.757	0.007	Low
5	The teacher fosters a positive and supportive atmosphere that encourages students to engage in sports activities.	3	2.51	1.331	4.080	0.000	Low
6	Continuous encouragement and motivation from the teacher contribute to providing a positive learning experience.	3	3.04	1.195	0.379	0.705	Medium
7	The teacher serves as an effective role model for sportsmanship, teamwork, and respect for all participants during lessons.	3	3.02	0.975	0.279	0.781	Medium
8	The teacher effectively balances challenge and support in sports activities.	3	2.34	0.950	7.719	0.000	Low
9	The teacher actively seeks feedback from students and incorporates it into the learning environment.	3	2.65	1.266	3.076	0.003	Low
10	The teacher demonstrates understanding and adaptability to students' diverse sports backgrounds and abilities.	3	2.79	1.108	2.125	0.036	Low
11	The teacher is committed to creating a safe and inclusive environment for all students.	3	2.87	1.098	1.319	0.190	Medium
12	The teacher fosters a passion for sports and physical activity within the learning environment by building a positive and respectful relationship with each student.	3	3.09	0.953	1.044	0.298	Medium
13	The teacher acknowledges and celebrates the diverse achievements of each student during the lesson.	3	3.19	1.181	1.764	0.080	Medium
14	The teacher consistently demonstrates patience, empathy, and understanding toward students' challenges and learning mistakes.	3	2.93	1.046	0.779	0.734	Medium
The total score of the tool		42	38.60	6.991	5.375	0.000	Low

Table (7) shows that the items of the tool measuring the quality of teacher-student relationships ranged between “low” and “medium” levels. Items (1, 2, 4, 5, 8, 9, 10) demonstrated low levels, with mean scores of (2.29, 2.16, 2.73, 2.51, 2.34, 2.65, 2.79), below the item's hypothetical mean. These results were statistically significant at levels of (0.000, 0.000, 0.007, 0.000, 0.000, 0.003). Items (3, 6, 7, 11, 12, 13, 14) scored medium levels, with mean values of (3.00, 3.04, 3.02, 2.87, 3.09, 3.19, 2.93) close to the hypothesized mean value. The significance levels for these items were (1.000, 0.705, 0.781, 0.190, 0.298, 0.080, 0.734). The overall tool achieved a high level with a mean of (45.21) at a significance level of (0.000).

The researcher attributes this low result observed in the tool measuring the quality of relationships between physical education teachers and students to the unsupportive learning environment prevailing in physical education lessons, which results from teachers not showing enough and genuine concern for the needs of their students. As a result, these students do not enjoy well-being during the lesson, nor do they acquire the educational characteristics that reflect their educational progress. This has led to a feeling of discomfort among the students during the lessons due to their inability to express their thoughts, opinions, and concerns regarding the educational content and the sports activities they engage in. Furthermore, these teachers fail to demonstrate an understanding of the fact that students have diverse backgrounds and abilities, and they do not adapt to or adjust their lessons and plans based on these differences. This is due to these teachers neglecting an important aspect of teaching physical education, which is considering the individual differences among students in terms of physical, skill, and cognitive abilities. Additionally, these students require various forms of support and feedback based on their abilities. The traditional, monotonous sports activities, which do not encourage students to face new challenges and dominate the atmosphere of the physical education lesson, may also play a role in the result. The teachers’ authoritarian approach in leading their lessons, coupled with their disregard for students’ opinions and feedback regarding the educational material and attempts to integrate them into the learning environment, has resulted in the relationship between physical education teachers and their students being of low quality.

Chen et al. (2024) indicate that the quality of teacher-student relationships plays a vital role in enhancing the learning process, as it directly impacts students’ academic and social experiences. When the relationship between the teacher and students is positive, students become more willing to participate in lessons and discussions. This enhances their understanding of the subject matter and increases opportunities for active learning. Moreover, such relationships provide students with a sense of security and emotional support, helping them express their concerns and educational challenges. This support can also reduce anxiety levels and increase their focus on learning. Students who have positive relationships with their teachers tend to achieve better academic outcomes. As these relationships enhance their motivation and commitment to academic achievement (Chen et al., 2024, pp. 2–3).

Table 8. Simple Linear Regression Equation

Research variable			Correlation Coefficient (R)	Contribution Ratio (R ²)	Sig.
Conductive learning environments	learning	The quality of teacher-student relationships	0.593	0.352	0.000

It is evident from Table (8) that there is a significant positive correlation between the tool for conducive learning environments and the tool for the quality of teacher-student relationships. Their correlation coefficient reached (0.593) with a significance level of (0.000). The table also indicates that conducive learning environments contribute (0.352) to improving

the quality of teacher-student relationships. This means that approximately (35%) of the variation in the quality of teacher-student relationships is attributed to the availability of conducive learning environments during physical education lessons, while the remaining variation is due to other factors.

The researcher may attribute this relationship and the acceptable positive role of conducive learning environments in improving the quality of teacher-student relationships to the fundamental connection between the learning environment and the dynamics of interaction between physical education teachers and their students. This correlation reflects the learning environment's profound impact in shaping relationships' quality. The researcher believes that the acceptable role played by conducive learning environments in improving teacher-student relationships is achieved through various mechanisms. The most prominent of which is fostering a supportive, inclusive, and engaging learning atmosphere within the learning environment. When physical education lessons take place in a learning environment that prioritizes inclusivity, access to resources, and clear communication channels, it paves the way for meaningful interactions and experiences between teachers and students. Moreover, a supportive learning environment, characterized by good sports facilities, diverse equipment, and opportunities for individual participation, enables teachers to create enriching educational experiences that resonate with students. By providing tools and resources and making them accessible, it is possible to meet their diverse abilities and offer valuable feedback. Thus, establishing the foundations for building positive and effective relationships with their students. Moreover, when the learning environment promotes a culture of cooperation, teamwork, and a sense of belonging, it paves the way for cohesive interactions between the teacher and students. It also creates opportunities for shared experiences, mutual respect, and the formation of a positive learning community. This allows teachers to interact with their students in a way that inspires trust, empathy, and active participation. This ultimately enhances the quality of their relationships, contributing to the creation of a learning environment where positive and effective teacher-student relationships can thrive.

CONCLUSION

The learning environments in physical education classes within the preparatory schools affiliated with the Nineveh Education Directorate (center) are characterized by a low level of suitability for the teaching process from the perspective of physical education teachers. According to their perspective, physical education teachers in the preparatory schools affiliated with the Nineveh Education Directorate (center) have low-quality relationships with their students during lessons. Conducive learning environments in physical education lessons improve the quality of relationships between teachers and students.

The researcher recommends that physical education teachers prioritize inclusivity, participation, and comprehensive support for students during lessons. This can be achieved by creating an environment that values their diverse abilities, encourages active participation, and integrates elements of physical, social, and emotional well-being into educational plans. Teachers should also foster a supportive and impactful space that enhances meaningful learning experiences and positive relationships between the teacher and students. The researcher recommends that physical education teachers prioritize open communication, empathy, and individual support between themselves and the students. This can be achieved by fostering a learning environment where clear dialogue, mutual understanding, and personal care are valued. Teachers can build strong, supportive connections with their students, creating a positive and rewarding learning experience in physical education. The researcher recommends that the responsible educational authorities in the directorates of education and their various

departments use the two tools developed by the researcher to assess the levels of conducive learning environments for different academic subjects and examine the quality of relationships between teachers of various subjects and their students.

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